

Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada – Nevada Rail Transportation Corridor DOE/EIS-0250F-S2

and

Final Environmental Impact Statement for a Rail Alignment for the Construction and Operation of a Railroad in Nevada to a Geologic Repository at Yucca Mountain, Nye County, Nevada DOE/EIS-0369

Volume VI

Nevada Rail Corridor SEIS and Rail Alignment EIS

Comment-Response Documents



U.S. Department of Energy Office of Civilian Radioactive Waste Management



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Nevada Rail Corridor SEIS

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2. NEVADA RAIL CORRIDOR SEIS COMMENT-RESPONSE DOCUMENT

INTRODUCTION

Background

This part of the *Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada -- Nevada Rail Transportation Corridor* (DOE/EIS-0250F-S2) (Nevada Rail Corridor SEIS) consists of responses to comments the U.S. Department of Energy (DOE, or the Department) received on the Draft Nevada Rail Corridor SEIS. DOE prepared Nevada Rail Corridor SEIS consistent with the Nuclear Waste Policy Act, as amended (NWPA, 42 U.S.C. 10101 *et seq.*), the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations that implement NEPA (40 CFR Parts 1500 to 1508), and the Department's procedures for implementation of NEPA (10 CFR Part 1021).

The following paragraphs describe the public comment and related processes.

DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

DOE issued the Draft Nevada Rail Corridor SEIS in October 2007 for public comment. The Department announced the availability of the Draft Rail Corridor SEIS for public review and comment in the *Federal Register* on October 12, 2007 (72 FR 58071); this announcement began a 90-day comment period, which ended on January 10, 2008. At the same time, DOE issued the *Draft Environmental Impact Statement for the Construction and Operation of a Railroad in Nevada to a Geologic Repository at Yucca Mountain, Nye County, Nevada* (DOE/EIS-0369D; the Rail Alignment EIS) and the *Draft Supplemental Environmental Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada* (DOE/EIS-0250F-S1D; the Repository SEIS).

This Rail Corridor SEIS and the Rail Alignment EIS evaluate the potential environmental impacts of constructing and operating a railroad for shipments of spent nuclear fuel and high-level radioactive waste from an existing rail line in Nevada to a repository at Yucca Mountain.

The Repository SEIS supplements the Yucca Mountain FEIS by considering the potential preclosure and postclosure environmental impacts of constructing and operating the repository, and the environmental impacts of national transportation of spent nuclear fuel and high-level radioactive waste.

This Comment-Response Document addresses comments on the Nevada Rail Corridor SEIS. Each of the other NEPA analyses has its own Comment-Response Document. As described below, DOE received some comments that apply to more than one of the three analyses. When this occurred, the Department addressed the comment in only one of the Comment-Response Documents.

The October 12, 2007 DOE Notice of Availability (72 *FR* 58071) invited commenters to submit their comments by regular mail, facsimile transmission (faxes), electronic mail (e-mail), and at public hearings at eight locations:

- Hawthorne, Nevada November 13, 2007
- Caliente, Nevada November 15, 2007
- Reno/Sparks, Nevada November 19, 2007
- Valley, Nevada November 26, 2007
- Goldfield, Nevada November 27, 2007
- Lone Pine, California November 29, 2007
- Las Vegas, Nevada December 3, 2007
- Washington, D.C. December 5, 2007

In addition, on November 27, 2007, DOE held a meeting with representatives of American Indian tribes and organizations to solicit their comments.

DOE received more than 4,000 comments on the NEPA documents from federal agencies; state, local, and tribal governments; public and private organizations; and individuals. These comments were in statements transcribed by a court reporter at the American Indian meeting and at the public hearings (the statement of each speaker is a separate comment document), or in written documents submitted at those hearings or sent to DOE by regular mail, e-mail, and fax.

Although the closing date of the public comment period was January 10, 2008, DOE was able to process all comments that it received and prepare responses for inclusion in the three Comment-Response Documents.

As part of this Final Nevada Rail Corridor SEIS, DOE has included compact disks that contain electronic images of the certified transcripts of the American Indian meeting and all public hearings held during the public comment period on the Draft SEIS. These compact disks also contain electronic images of all comment documents (including transcripts for each commenter at the public hearings) that DOE received on the Draft Nevada Rail Corridor SEIS; these images include brackets that identify the comments to which DOE has responded in this Comment-Response Document. In addition, DOE has placed this material on the Internet site for the proposed Yucca Mountain Repository (*www.ymp.gov*). Tables CR-1 and CR-2 (at the end of this volume) provide pointers to all comments DOE received from organizations and individuals, respectively. These tables point to the locations in this Comment-Response Document where the reader can find particular comments and the DOE responses. On several occasions, speakers at public hearings represented other individuals. In such cases, the tables list the person for whom the representative spoke. Table CR-3 is a cross-reference from the comments and responses back to the commenter(s); it identifies who made each comment and, for summary comments, the group of commenters.

HOW DOE CONSIDERED PUBLIC COMMENTS

DOE assessed and considered public comments on the Draft Nevada Rail Corridor SEIS, both individually and collectively. Some comments led to SEIS modifications; others resulted in a response to explain DOE policy, to refer readers to information in the SEIS (or to the Repository SEIS or Rail Alignment EIS), to answer technical questions, to explain technical issues, to correct reader misinterpretations, or to provide clarification.

A number of comments provided valuable suggestions on improving the Nevada Rail Corridor SEIS. As applicable, the responses in this volume identify changes DOE made to the SEIS as a result of comments.

Methodology

Because of the large number of submittals (letters, e-mails, faxes, comment forms, public hearing transcripts) that DOE received during the public comment period on the Draft Nevada Rail Corridor SEIS, the Department elected to extract and categorize comments and, as appropriate, group the same or similar comments for response. This approach enabled the Department to consider, individually and collectively, all comments it received on the Draft SEIS in an efficient manner, and to respond to those comments.

The following list highlights key aspects of the DOE approach to capturing, tracking, and responding to public comments on the Draft Nevada Rail Corridor SEIS:

- DOE read all comment documents and their attachments to identify and extract comments. As a part of this process, DOE reviewed technical attachments (for example, reports) for potential applicability to the SEIS. After comment identification, DOE grouped individual comments by categories and assigned each comment to an expert in the appropriate discipline to prepare a response. Senior-level experts reviewed each response to ensure technical and scientific accuracy, clarity, and consistency, and to ensure that the response addressed the comment.
- Frequently, more than one commenter submitted identical or similar comments. In such cases, DOE grouped the comments and prepared a single summary response for each group. Summarizing comments was appropriate because of the large number of similar comments received.
- To the extent practicable, DOE presented the comments in this document by topic. Each commentresponse pair, individual or summary, consists of three parts: (1) information on the source of the comment, including the number of the submitted comment document and the comment number, or for summary comments, the number of comments summarized, (2) the individual or summary comment, and (3) the response.
- To the extent practicable, this Comment-Response Document presents the comments extracted from comment documents as stated by the commenters (see next bullet). In some cases, however, DOE paraphrased individual comments to capture their meaning if they were general in nature (for example, for or against an activity or action), if they indicated something was incomplete or insufficient but did not provide specific examples (for example, "cumulative impacts are inadequate"), or if they indicated something was not safe (for example, transportation of spent nuclear fuel) but provided no specific information. Comments grouped and summarized for response are, of necessity, paraphrased, but DOE made every effort to capture the essence of every comment included in a comment summary.
- DOE did not modify certified transcripts of public hearings. However, some transcripts (and letters, e-mails, and faxes) contained obvious errors (for example, misspelled names or words). For this Comment-Response Document, DOE corrected such errors in the extracted comments. Similarly, DOE deleted extraneous material (such as repeated words) from extracted comments whenever such a deletion would not alter the meaning of the comment. The compact disk included with this Final EIS contains an image of the text of each hearing transcript as certified by the court reporter.

- If the meaning of a comment was not clear, DOE made a reasonable attempt to interpret the comment and respond based on that interpretation.
- Some commenters incorporated comments by reference to other documents. DOE handled such comments in one of three ways: (1) For a comment submitted under a separate process that was complete, which includes scoping for the three NEPA documents under consideration, DOE did not provide a response because it had already considered the matter. (2) For a comment submitted under a separate process that was not complete (for example, an environmental assessment on repository infrastructure), DOE considered changed circumstances and responded by discussing in general what it had done. (3) For comments submitted previously and submitted again under the current process with additional information, DOE responded to the current comment and reevaluated the earlier submittal.
- DOE determined that some comments it received for one of the EISs were more suited for response in another document (for example, some comments on the Nevada Rail Corridor SEIS or Rail Alignment EIS fit better in the Repository SEIS responses); in these cases, the Department provided its response in the appropriate Comment-Response Document.

Key Issues Raised in Comments

The purpose of this Nevada Rail Corridor SEIS is to analyze the potential environmental impacts of the Proposed Action to construct and operate a railroad to connect the Yucca Mountain Site to an existing rail line near Wabuska, Nevada, in the Mina Corridor, thereby providing the necessary background, data, and analyses to help decisionmakers and the public understand the potential impacts.

This section provides short summaries of a variety of key issues raised by commenters (presented in *italics*) during the public comment process for the Draft Nevada Rail Corridor SEIS. It also provides DOE responses to those key issues. DOE identified the issues as "key" based on the following factors:

- The extent to which an issue concerned fundamental aspects of the Proposed Action
- The nature of the comments as characterized by the commenters
- The extent to which DOE changed the SEIS in response to the issue

The main body of this Comment-Response Document contains all the comments DOE received on the Draft Nevada Rail Corridor SEIS, and the DOE responses to those comments. DOE encourages readers to review the specific comments and DOE responses for particular areas of interest.

I. MINA RAIL CORRIDOR

Study of the Mina rail corridor is unwarranted.

In the Yucca Mountain FEIS, DOE evaluated in detail five potential rail corridors in the State of Nevada in which DOE could construct a rail line to link an existing rail line to Yucca Mountain. In the Yucca Mountain FEIS, DOE considered, but eliminated from further study, several other potential rail corridors. The Department eliminated one of those, the Mina rail corridor, because it crosses the Walker River Paiute Reservation and the Tribe had previously stated that it would not allow DOE to transport nuclear waste across the Reservation.

During initial scoping for the Rail Alignment EIS in 2004, DOE received comments that identified the Mina rail corridor for consideration as an alternative to the Caliente rail corridor. DOE subsequently held discussions with the Tribe on the availability of the Mina rail corridor, and in May 2006 the Tribe informed DOE that it would not object to the Department studying the potential impacts of constructing and operating a railroad across its Reservation. In response, DOE prepared a preliminary feasibility study of the Mina rail corridor. On October 13, 2006, based on the results of the study, DOE issued an Amended Notice of Intent to expand the scope of the Rail Alignment EIS to include the Mina rail corridor (71 FR 60484).

In April 2007, the Walker River Paiute Tribal Council passed a resolution and announced that it was withdrawing from participation in the EIS process. The Tribe renewed its prior objection to the transportation of nuclear waste across the Reservation. At the time the Tribe announced its withdrawal from the EIS process, DOE had completed the fieldwork and engineering studies necessary to conclude that it should include the Mina rail corridor in both the Nevada Rail Corridor SEIS and the Rail Alignment EIS. The studies indicated that construction and operation of a railroad along the Caliente or Mina rail alignment would have similar but generally small environmental impacts. On balance, however, the Mina rail corridor would be environmentally preferable because, in general, it would present fewer private-land conflicts, less surface disturbance, and smaller impacts to wetlands and air quality than the Caliente rail corridor would. In addition, based on preliminary estimates, the total cost to construct the railroad along the Mina rail corridor would be approximately 20 percent less than to construct along the Caliente rail corridor.

For the reasons stated above, DOE has included the Mina rail corridor in the Nevada Rail Corridor SEIS and Rail Alignment EIS but, in light of the Walker River Paiute Tribe's current position on the shipment of nuclear waste across its Reservation, DOE has identified the Mina rail corridor as a nonpreferred alternative.

II. LEAD AGENCY

The Surface Transportation Board should be the lead agency for the Rail Alignment EIS not DOE.

CEQ regulations (40 CFR 1501.5, 1501.6) address the issue of lead and cooperating agencies. DOE has adopted the CEQ NEPA regulations and implemented its own regulation on interagency cooperation (10 CFR 1021.342). The role of a federal agency in the NEPA process is a function of the agency's expertise and relationship to the proposed action. If more than one federal agency is involved in an undertaking that requires an EIS, CEQ regulations provide for the designation of a lead agency to supervise preparation of the environmental analysis (40 CFR 1501.5). The lead agency, which is generally the agency with major responsibility for the proposed action [40 CFR 1501.5(c)], is responsible for the preparation of the EIS and for compliance with other NEPA procedural requirements (40 CFR 1508.16).

A federal, state, tribal, or local agency with special expertise on an environmental issue or jurisdiction by law can be a cooperating agency in the NEPA process. A cooperating agency has the responsibility to assist the lead agency by participating in the NEPA process at the earliest possible time; by participating in the scoping process; in developing information and preparing environmental analyses including portions of the environmental impact statement for which the cooperating agency has special expertise; and in making available staff support at the lead agency's request to enhance the lead agency's interdisciplinary capabilities (40 CFR 1501.6). A

cooperating agency can adopt the EIS prepared by the lead agency and use it in its own decisionmaking (40 CFR 1506.3).

DOE is the lead agency for this Rail Alignment EIS. Under the Nuclear Waste Policy Act, the Department is responsible for the disposal of spent nuclear fuel and high-level radioactive waste to protect public health, safety, and the environment, and for the development and implementation of a plan to transport spent nuclear fuel and high-level radioactive waste to a repository at Yucca Mountain. The Rail Alignment EIS appropriately tiers from the broader corridor analysis in the Yucca Mountain FEIS, consistent with CEQ regulations (40 CFR 1508.28) and the court's decision in <u>State of Nevada v. DOE</u>, 457 F.3d 78 (D.C. Cir. 2006).

Consistent with CEQ and DOE regulations, DOE has requested the assistance of other agencies that have management or regulatory authority over lands and resources that the proposed railroad could affect or that have special expertise related to the proposed action in the Rail Alignment EIS. One of those agencies is the Surface Transportation Board (STB), which has exclusive jurisdiction over common-carrier rail lines that are part of the interstate rail network. The STB accepted cooperating agency status in the preparation of the Rail Alignment EIS. During the preparation of the NEPA analyses, DOE met with the STB to discuss project direction and coordination, as Appendix B, Section B.1 of the EIS describes.

If the proposed railroad were to be operated as a common-carrier railroad (referred to as shared use in this Rail Alignment EIS), the Department would have to obtain a certificate of public convenience and necessity to construct and operate the railroad from the STB. As part of its review process, the STB would need to consider the environmental effects of railroad construction and operation. Although DOE has not made a decision whether to construct and operate a railroad, DOE filed an application for a certificate of public convenience and necessity with the STB on March 17, 2008 (DIRS 185339-Vandeberg 2008, all). As part of the consideration of that application, the STB Section of Environmental Analysis is responsible for preparing the appropriate NEPA documentation for railroad construction and operation cases under the jurisdiction of the STB. Consistent with CEQ regulations, the STB could adopt the Rail Alignment EIS in whole or in part and use it as a basis for its decision. If the STB determined that it needed NEPA documentation in addition to the Rail Alignment EIS to support its decision whether to issue a certificate of public convenience and necessity, that additional NEPA documentation will be prepared by the STB.

The STB has not requested lead agency status, nor has it expressed any disagreement with DOE's status as lead agency. Under these circumstances, where no federal agency has expressed disagreement with the decision on lead agency status, as CEQ concluded in a letter dated February 8, 2005 (DIRS 185485-Connaughton 2005, all), the process outlined in its regulations (40 CFR 1501.5(c) for resolution of disagreements among agencies regarding lead agency status has not been triggered.

For these reasons, DOE is the appropriate lead agency for the Rail Alignment EIS and the Nevada Rail Corridor SEIS.

In addition to the above, DOE received comments on a number of other key issues – Environmental Justice, Mitigation Measures and Compensation, No-Action Alternative, and others – that apply to the Repository SEIS or the Rail Alignment EIS. The Comment-Response Documents for those NEPA documents discuss these issues and include the DOE responses.

Organization of the Comment-Response Document

Because DOE issued the Repository SEIS, the Nevada Rail Corridor SEIS, and the Rail Alignment EIS simultaneously for public comment and the documents shared the same comment period and public hearings, most commenters provided their comments on the proposed repository and railroad projects and all three NEPA documents in a single comment document. Very often, particularly in relation to the Nevada Rail Corridor SEIS and the Rail Alignment EIS, commenters did not distinguish which NEPA analysis their comments concerned, or provided comments in a way that could make them applicable to more than one of the analyses.

In preparation for receipt and processing of public comments, DOE developed three parallel topical outlines (one for each of the NEPA analyses) for use in categorizing comments for response. In general, DOE based the topical outlines on the structure and contents of the NEPA analyses. Further, DOE used a database to capture and track comments according to the topical outlines, and ultimately to produce the Comment-Response Documents. Based on specifics provided by commenters or on an interpretation of the intent of the comment, the Department assigned each comment to the most appropriate topic in only one topical outline. The topical outline for the Repository SEIS Comment-Response Document begins with 1; the topical outline for the Nevada Rail Corridor SEIS Comment-Response Document begins with 2; and the topical outline for the Rail Alignment EIS Comment-Response Document begins with 3.

After the Department received and processed all the comment documents, the topical outline (and therefore, the database) had topics for which DOE did not receive any comments; there also were numbered placeholders the Department did not use. This Comment-Response Document identifies topics for which the Department did not receive comments and numbered sections not used. This approach maintains the parallel structures of the three comment-response documents.

Because a number of comments were similar, the Department has combined and summarized them.

The compact disks that are part of this Final EIS contain electronically scanned images of the transcripts of all the public hearings along with scanned images of all letters, e-mail, faxes, etc., for the Draft Rail Alignment EIS.

How to Use this Comment-Response Document

Tables CR-1 and CR-2 provide alphabetical guides to the location of comments by organizations and individuals, respectively. Table CR-2 lists anonymous submittals as "Anonymous"; lists as "Illegible" submittals for which DOE could not read the signature; and lists as "No last name given" submittals from those who provided only a first name. To find a comment and the DOE response, locate the commenter's name (by individual or organization) in the appropriate table and turn to the index location listed. The identification number in parentheses after the index location identifies the comment-response pair.

As an actual example, Alice Bartholomew submitted a letter (comment document RRR000529) that contains 14 identified comments. To read the DOE responses to Ms. Bartholomew's comments, first find her name in Table CR-2. In addition to her name, the table includes the locations of her 14 comments and the DOE responses to those comments.

Note that Ms. Bartholomew submitted comments on (or DOE interpreted her comments to apply to) all three of the NEPA analyses. The Repository SEIS Comment-Response Document responds to comments

beginning with 1; the Nevada Rail Corridor SEIS Comment-Response Document responds to comments beginning with 2; and the Rail Alignment EIS Comment-Response Document responds to comments beginning with 3.

To read the response to Ms. Bartholomew's first comment, turn to Section 1.1.3 of the Repository SEIS Comment-Response Document, response number (15); to read the response to her twelfth comment, turn to Section 2.1.2 of the Nevada Rail Corridor SEIS Comment-Response Document, response number (1418); and to read the response to her thirteenth comment, turn to section 3.2.4.2 of the Rail Alignment EIS, response number (7).

To read Ms. Bartholomew's comments in the context of her original letter, find comment document RRR000529 on the compact disk included with this Comment-Response Document, on the Yucca Mountain Project's Internet web site (http://www.ymp.gov), or in the copy at the nearest DOE Reading Room. Comment document RRR000529 is a scanned image of Ms. Bartholomew's letter with brackets around each identified comment.

Table CR-3 is a cross-reference from the comments and responses back to the commenter(s). This table identifies who made each comment and, for summary comments, the group of commenters.

COMMENTS AND RESPONSES

2.1 Proposed Action

2.1 (1033)

Comment - RRR000617 / 0034

Page 2-10, Section 2.2.5.1: The text here indicates that Union Pacific Railroad trains would utilize existing mainline routes to arrive in Nevada to access either the Caliente or Mina route. The Nevada Rail Corridor SEIS is silent on the issue of whether any improvements to the existing Union Pacific Railroad mainline system would be required to accommodate shipments of spent nuclear fuel and high-level radioactive waste, which may be significantly heavier than most common freight currently shipped along the Union Pacific Railroad mainline.

The SEIS must identify utilization and any required upgrades of the existing Union Pacific Railroad mainline routes as a connected action. The SEIS must disclose the impacts of said connected action.

Response

DOE has not identified any circumstances in which the existing Union Pacific Railroad mainline system would require upgrades to accommodate shipments of spent nuclear fuel and high-level radioactive waste. Moreover, even if the Union Pacific undertook such upgrades or modifications, DOE does not consider such upgrades to be a connected action. CEQ regulations (40 CFR 1508.25(1)) define a connected action as an action that is automatically triggered by another action; that cannot proceed unless other actions are taken previously or simultaneously; or, where the actions are interdependent parts of a larger action and depend on the larger action for their justification. In this case, DOE believes options to track upgrades would be available. For example, rather than rebuild a railroad bridge to accommodate the weight of cask cars in a train consist, the operator could modify the train consist by adding buffer cars between cask cars. As another example, rather than the railroad upgrading existing track, trains could operate at lower speeds. For these reasons, the analyses suggested by the commenter are unnecessary.

2.1 (1132)

<u>Comment</u> - RRR000663 / 0036

The Draft Rail Corridor SEIS does not identify the array of new facilities that would need to be constructed along the rail line, nor does it evaluate their environmental impacts. As demonstrated in the Rail Alignment Draft EIS, construction of a rail line would require the addition of numerous facilities such as an interchange yard, staging yard, maintenance of way facilities, rail equipment and cask maintenance facilities, and a Nevada railroad control center (Rail Alignment Draft EIS, p. 2-5). None of these facilities were described in the 2002 [Yucca Mountain] FEIS. The facilities would increase many of the impacts previously examined, including socioeconomic impacts and land use impacts.

Response

The Rail Alignment EIS analyzes construction of a rail line at the alignment level and analyzes the impacts of constructing the facilities necessary to operate a railroad.

2.1.1 Purpose and Need for Agency Action

2.1.1 (977)

<u>Comment</u> - RRR000617 / 0031

Page 1-1, Section 1.1: The following sentence, found in the Repository SEIS, must also be included in the Rail Corridor SEIS: "DOE has prepared this Draft Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High Level Nuclear Waste at Yucca Mountain, Nye County, Nevada -- Nevada Rail Transportation Corridor (DOE/EIS-0250F-S2D) (Rail Corridor DSEIS) to assist the U.S. Nuclear Regulatory Commission (NRC) in adopting, to the maximum extent practicable, any environmental impact statement (EIS) prepared pursuant to Section 114(f) of the Nuclear Waste Policy Act, as amended. (NWPA, 42 U.S.C. 10101 et seq.)"

Response

DOE plans to submit the Repository SEIS to the NRC pursuant to Section 114(f) of the Nuclear Waste Policy Act, as amended. Because the Repository SEIS incorporates by reference portions of the Nevada Rail Corridor SEIS and the Rail Alignment EIS, DOE will also provide copies of those documents to the NRC. The NRC will make a determination as to which of these documents (or portions thereof) it will consider for adoption pursuant to Section 114(f).

2.1.1 (1406)

<u>Comment</u> - RRR000656 / 0020

Section 1.11, page 1- 6: This section has a great deal of information about the process to consider and select potential rail corridors, but does not have a comprehensive statement of Need. The Need for the project is not only the permanent repository for spent fuel, but also contributing to the betterment of the local communities affected by the DOE action. Need is addressed in the SEIS by studying shared use of the rail corridor by local shippers.

Prior to defining this option, the SEIS should more broadly define and explicitly state the need to include the economic deficiencies in the local communities that the project can help overcome, such as:

- Limited transportation infrastructure for local businesses to be competitive with and access national and international markets
- Limited opportunity for local businesses to participate in the construction and operation of DOE facilities

- Lack of local job opportunities in the study area and the economic benefits derived from increased employment
- Limited tax base underscored by the undiversified economies of the counties in the study area
- Availability of land without the infrastructure to fully utilize the land for the benefit of the local communities

Section 1.1 of the Nevada Rail Corridor SEIS explains the purpose and need for agency action. In short, DOE needs to ship spent nuclear fuel and high-level radioactive waste to a repository at Yucca Mountain by rail. To accomplish this, the Department needs to build a rail line to connect the repository to an existing rail line in Nevada. The purpose and need for the project does not include economic development in communities along the proposed railroad, although the project could beneficially affect economic development in those communities.

2.1.2 Decision on Proposed Action

2.1.2 (1405)

<u>Comment</u> - RRR000656 / 0019

Section S.2.9, page S-30: There is no information relevant to environmental concerns that would warrant further consideration of the Carlin, Jean, or Valley Modified rail corridors.

DOE should acknowledge and take care not to imply that the Carlin, Jean, or Valley Modified have ever been determined to be environmentally unacceptable. If for some reason both the Mina and Caliente corridors prove infeasible for a branch rail line, rail transportation is still preferable to other modes and reconsideration of the alternative corridors should take place. This comment also applies to similar text on page FW-3; Section 1.3, page 1-6; Section 1.3.3, page 1-9; Table 1-1, page 1-17.

Response

As DOE states in Chapter 6 of the Nevada Rail Corridor SEIS, the Department concludes there are no significant new circumstances or information bearing on environmental concerns that would warrant further consideration of the Carlin, Jean, or Valley Modified rail corridors at the alignment level. DOE did not find these corridors to be environmentally unacceptable, but rather concluded in the April 8, 2004, Record of Decision (69 *FR* 18557) that the Caliente rail corridor was preferable. In the event that DOE were to not select a rail alignment in the Caliente or Mina rail corridor, the future course that it would pursue to meet its obligations under the NWPA is highly uncertain. DOE recognizes that other possibilities could be pursued, including evaluating the Carlin, Jean, or Valley Modified rail corridors to determine an alignment for the construction and operation of a railroad to transport spent nuclear fuel and high-level radioactive waste to the repository at Yucca Mountain. DOE analyzed these possibilities in the Yucca Mountain FEIS and in the Nevada Rail Corridor SEIS. Further consideration of these possibilities could require additional NEPA reviews, as appropriate.

2. 1.2 (1418)

<u>Comment</u> - RRR000404 / 0012

The commenter states that DOE's selection of the Caliente rail corridor is not supported by the information in the Draft SEIS. The information in the Draft SEIS does not adequately compare Caliente with the other viable rail corridors.

In its April 8, 2004, Record of Decision on Mode of Transportation and Nevada Rail Corridor for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, NV (69 *FR* 18557), DOE selected the Caliente rail corridor for the study of possible alignments for a rail line. The Department based that selection on the analysis of five rail corridors in the Yucca Mountain FEIS. The purpose of the Nevada Rail Corridor SEIS is to analyze the Mina rail corridor at a level of detail commensurate with the rail corridor analysis in the Yucca Mountain FEIS and to update information on the Carlin, Jean, and Valley Modified rail corridors.

2.1.3 General Opposition to the Proposed Action

See the Rail Alignment EIS Comment-Response Document, Section 3.1.3.

2.1.4 General Support for the Proposed Action

2.1.4 (71)

Comment - 7 comments summarized

Commenters expressed broad support for rail transportation of spent nuclear fuel and high-level radioactive waste and for the construction and operation of a rail line to Yucca Mountain. Commenters suggested that the Mina Corridor is feasible for the transportation of casks to Yucca Mountain. A commenter also suggested that the Walker River Paiute Tribe would support the project once they understood the economic benefits.

Commenters expressed the opinion that the public could have full confidence that DOE could transport nuclear materials safely and securely to Yucca Mountain. Commenters noted that the National Academy of Sciences completed a nearly 3-year study of the viability of the national transportation campaign to Yucca Mountain that concluded there are no fundamental barriers to the safe transport of spent nuclear fuel and high-level radioactive waste. The reasons for this conclusion include the tested experience of the transportation industry, the robustness of the transport packages, and a proven record of accomplishment by the regulatory oversight bodies. Commenters supported the use of dedicated trains with escort guards.

Response

DOE acknowledges the support for the proposed railroad.

2.2 NEPA Process

2.2 (32)

<u>Comment</u> – 2 comments summarized

Commenters asserted that publication of the Nevada Rail Corridor SEIS and the Rail Alignment EIS is premature in the absence of a National Transportation Plan. A commenter said that DOE should have undertaken a national routing analysis to look at different impacts of various route alternatives, and that only after the completion of such a national transportation analysis can DOE assess the preferred rail route (if any) in Nevada. The commenter asserted that to do otherwise is a violation of NEPA. Other commenters stated that the Nevada Rail Corridor SEIS and the Rail Alignment EIS are premature because DOE has not completed the work necessary to prepare and publish a draft EIS for the proposed railroad, consistent with the requirements of NEPA.

The Nevada Rail Corridor SEIS and the Rail Alignment EIS are not premature. A final National Transportation Plan is not a prerequisite for initiation of the NEPA analysis for construction and operation of a railroad in Nevada. The Repository SEIS includes analyses of representative national rail routes, based on selection of either the Caliente or Mina rail corridor. That national transportation analysis is available to DOE to inform its decision on selection of a preferred rail alignment in Nevada.

The suggestion that DOE must await the availability of additional, more detailed, design and operations details is counter to the requirements of NEPA and CEQ regulations. DOE has used the best available information in the Nevada Rail Corridor SEIS and the Rail Alignment EIS to provide a reasonable thorough discussion of the probable environmental consequences of the Proposed Action. DOE and CEQ policies and procedures that implement the requirements of NEPA call for the environmental impact analyses early in the process of development of a proposed federal project. In particular, the need to prepare an EIS early in the process is stressed throughout the CEQ regulations (40 CFR 1500.5, 1501.2, 1502.5, and 1508.23). In addition, there are processes for determining if there is a need for additional NEPA analyses if an agency proposes substantial changes to a proposed action, or there are significant new circumstances or information relevant to environmental concerns and bearing on the Proposed Action or its impacts.

2.2 (825)

Comment - RRR000668 / 0003

The EPA supports the conclusion of the Nevada Rail Corridor draft SEIS. Therefore, in accordance with our policies and procedures for the review of EISs pursuant to section 309 of the CAA [Clean Air Act], we have rated this document as Lack of Objections (LO).

Response

Thank you for your comment.

2.2 (1350)

Comment - RRR000656 / 0018

Section S.2.6 (pages S-19 to S-29) discusses new environmental information regarding the Carlin, Jean, and Valley-Modified rail corridors.

The comparison to the Yucca Mountain FEIS information is difficult to understand and meaningless. DOE should provide a side-by-side comparison of these three corridors to the Mina and Caliente corridors. In addition, other information that is relevant to rail corridor selection, such as cost, should be included as was done in the Yucca Mountain FEIS. Such a comparison would likely show that the declaration of Mina or Caliente as the environmentally preferable rail corridor is not so clear cut. It could easily be argued that the shorter routes through less rugged terrain that disturbed far less land would be environmentally preferable. This comment also applies to Section 1.5.2, page 1-15, Table 1-1, third item, dealing with scope of the Rail Corridor SEIS, and Chapter 5 in its entirety.

Response

The Nevada Rail Corridor SEIS analyzes the Mina rail corridor at a level of detail commensurate with the rail corridor analysis in the Yucca Mountain FEIS. In addition, the SEIS updates information on the Carlin, Jean, and Valley Modified rail corridors to determine if any of them warrant further consideration in the Rail Alignment EIS, and concludes that they do not. The purpose of the Nevada Rail Corridor SEIS is not to provide a direct comparison between the Carlin, Jean, and Valley Modified rail corridors

and the Caliente and Mina rail corridors, although such a comparison is possible using Tables S-1, S-2, S-3, and S-4 in the SEIS and Table 6-16 in the FEIS.

2.2 (1368)

Comment - RRR000617 / 0251

The EIS must discuss the reasons why any previously identified alternative routes for developing rail access across Nevada have been eliminated from detailed study. 40 C.F.R. Section 1502.14(a). In its Record of Decision on Mode of Transportation and Nevada Rail Corridor for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, NV dated April 8, 2004 (69 Fed. Reg. 18,557), the DOE stated that it "does not consider the differences among the corridor alternatives to be sufficient to make any of them clearly environmentally preferable." [Lincoln] County encourages DOE to update (utilizing current environmental, land use and socioeconomic data) and distribute in draft form its comparative analysis of all previously considered rail routes through Nevada to Yucca Mountain. This reevaluation should serve as the basis upon which DOE moves forward with detailed NEPA analysis of the Mina and/or Caliente routes and/or justifies the elimination from detailed analysis in the EIS the Mina, Caliente or any other route previously considered by DOE.

The Rail Corridor SDEIS includes updated information regarding the Jean, Carlin, and Valley Modified corridors. DOE/EIS-0250F-S2D, Volume I, 5-1. This information is intended to update previous analysis of the affected environment of construction and operation of a rail line. However, this update does not provide explanation as to why these previously identified alternatives have been eliminated from detailed study.

Response

DOE identified its preference for the Caliente rail corridor in a Federal Register notice on December 29, 2003 (68 *FR* 74951), and further explained the reasons for this preference in the April 8, 2004, Record of Decision. The Nevada Rail Corridor SEIS updates relevant information on the Carlin, Jean, and Valley Modified rail corridors. In addition, it restates why DOE dismissed the Caliente-Chalk Mountain rail corridor from further consideration. This update, along with the Nevada Rail Corridor SEIS analysis and conclusion that the Mina rail corridor warrants further study in the Rail Alignment EIS meets the intent of the comment. The Nevada Rail Corridor SEIS does not identify any reason to change the DOE decision not to develop and study rail alignments in the Carlin, Jean, or Valley Modified rail corridors.

DOE does not need to update information on additional rail routes identified prior to preparation of the Yucca Mountain FEIS and dismissed in that document as infeasible. DOE originally identified the Mina rail corridor along with other potential rail routes in a series of three transportation studies prior to the preparation of the FEIS – *Preliminary Rail Access Study* (DIRS 104792-YMP 1990, all); *Nevada Potential Repository Preliminary Transportation Strategy Study 1* (DIRS 104795-CRWMS M&O 1995, all); and *Nevada Potential Repository Preliminary Transportation Strategy Study 2* (DIRS 101214-CRWMS M&O 1996, all). These studies and Section 2.3.3.1 of the FEIS provide the rationale for eliminating other routes from detailed study.

2.2 (1475)

<u>Comment</u> - RRR000737 / 0005

The commenter does not agree that the Mina alignment is viable. The commenter states that if DOE can legally prove that this alignment is viable, it should conduct a proper NEPA process across the country to inform and solicit comments on the potential for significant rerouting of waste through northern Nevada.

The Nevada Rail Corridor SEIS concludes that the Mina rail corridor warrants further study at the alignment level. DOE attempts to hold public meetings at locations and times that are most convenient for the general public. In this case, DOE held public meetings in Nevada (Hawthorne, Caliente, Reno/Sparks, Amargosa Valley, Goldfield, and Las Vegas), in Lone Pine, California -- locations with the largest populations that the construction and operation of the proposed railroad would affect -- and in Washington, D.C. The Department encouraged commenters nationwide to submit comments at the public hearings and by mail, facsimile, and electronic mail during the comment period. DOE used customary means to notify the public (advertisements, press releases, and public service announcements).

2.2 (1980)

<u>Comment</u> - RRR000682 / 0027

Page 1-6, 2nd paragraph: It is not necessary to designate the Mina route as a non-preferred alternative. The Mina corridor is superior to the Caliente corridor in nearly all categories. Do the CEQ regulations define non-preferred?

Response

DOE acknowledges that there is support for, as well as opposition to, the proposed rail line within the Mina rail corridor and the associated analyses presented in the Nevada Rail Corridor SEIS and the Rail Alignment EIS. As presented in Section 2.5 of the Rail Alignment EIS, the Mina Implementing Alternative is environmentally preferable when compared to the Caliente Implementing Alternative. However, the Mina Implementing Alternative remains the nonpreferred alternative in the Rail Alignment EIS due to the objection of the Walker River Paiute Tribe to transporting spent nuclear fuel and high-level radioactive waste through its Reservation. CEQ does not define nonpreferred.

2.2.1 NEPA Adequacy

2.2.1 (43)

<u>**Comment**</u> – 4 comments summarized

Commenters asserted that DOE has not fully or properly analyzed environmental impacts and that the Nevada Rail Corridor SEIS uses language throughout that leaves substantive issues surrounding the scope of the impacts open to dramatic and unbounded changes after finalization of these documents. Commenters asserted that DOE has not performed an adequate evaluation of many significant environmental impacts that include grazing, socioeconomic impacts, soils, and emergency response. Commenters stated that DOE must provide specific information on specific impacts that specific plans could cause, and provide substantive answers to the questions posed by the commenters.

A commenter provided the opinion that the updated information on the Carlin Corridor is meaningless and has no bearing on the feasibility of the route. Another commenter asserted that the information in the Nevada Rail Corridor SEIS does not support DOE's selection of the Caliente rail corridor and the Draft SEIS does not adequately compare the Caliente rail corridor with other viable rail corridors. The analysis of potential rail corridors in Nevada is inadequate, incomplete, and arbitrary. The SEIS evaluates different corridors at different levels of detail.

Response

The Nevada Rail Corridor SEIS is consistent with the requirements of NEPA and the NWPA. General information provided by the commenters was not adequate for DOE to provide a detailed response. To the extent that commenters provided greater detail elsewhere in their comments, those comments are addressed elsewhere in this Comment-Response Document. The level of information and analyses, the

analytical methods and approaches DOE used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions to address incomplete or unavailable information or uncertainties provide an assessment of environmental impacts consistent with the applicable requirements. DOE used the best reasonably available data to prepare the Nevada Rail Corridor SEIS, and the document analyzes a Proposed Action and a No-Action Alternative.

2.2.2 Comments Regarding Structure of the Nevada Rail Corridor SEIS and Rail Alignment EIS

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS on this subject.

2.2.3 Agency Coordination

2.2.3 (1269)

<u>Comment</u> - RRR000129 / 0001

The proposed project is consistent with the Maryland Department of the Environment's plan, programs, and objectives.

Response

Thank you for your comment.

2.2.4 Cooperating Agencies

2.2.4 (979)

<u>Comment</u> - RRR000617 / 0033

Page 1-10, Section 1.4: Lincoln County also requested cooperating agency status, but the DOE has never responded to this request. The DSEIS does not fully disclose the extent of parties seeking cooperating agency status or the DOE reasons for denying said status.

The Rail Corridor SEIS must disclose all parties seeking cooperating agency status and the DOE's reasons for not granting said status.

Response

DOE added Lincoln, Nye, and Esmeralda Counties and the City of Caliente as cooperating agencies for the Nevada Rail Corridor SEIS. The Department updated Section 1.4 of the Nevada Rail Corridor SEIS to describe these new cooperating agencies.

2.2.5 Regions of Influence

2.2.5 (2690)

<u>Comment</u> - RRR000523 / 0026

Page 3-32: To estimate transportation impacts, DOE defined the region of influence beginning at the Hazen siding in Churchill County, Nevada, and ending at Yucca Mountain. Why does DOE use Hazen to Yucca Mountain as a region of influence and ignore it for socioeconomic and other resources?

Response

DOE does not propose any new construction along the Union Pacific Railroad Hazen Branchline, but does propose to operate trains on the branchline. The region of influence for transportation includes the Hazen Branchline because, at present, the line carries low volumes of rail traffic and DOE's proposed rail

traffic would represent a substantial increase (more than 100 percent) over existing average daily traffic counts. Impacts to most resource areas (from construction or operations), would not extend as far as Hazen, and would not be driven by rail traffic on the branchline. Therefore, the regions of influence for those resource areas do not extend to Hazen. The region of influence for socioeconomics is the counties the Mina rail corridor would cross (including Churchill County) and Clark and Washoe Counties.

2.2.6 Perceived Risk

DOE did not receive any comments directed at the Nevada Rail Corridor SEIS on this subject. However, see Section 3.2.6 of the Rail Alignment EIS Comment-Response Document.

2.2.7 Miscellaneous NEPA Comments

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS on this subject.

2.3 Legal, Regulatory, and Policy

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS on this subject. However, see Section 3.3 of the Rail Alignment EIS Comment-Response Document.

2.4 Alternatives

2.4 (65)

<u>Comment</u> – 2 comments summarized

Commenters stated that the Nevada Rail Corridor SEIS and the Rail Alignment EIS are deficient and fatally flawed because they fail to meet the standards for such documents pursuant to NEPA and applicable case law for the following reasons:

These documents fail to identify alternatives that are environmentally preferable. In fact, they fail to identify alternative rail alignments, routes, and segments that DOE previously identified, mapped, and published, including but not limited to the Caliente Rail Alignment Crestline Alternative Segment, Caliente-Chalk Mountain Corridor, Orange Blossom Road Option, Mercury Highway Option, Mine Mountain Alternate, Valley Modified Corridor, Sheep Mountain Alternate, Indian Hills Alternate, Jean Corridor, Stateline Pass Option, Wilson Pass Option, Pahrump Valley Alternate, White River Alternate, Garden Valley Alternate, Carlin Corridor, Crescent Valley Alternate, Wood Canyon Alternate, Steiner Creek Alternate, Rye Patch Alternate, Monitor Valley Option, Big Smoky Valley Option, Mud Lake Alternate, Goldfield Alternate, Tonopah Option, Area 4 Alternate, Ely Corridor, and Baker Corridor. They fail to analyze, report, and compare any of the potential environmental effects of such alternatives.

DOE has omitted such alternatives for reasons known only to certain unknown and unidentified DOE personnel and consultants. DOE personnel have stated publicly that the Department eliminated such alternative routes from further study based on its estimates of costs and difficulty of engineering and construction, but such engineering and construction analyses and estimates of all such omitted alternatives remain secret and are not on record, so their actual existence is in doubt. DOE eliminated one of the alternate routes, the Caliente-Chalk Mountain Corridor, due to U.S. Air Force opposition some years ago, but there is no indication in the Nevada Rail Corridor SEIS and the Rail Alignment EIS if that opposition remains at present. DOE has omitted alternatives from these documents capriciously and wrongfully.

DOE prepared the Nevada Rail Corridor SEIS and the Rail Alignment EIS in full compliance with NEPA and with CEQ and DOE NEPA implementing requirements.

DOE completed engineering studies that evaluated both the Caliente and Eccles alternative segments consistent with a level of detail necessary to evaluate the potential environmental impacts of constructing and operating a rail line along either segment. Chapter 4 of the Rail Alignment EIS discusses these environmental impacts in detail.

In the Nevada Rail Corridor SEIS, DOE evaluated the potential environmental impacts of the Mina rail corridor at a level consistent with the analyses of rail corridors in the 2002 Yucca Mountain FEIS to determine whether the Mina rail corridor warrants further consideration at the alignment level. Similarly, the Nevada Rail Corridor SEIS updated information on the Carlin, Jean, and Valley Modified rail corridors to determine if anything had changed to warrant further consideration of those corridors at the alignment level. On the basis of the Mina rail corridor evaluations in the Nevada Rail Corridor SEIS, DOE determined that further consideration of the Mina rail corridor at the alignment level was warranted; however, there was no significant new information or circumstances that warranted evaluating the Carlin, Jean, or Valley Modified Corridors at the alignment level. DOE considered the other alternatives mentioned in the comment, eliminated them from further analysis, or analyzed them in the Rail Alignment EIS. Chapter 2 of the Rail Alignment EIS outlines the alternative segments the Department considered in the Mina and Caliente rail corridors, and Chapter 4 analyzes the potential environmental impacts of constructing and operating a railroad in those segments. Appendix C of the Rail Alignment EIS describes the process and basis for the consideration of all alternative segments in the EIS and presents an overview of the alternative segments that DOE considered but eliminated from detailed analysis.

As discussed in Chapter 1 of the Nevada Rail Corridor SEIS, DOE did not evaluate the Caliente-Chalk Mountain rail corridor in the Rail Alignment EIS because of continued opposition from the U.S. Air Force to the shipment of spent nuclear fuel and high-level radioactive waste across the Nevada Test and Training Range.

2.4.1 Mina Rail Corridor

2.4.1 (41)

$\underline{Comment} - 14$ comments summarized

Commenters expressed opposition to the inclusion and analysis of the Mina rail corridor in the Nevada Rail Corridor SEIS following the Walker River Paiute Tribal Council's 2007 resolution to no longer support the analysis of transporting spent nuclear fuel and high-level radioactive waste across the Walker River Paiute Reservation. Commenters stated that NEPA requires analysis of reasonable or viable alternatives (those alternatives capable of being selected), and because the Mina rail corridor requires the consent of the Walker River Paiute Tribal Council, DOE cannot consider it as a reasonable alternative. Therefore, DOE should not have analyzed the Mina rail corridor in the Draft Nevada Rail Corridor SEIS and should not carry it forward into the Final SEIS. Some commenters recommended that DOE classify the Mina rail corridor as an alternative considered but eliminated from detailed analysis.

Response

In the Yucca Mountain FEIS, DOE evaluated in detail five potential rail corridors in the State of Nevada in which the Department could construct a rail line to link an existing rail line to Yucca Mountain. DOE considered, but eliminated from further study, several other potential corridors. The Department

eliminated the Mina rail corridor because it crosses the Walker River Paiute Reservation and the Tribe had previously stated it would not allow DOE to transport nuclear waste across the reservation.

During initial scoping for the Rail Alignment EIS in 2004, DOE received comments that identified the Mina rail corridor for consideration as an alternative to the Caliente rail corridor. DOE subsequently held discussions with the Walker River Paiute Tribe, and in May 2006 the Tribe informed DOE that it would not object to the Department studying the potential impacts of constructing and operating a railroad across the reservation. In response, DOE prepared a preliminary feasibility study of the Mina rail corridor. Based on the results of the study, on October 13, 2006, DOE issued an Amended Notice of Intent to expand the scope of the Rail Alignment EIS to include the Mina rail corridor (71 *FR* 60484, October 13, 2006).

In April 2007, the Walker River Paiute Tribal Council passed a resolution and announced that it was withdrawing from participation in the EIS process. The Tribe renewed its past objection to the transportation of nuclear waste across the reservation. At the time the Tribe announced its withdrawal from the EIS process, DOE had completed the fieldwork and engineering studies necessary to conclude that it should include the Mina rail corridor in both the Nevada Rail Corridor SEIS and the Rail Alignment EIS. The studies indicated that construction and operation of a railroad along the Caliente rail alignment or the Mina rail alignment would have similar, but generally small, environmental impacts. On balance, however, the Mina rail alignment is environmentally preferable because, in general, it would present fewer private-land conflicts, less surface disturbance, and smaller impacts to wetlands and air quality than the Caliente rail alignment. In addition, based on preliminary estimates, the total cost to construct the railroad along the Mina rail alignment would be approximately 20 percent less than to construct the railroad along the Caliente rail alignment.

For these reasons, DOE retained the Mina rail corridor in the Nevada Rail Corridor SEIS and the Rail Alignment EIS. However, in light of the Walker River Paiute Tribe's current position on the shipment of nuclear waste across the Reservation, DOE has identified the Mina rail alignment as a nonpreferred alternative.

2.4.1 (151)

<u>**Comment**</u> – 3 comments summarized

Commenters suggested that the Mina rail corridor should include all areas up to Hazen. Commenters stated that DOE's use of the existing rail line from Hazen to Wabuska would be the largest use of the rail line. They stated that DOE was inappropriately segmenting the rail corridor and ignoring what should be considered part of the rail corridor.

Response

In the Nevada Rail Corridor SEIS, DOE describes the Mina rail corridor as beginning in Wabuska. Between Hazen and Wabuska, an existing Union Pacific Railroad branchline would connect the rail line DOE constructed to the Union Pacific Railroad mainline. DOE would not construct a new rail line north of Wabuska.

By definition, the rail corridors do not include the existing Union Pacific Railroad branchlines and mainlines to which they might connect. However, because DOE proposes to operate trains on the branchline between Hazen and Wabuska and because, at present, this branchline carries low volumes of rail traffic (which DOE train traffic would increase by more than 100 percent), the region of influence for transportation includes the existing branchline. Construction, but not operations, would affect most of the resource areas DOE analyzed in the Nevada Rail Corridor SEIS; therefore, the regions of influence for

those resource areas do not extend to Hazen. In addition, in the Rail Alignment EIS, the region of influence for the noise and transportation resource areas includes the Union Pacific Railroad Hazen Branchline.

2.4.1 (413)

<u>Comment</u> - RRR000071 / 0002

I oppose the Mina rail route for its proximity to the Walker River, Lahontan Reservoir, and Inyo County.

Response

DOE acknowledges the commenter's opposition to the construction of a rail line in the Mina rail corridor. Because of the general nature of the comment, the Department refers the commenter to the discussion of the issues in the introduction to this Comment-Response Document and to other comments and responses related to specific topics of concern to the commenter (see the Comment-Response Document Table of Contents).

2.4.1 (915)

<u>Comment</u> - RRR000668 / 0001

DOE states that the Mina rail corridor warrants further study at the alignment level. However, in 2007, the Walker River Paiute Tribal Council withdrew from participation in the draft SEIS. Accordingly, the draft SEIS identified the Mina rail corridor as the "nonpreferred" alternative; the document continues to identify the Caliente rail corridor as the preferred alternative. EPA supports the DOE conclusion to evaluate potential alignments in the Caliente and Mina rail corridors.

Response

Thank you for your comment.

2.4.1 (1708)

<u>Comment</u> - RRR000117 / 0005

The [Walker River Paiute] Tribe's decision to withdraw support for the Mina corridor was unfortunate as it offers the advantages of simplified design, crosses fewer mountain ranges, utilizes an existing rail bed, is a shorter distance to the repository, and is less costly to construct.

Response

DOE acknowledges that there is support for, as well as opposition to, the proposed rail line within the Mina rail corridor and the associated analyses presented in the Nevada Rail Corridor SEIS and Rail Alignment EIS. As presented in Section 2.5 of the Rail Alignment EIS, the Mina Implementing Alternative is environmentally preferable when compared to the Caliente Implementing Alternative. However, the Mina Implementing Alternative remains the nonpreferred alternative in the Rail Alignment EIS due to the objection of the Walker River Paiute Tribe to transporting spent nuclear fuel and high-level radioactive waste through its Reservation.

2.4.1 (1995)

<u>Comment</u> - RRR000682 / 0013

Page S-4, last paragraph: "...at the same level of analysis as that for Carlin, Jean and Valley Modified rail corridors..." The Mina corridor should be analyzed to the same level of detail as the Caliente corridor.

DOE analyzed the Caliente, Carlin, Caliente-Chalk Mountain, Jean, and Valley Modified rail corridors in the Yucca Mountain FEIS. In the Nevada Rail Corridor SEIS, DOE analyzed the Mina rail corridor at the same level of detail it used for the analysis of the Caliente rail corridor in the FEIS.

2.4.2 Carlin, Jean, or Valley-Modified

2.4.2 (145)

Comment - 2 comments summarized

Page 1-2, Section 1.3, of the Nevada Rail Corridor SEIS states that DOE considered five rail corridors in detail. The statement is not necessarily true; DOE developed only limited cursory information for the Carlin Corridor. Lander County developed far more information about the corridor than any of the DOE studies.

Response

DOE analyzed the five rail corridors in detail in the Yucca Mountain FEIS. The analysis of the environmental impacts of the corridors was consistent with the requirement in the 2004 Record of Decision to select a rail corridor in which it would study possible alignments for a rail line. DOE updated the information and analyses for the Carlin rail corridor in the Nevada Rail Corridor SEIS and concluded there were no significant new circumstances bearing on environmental concerns that warranted further consideration of the corridor at the alignment level.

2.4.2 (380)

<u>Comment</u> - RRR000217 / 0002

By reference to Table S-3 in the Nevada Rail Corridor SEIS summary, the commenter favors utilizing the Jean rail corridor.

Response

DOE acknowledges that there is support for, and opposition to, the rail corridor options presented in the Nevada Rail Corridor SEIS; however, the Caliente rail corridor remains the preferred rail corridor for the construction and operation of a railroad to a repository at Yucca Mountain.

2.4.2 (1931)

<u>Comment</u> - RRR000646 / 0017

The Carlin rail route still remains a viable option to Caliente and Carlin. There are a limited number of land use conflicts toward the northern end of the route in Crescent Valley associated with a checkerboard pattern of public and private ownership. DOE never made a reasonable effort to assess the difficulty to assemble private lands. The cost to acquire such lands would be substantially below the costs to construct the Caliente rail route.

The Carlin rail route remains DOE's preferred secondary rail alternative. Any new environmental analysis addressing rail access should include this route because it avoids several Nevada communities adjacent to the rail line and it avoids rapidly growing areas in western Nevada. Lander County prepared several reports on the potential impacts and costs associated with this route. The Carlin rail route provides a reasonable cost alternative to Mina and Caliente.

Response

In the *Record of Decision on Mode of Transportation and Nevada Rail Corridor* (69 *FR* 18557) following the publication of the Yucca Mountain FEIS, DOE outlined the rationale for choosing the Caliente rail

corridor as preferred. The Department based that decision in part on the fact that the Carlin rail corridor would require crossing relatively greater amounts of private lands. Moreover, little infrastructure, such as roads and electric power, is available over long segments of the corridor, which would tend to make logistics during construction and emergency response capabilities more challenging. Overall, the Caliente rail corridor appears to have the fewest land-use or other conflicts that could lead to substantial delays in acquiring the necessary land and rights-of-way, or in beginning construction.

The Nevada Rail Corridor SEIS concludes that there are no significant new circumstances or information bearing on environmental concerns that would warrant further consideration of the Carlin rail corridor at the alignment level. Specifically, the Nevada Rail Corridor SEIS concludes that the complex land-ownership pattern along the Carlin rail corridor remains unchanged, which would increase the potential to affect construction of a railroad and increase the potential for delays.

2.4.2 (2051)

<u>Comment</u> - RRR000525 / 0029

The incorporation of new information in S.2.6 about the previously considered and rejected Carlin, Jean and Valley Modified corridors seems to be a matter of bringing the record up to date since 2002. Land-use and ownership conflicts add complexity and the likelihood of delay in the Jean and Valley Modified corridors, as noted in S.2.9.

Response

Land-use and ownership conflicts along the Carlin, Jean, or Valley Modified rail corridor would increase the potential for adverse impacts from the construction of a railroad, and increase the potential for delays that could affect the availability of a railroad in these corridors. Chapter 5 of the Nevada Rail Corridor SEIS provides additional details about new information on these rail corridors.

2.4.2 (2574)

<u>Comment</u> - RRR000071 / 0003

The commenter opposes the Carlin route because it passes through the Big Smokey or Monitor Valley, especially the latter because "it is one of the most beautiful and pristine places in the United States."

Response

The 2002 Yucca Mountain FEIS analyzed the aesthetic impacts of constructing a rail line in the Carlin rail corridor. In the Nevada Rail Corridor SEIS, DOE determined that there were no significant new circumstances or information bearing on environmental concerns warranted further consideration of the Carlin Corridor at the alignment level.

2.4.2 (2654)

<u>Comment</u> - RRR000664 / 0047

Eureka County agrees with the Department of Energy that the complex land use, private land ownership, and increasingly intricate mining activity in Crescent Valley, combined with other stated concerns, make the Carlin rail corridor an unviable rail corridor alternative.

Response

Thank you for your comment.

2.4.2 (2765)

<u>Comment</u> - RRR000664 / 0002

We [Eureka County Board of Commissioners] recognize, as does the Department of Energy, that the complex private/public land ownership patterns in Crescent Valley and the expanding mining exploration and development are impediments to the practical consideration of the Carlin corridor. We believe it is essential that the suite of EISs being reviewed provide an accurate assessment of impacts and alternatives. The uncertain future of the Yucca Mountain project combined with frequent changes in policy and direction, especially in the area of transportation, warrant a thorough and complete assessment of impacts for all proposed routes. Should DOE again change course regarding transportation decisions, it will be essential to start over anew, to consider new routes and transportation options.

Response

In the Nevada Rail Corridor SEIS, DOE updated the analysis of the Carlin rail corridor to identify significant new information or circumstances bearing on environmental concerns. Based on this analysis, DOE concluded that there were no significant new circumstances or information bearing on environmental concerns that warranted further consideration of the Carlin, Jean, or Valley Modified rail corridors at the alignment level.

2.4.2 (3087)

Comment - RRR000664 / 0011

If DOE were to identify the Carlin corridor as the preferred alternative, a more detailed environmental analysis would be required.

The supplemental information analyzed in the Corridor Draft SEIS confirms the unsuitability of the Carlin corridor as the preferred alternative for rail transport of high-level radioactive waste to Yucca Mountain. If the DOE were to alter its decision and identify the Carlin corridor as the preferred alternative, the DOE would need to do a far more detailed analysis of the environmental impacts of the rail line.

An EIS's discussion of alternatives "must look at every reasonable alternative, with the range dictated by the 'nature and scope of the proposed action.'" Idaho Conservation League, 956 F.2d at 1519, quoting State of California v. Block, 690 F.2d 753, 757 (9th Cir. 1982). The EIS must provide "sufficiently detailed information" to allow agencies "to decide whether to proceed with an action in light of potential consequences." Idaho Conservation League, 956 F.2d at 1519-20.

DOE would also need to do a much more detailed analysis of mitigative measures. As stated in the Council on Environmental Quality's (CEQ's) regulations for implementation of the National Environmental Policy Act (NEPA), consideration of alternatives to the proposed action is "the heart" of an Environmental Impact Statement (EIS). 40 C.F.R. Section 1502.14. See also Idaho Conservation League v. Mumma, 956 F.2d 1508, 1519 (9th Cir. 1992). The alternatives that must be considered in an EIS include alternatives for mitigating the environmental impacts of the proposed action. 40 C.F.R. Section 1502.14(f). Section 1502.16 of the CEQ regulations also requires an EIS to discuss the relative costs and benefits of mitigative measures.

The following are examples of environmental impacts of use of the Carlin rail corridor and potential mitigative measures that have not been identified or analyzed in the Corridor Draft SEIS. Nor have they been identified or analyzed in the 2002 FEIS for the Yucca Mountain repository.

The Corridor Draft SEIS does not identify the array of new facilities that would need to be constructed along the rail line, nor does it evaluate their environmental impacts. As demonstrated in the Rail

Alignment Draft EIS, construction of a rail line would require the addition of numerous facilities such as an interchange yard, staging yard, maintenance of way facilities, rail equipment and cask maintenance facilities, and a Nevada railroad control center. Id. at 2-5. None of these facilities were described in the 2002 FEIS. See Eureka County 2002 FEIS comments at 6. As the starting point for a rail line constructed in the Carlin corridor, most, if not all, of these facilities would probably be located in Eureka County. The facilities would increase many of the impacts previously examined, including socioeconomic impacts and land use impacts.

Although the Rail Alignment Draft EIS contains significant increases in the estimated cost of a rail line constructed in either the Caliente or Mina corridors, the Corridor Draft SEIS does not provide updated construction cost estimates for Carlin or any of the other corridors. Information based on current economic conditions and projections of future economic conditions would have to be provided if Carlin were selected as the preferred alternative.

The DOE would need to resolve conflicts between the Corridor Draft SEIS and supporting documents regarding whether or not the right-of-way will be fenced, a comment made by Eureka County to DOE in 2000. See Eureka County 2000 DEIS comments at 7. Most western ranching operations are based upon a combination of privately owned fee land and grazing leases on publicly owned lands. In most cases, the ranching unit depends on these grazing leases to be economically viable. Most grazing leases are held by the ranches that can access the lease as a logical part of their operation. Splitting an existing operation with a rail line that will limit access to the leased land can have significant adverse effects on the operation of the ranch. The degree of impact that splitting a ranching operation with the rail line will have will be much greater if the rail road right-of-way is fenced. However, the Corridor Draft SEIS does not provide enough information to permit a determination of which sections of the corridor in Eureka County, if any, would be fenced.

To make matters more confusing, in the Rail Alignment Draft EIS, DOE provides conflicting statements regarding fencing. For example, DOE states that it will consult with BLM during the final design phase to determine where fencing will be required on Public Lands. Id. at 4-61. In the sections on impacts to big game and wild horses and burros, however, DOE states that the rail line will not be fenced. Id. at 4-231 and 4-232. In the section on potential mitigation, DOE states that potential mitigation measure includes "limit fencing on public lands to those areas where safety is a concern, or where it is required for the safety of livestock" [Id. at 7-16], without stating who is going to determine whether the right-of-way must be fenced due to safety concerns.

While DOE concedes land use impacts are significant it understates them by using the amount of disturbed acreage as the primary indicator of land use impacts. See Corridor Draft SEIS, p. 5-7. Although the number of disturbed acres is one measure of land use impacts, it is not the only one. For linear facilities such as a rail line, an assessment of land use impacts should also include an evaluation of the impacts of bisecting current and future land uses. As discussed above, splitting a ranching operation with a rail line can have significant impacts on the entire operation, not just the area within the right-of-way. Similar impacts will be felt by other types of businesses and government operations.

The rail line will bisect many local roads, causing potentially significant impacts. The ability of vehicles to cross the rail line will greatly influence the degree of impact. See Eureka County Impact Assessment Report at 66-68 (2001) http://www.yuccamountain.org/impact01.htm. The EIS should present a full discussion of rail crossings. A crossing can be either at-grade or grade separated. At-grade crossings can be either signaled or unsignaled. Grade separated crossings may be either by structures constructed over the tracks or by underpasses. Grade separated crossings will be limited to major roads. Although the

length of trains will vary, the typical train will probably consist of three locomotives, a buffer car, up to 10 cask cars, another buffer car, and an escort car, and would be approximately 1,300 feet in length.

Ranching operations will be the most affected by the barrier to movements created by the proposed rail lines. The EIS should discuss mitigative measures that would allow livestock and equipment to cross the rail line, such as culverts and bridges. The EIS should also evaluate the feasibility of various locations for crossings, because possible locations for grade separation are highly dependent upon terrain. For example, the height required for separation can be provided by natural drainages. Underpasses will be limited to locations where underpasses can be constructed based on the topography and the profile of the proposed rail line. The degree of impact, and the effectiveness of mitigation measures, depend on a combination of the height of proposed road crossings (either at grade or grade separated) and proposed drainage structures.

Areas for the development of ballast and sub-ballast quarries, solid waste disposal facilities, construction lay-down areas, and construction staging areas are not identified. These areas are associated with land use impacts which cannot be estimated without information about the location of the support facilities.

Proposed rail line corridors also cross areas of potential future community growth. Although DOE identifies these areas, the DEIS does not contain an assessment of the impacts of this conflict on future community growth patterns.

The Carlin route crosses areas of potential future community growth for both Beowawe and Crescent Valley in Eureka County. Beowawe is currently bounded on the north by the Union Pacific tracks. The Carlin route and interchange facilities will prevent future growth of Beowawe to the east. The proposed route also passes just east of the community of Crescent Valley, preventing any eastward expansion of this community.

As Eureka County has previously commented, construction and operation of the rail line would also increase the possibility of rangeland wildfires. Eureka 2000 DEIS comments at 14. These impacts were identified by Eureka County but have not been assessed by DOE, nor have any mitigation measures been suggested. Mitigative measures should include the development of a plan for fire prevention and suppression, developed in cooperation with appropriate local, State, and federal agencies. The plan should include procedures to restore any land affected by a construction related wild land fire. Rail equipment used during construction and operation should be adequately equipped and maintained to reduce the potential fire hazard.

A large, temporary resident workforce would have significant socioeconomic impacts on small, rural communities in the Carlin Corridor, particularly in Crescent Valley in Eureka County where the rail line for the Carlin Corridor would originate. The estimated population of Eureka County in 2006 is 1,460 (Nevada State Demographer's Office). The County consists of two census districts, the Eureka county census division (CCD) and the Beowawe CCD, which is primarily the community of Crescent Valley. The 2000 Census reported only 548 people, or 33 percent of the residents in the Beowawe CCD. The portion of the Corridor Draft SEIS devoted to "socioeconomics" (Section 5.2.7) does not even mention Eureka County or Crescent Valley. As discussed above, DOE now states that significant additional facilities such as an interchange yard, maintenance of way facility, equipment maintenance facility, etc., will be required. Many of these facilities would probably be located near the start of the rail line at Beowawe if a rail line were constructed in the Carlin Corridor. Construction of these facilities would also increase the impacts on Crescent Valley, since the construction of these facilities would be at a fixed location near Crescent Valley, rather than further along the rail corridor.

In the Nevada Rail Corridor SEIS, the Department updated the analysis of the Carlin rail corridor to determine whether there were significant new information or circumstances bearing on environmental concerns that would warrant further consideration of the Carlin corridor. On the basis of that analysis, DOE determined that there were no significant new circumstances or information that would warrant further consideration at the alignment level.

2.4.2 (4027)

Comment - RRR001079 / 0001

Along the Jean rail corridor, a large reliever airport is being planned for Las Vegas McCarran. Jean is used for many aviation events, parachute training, glider operations, aerobatic events, young eagle flights, pilot training, etc.

Additionally, the west side of the Spring Mountains below Mount Charleston is an area of rugged terrain that is prone to flash floods.

Response

The environmental impacts of constructing a rail line in the Jean rail corridor were originally analyzed in the 2002 Yucca Mountain FEIS. The Nevada Rail Corridor SEIS updates the primary impact indicators and compares them to the original analysis in the 2002 Yucca Mountain FEIS. Based on this analysis, the Department concludes that land use and ownership conflicts have increased and that there were no significant new circumstances or information bearing on environmental concerns that would warrant further consideration of this rail corridor at the alignment level. See Section 5.3 of the Nevada Rail Corridor SEIS for additional details about the analysis of the Jean rail corridor.

2.4.3 Section Not Used

2.4.4 No-Action Alternative

2.4.4 (37)

Comment - 3 comments summarized

Commenters stated that DOE has erroneously described the No-Action Alternative as "DOE would not construct and operate a railroad within the Mina rail corridor." Commenters also stated that because Congress has directed DOE to proceed with the Yucca Mountain Repository, without a railroad in the Mina rail corridor, the Department would have to find an alternative means to transport spent nuclear fuel and high-level radioactive waste to the repository site. Alternative means of transportation would include (1) shipping waste along an alternative rail corridor, (2) shipping waste by rail to Nevada and by legal- or overweight trucks to Yucca Mountain in the state or (3) shipping waste by legal-weight or overweight trucks from reactor sites to Yucca Mountain. Commenters stated that DOE must expand the description of the No-Action Alternative to include these alternative means of transportation as an alternative to the Mina rail corridor. The Department must analyze the impacts from these alternative means of transportation in the Nevada Rail Corridor SEIS.

Response

In the Yucca Mountain FEIS, DOE analyzed two national transportation scenarios: mostly rail and mostly legal-weight truck. The Department specifically considered the human health and environmental impacts from the mostly legal-weight truck scenario in the FEIS. Based on the FEIS analyses, DOE made several decisions in a Record of Decision, one of which was selection of the mostly rail scenario as the transportation mode both nationally and in Nevada (69 *FR* 18557, April 8, 2004). In that Record of

Decision, DOE acknowledged that selection of the mostly rail scenario would ultimately require construction of a rail line in Nevada. Because DOE, as lead agency, analyzed the mostly legal-weight truck scenario in the FEIS and did not select it as the preferred mode of transportation in its Record of Decision, it is an issue the Department has already decided and, therefore, excluded from further consideration in the Nevada Rail Corridor SEIS.

The Nevada Rail Corridor SEIS supplements the analyses in the Yucca Mountain FEIS. It analyzes the Mina rail corridor, which DOE did not analyze in the FEIS, at a level of detail commensurate with that of the rail corridors analyzed in the FEIS to determine if it warranted further detailed analysis at the alignment level. In addition, the Nevada Rail Corridor SEIS updates information on the Carlin, Jean, and Valley Modified rail corridors to identify any significant new circumstances or information bearing on environmental concerns that would warrant further detailed evaluation of those rail corridors at the alignment level. The conclusion of the SEIS is that the Mina rail corridor warrants further consideration at the alignment level and that there are no significant new circumstances or information to warrant further consideration of the Carlin, Jean, or Valley Modified rail corridor at the alignment level.

In addition, CEQ regulations state that the No-Action Alternative can mean that the proposed activity would not take place, and the agency should compare the environmental impacts of taking no action with the impacts of permitting the proposed activity. [See *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 *FR* 18026, 18027 (March 23, 1981).] Therefore, it is appropriate that the No-Action Alternative for the Nevada Rail Corridor SEIS assumes maintenance of the status quo, which in this case would be to not construct a rail line in the Mina rail corridor.

2.4.5 Cost of Proposed Action or No-Action Alternative

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS on this subject.

2.4.6 Alternatives Suggested by Commenters

2. 4.6 (1913)

Comment - RRR000682 / 0030

Page 2-5: DOE should consider options for commercial ownership and operations of the rail line.

Response

As described in Section 2.2.6 of the Rail Alignment EIS, the primary purpose of the proposed railroad would be to ship spent nuclear fuel and high-level radioactive waste. Priority would go to shipments of those materials; therefore, DOE would retain ownership of and maintain the railroad. Following completion of the DOE shipping campaign, the Department could consider abandoning the rail line or transferring ownership and maintenance responsibilities to local communities or the private sector.

2. 4.6 (4092)

<u>Comment</u> - RRR001079 / 0003

I would like to make a suggestion of a rail line from a railroad about 20 miles south of Baker, CA, generally following Highway 127 and 373 to Amargosa, NV, to Yucca Mountain in Restricted Area r4808w. The distance is about 120 miles. Both the Caliente and Mina rail routes would pass through several mountain ranges.

I have flown all of the general corridors, including the restricted areas when on official search for missing aircraft for the civil air patrol authorized by the U.S. Air Force search and rescue center. The Mina and

Caliente routes have some very rugged terrain. The Baker-Yucca Mountain corridor has much more favorable terrain, weather, no mountains. There are airports at Baker, Shoshone, and Amargosa. There is also a large railroad switching terminal at Barstow-Daggett.

This suggestion would save a very large amount of money and time.

Response

In the early 1900s, DOE undertook feasibility studies to examine possible rail routes, including rail options called the Crucero and Ludlow routes, that would connect Yucca Mountain to the national rail system near Baker, California (DIRS 104792-YMP 1990, all). These routes would connect to the Union Pacific Railroad or Burlington Northern Santa Fe Railroad east of Barstow, California, run north to Baker, and then proceed generally northwest to the proposed repository. These routes would pass through land protected by the California Desert Protection Act (1994) and protected wilderness land. For this reason, DOE did not further evaluate these routes. Access to land would be the major challenge with these routes; therefore, DOE did not consider them to be feasible. DOE eliminated these routes from further study in 1995 (DIRS 104795-CRWMS M&O 1995, pp. 30 to 33).

2.4.7 Other Comments on Alternatives

2.4.7 (82)

<u>Comment</u> – 2 comments summarized

The Rail Alignment EIS notes that U.S. Air Force opposition and land use complexities were sufficient reasons for elimination of the Caliente-Chalk Mountain route and the Carlin route, respectively, from further detailed NEPA analysis. In contrast, DOE has not eliminated the Mina rail corridor from detailed consideration, despite the fact that the Walker River Paiute Tribe formally opposes shipment of spent nuclear fuel and high-level radioactive waste across Tribal lands. The DOE application of opposition and land use conflict criteria to decisions on whether to carry alternatives forward for detailed analysis appears to be inconsistent in relation to the Mina and Caliente-Chalk Mountain routes. For reasons of consistency, DOE should either eliminate both the Mina and Caliente-Chalk Mountain rail corridors from detailed analysis or carry both routes forward for detailed analysis.

Response

Land-use conflicts were an important consideration, although not the only consideration, in DOE decisionmaking and determining if a rail corridor warranted further, more detailed study to identify an alignment for the construction and operation of a railroad.

In the Foreword to the Nevada Rail Corridor SEIS, DOE describes the circumstances under which it decided to evaluate the Mina rail corridor. In short, after discussions with the Walker River Paiute Tribe, DOE prepared a preliminary feasibility study of the corridor and, based on the results of that study, issued an Amended Notice of Intent to expand the scope of the Rail Alignment EIS to include the corridor (71 *FR* 60484, October 13, 2006).

DOE also announced at that time that it intended to update relevant information regarding three other rail corridors previously analyzed in the FEIS -- Carlin, Jean, and Valley Modified. As discussed in DOE's Record of Decision (April 8, 2004), use of the Caliente-Chalk Mountain corridor, would conflict with U.S. Air Force and Department of Defense testing and training activities directly related to national security interests on the Nevada Test and Training Range. Thus, DOE eliminated the Caliente-Chalk Mountain corridor from further consideration.

Given the above, DOE proceeded to evaluate the Mina rail corridor to determine whether it warranted further consideration to identify an alignment for the construction and operation of a railroad. DOE also proceeded to update the environmental information for the other three corridors to determine whether there were any significant new circumstances or information bearing on environmental concerns that would warrant further consideration of these corridors at the alignment level.

As reported in Chapter 6 of the Nevada Rail Corridor SEIS, DOE found that, on balance, the Mina rail corridor is environmentally preferable because in general, it would present fewer private-land conflicts, less surface disturbance, and smaller impacts to wetlands and air quality than would the Caliente rail corridor. The Department also found that land use ownership and conflicts remained or had increased for the other three corridors since the evaluations of the FEIS, and concluded there were no significant circumstances or information bearing on environmental concerns that would warrant further consideration of the three corridors at the alignment level. Accordingly, DOE evaluated the Mina rail corridor as a "non-preferred alternative" at the alignment level, even though the Walker River Paiute Tribe had withdrawn its participation in the EIS process.

2.4.7 (962)

<u>Comment</u> - RRR000617 / 0016

Page 1-6, Section 1.3: The Caliente-Chalk Mountain rail corridor, also previously analyzed in the Yucca Mountain FEIS, was previously rejected by DOE on the grounds that it would conflict with the mission of the U.S. Air Force. DOE has not updated information concerning the Caliente-Chalk Mountain rail corridor in this Nevada Rail Corridor SEIS. What actions did DOE take to verify this conflict still exists? The environmental information should have been updated like it was for the other corridors and this could have been restated if it is still the case.

The SEIS must include an update of information regarding the nature of immitigable specific conflicts between the rail alignment and the Nevada Testing and Training Range.

Response

In the 2002 Yucca Mountain FEIS, the Caliente-Chalk Mountain rail corridor was identified as a nonpreferred alternative because the U.S. Air Force believed that the route would be inconsistent with the national security uses of the Nevada Test and Training Range. Given this conflict, DOE eliminated the Caliente-Chalk Mountain rail corridor from further consideration. The U.S. Air Force is a cooperating agency in the preparation of the Nevada Rail Corridor SEIS and the Rail Alignment EIS because of its jurisdiction over airspace and land associated with the Nevada Test and Training Range and because it offers special expertise associated with portions of the rail corridors near the Nevada Test and Training Range.

2.4.7 (1398)

<u>Comment</u> - RRR000656 / 0024

Section 3.2.1.2, page 3-10: Here and elsewhere, Montezuma Option 2 should conform to alternate routes suggested for the Caliente Corridor, or vice-versa.

Response

Where practicable, the alternative segments described for the Goldfield area along the Caliente rail alignment and the alternative segments described for the Montezuma area along the Mina rail alignment conform. However, conformities were not always possible given the differing natures of the two alignments. For example, DOE did not consider the shared portion of Montezuma alternative segments 1 and 3 a practical alternative segment for the Caliente rail alignment, because it would have added

considerable length and would not have provided any environmental advantage over the alternative segments in the Goldfield area.

2.4.7 (1709)

Comment - RRR000117 / 0006

We [Nuclear Waste Strategy Coalition] agree with the elimination of the Caliente-Chalk Mountain rail corridor since it crosses part of the Nevada Test and Training Range and thus there is the possible interference with military mission activities.

Response

Thank you for your comment.

2.4.7 (4030)

Comment - RRR001079 / 0002

The out of Apex plan would involve the City of Las Vegas, the City of North Las Vegas, Clark County, Nye County, Desert National Wildlife Refuge, private property, an Indian Reservation, Nellis Air Force Base operations, air to ground targets, the town of Indian Springs, and Creech Air Force Base Unmanned Aerial Vehicle, Thunderbird flying, and Restricted Areas 4806W and 4808S.

Response

Section 5.4.1 of the Nevada Rail Corridor SEIS discusses land-use conflicts in the Valley Modified rail corridor.

2.5 Section Not Used

2.6 Design and Performance

2.6 (1135)

Comment - RRR000663 / 0037

Although the Draft Rail Alignment EIS provides significant increases in the estimated cost of a rail line constructed in either the Caliente or Mina Corridors, the Draft Rail Corridor SEIS does not provide updated construction cost estimates for any of the other corridors. Therefore, it is impossible to adequately evaluate the merits of the Caliente or Mina routes compared to other corridors not selected. Given the high estimated cost of the Caliente rail line, costs of constructing the rail line in other corridors should have been updated.

Response

DOE based the conclusions in Chapter 6 of the Nevada Rail Corridor SEIS on the environmental information in 12 resource areas that it updated for the Carlin, Jean, and Valley Modified rail corridors. Based on the updated environmental information, DOE concluded that there are no significant new circumstances or information bearing on environmental concerns that warranted further consideration of those rail corridors at the alignment level. The Nevada Rail Corridor SEIS does not provide cost information because cost is not a factor in DOE decisionmaking related to selection of rail corridors for further analysis at the alignment level.

2.6 (1946)

<u>Comment</u> - RRR000682 / 0028

Page 2-2, Section 2.2.1: The description of the Mina Corridor is misleading. The corridor is comprised of new construction and reconstruction. The existing portion of the rail line from Hazen to Mina is

subject to reconstruction. New construction extends from Hawthorne south to Yucca Mountain. The description of the corridor needs to be refined.

Response

The Proposed Action does not involve reconstruction of the existing rail line from Hazen to Wabuska. DOE would limit upgrades in this area to signaling systems in the existing right-of-way. DOE proposed adding sidings to the existing rail line only along the U.S. Department of Defense Branchline, which is the section of track between Wabuska and Hawthorne.

2.6 (4035)

<u>Comment</u> - RRR000671 / 0019

Page 2-10, Section 2.2.5, Railroad Operations and Maintenance, states 50 years for the shipment of spent nuclear fuel, high-level radioactive waste, and "other materials." It is unclear what is defined by "other materials."

Response

"Other materials" refers to materials and equipment that DOE would need to construct and operate a repository.

2.7 Existing Environment and Environmental Consequences

2.7.1 Land Use and Ownership

2.7.1 (128)

<u>Comment</u> – 6 comments summarized

Potential land use conflicts in Crescent Valley are substantial and growing due to expanding mining activity. As a consequence, the Carlin rail corridor includes major obstacles to development of a rail line.

Response

Figure 5-3 of the Nevada Rail Corridor SEIS shows the complex land ownership pattern and location of the Cortez Mine in Crescent Valley along the Carlin rail corridor. This ownership pattern and the rise of mining activity in Crescent Valley were important factors in the DOE determination that the Carlin rail corridor did not warrant further consideration.

2.7.1 (1148)

<u>Comment</u> - RRR000663 / 0038

Land use conflicts identified in the Corridor Draft SEIS include conflicts with private mining operations. Supplemental information in the Corridor Draft SEIS shows that land use conflicts with respect to mining operations are on the rise, particularly in the Carlin Corridor. As DOE acknowledges, the rising price of gold and other metallic resources has caused a "resurgence in the number of mining claims" (CA p. 5-11). Most of the conflicts are where known mining patents are within the proposed corridors and where there is increasing activity today.

DOE understates the potential for land use conflicts over mineral development. While the very nature of mineral development precludes the precise geographical identification of conflicts with future mining projects, it is possible to predict that certain areas have strong mineral potential. While a number of exploratory activities are underway, it is reasonable to predict that significant additional mineral deposits will be discovered in the corridors in Nevada.

Depending on the distance between the rail line and the deposits, a rail line in the proximity of newly discovered deposits could be a detriment to the development of newly discovered mineral resources. Potential conflicts include the intersection of rail line and haul roads used to transport mined material from a mine for processing.

Response

DOE evaluated potential conflicts with mineral and energy extraction for the Caliente, Mina, Carlin, Jean, and Valley Modified rail corridors in the Nevada Rail Corridor SEIS. DOE developed the alignments to avoid private land, environmentally sensitive features, and areas with active mineral and energy extraction. The SEIS acknowledges that conflicts could occur where a rail line crossed mining claims, energy leases, and public roads.

2.7.1 (1720)

<u>Comment</u> - RRR000682 / 0032

Page 2-13, Table 2-1, needs to describe mitigation and monitoring measures to be undertaken by DOE for rail construction.

Response

Because the Nevada Rail Corridor SEIS updates information concerning the rail corridors DOE discussed in the Yucca Mountain FEIS and provides a corridor-level overview analysis, discussion of mitigation in the SEIS is not appropriate. However, DOE discusses mitigation measures and best management practices in the Rail Alignment EIS (Chapter 7), which contains a more in-depth analysis of impacts.

2.7.1 (1724)

<u>Comment</u> - RRR000682 / 0015

Page S-10, Section S.2.4.1, 3rd paragraph: The EIS needs to include specific passages to BLM resource management plans and policies.

Response

Sections 3.2.1, 3.2.4, and 3.2.9 of the Nevada Rail Corridor SEIS discuss the BLM resource management plans that apply to the Mina rail corridor (the Carson City Consolidated Resource Management Plan, the Tonopah Resource Management Plan, and the Las Vegas Resource Management Plan).

2.7.1 (1839)

<u>Comment</u> - RRR000682 / 0038

Figure 3-1 should be expanded to include the Churchill County portion of the Mina rail corridor.

Response

The Nevada Rail Corridor SEIS discusses the initial Mina alternative segments (those developed before the scoping meetings), none of which are in Churchill County. The SEIS discusses only Schurz bypass options 1, 2 and 3. After the scoping meetings, DOE developed Schurz alternative segment 6, which is in Churchill County but only on the Walker River Paiute Reservation. Figure 2-13 in the Rail Alignment EIS shows Schurz alternative segment 6. Figure 3-1 in the Nevada Rail Corridor SEIS does not show Schurz alternative segments that DOE developed after the scoping meetings.

2.7.1 (1841)

Comment - RRR000682 / 0037

Land Use Section: The impact analysis does not quantify or qualify any impacts. The analysis discusses potential conflicts and issues, but does not consider them small, medium or large, why? There are

significant impacts when new rail construction occurs on private lands. This section calls for impacts on grazing operations and loss of forage, but offers nothing in terms of mitigation. Why?

Response

Where practical, DOE has quantified potential impacts and other characteristics of the Proposed Action. In other instances, it is not practical to quantify impacts and DOE provides a qualitative assessment of potential impacts, for example, small, moderate, or large. Regarding land use, DOE provides quantitative information. Because the Nevada Rail Corridor SEIS updates information concerning the rail corridors DOE evaluated in the Yucca Mountain FEIS and because DOE developed the SEIS to provide a corridor-level overview analysis and comparison of impacts, a discussion of mitigation is not appropriate. However, DOE discusses mitigation measures and best management practices in the Rail Alignment EIS (Chapter 7), for which it conducted a more in-depth analysis of impacts.

2.7.1 (1910)

<u>Comment</u> - RRR000682 / 0033

Pages 2-14 and 2-15, Land Use: DOE describes the resources and conflicts, but never establishes whether such conflicts are significant adverse environmental impacts or whether the conflicts represent small, median, or large impacts. The analysis needs to make some judgment about the impacts.

Response

Where practical, DOE has quantified potential impacts and other characteristics of the Proposed Action. In other instances, it is not practical to quantify impacts and DOE provides a qualitative assessment of potential impacts, for example, small, moderate, or large. Regarding land use, DOE provides quantitative information.

2.7.1 (2324)

<u>Comment</u> - RRR000836 / 0014

The current Ely Resource Management Plan does not account for or permit the Yucca Mountain site or rail lines to the site. The proposed Ely Resource Management Plan, which is not in effect at this time and has not been approved, mentions its possibility in a single paragraph. Law suits can arise from construction of a facility or rail line that is not covered in the Resource Management Plan of an area. The repository and rail lines must be described in detail in the Plans in order to be authorized. The rail lines were not discussed during deliberation over development of the plan. How will the Resource Management Plan or the Resource Management Plans of any BLM service area be amended to account for a rail line/repository? How do these drafts relate to any and all Resource Management Plans or Forest Service Plans in all the alternative areas?

Response

The BLM is a cooperating agency in the preparation of the Nevada Rail Corridor SEIS and the Rail Alignment EIS. The Ely Office and other BLM offices provided guidance to DOE on the development of the EIS in relation to BLM resource management plans. Those plans provide a framework for the BLM to manage public land and provide guidelines for new projects, such as the issuance of new rights-of-way. The BLM could adopt the EIS as part of its role in processing the DOE railroad right-of-way application. Therefore, the land-use sections of the EIS discuss relevant provisions of the BLM resource management plans and have assessed the proposed project's conformance with those plans. DOE revised Sections 3.2.2.4.1.1 and 4.2.2.2.3.1 of the EIS to address provisions of the proposed Ely District Resource Management Plan issued in November 2007. DOE found that the proposed railroad would not be inconsistent with BLM resource management plans.

2.7.2 Air Quality

2.7.2 (3117)

<u>Comment</u> - RRR000691 / 0021

Although the EIS states that due to the rural nature of the Mina Corridor impacts to air quality will be unclassifiable for air pollutant Ambient Air Quality Standards, any release of additional air pollutants within tribal aboriginal or traditional cultural, religious or gathering areas are of great concern to the [Timbisha Shoshone] Tribe. The EIS should include information concerning what effect, if any, the release of nonradiological air pollutants will have within both rail corridor study areas, specifically within any traditional Native American religious, cultural and gathering areas. Studies should include what effects nonradiological air pollutants may have on sensitive groups, such as tribal elders and children.

Response

The Nevada Rail Corridor SEIS states that portions of the Mina rail corridor are not classified for air quality because ambient air quality measurements are not available. Due to their rural setting, DOE assumed that these areas are in attainment for National Ambient Air Quality Standards. Sections 3.2.4 and 3.3.4 of the Rail Alignment EIS estimated the most likely existing background concentrations along the Caliente and Mina rail alignments, respectively. DOE conducted air quality modeling along sections of the alignments where emissions from the proposed project would be highest to determine if values would exceed National Ambient Air Quality Standards. The purpose of these standards is to protect human health, with an adequate margin of safety, including sensitive populations such as children, the elderly, and individuals suffering from respiratory disease. Only during construction near the quarries (Garfield Hills and South Reveille Valley), construction of the Staging Yard in Hawthorne, and construction of the rail alignment east of Schurz could air pollutant concentrations exceed the standards. Exceedances near Hawthorne and Schurz would apply only at the edge of the construction right-of-way and would occur only during the relatively short time of construction activities (less than 6 months).

Only 24-hour PM_{10} and $PM_{2.5}$ concentrations showed the potential for exceeding the standards. Air quality dispersion modeling for Schurz showed that the highest simulated 24-hour PM_{10} and $PM_{2.5}$ concentrations in town, including the highest measured background concentration, would be 105 and 25 micrograms per cubic meter, respectively, both of which are below National Ambient Air Quality Standard levels.

For construction of the rail line, the Staging Yard, and the quarry, DOE would have to obtain a Surface Area Disturbance Permit Dust Control Plan, which would address in detail the best methods for controlling fugitive dust, which would limit these emissions so there would be no exceedances of National Ambient Air Quality Standards. The plan could require such measures as paving roads, cessation of operations when winds made control of fugitive dust difficult, and temporary monitoring of particulate matter to ensure that no violations occurred during construction.

DOE does not anticipate adverse effects to sensitive populations from the release of air pollutants along any portion of either rail alignment.

2.7.3 Section Not Used

2.7.4 Hydrology

2.7.4 (54)

Comment - 3 comments summarized

Several commenters said that DOE should evaluate impacts to surface-water features such as the Lahontan Reservoir and Carson River in the Nevada Rail Corridor SEIS because they are in the Mina rail corridor. One commenter said that the Lahontan Reservoir and the Carson River are perennial water bodies.

Response

The Amended Notice of Intent (71 *FR* 60484, October 13, 2006) defined the Mina rail corridor as beginning at Wabuska, Nevada, and proceeding southeast. Therefore, physical features and water bodies that include the Lahontan Reservoir are not in the Mina rail corridor. DOE could use the existing branch rail line from Hazen to Wabuska that passes near the Lahontan Reservoir without substantial improvements, so did not consider it part of the corridor.

2.7.4 (1908)

<u>Comment</u> - RRR000682 / 0034

Page 2-15, Hydrology: This section simply describes what could happen and not whether there will or will not be impacts. There is no impact analysis.

Response

The purpose of Section 2.4.3 of the Nevada Rail Corridor SEIS is to summarize impacts to hydrology. Section 3.2.3.2 of the SEIS provides a more detailed analysis of potential impacts.

2.7.4 (2623)

<u>Comment</u> - RRR000523 / 0035

Page 4-23: DOE has not addressed the use of groundwater for drinking water supplies and how it intends to meet drinking water standards for human consumption at construction camps.

Response

Section 2.2.2.2 of the Rail Alignment EIS describes construction camps. Potable and non-potable water needs would be met by drilling wells at each camp. A portable water treatment facility would be installed to meet water needs and would comply with applicable federal and state requirements. Water would be stored in on-site tanks for camp use. The well, treatment facilities, and water storage tank(s) are anticipated to cover 1 acre. Depending on the final design, the water treatment process would result in the production of minor amounts of sludge. DOE would dispose of this sludge at a licensed facility in accordance with state and federal laws.

2. 7. 4 (2694)

<u>Comment</u> - RRR000523 / 0022

Section 3.2.3.2.2, Groundwater: DOE needs to describe its options to provide adequate water for rail construction activities in the event the State Engineer denies permits for wells supporting construction. Also, DOE needs to describe how it will meet drinking water standards for construction camps in the event groundwater does not meet Maximum Contaminant Levels.

Response

As with any major construction project, the building and operation of a railroad would require an adequate supply of water. This water would be necessary for construction materials such as concrete,

compaction of earthen materials during construction of the rail line, control of dust, support of operations at facilities during and after the construction phase, and emergency use such as fire suppression during railroad construction and operations.

As an alternative means of acquiring water, including instances where DOE could meet drinking water quality standards from a newly installed well, the Department could use existing wells to obtain the necessary water (that is, by purchasing it from a municipality or other water-rights holder). DOE would follow the requirements of state water law in Nevada Revised Statute Section 533 in applying for and acquiring water rights for the proposed railroad. Unless DOE sought an additional water appropriation from the State Engineer, the Department would have to limit the quantity of groundwater it could acquire from a municipality or other water-rights holder such that the total amount of water pumped from a well did not exceed the existing authorized annual or seasonal duty for that well for the calendar year or authorized pumping season, and the pumping rate in that well did not exceed the authorized maximum diversion rate for the well.

DOE has not proposed other alternatives for acquiring water.

2.7.4 (2695)

<u>Comment</u> - RRR000523 / 0021

Section 3.2.3.2.1, Surface Water, offers little in the way of impact analysis and nothing in terms of mitigation. More specific details should be provided.

Response

DOE would adhere to engineering design standards and construction practices and would implement best management practices during rail line construction to minimize impacts from sedimentation and erosion. Erosion and sediment control structures would reduce the transport of sediments and minimize erosion and the degradation of water resources. A runoff interceptor trench or swale would convey surface runoff, minimize soil erosion from surface runoff, and reduce the degradation of receiving water resources. All operations and maintenance activities would comply with applicable regulatory requirements for spill-prevention measures, reporting, and remediating spills of oil or hazardous substances. Stormwater pollution control practices would require implementation of best management practices, storage of hazardous materials inside facilities or use of secondary containment or other protective devices, and location of spill control and containment equipment close to hazardous material and fuel storage areas. DOE would prepare a Spill Prevention, Control, and Countermeasure Plan for all railroad operations.

DOE expanded Section 3.2.3.2.1 of the Nevada Rail Corridor SEIS to address sediment and erosion control measures and spill prevention measures that it would implement to minimize impacts during rail line construction.

2.7.4 (2696)

<u>Comment</u> - RRR000523 / 0020

Page 3-20, paragraph 5: What are the impacts to water quality from bridge construction and what is the appropriate mitigation? Please explain.

Response

As stated in Section 3.2.3.2.1 of the Nevada Rail Corridor SEIS, construction activities could adversely impact surface-water quality due to increased sedimentation, because rail line construction activities would result in the potential for erosion and sediment during precipitation events. Sediment would

generally be contained onsite through the use of best management practices, including erosion- and sedimentation-control measures. Therefore, the potential for off-site impacts to surface water from increased sediment loads would be small.

All operations and maintenance activities would be required to comply with applicable regulatory requirements specified for spill-prevention measures, reporting, and remediating spills of oil or hazardous substances. Storm-water pollution control practices require that best management practices be implemented, hazardous materials be stored inside facilities or have secondary containment or other protective devices, and that spill control and containment equipment be stationed close to hazardous material and fuel storage areas. A Spill Prevention, Control and Countermeasure Plan would be required for all railroad operations. DOE expanded Section 3.2.3.2.1 of the Nevada Rail Corridor SEIS to further address sediment and erosion control measures and spill prevention measures the Department would implement.

Mitigation measures include minimizing the construction footprint in stream channels, constructing bridges in a dry season of the year, and using techniques such as those mentioned above and summarized in Chapter 7 of the Rail Alignment EIS.

2.7.4 (2697)

Comment - RRR000523 / 0019

Figure 3-5: DOE should include a similar figure which shows the surface water features in the corridor.

Response

Figures 3-1 and 3-2 of the Nevada Rail Corridor SEIS show major surface-water features.

2.7.4 (2699)

<u>Comment</u> - RRR000523 / 0017

Page 3-14: DOE failed to include a discussion of Lahontan Reservoir, which is adjacent to the Mina corridor. The reservoir and the Carson River are adjacent to the corridor. Both features are important locally and regionally to provide agricultural and drinking water supplies in the region.

Response

The Amended Notice of Intent (71 *FR* 60484, October 13, 2006) defined the Mina rail corridor as beginning at Wabuska on the north end and proceeding southeast. Therefore, physical features and water bodies such as the Lahontan Reservoir are not in the rail corridor. DOE would use the existing Union Pacific Railroad branch rail line from Hazen to Wabuska without substantial improvements, so did not consider it to be part of the corridor. As part of the national transportation studies, the Yucca Mountain FEIS analyzed the environmental impacts of using existing rail lines outside the defined rail corridors in Nevada.

2.7.4 (3160)

<u>Comment</u> - RRR000691 / 0030

The EIS anticipates potential impacts to surface and groundwater to be small. However, the EIS does not discuss potential impacts, if any, to the Ash Meadows alluvial aquifer that is nearest tribal trust lands within the Death Valley National Park. Any information concerning potential contamination is of intrinsic concern to the [Timbisha Shoshone] Tribe because it maintains a 300 plus acre trust land area near the Ash Meadows aquifer which is within the Tribe's homeland situated in the heart of the Death Valley National Monument. The Tribe is concerned about any radiological or hazardous material contamination of available drinking waters to aquifers near the Tribe's trust lands. Moreover, the Tribe is

specifically concerned about any migration of polluted waters to the Tribe's Death Valley trust lands, where a significant population of its membership resides, and to non-trust areas, where high percentages of tribal members reside. Therefore, the EIS is incomplete absent additional studies concerning impacts to both surface and groundwaters, and potential contaminated water migration upon the Ash Meadows [alluvial] aquifers.

Response

Impacts to water users remote from the Mina, Carlin, Jean, and Valley Modified rail corridors are outside the scope of the Nevada Rail Corridor SEIS. Ash Meadows is outside the region of influence for groundwater impacts analysis. However, an analysis of impacts to groundwater in the Rail Alignment EIS addresses the commenter's concern.

As described in Sections 4.2.6.2.1 and 4.3.6.2.1 and summarized in Sections 4.2.6.5 and 4.3.6.5 of the Rail Alignment EIS, the results of the groundwater resource impacts analysis indicate that the effects of withdrawals from proposed wells at the range of withdrawal rates DOE would need for railroad construction and operations would be localized. The duration of the impacts from most water withdrawals and the wells with the highest production rates (those associated with construction of the rail roadbed) would be short-term. The effects in each case for which DOE assumed that average withdrawal rates would occur at the well locations would be limited to a maximum horizontal distance of about 0.5 mile or less and generally a shorter distance for the Caliente rail alignment. Analysis results indicated that the effects in each case for which DOE assumed a hypothetical withdrawal rate of 225 gallons per minute at each proposed well location would be limited to a maximum horizontal distance of about 0.75 mile or less for the Caliente rail alignment and, including one case where the pumping rate could be as high as 350 gallons per minute, to a maximum horizontal distance of about 0.7 mile for the Mina rail alignment.

As summarized in Sections 4.2.6.5 and 4.3.6.5 of the Rail Alignment EIS, for areas in which new water wells would be near a boundary between adjacent hydrographic areas, proposed groundwater withdrawals would probably not affect downgradient hydrographic areas because (1) there are no identified existing groundwater users in the downgradient groundwater basins within 1 mile of any proposed withdrawal location, and (2) available hydrogeologic information indicates that significant interbasin groundwater flow does not occur in the areas downgradient of proposed well locations.

For these reasons, DOE anticipates no impacts to groundwater resources in the Ash Meadows aquifer as a result of proposed withdrawals to support construction and operations of a railroad along the Caliente or Mina rail alignment.

2.7.4 (3161)

<u>Comment</u> - RRR000691 / 0031

The EIS is absent information for the Mina Corridor concerning the following:

- Information concerning potential water shortages and how water shortage measurements will be implemented.
- Data used to quantify how it concluded surface water impacts will be small. In the event that use of ground water during construction results in a short term decrease in ground water availability what regional alternatives are presently being contemplated.

Response

DOE would follow the requirements of Nevada state water law in applying for and acquiring water rights for the proposed railroad. This process necessarily entails an assessment of the availability of water for the proposed uses.

The results of groundwater resource impacts analyses indicate that the effects of withdrawals from proposed wells at the range of withdrawal rates that would be necessary for railroad construction and operation would be localized. In addition, the duration of impacts from most water withdrawals and wells with the highest production rates (those associated with construction of the rail roadbed) would be short.

Because of the speculative nature of such an occurrence or scenario, DOE did not analyze conditions that could result from a potential future water shortage.

2.7.5 Biological Resources and Soils

2.7.5 (2372)

<u>Comment</u> - RRR000664 / 0017

While the Corridor Draft SEIS correctly notes that soil attributes of "shrink swell" and "erodes easily" are common in the Carlin Corridor (Corridor Draft SEIS at 5-18), DOE fails to acknowledge that the "erodes easily" soils would require aggressive erosion control methods. DOE acknowledges this concern but dismisses it by simply stating that erosion control and revegetation would minimize these concerns. Coping with soils that erode easily is a potentially significant impact that merits recognition. Moreover, the potentially significant impact of easily eroded soils on water quality is not addressed in Section 5.2.3.1 (entitled "Surface Water").

Similarly, DOE underestimates the difficulty posed by shrink swell soils with respect to the construction of the rail line. Shrink swell soils are not usually suitable for compacted fill. As soil water content increases, these soils will swell, heaving upward. When the soil moisture decreases, the soil shrinks causing the ground surface to recede. Therefore, where these soils are encountered, it would be difficult to balance the cut and fill requirements of construction of the rail line in the proposed corridor. Additional borrow areas would be required, probably outside of the corridor assessed, in order to obtain sufficient quantities of fill for the roadbed. As previously noted by Eureka County, significant fill material would probably be required in Eureka County in order to maintain grade requirements for the proposed rail line when climbing out of Crescent Valley. The impact of additional fill requirements has not been assessed by DOE.

Response

The Nevada Rail Corridor SEIS updates information on rail corridors previously considered in the Yucca Mountain FEIS. The Nevada Rail Corridor SEIS states that the soils within the Carlin rail corridor and the potential impacts to those soils remain unchanged since DOE completed the Yucca Mountain FEIS (Section 5.2.4).

2.7.5 (2401)

<u>Comment</u> - RRR000664 / 0018

The Corridor Draft SEIS does not adequately address the potential impact of construction of rail line on the spread of noxious weeds and invasive species. ... The discussion of noxious weeds is inadequate in several respects. First, there is no mention of noxious weeds in the section on the Carlin Corridor, despite the importance of livestock grazing to the area. The only part of the Corridor Draft SEIS that [discusses] noxious weeds and invasive species is the discussion of the Mina Corridor.

Moreover, the discussion of the Mina Corridor is inadequate to address the issue of noxious weeds. While DOE does acknowledge that noxious weeds may be a problem, it does not adequately address the nature or effectiveness of measures proposed for controlling them, or possible conflicts with other mitigative measures. For instance, the DOE states that "clearing vegetation and disturbing the soil could create habitat for colonization by noxious weeds and invasive species in the Mina corridor. . ." Corridor Draft SEIS at 3-26. DOE then concludes that reclamation of disturbed areas would reduce the colonization by noxious weeds. Under cumulative impacts for the Mina corridor, DOE further notes that linear disturbances, such as rail lines, may result in the spread of noxious weeds into areas where they had not previously been a problem. DOE then concludes that the "strict adherence to best management practices should reduce the potential for impacts" and that the cumulative impacts, would therefore, be small. Id. at 4-25.

Response

The Nevada Rail Corridor SEIS does not evaluate details such as control of invasive plant species and noxious weeds. The Rail Alignment EIS addresses those details for potential alignments in the Caliente and Mina rail corridors.

The Nevada Rail Corridor SEIS focuses on environmental conditions that would make a corridor unsuitable for construction of a rail line or that could help to discriminate the impacts among the corridors. The reason for the difference in the treatment of weeds for the Mina rail corridor compared with the Carlin rail corridor is as follows: The update presented for the Carlin, Jean, and Valley Modified rail corridors was undertaken to determine whether there are any significant new circumstances or information bearing on environmental concerns since DOE completed the Yucca Mountain FEIS in 2002 that would warrant further consideration of those corridors at the alignment level.

2.7.5 (2622)

<u>Comment</u> - RRR000523 / 0036

Section 4.2.2.4.2: DOE needs to set forth measures it will implement to control invasive and noxious weeds during construction. Neither the cumulative impact section nor the impact analysis addresses this issue. Monitoring should be required.

Response

The Nevada Rail Corridor SEIS does not evaluate details such as control of invasive species and weeds. The Rail Alignment EIS includes such details for the Caliente and Mina rail alignments. The SEIS focuses on environmental conditions that would make a corridor unsuitable for construction of a railroad or that could help to discriminate impacts among the corridors.

2.7.5 (3166)

<u>Comment</u> - RRR000691 / 0036

Does DOE plan any additional studies in the Mina corridor/alignment to determine whether any existing plant life is BLM-designated sensitive?

Response

DOE obtained lists of plant species the BLM has designated as sensitive for the corridors the Department evaluated and updated (see Section 3.2.4.1.1 of the Nevada Rail Corridor SEIS). In addition, DOE obtained Geographical Information System maps and plotted the locations of known sightings and habitat areas for such species. Biologists used this information during field reconnaissance trips to the potential rail corridors (DIRS 182772-MTS 2007, p. 38; DIRS 182760-URS Corporation/Potomac Hudson

Engineering 2006, all). DOE has applied to the BLM for a right-of way grant. The BLM could include stipulations in such a grant for additional studies or restrictions that DOE would have to perform or observe for sensitive species.

2.7.5 (4070)

<u>Comment</u> - RRR000671 / 0021

Page 3-24 indicates that the Railroad Valley Springfish, a federally and state classified threatened species of concern to the Western Shoshone people, but the document does not mention or consider that.

Response

DOE revised Section 3.2.4.1.1 of the Nevada Rail Corridor SEIS to note that the Western Shoshone consider the Railroad Valley Springfish sensitive. The Department has not changed its assessment of no impact to this species.

2.7.6 Cultural Resources

2.7.6 (1486)

<u>Comment</u> - RRR000693 / 0003

Section 3.2.5.2, Potential Impacts to Cultural Resources: The EIS needs to address the impacts to mineral (paint) sources along the corridor that will be impacted by the rail line, especially along the Cuprite and Stonewall area.

Response

DOE modified Chapter 3, Section 3.2.5.2, of the Nevada Rail Corridor SEIS to include a reference to the presence of mineral, medicinal, and food plant areas. Identification of specific resources of concern is an ongoing process in which tribal representatives would be involved before the start of construction.

2.7.6 (1488)

<u>Comment</u> - RRR000693 / 0004

Unavoidable Adverse Impacts/Irretrievable Commitments of Resources, Section 4.3.1.5, Cultural Resources: DOE should make every effort to work with the Tribes who have aboriginal and traditional ties to avoid cultural resources along the entire rail corridor.

Response

DOE agrees with this recommendation. The Department's primary interaction with tribes has been through the Consolidated Group of Tribes and Organizations. To better understand the locations and importance of areas and resources significant to tribal representatives, the Department plans additional studies. DOE is committed to continue its Native American Interaction Program through the direct involvement of tribes in cultural resource and ethnographic study efforts before railroad construction.

2.7.6 (2693)

<u>Comment</u> - RRR000523 / 0023

Section 3.2.3.2.1: This section is incomplete because adequate cultural resource analysis has not been completed for the corridor.

Response

DOE conducted a sample archaeological inventory of the Caliente and Mina rail corridors to assist in the analysis and selection of preferred routes. The Department would conduct an intensive 100-percent inventory of selected alignments before beginning construction, and would avoid significant cultural

resources wherever feasible. The Department would mitigate impacts to disturbed or damaged sites in consultation with the State Historic Preservation Office, the BLM, and other appropriate agencies. The Department would include tribal representatives in the archaeological survey process and subsequent mitigation actions to ensure that it addressed and documented cultural sensitivities and American Indian perspectives.

2.7.6 (3201)

<u>Comment</u> - RRR000121 / 0021

Additional potential adverse impacts and concerns of the WSNC [Western Shoshone National Council] not addressed from a culturally appropriate tribal perspective in the Repository SEIS and the Rail Alignment EIS include:

Impacts to the tribe's cultural relationship to lands outside of the reservations boundaries that may be removed from tribal use and access by transportation route designation and construction.

Response

DOE has worked with the Consolidated Group of Tribes and Organizations to identify an American Indian Writers Subgroup comprised of representatives of the three ethnic groups that comprise the Consolidated Group: Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shoshone. DOE invited the American Indian Writers Subgroup to tour the route of the Caliente rail corridor and work with DOE staff to gain an understanding of the potential routes being considered. The American Indian Writers Subgroup accepted DOE's invitation and then drafted a reference document outlining American Indian concerns and perspectives related to the Caliente rail corridor. DOE began to work with the Northern Paiute Tribes, primarily the Walker River Paiute Tribe, as part of the Department's analysis of the Mina rail corridor. Through these interactions, DOE has sought to receive input that would enable proposed construction activities to avoid sacred grounds or other sensitive areas.

2.7.6 (3434)

<u>Comment</u> - RRR000691 / 0050

Mina Corridor and Rail Alignment: The EIS connotes impacts to cultural resources to be in the area of small to moderate and that the DOE would use best practices to mitigate potential cultural resource impacts. The proposed action and alternative of no-action lack the appropriate studies and or reports analyzing the complete impact upon cultural resources, sacred sites, game and gathering areas within and near the rail corridors. Therefore, at this time, in the absence of an appropriate assessment, the [Timbisha Shoshone] Tribe cannot support either rail corridor or alignment proposal. Additional studies should include an appropriate assessment, documentation and inventory of cultural sites and the cultural dynamic involved.

Response

DOE would not complete Class III cultural resource inventories until it had selected a final alignment. As a consequence, at present, the Department cannot fully determine the specific effects of the project. However, the Nevada Rail Corridor SEIS acknowledges the potential for damage or destruction of historic properties and mitigative measures to prevent such damage or destruction. In the Programmatic Agreement developed for the project, DOE committed to a process to satisfy its National Historic Preservation Act, Section 106, responsibilities that would identify and address adverse effects to historic properties. Where adverse effects were identified, DOE, in consultation with the BLM, the State Historic Preservation Office, tribes, and other consulting parties as appropriate, would develop and evaluate ways to avoid, minimize, or mitigate such effects.

2.7.6 (3435)

<u>Comment</u> - RRR000691 / 0051

It is recommended that a document, something akin to a cultural resource management plan, be developed to specifically address and monitor the assessment of YMP [Yucca Mountain Project] upon indigenous cultural resources. Such assessments should, again, include indigenous representatives, and if possible, indigenous experts or experts familiar with and respected by indigenous communities and their cultural resources. The above approach would greatly assist in the identification, evaluation and monitoring of cultural resources and assist in promoting government-to-government relations. With these assessments completed, and in the event either the Caliente or Mina rail corridor alternative is approved, the [Timbisha Shoshone] Tribe could recommend that specific cultural and or ceremonial areas be set aside as American Indian Cultural Resource Areas.

Response

Thank you for the suggestion. The preparation of a formal cultural resource management plan is under consideration. In addition, DOE has a Programmatic Agreement that addresses the cultural resources study, management, and protection program. Representatives of the Consolidated Group of Tribes and organizations, of which the Timbisha Shoshone Tribe is a member, reviewed this document, which addresses regulatory requirements of the Nevada State Historic Preservation Office. The cultural resources management program would continue to include tribal representatives to provide their perspectives and recommendations.

2.7.6 (3966)

<u>Comment</u> - RRR000671 / 0007

The CGTO [Consolidated Group of Tribes and Organizations] knows that Southern Paiute Settlements are not included with areas along Caliente Corridor.

Response

DOE has recognized historic settlements through file searches, field surveys, and information obtained from tribal representatives. DOE did not include the locations of some of the known settlement sites on maps so that the sensitive nature of those places can be preserved. However, Section 3.2.13.3.2 of the Rail Alignment EIS discusses historic Southern Paiute settlements along the Caliente rail corridor, including those in the Pahranagat Valley, Pahroc, and Panaca areas. DOE added locations of settlements to that section.

2.7.6 (3976)

<u>Comment</u> - RRR000671 / 0013

The CGTO [Consolidated Group of Tribes and Organizations] knows that S-85 [Table S-8] Cultural Resource Sites does not consider the Massacre Site and limits the evaluation to mining sites in the Hiko area.

Response

The massacre site identified by the commenter refers to historical events identified by American Indians in the Quinn Canyon area north of Caliente common segment 2. The information is not referenced in the summary impact tables of the Nevada Rail Corridor SEIS because the Caliente rail corridor is not addressed in the SEIS. However, DOE added a reference to historical events in the area important to American Indians to Section 3.2.13.5.4 of the Rail Alignment EIS where the Caliente rail alignment is discussed in detail. Section 4.2.13.2.1.4 of the Rail Alignment EIS already contained a reference to the same historical events in the Quinn Canyon area.

2.7.6 (4022)

<u>Comment</u> - RRR000671 / 0014

The CGTO [Consolidated Group of Tribes and Organizations] notes that the document considers archaeological sites and does not consider other cultural resource sites identified or known to Indian people.

Response

The American Indian Perspectives Document prepared by the American Indian Writers Subgroup as a reference for the Rail Alignment EIS identifies some cultural resource sites known to American Indians. DOE acknowledges that there could be many other sites along the rail corridors known to American Indians that have not been documented or disclosed to DOE. The Department expects that as cultural resource surveys and studies get under way prior to the start of proposed construction activities, were DOE to decide that a railroad should be constructed, tribal involvement in those efforts would serve to document additional, applicable information and perspectives regarding cultural sites.

2.7.6 (4076)

<u>Comment</u> - RRR000671 / 0025

Page 4-27, Section 4.2.2.5, Cultural Resources, states that other federal agencies including the Nevada Test Site and the Nellis Air Force Base employ cultural resource specialists and involve tribal representatives, as appropriate. There is no provision, indication or intention that the YMP [Yucca Mountain Project] will replicate such a position with tribal involvement which is inconsistent with regulations promulgated under the provisions of government-to-government relations.

Response

The Yucca Mountain Project Nevada Rail Program employs appropriate cultural resource expertise in the form of federal environmental compliance program management and coordination personnel, directly supported by contracted archaeological and cultural resource professionals. In addition, the cultural resources management program has always incorporated tribal involvement to varying degrees. The Yucca Mountain Project Native American Interaction Program would continue to operate to provide tribal perspectives and direct involvement in ethnographic studies on the Yucca Mountain Project prior to construction.

2.7.7 Socioeconomics

2.7.7 (1397)

<u>Comment</u> - RRR000656 / 0023

Section 3.2.1, page 3-2, Table 3-1 states in the socioeconomics listing that most rail construction workers would live in Clark County and the Carson City/Washoe County area.

Nye County has a different view that has been included in the Repository SEIS. This view should also be recognized in this Rail Corridor SEIS.

Response

The Repository SEIS analyzes the impacts of a different residential pattern of construction and operations workers for the Cask Maintenance Facility and the Rail Equipment Maintenance Yard. The pattern would be for 80 percent of the workers to reside in Nye County and 20 percent in Clark County. DOE has a cooperating agency agreement with Nye County to gain its perspective on this topic and others. DOE would establish a monitoring program to evaluate future impacts of the proposed railroad and potential mitigation measures, including those that would arise from shared use.

2.7.7 (1399)

<u>Comment</u> - RRR000656 / 0025

Section, 3.2.7.2.1.11, page 3-41: Nye County recommends that special efforts be undertaken to assure that preference be given to hiring workers residing in Nye County and the other transportation impacted counties.

Response

DOE assumed that workers would come from the two large urban areas in the State of Nevada because they are the only locations with sufficient workforce to staff the construction effort. According to the June 2007 Covered Employment report (DIRS 185246-Nevada Department of Employment, Training and Rehabilitation 2007, all), Clark and Washoe Counties employ approximately 92 percent of workers in the construction industry. Clark County has about 76 percent and Washoe County has about 16 percent of the state's employees in the construction industry.

DOE could establish hiring guidelines for its rail line constructor; however, it is premature to determine the contractual structure.

2.7.7 (1400)

<u>Comment</u> - RRR000656 / 0026

Section 3.2.7.2.1.2, page 3-42: Nye and Mineral Counties would be unlikely to experience noticeable changes in economic measures.

Nye County could experience significant beneficial impacts from local citizens being employed in rail construction. This is particularly true if rail construction extended for a period of 10 years.

Response

DOE would establish a monitoring program to evaluate future impacts from and potential mitigation measures for the proposed railroad, including those from shared use.

2.7.7 (1871)

<u>Comment</u> - RRR000677 / 0020

The transportation SEIS should also assess any employment and economic development impacts on Washington and Iron Counties in Utah.

Response

Washington and Iron Counties are not within the region of influence for socioeconomics. An analysis of any possible employment and economic development impacts to these counties from proposed railroad construction and operations would require speculative assumptions. Because of the speculative nature of such impacts, it is not practical to conduct a detailed analysis.

2.7.7 (2319)

<u>Comment</u> - RRR000675 / 0019

On page 4-12 (Section 4.2.1.2.8, Timbisha Shoshone Trust Land) of the Draft Nevada Rail Corridor SEIS the text states that "the locations and nature of these future development opportunities are not known and are not considered to be reasonably foreseeable for purposes of this cumulative impact analysis." It should be noted that no discussions or requests from the DOE has occurred for information from the Timbisha Shoshone relating to planned or future activities within the Timbisha Shoshone Homelands. Further, there is no analysis or consideration of those activities equal to what is stated and considered for the Walker River Paiute Tribe in the Mina rail corridor analysis.

Response

DOE has requested, but not received, economic development information from the Timbisha Shoshone Tribe as it relates to the Tribe's Trust Lands near Scottys Junction. The differences between the levels of analysis for the Walker River Paiute Tribe and the Timbisha Shoshone Tribe arise because there are no residents of the Timbisha Shoshone Trust Lands and the nearest rail alignment would be more than 2 miles to the east, whereas the proposed rail line would pass through the Walker River Paiute Reservation and would have a greater potential for impacts.

2.7.7 (2689)

Comment - RRR000523 / 0027

Page 3-35: The per capita income in this paragraph for Carson City is wrong. The Bureau of Economic Analysis shows 2000 per capita income for Carson City to be \$32,041.

Response

The Federal Government has more than one way to collect and report income and other economic measures. The Nevada Rail Corridor SEIS reported per capita income published for the decennial census. The value in the SEIS, which is from the Bureau of the Census, is accurate, and change is unnecessary.

The per capita income figure identified by the commenter is correct. The difference is in the underlying data collected by the Bureau of the Census and the Bureau of Economic Analysis. The Bureau of the Census collects information directly from residents, who report wages, salaries, and income from self-employment, interest, and dividends. The Bureau of Economic Analysis includes these values, but also includes employer contributions to pensions, and insurance, and a residential adjustment (DIRS 173548-BEA 2005, all). As a result, Bureau of Economic Analysis-defined personal income and per capita personal income are higher.

2.7.7 (3349)

<u>Comment</u> - RRR000691 / 0040

The EIS evaluates social and economic activities within the study area and makes a general statement concerning potential socioeconomic impacts that the percentage of value of changes would be low. However, the report is absent information concerning socioeconomic impacts to the indigenous economy within the study area. Additional [data] is required to provide a complete perspective of socioeconomic impacts to indigenous peoples. Within the YMP [Yucca Mountain Project] area there are several Indian reservations, tribal enterprises, tribally controlled schools, tribal police departments and tribal emergency response units, many of which are federally funded. The EIS does not presently quantify the potential impact to these federally funded programs, i.e., whether school or public safety or business employment would be adversely impacted. Additionally, several tribes have shown interest in developing potential economic vehicles both within and near the study area. A full evaluation of all potential impacts to these indigenous services and businesses should be conducted. Studies should include, but should not be limited to:

- YMP affect on tribal members leaving the study and nearby areas
- Potential impact on tribal salaries and employment
- Potential impact on Housing and Urban Development grants and funds
- Potential impact on federal Indian education monies

- Potential impact upon Indian police, fire and emergency response grant funding
- Potential impact on the loss of tribal culture and community as a result of the above potential socioeconomic impacts

A complete socioeconomic assessment would include specific data concerning the potential impacts upon "affected status" designated indigenous communities such as the Timbisha Shoshone. Such an assessment would include specific studies detailing any and all socioeconomic impacts upon the tribe, its trust areas within and without the YMP area and in areas where high concentrations of tribal members reside.

Response

Section 1.3 of the Nevada Rail Corridor SEIS explains that the analysis of the Mina rail corridor supports DOE conclusions about whether the potential attributes, characteristics, and environmental impacts of constructing and operating a railroad in the corridor would be such that DOE should proceed with analyzing the corridor at the alignment level in the Rail Alignment EIS. In Chapter 6 of the Nevada Rail Corridor SEIS, DOE concludes that the Mina rail corridor warrants further study to determine an alignment for the construction and operation of a railroad.

In addition, the Nevada Rail Corridor SEIS updates information about other rail corridors DOE analyzed in the Yucca Mountain FEIS (Carlin, Jean, and Valley Modified) to identify significant new circumstances or information that would cause the Department to consider these corridors further. Factors important to reaching a conclusion included the nature of the updated information and associated changes to potential impacts, including irreversible and irretrievable commitments of resources and cumulative impacts, since DOE completed the Yucca Mountain FEIS. Other factors included, as appropriate, changes to potential land-use conflicts and their potential to affect construction of a rail line, and delays that could affect the availability of a rail line in these corridors.

Based on these factors, full economic analyses of the three corridors, including socioeconomic impacts to indigenous peoples, are not required because economic factors were not a major consideration in determining whether a corridor warranted further study at the alignment level. Further, DOE identified a region of influence and analyzed socioeconomics in accordance with CEQ guidance (DIRS 103162-CEQ 1997, all).

2.7.7 (3425)

Comment - RRR000691 / 0041

The EIS is absent any discussion of the following concerns for the Mina corridor/alignment:

- The data or models used to determine that surrounding community impacts will be short term and small.
- Data concerning how it determined that only 42 workers would be required to operate the rail line safely.
- Whether the construction phase would result in an impact upon surrounding communities by negatively affecting the existing employee workforce of surrounding communities, specifically Native American communities.

Response

DOE identified a region of influence and analyzed socioeconomics in accordance with CEQ guidance (DIRS 103162-CEQ 1997, all). Section 4.1.6 of the Yucca Mountain FEIS describes the data and models more completely.

The number of workers required to operate the railroad is an estimate for analysis purposes based on information in the Yucca Mountain FEIS.

DOE has no information that the construction phase would negatively affect the existing workforce in surrounding communities, including American Indian communities.

2.7.7 (4164)

Comment - 5 comments summarized

DOE received comments on the need to expand its analysis of county and local government services to support construction and operation of a railroad. It also received comments on the need to address emergency medical services and impacts on public safety organizations, including the possibility of hazardous material spills. Commenters requested additional information on impacts to emergency response services during the shipping campaign and the need to analyze current capabilities and identify specific response teams.

Response

DOE does not anticipate large impacts to government services during construction of the proposed rail line. The construction camp medical facilities, which would have four personnel on rotating shifts, would treat these injuries and illnesses. Each construction camp would have similar facilities and medical personnel. For serious injuries or illnesses, each camp would be able to receive helicopters for airlift to a hospital in Las Vegas, Reno, or Utah.

DOE would provide security at the construction camps to minimize impacts on local law enforcement. The rail constructor or DOE could establish protocols with local law enforcement agencies on how to address these issues. DOE and its contractors would institute best management practices to minimize environmental impacts on lands, including maintenance of equipment and procedures to handle hazardous materials safely, minimize the possibilities of spills, and respond to spills if necessary. In addition, DOE would fulfill its obligations for emergency response under Section 180(c) of the NWPA. The Department would establish a monitoring program to evaluate future impacts and potential mitigation actions related to construction and operation of the proposed railroad.

As described in Appendix L, Section L.6, of the Rail Alignment EIS, state and tribal governments would have primary responsibility to respond to and protect public health and safety in their jurisdictions in accidents that involved radioactive materials. This would include providing, managing, and maintaining responsibility for emergency response capabilities. Although DOE would provide the funding, each state and tribe would determine how it would administer that funding. Section 180(c) of the NWPA requires DOE to provide technical assistance and funds to states for training public safety officials of appropriate units of local government and tribes through whose jurisdictions it would transport spent nuclear fuel and high-level radioactive waste. The training would cover procedures for safe routine transportation of these materials and for addressing emergency response situations. DOE would base its assistance on the training needs of the states and tribes as they determined with the use of a planning grant, and on the availability of funds in the annual Congressional budgets.

DOE would identify shipping routes at least 4 years before any shipments began and would make Section 180(c) assistance available approximately 4 years before any shipments through a jurisdiction. This would be sufficient time for emergency responders to receive training to prepare them to respond to any accident that involved DOE shipments. Appendix L, Section L.7 of the Rail Alignment EIS discusses DOE Section 180(c) policy and procedures.

2.7.7 (4173)

Comment - 7 comments summarized

Commenters stated that the 2000 Census data DOE used in the baseline for the Nevada Rail Corridor SEIS were dated and that the Department should replace them with more current socioeconomic information.

Response

Ten-year census information provides data that are consistent across jurisdictions and collected from a large data source, the American population. Approximately 1 in 6 households receive the long census form, and all households receive the short form. More recent data from the Bureau of the Census for all baseline categories are not available for all counties in Nevada. The use of different sources would mean that DOE would have to collect information from different base years for different categories, and would probably have to use different methods. Updating such information would not be of value to the analyses of impacts because they would be changes from baseline projections, which include more recent data from the Nevada State Demographer and the Nevada Department of Employment, Training and Rehabilitation.

2.7.7 (4175)

<u>Comment</u> – 11 comments summarized

Commenters asserted that it was incorrect for DOE to assume that the workforce for construction of the proposed railroad would come from Clark County and, for the Mina rail corridor, also from Washoe County. Commenters stated that for the Mina route the construction industry in Churchill County would benefit and that DOE should perform a full socioeconomic analysis of Churchill County; further, workers would not come from Carson City but more likely from Churchill County due to the shorter commuting distance. Commenters also stated that the impact assessment incorrectly assigned benefits to large urban areas and did not properly assess impacts on smaller counties through which the rail line would pass. Further, due to competition for workers in the large urban areas, construction workers would not sign on to build the rail line, but rather would stay home, so DOE could use out-of-state workers and those workers could bring their families and establish temporary residences in rural communities. One commenter stated that workers would not stay in work camps but would live in the local economy and use local services. In addition, commenters stated that, because the workforce for construction of the rail line would increase from that analyzed in the Yucca Mountain FEIS, DOE should complete a full economic analysis of the Carlin, Jean, and Valley Modified rail corridors.

Response

DOE analyzes a reasonably foreseeable scenario for the Nevada Rail Corridor SEIS that the rail line constructor would establish construction camps at locations along the alignment that minimized travel time to the job site every day. It is not possible to predict with confidence whether all workers would stay in the camps; however, it would prepare contracts that provided incentives to the rail line constructor and employees to do so.

DOE assumed that workers would come from the two large urban areas in the State of Nevada because they are the only locations with sufficient workforces to staff the construction project. In Nevada, Clark

and Washoe Counties employ approximately 92 percent of workers in the construction industry, according to the June 2007 Covered Employment report (DIRS 185246-Nevada Department of Employment, Training and Rehabilitation 2007, all); Clark County has approximately 76 percent and Washoe County approximately 16 percent of the state's construction workers. While a contractor from Churchill County or another county could become the rail line constructor, the size of the construction workforce in Churchill County, approximately 700 (DIRS 185246-Nevada Department of Employment, Training and Rehabilitation 2007, p. 2), would not be sufficient. The constructor could employ some workers from Churchill or other counties; however, identification of how many would come from each county would be speculative. On the possibility of construction workers coming from Carson City, DOE assumed they would come from Washoe County, as discussed above. The combining of Carson City with Washoe County in the model is related strictly to the way the computer model was built. If the constructor employed workers from other states, the impacts on population and subsequently on services in the urban areas of Clark and Washoe Counties would be less.

The analysis of local economies did not assume that all monies would flow to the urban areas. Rather, it assumed that it would cost \$300,000 for each month of operation of each camp. It also assumed that these monies would be spent in the local counties, which would increase the economic and demographic measures that DOE discussed in the Rail Alignment EIS. The analysis included expenditures for the construction of batch plants, drilling of wells, development of quarries, building of access roads, and construction of rail line facilities. It assumed that employees who lived in local counties would operate the wells, batch plants, and quarries, as well as construction trains. DOE used these assumptions in the development of the impacts analysis.

For the Carlin, Jean, and Valley Modified rail corridors, Section 1.3 of the Nevada Rail Corridor SEIS explains that the SEIS updates relevant information on other rail corridors analyzed in the Yucca Mountain FEIS (Carlin, Jean, and Valley Modified) to identify any significant new circumstances or information that would cause DOE to consider these corridors further. Section 1.3 also explains that the purpose of the updated information and analysis is to support Departmental conclusions on whether there are significant new circumstances or information bearing on environmental concerns for the Carlin, Jean, and Valley Modified rail corridors.

The update was undertaken to determine whether there are significant new circumstances or information bearing on environmental concerns for the Carlin, Jean, and Valley Modified rail corridors. Factors important to reaching a conclusion include the nature of the updated environmental information and associated changes to potential environmental impacts, including irreversible and irretrievable commitments of resources and cumulative impacts, since DOE completed the Yucca Mountain FEIS. Other factors include, as appropriate, changes to potential land-use conflicts and their potential to affect construction of a rail line adversely, and the potential delays that could affect the availability of a rail line in these corridors.

The Department found that there are no significant new circumstances or information bearing on environmental concerns that would warrant further consideration of the Carlin, Jean, and Valley Modified rail corridors at the alignment level. Based on these factors, full economic analyses of the three corridors are not required because economic factors were not a major consideration in determining whether a corridor warranted further study at the alignment level.

2.7.8 Occupational and Public Health and Safety

2.7.8 (936)

<u>Comment</u> - RRR000453 / 0001

In February 2002, DOE submitted the *Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada* (FEIS). The Nevada Rail Corridor SEIS supplements the FEIS by performing a more detailed analysis of the Mina rail corridor.

DOE estimated that during the 50 years of railroad operations, there would be less than 1 latent cancer fatality among the exposed public. The estimated latent cancer fatalities in the public due to an accident would also be less than 1.

The public health impacts estimated by the Nevada Rail Corridor SEIS are minimal and based on conservative assumptions. The methods used to calculate these results are widely accepted by advisory groups and federal regulatory agencies.

Response

Thank you for your comment.

2.7.8 (953)

Comment - RRR000663 / 0021

The Draft EISs fail to comprehensively assess impacts to safety from issues raised in the lawsuit brought by workers and employees against the Burlington Northern and Santa Fe Railway Corporation [filed May 2004 in the U.S. District Court for the District of Iowa, Western Division]. That petition was attached to the State of Nevada's comments on DOE's April 8, 2004 Federal Register Notice (State of Nevada Comments on DOE's Notice of Intent to Prepare [an] Environmental Impact Statement for Alignment, Construction, and Operation of a Rail Line to a Geologic Repository at Yucca Mountain, Nye County, Nevada - May 24, 2004) and is incorporated by reference into these comments. The operational safety deficiencies alleged in the litigation are systemic in nature and have direct relevance to the operation of any rail line to Yucca Mountain. The lawsuit specifically addresses increased risks and the potential for accidents involving spent fuel shipments as a result of railroad safety violations and worker intimidation. The Draft EISs should have addressed these safety deficiencies and assess the impacts on risk, operations, and overall performance. Further, the Draft EISs should have addressed these issues in a comprehensive fashion (i.e., their effects on the national Yucca Mountain rail transportation system), not just in relation to the proposed Nevada rail lines.

Response

The DOE analyses considered the safety violations and associated accident risks alleged in the cited lawsuit. As described in Appendix G, Section G.7.1.1 of the Repository SEIS, the Department used a combination of rail accident rates based on train-kilometers and railcar-kilometers to estimate accident risks. These rates were for Track Class 3 and included derailments and collisions. In addition, DOE updated rail fatality rates to reflect data from 2000 to 2004. These rates do not discriminate among the causes of accidents, but consider them in the aggregate. In other words, if an operational deficiency of the type mentioned by the commenter resulted in an accident on a rail shipment of a certain length (kilometers), DOE considered it in the overall accident rates in the Nevada Rail Corridor SEIS.

2.7.8 (1335) <u>**Comment**</u> - RRR000656 / 0012 Table S-1, Potentially affected resources - Mina rail corridor, page S-18:

Operations phase only

Incident-free radiological impacts (latent cancer fatalities) Public (0.00082) Workers (0.33)

These numbers are too small to be significant. The dose for the public is absurd and should be changed or characterized as close to zero.

Response

DOE agrees with the commenter that the public health impacts it estimated for the Nevada Rail Corridor SEIS are small and notes that they are based on conservative assumptions. DOE agrees that the most likely outcome would be zero fatalities. The Nevada Rail Corridor SEIS presents impacts in numerical terms (for example, radiation dose, latent cancer fatalities), rather than such terms as "significant" or "insignificant" for impact assessments for which the Department conducted quantitative analyses. Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions if information was incomplete or unavailable or if uncertainties existed, the Nevada Rail Corridor SEIS analyzes the environmental impacts that could result from the Proposed Action. The use of widely accepted analytical tools, latest reasonably available information, and cautious but reasonable assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts.

2.7.8 (1336)

<u>**Comment</u></u> - RRR000656 / 0013 Table S- 1, Potentially affected resources - Mina rail corridor; page S-18:</u>**

Operations phase only Radiological transportation accident fatalities Radiological accident risk (latent cancer fatalities), 0.0000074

What about workers, public or emergency responders? Value appears very low, accident not very severe. The values should be characterized or restated as close to zero.

Response

The Nevada Rail Corridor SEIS presents impacts in numerical terms (for example, radiation dose, latent cancer fatalities), rather than such terms as "significant" or "insignificant" for impact assessments for which the Department conducted quantitative analyses. Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions if information was incomplete or unavailable or if uncertainties existed, the Nevada Rail Corridor SEIS analyzes the environmental impacts that could result from the Proposed Action. The use of widely accepted analytical tools, latest reasonably available information, and cautious but reasonable assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts. DOE agrees that the most likely outcome would be zero fatalities.

2.7.8 (1337) <u>**Comment**</u> - RRR000656 / 0014 Table S-2, Updated environmental information for the Carlin rail corridor, page S-21:

Occupational and public health and safety

Transportation hazards (construction only)Traffic fatalitiesCancer fatalitiesYucca Mountain FEIS: 0.14; Updated analysis: 0.6

Why did these values more than triple? The reason is not obvious from other changes in the table. The differences are due to changes in assumptions (e.g., number of shipments) combined with a change in the dose coefficient. DOE should explain any significant changes in results from the FEIS.

Response

As discussed in Section 5.2.6.2 of the Nevada Rail Corridor SEIS, the increase in cancer fatalities from vehicle emissions was due to the longer operations phase, up to 50 years. The increase in traffic fatalities was due primarily to the use of the updated rail fatality rate (DIRS 178016-DOT 2005, all) and from accounting for the presence of locomotives and buffer cars in the estimation of the number of nonradiological transportation accidents, and to the increase in the number of commuting workers.

2.7.8 (1338)

<u>**Comment</u></u> - RRR000656 / 0015 Table S-2, Updated environmental information for the Carlin rail corridor, page S-22:</u>**

Occupational and public health and safety

Radiological transportation accident fatalities

Radiological accident risk (latent cancer fatalities)

Yucca Mountain FEIS: 0.000000037; Updated analysis: 0.000001

Why did this increase two orders of magnitude? These figures are truly absurd, real answer is likely "zero," and should be restated or characterized as close to zero.

Response

Since DOE completed the Yucca Mountain FEIS, there have been updates to the methods and data used to estimate the radiation doses for workers and members of the public. The changes from the Yucca Mountain FEIS to the Nevada Rail Corridor SEIS noted by the commenter are primarily due to the use of a different accident rate and an increase in the latent cancer fatality conversion factor, as explained in Section 5.2.6.2 of the Nevada Rail Corridor SEIS. DOE agrees that the most likely outcome would be zero fatalities.

2.7.8 (1345)

<u>**Comment</u></u> - RRR000656 / 0016 Table S-2, Updated environmental information for the Carlin rail corridor, page S-22:</u>**

Occupational and public health and safety Nonradiological transportation accident fatalities Spent nuclear fuel and high-level radioactive waste transportation Yucca Mountain FEIS: 0.54; Updated analysis: 0.3 1 Construction and operations workforce Yucca Mountain FEIS: 0.7; Updated analysis: 3.3 Why did this go down and others (in particular the previous one [see 2.7.8 {1338}]) go up? Note, radiological incidents are insignificant except small number for worker exposure. DOE should explain any significant changes in results from the FEIS.

Response

As discussed in Section 5.2.6.2 of the Nevada Rail Corridor SEIS, the increase in the nonradiological transportation accident fatalities was due primarily to the use of the updated rail fatality rate (DIRS 178016-DOT 2005, all) and from accounting for the presence of locomotives and buffer cars in the estimation of the number of nonradiological transportation accident fatalities. The increase in the nonradiological transportation accident fatalities was due to the increase in the number of commuting workers.

2.7.8 (1347)

<u>Comment</u> - RRR000656 / 0017 Table S-3, Updated environmental information for the Jean rail corridor, page S-24.

Occupational and public health and safety

Radiological transportation accident fatalities Radiological accident risk (latent cancer fatalities) Yucca Mountain FEIS: 0.000000015; Updated analysis: 0.0000018

These figures are truly absurd, real answer is likely "zero," and should be characterized as such.

Response

Since DOE completed the Yucca Mountain FEIS, there have been updates to the methods and data used to estimate the radiation doses for workers and members of the public. The changes from the Yucca Mountain FEIS to the Nevada Rail Corridor SEIS noted by the commenter are primarily due to the use of a different accident rate and an increase in the latent cancer fatality conversion factor, as explained in Section 5.3.6.2 of the Nevada Rail Corridor SEIS. DOE agrees that the most likely outcome would be zero fatalities.

2.7.8 (2692)

Comment - RRR000523 / 0024

Page 3-33, Section 3.2.6.2.2.4: During the shipment of spent nuclear fuel and high-level radioactive waste from the Hazen siding to Yucca Mountain, people along the rail line could be exposed to direct radiation from approximately 9,500 shipping casks. What about people along the corridor from Hazen to Salt Lake City? DOE did not analyze this section of rail. Is it similar to national transportation impacts? Why distinguish the Mina rail corridor from national transportation impacts?

Response

Appendix G of the Repository SEIS lists impacts of shipments from generator sites to Hazen and the Yucca Mountain Site. Tables G-46 and G-60 list transportation impacts of these shipments in Nevada and Utah, respectively.

2.7.8 (3426)

<u>Comment</u> - RRR000691 / 0042

Although the EIS assumes that the exposure to radiation by both nonworkers and workers will be low, the SEIS is absent any information concerning indigenous peoples perspectives concerning their view of radiation in general and or what irradiation (exposure) to plants, game and minerals exposure means to them. For example, many indigenous cultures believe the concept of irradiation includes the release of

"angry powers" that can only be satisfied by a return of the power to its original release point. Additionally, indigenous cultures also believe that they can neither eat game, plants nor use minerals in areas exposed to these powers, therefore making it impossible to perform religious, cultural or gathering activities in the areas of exposure. Additional studies concerning indigenous peoples' perceptions concerning radiation are required to be conducted to acquire the complete perspective concerning occupational health and safety impacts.

Response

DOE understands that additional tribal involvement in documenting and recording cultural information and perspectives would be appropriate. DOE is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before the start of construction.

2.7.8 (4071)

<u>Comment</u> - RRR000671 / 0022

Page 3-33 (Sections 3.2.6.2.2.2 and 3.2.6.2.2.3) indicates anticipated radiation exposure to "noninvolved workers" and escorts that causes great concern to Indian people. A better explanation is needed to substantiate these claims.

Response

Consistent with DOE Order 440.1A, *Worker Protection Management for DOE, Federal and Contractor Employees, and Fire Protection*, DOE would inform workers of potential health risks from transporting radioactive materials. DOE Order 440.1A ensures that the Department and its contractor employees have an effective worker protection program to reduce or prevent injuries, illnesses, and accidental losses by providing workers a safe and healthful workplace. Specifically, a radiation protection program that met the requirements of 10 CFR Part 835, Occupational Radiation Protection, would protect workers and escorts at the Staging Yard.

DOE based the radiological impact analysis for escorts and noninvolved workers in Sections 3.2.6.2.2.2 and 3.2.6.2.2.3 of the Nevada Rail Corridor SEIS on conservative assumptions. Appendix K, Section K.2.3.1 of the Rail Alignment EIS lists the details of these assumptions.

To provide an upper bound on potential radiation doses, DOE assumed the maximally exposed worker to be exposed for up to 50 years, a conservative assumption for analytical purposes. The resulting potential radiation exposure for the maximally exposed worker would be 25 rem, based on the assumption that through the application of administrative controls, the worker would receive an annual dose limit of 500 millirem escorting shipments. The use of maximum annual results based on the limit of 500 millirem would overestimate the actual exposure of the maximally exposed worker because it is unlikely that any individual worker would escort the Yucca Mountain shipments for 50 years or be exposed to the annual administrative limit of 500 millirem. Industry experience in measuring radiation exposure of workers indicates that the average worker dose is less than 200 millirem per year (DIRS 185130-WANO 2004, p. 3).

2.7.9 Noise and Vibration

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS on this subject.

2.7.10 Aesthetics

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS on this subject.

2.7.11 Utilities, Energy, and Materials

2.7.11 (3427)

<u>Comment</u> - RRR000691 / 0043

The SEIS indicates that quantities of utilities, energy, and materials used in support of repository construction activities will be small in comparison to regional supply capacity. The SEIS should include information concerning any potential impact to Native American use of utilities, energy and materials, i.e., whether prices or the availability of utilities, energy and materials will be impacted on or near reservation lands.

Response

DOE would solicit bids for materials with sufficient lead time for markets to adjust, thereby alleviating potential shortages and lessening the possibility of price hikes for utilities, energy, and materials on a local level, including on or near reservation lands. Section 3.2.10.2 of the Nevada Rail Corridor SEIS discusses provision of electricity, and sufficient capacity from affected utilities and other energy sources for the Mina rail corridor. Sections 5.2.10, 5.3.10, and 5.4.10 of the Nevada Rail Corridor SEIS discuss impacts to existing utilities and providers for the other rail corridors, which DOE expects would be small.

2.7.11 (3428)

<u>Comment</u> - RRR000691 / 0044

The EIS is also absent any information for the Mina corridor/alignment concerning the following: Data quantifying whether the use of utilities, energy and materials will have an impact on utility, energy, and material prices in surrounding communities, specifically Native American, communities and businesses.

Response

DOE would solicit bids for materials with sufficient lead time for markets to adjust, thereby alleviating potential shortages and lessening the possibility of price hikes for utilities, energy, and materials on a local level, including on or near reservation lands. Section 3.2.10.2 of the Nevada Rail Corridor SEIS discusses provision of electricity, and sufficient capacity from affected utilities and other energy sources for the Mina rail corridor. Sections 5.2.10, 5.3.10, and 5.4.10 of the Nevada Rail Corridor SEIS discuss impacts to existing utilities and providers for the other rail corridors, which DOE expects would be small.

2.7.11 (3429)

<u>Comment</u> - RRR000691 / 0045

The EIS is also absent any information for the Mina corridor/alignment concerning the following: Information concerning the transportation and storage of gasoline, diesel fuel, and other hazardous materials and information concerning spillage probabilities due to accidents or sabotage.

Response

Section 4.2.2.3.1.2 of the Nevada Rail Corridor SEIS discusses, at the corridor level, the consequences of spills and explains that management and regulatory controls could minimize the possibilities of spills. This level of detail is sufficient for the purpose of the SEIS.

Section 4.3.5.2.1.2 of the Rail Alignment EIS also discusses the consequences of spills. DOE would require construction contractors to comply with regulatory requirements for spill-prevention measures, reporting and remediating spills, and properly disposing of or recycling used materials.

Section 4.3.5.3.2 of the Rail Alignment EIS states that facility operations would adhere to a Spill Prevention, Control and Countermeasures Plan to comply with environmental regulations and would include a number of best management practices. The plan would describe the actions DOE would take to prevent, control, and remediate spills of fuel or lubricants. In addition, it would describe the reporting requirements that would accompany the identification of a spill.

Section 4.3.12.2.2, of the Rail Alignment EIS discusses hazardous material use and hazardous waste generation, and Chapter 7 describes best management practices and impacts mitigation.

2.7.12 Waste Management

2.7.12 (3430)

<u>Comment</u> - RRR000691 / 0046

The EIS concludes that any hazardous materials and or wastes will be appropriately disposed of in regional and statewide landfills, with little or no impact to existing regional or state waste disposal requirements. However, the EIS is absent information concerning the indigenous cultural perspective concerning how best to appropriately dispose of hazardous materials and waste. Additional studies, with the assistance of indigenous persons, should be conducted and included within subsequent environmental documents concerning the appropriate means of disposing of hazardous materials and waste. In short, indigenous persons should be included in any assessment and siting of waste disposal in general and the siting of new waste disposal facilities specifically.

Response

DOE would use existing regional or statewide disposal facilities appropriate for the types of waste generated. The Department does not anticipate the need to site and develop new hazardous waste disposal facilities.

2.7.12 (3431)

<u>Comment</u> - RRR000691 / 0047

The EIS is also absent any discussion for the Mina corridor/alignment of the following: Information concerning the possibility of a hazardous waste spill situation during the construction phase and appropriate emergency responses and emergency response planning.

Response

The Department would accumulate, ship, and dispose of hazardous wastes in compliance with Resource Conservation and Recovery Act requirements, as described in Sections 4.2.12 and 4.3.12 of the Rail Alignment EIS. DOE would ship hazardous wastes in compliance with 49 CFR Parts 171 and 172 and U.S. Department of Transportation hazardous materials regulations. The handling and transfer of hazardous waste could result in localized releases of such materials to the environment. Impacts from hazardous material releases would be highly localized and short-term because affected areas would be immediately remediated in compliance with applicable regulations (see Rail Alignment EIS Chapter 6).

2.7.12 (3432)

<u>Comment</u> - RRR000691 / 0048

The EIS is also absent any discussion for the Mina corridor/alignment of the following: Information concerning the project's waste impact on area landfills and or tribally owned or operated landfills.

Response

Sections 4.3.12.2.1 and 4.3.12.3.1 of the Rail Alignment EIS discuss potential impacts to area landfills during proposed railroad construction and operation in the Mina rail alignment. County governments or private entities own the landfills DOE is considering as potential disposal options; the Department does not anticipate using tribally owned or operated facilities (see Rail Alignment EIS, Table 3-154).

2.7.12 (3433)

Comment - RRR000691 / 0049

The EIS is also absent any discussion for the Mina corridor/alignment of the following: Information concerning how hazardous waste would be moved from the construction site to its final destination, i.e., safety issues.

Response

The Department would truck hazardous waste off site to permitted disposal facilities, as discussed in Sections 4.2.12 and 4.3.12 of the Rail Alignment EIS. Waste management is also discussed in Section 3.2.11 of the Nevada Rail Corridor SEIS. DOE could contract with private vendors to dispose of hazardous wastes, so disposal facilities could be anywhere in the country. DOE would accumulate, ship, and dispose of hazardous wastes consistent with 49 CFR Parts 171 and 172 and U.S. Department of Transportation hazardous materials regulations. The handling and transfer of hazardous waste could result in releases to the environment. Impacts from such releases would be highly localized and short-term because affected areas would be immediately remediated in accordance with applicable regulations (see Rail Alignment EIS Chapter 6), thereby ensuring that no long-term effects to human health or the environment occurred.

2.7.13 Environmental Justice

2.7.13 (1485)

<u>Comment</u> - RRR000693 / 0002

Section 2.4.12, Environmental Justice: Native American environmental justice is not addressed in this section.

Response

Section 2.4 of the Nevada Rail Corridor SEIS is a summary of potential environmental impacts for the Mina rail corridor. As explained in that Section 2.4.12, DOE did not identify any environmental justice impacts for the corridor. However, the environmental justice sections for each rail corridor include information on environmental justice analyses, including discussions on the subject from an American Indian standpoint.

DOE performed an environmental justice analysis consistent with CEQ guidance (DIRS 177702-CEQ 1997, all) and NRC policies (69 *FR* 52040, August 24, 2004). The Department acknowledges a difference of opinion on this issue with American Indian tribes and organizations. DOE initiated the Native American Interaction Program in 1987; as a result of that program, the American Indian Writers Subgroup prepared a resource document, *American Indian Perspectives on the Proposed Rail Alignment Environmental Impact Statement for the U.S. Department of Energy's Yucca Mountain Project* (DIRS

174205-Kane et al. 2005, all). This document provides details on American Indian perspectives concerning environmental justice.

Based on current information, construction and operation of the proposed railroad would not result in disproportionately high and adverse impacts to minority or low-income populations. DOE understands that the American Indian perspective is that the Proposed Action would produce such impacts.

DOE revised Section 2.4.12 of the Nevada Rail Corridor SEIS to include reference to the Walker River Paiute Reservation.

2.7.13 (3436)

Comment - RRR000691 / 0052

The EIS makes a general statement that the largest concentration of low-income and minority populations within the Mina Corridor is within the Walker River Paiute Reservation. However, this statement fails to fully quantify the impacts to minority and low-income persons as compared to those of the non-minority or low income community in general. Further evaluation is needed because quite often, persons at the lower end of the financial spectrum, when impacted, face impacts that are many times more severe than those faced by non-minorities or low income persons, this is unfortunately true with indigenous communities in general and indigenous peoples specifically. Therefore, additional studies should be performed to identify and address any disproportionately high and adverse effects of the proposed action on indigenous federal programs, policies and economies.

Response

DOE performed an environmental justice analysis consistent with CEQ guidance (DIRS 177702-CEQ 1997, all) and NRC policies (69 *FR* 52040, August 24, 2004).

DOE acknowledges a difference of opinion with American Indian tribes and organizations on the issue of environmental justice. The Department initiated the Native American Interaction Program in 1987; as a result of that program, the American Indian Writers Subgroup prepared a resource document, *American Indian Perspectives on the Proposed Rail Alignment Environmental Impact Statement for the U.S. Department of Energy's Yucca Mountain Project* (DIRS 174205-Kane et al. 2005, all). This document provides details on American Indian perspectives on environmental justice.

Based on current information, construction and operation of the proposed railroad would not result in disproportionately high and adverse impacts to minority or low-income populations. DOE understands that the American Indian perspective is that the Proposed Action would produce such impacts.

2.7.14 Section Not Used

2.7.15 Section Not Used

2.7.16 Sabotage and Terrorism

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS on this subject.

2.8 Section Not Used

2.9 Section Not Used

2.10 No-Action Alternative Impacts

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS on this subject.

2.11 Cumulative Impacts

2.11 (1419)

<u>Comment</u> - RRR000656 / 0030

Section 4.2.1.2.1, page 4-7: The Global Nuclear Energy Partnership (GNEP) program has the potential to have significant impact on the scope of the YMP [Yucca Mountain Project] and, if recycling facilities are built in proximity to the repository, to have significant impacts on the situs county.

Nye County will encourage DOE to include Nye County in discussions and planning for the GNEP so that the County can be prepared for any resulting impacts.

Response

DOE added discussion of the GNEP program and potential cumulative impacts to Section 4.2.1.2.1 of the Nevada Rail Corridor SEIS. The Department has not identified a location for a recycling facility. If the Department proposed a specific location after completing the GNEP Programmatic EIS, it would determine the appropriate steps to analyze potential impacts from constructing and operating that facility consistent with NEPA and other requirements. When DOE issues the Draft GNEP Programmatic EIS, the public will have an opportunity to comment on that document.

2.11 (1422)

Comment - RRR000656 / 0031

Section 4.2.1.2, pages 4-8 and 4-9: The possibility exists that the YMP [Yucca Mountain Project] and NTS [Nevada Test Site] will experience additional shipments of nuclear waste materials. LLW [low-level radioactive waste] shipments are expected to continue for many years due to facility decommissioning and remediation.

A coordinated effort to evaluate the cumulative impacts to Nye County caused by all waste shipments should be conducted and mitigation measures identified to limit the impacts to local communities and residents.

Response

DOE added consideration of waste shipments that could occur due to the GNEP and Greater-Than-Class-C low-level waste activities, the extension of existing nuclear power plant operating licenses, and facility decommissioning and remediation activities to Section 4.2.1.2.1 of the Nevada Rail Corridor SEIS. Chapter 7 of the Rail Alignment EIS discusses the DOE mitigation and monitoring program. The Department would consult with directly affected parties -- including Nye County -- as the rail line engineering advances, and during construction and operation of the railroad if the Department decided that a railroad should be constructed.

2.11 (1428)

<u>Comment</u> - RRR000656 / 0032

Section 4.2.2.4.4, page 4-27: Offsite contamination from historic DOE activities on the NTS [Nevada Test Site] are poorly defined. Information suggests that off-site contamination may exist within the proposed transportation corridors.

Nye County is anxious to identify the extent and significance of any off-site radioactive contaminated media. Nye County will be proposing a DOE/Nye County study to examine whether or not this is an issue, and if so, a plan for dealing with such contamination.

Response

DOE's studies of contamination at the Nevada Test Site have not identified any significant off-site contamination in the vicinity of the proposed rail corridor. However, DOE is willing to work with Nye County to understand its concerns. As described in Section 4.2.2.4.4 of the Nevada Rail Corridor SEIS, information on contamination at the Nevada Test Site is in several recent DOE NEPA analyses (DIRS 101811-DOE 1996, all; DIRS 162638-DOE 2002, all). Section 4.2.2.4.4 states that contamination of soil resources has occurred at the Nevada Test Site primarily due to radioactive waste management sites and past nuclear testing activities.

In April 1996, a Federal Facility Agreement and Consent Order was entered into by and among the State of Nevada, acting by and through the Department of Conservation and Natural Resources, Division of Environmental Protection, DOE, and the U.S. Department of Defense. The purpose of the Consent Order was to identify sites of potential historic contamination due to Nevada Test Site operations and implement proposed corrective actions based on public health and environmental considerations. The Consent Order identifies Corrective Action Units, which are groups of Corrective Action Sites that delineate and define areas of concern for contamination. Offsite Corrective Action Sites include the Central Nevada Test Area and Project Shoal.

The potential for exposure for construction workers and the public would result from resuspension of contaminated surface soils. Corrective Action Units 416 and 417 address surface contamination. Closure Reports indicating that the site remediation process was complete were submitted to the Nevada Division of Environmental Protection on February 13, 1998, for Corrective Action Unit 416, and on June 27, 2002, for Corrective Action Unit 417. Based on work under the Consent Order, the potential for worker or public exposure to contamination during railroad construction and operations along the Caliente or Mina rail alignment due to testing activities at the Nevada Test Site is not reasonably foreseeable.

2.11 (1434)

<u>Comment</u> - RRR000656 / 0034

Section 4.2.2.7, page 4-29: Long term economic development potential would be limited and related to railroad construction.

Although construction could mean a beneficial increase in employment and local purchase of materials, any long term benefit to local economies will be associated with shared use of the railroad. The Nye County study of economic impact from shared use clearly predicts a substantial economic benefit to all the transportation impacted counties. This benefit may out-live the repository.

Response

The Nevada Rail Corridor SEIS does not analyze the Shared-Use Option. See the Rail Alignment EIS.

2.11 (1436)

<u>Comment</u> - RRR000656 / 0035

Section 4.2.2.7, page 4-32: Cumulative traffic impacts would generally not be sufficient for major upgrades of regional roads.

Nye County believes that such a prediction cannot be made with existing information. Nye County recommends that a DOE/Nye County cooperative evaluation be initiated to monitor socioeconomic impacts to document the actual impact of rail and repository construction and operation. If unacceptable impacts are documented, it is expected that DOE will assist local entities in mitigating the impacts.

Response

Chapter 7 of the Rail Alignment EIS describes the DOE mitigation and monitoring program. DOE is committed to continuing its cooperative relationship with Nye County as the repository and rail projects progress. This process would be iterative because DOE would consult with directly affected parties about potential traffic and other impacts as the rail line engineering advanced and during railroad construction and operations.

2.11 (1437)

<u>Comment</u> - RRR000656 / 0036

Section 4.3.1.6, page 4-38: Due to the mostly rural nature, we [Nye County] expect the socioeconomic impacts to Nye County to be significantly greater than the urban regions referred to.

DOE should work in conjunction with the local communities to identify how the location of such facilities as work camps, sidings, and maintenance facilities can have a positive local impact. Such joint efforts should begin as early in the planning process as possible and continue through design and construction.

Response

Nye County has accepted cooperating agency status on the Nevada Rail Corridor SEIS and the Rail Alignment EIS. DOE is committed to continue its cooperative relationship with the County as the repository and rail projects progress. The Department added Nye County's perspective to Sections 5.5 and 7.4 of the Rail Alignment EIS. As discussed in Chapter 7 of the Rail Alignment EIS, DOE would establish a monitoring program to evaluate future impacts, including those from shared use and transportation issues, and determine potential mitigation measures.

2.11 (1697)

<u>Comment</u> - RRR000682 / 0058

Section 4.2.2.4.2: DOE needs to set forth measures it will implement to control invasive and noxious weeds during construction. Neither the cumulative impact section nor the impact analysis addresses this issue. Monitoring should be required.

Response

DOE added a discussion of mitigation and monitoring measures for a potential increase in invasive species and noxious weeds to Section 4.2.2.4.2 of the Nevada Rail Corridor SEIS. Section 2.2.2.10 and Table 7-1 of the Rail Alignment EIS describe the Department's commitment to monitor and control noxious weeds and invasive species. DOE clarified those descriptions to provide more detail on how it would develop and implement weed control during proposed railroad construction and operations.

DOE would develop a weed-management plan that met BLM requirements for monitoring and control of weeds, and would consult with directly affected parties during the development of the plan. The Department would implement a program to monitor and control weeds before beginning construction; this program would include an inventory of the alignment before construction, monitoring of disturbed sites, control of weeds throughout construction and operations, and reclamation of disturbed sites no longer needed for railroad operations. The weed management plan would include details about how and when

DOE would monitor and control weeds. As listed in Table 7-1 of the Rail Alignment EIS, application of water to disturbed sites would be limited to that necessary to meet requirements for the control of fugitive dust; DOE would control weeds that grew as a result of applying water.

2.11 (1701)

<u>Comment</u> - RRR000682 / 0056

Page 4-1, Cumulative Impacts: DOE needs to examine the increased rail activity and the impacts to transportation in the region.

Response

As described in Section 4.2.2.7 of the Nevada Rail Corridor SEIS, construction and operation of a railroad to Yucca Mountain along the Mina rail corridor -- coupled with other proposed development activities that DOE described in that section -- could strain parts of the existing roadway infrastructure. In addition, Section 4.2.2.7 describes the cumulative impacts to transportation in the region of influence and states that the level of cumulative traffic changes would not be sufficient to require major upgrades to regional roads.

2.11 (4181)

<u>**Comment**</u> – 2 comments summarized

The commenter expressed the belief that DOE did not make an attempt to ascertain the future development plans of the Timbisha Shoshone to include in this analysis. The commenters suggested that DOE revise the text to include a systematic analysis of the cumulative impacts from this project on Timbisha Shoshone Trust Land. They also suggested that the text should be comparable to that for the Walker River Paiute Tribe in the Mina rail corridor analysis.

Response

Although there are no residents on the Trust Lands, and significant current economic development there, the Department anticipates that the Timbisha Shoshone Tribe will develop and implement economic development plans for the Trust Lands. The *Final Legislative Environmental Impact Statement for the Timbisha Shoshone Homeland* (DIRS 154121-DOI 2000, all) stated that expected development for the Trust Lands would include a service station/convenience store, a gift/souvenir shop, and single-family detached housing units. DOE modified Section 4.2.1.2.8 of the Nevada Rail Corridor SEIS to include consideration of these plans.

2.11 (4182)

<u>**Comment**</u> – 2 comments summarized

Commenters suggested that DOE analyze the cumulative impacts of past, present and reasonably foreseeable radioactive waste shipments to and from Yucca Mountain and the Nevada Test Site. Commenters stated that with the extension of powerplant operating licenses and new applications for nuclear power plants, it is reasonable to assume that waste shipped and stored at Yucca Mountain could increase substantially. Other commenters noted that the GNEP program has the potential to have a significant impact on the repository.

Response

DOE added consideration of the effects the GNEP program could have on the total number of shipments in Nevada. DOE added information on the extension of existing operating licenses, and facility decommissioning and remediation activities to Section 4.2.1.2.1 of the Nevada Rail Corridor SEIS. DOE has not quantified the potential effects of new reactors in its cumulative impacts analysis because certain factors are unknown, such as how many new reactors would receive licenses, complete construction, and begin operations; whether spent nuclear fuel would be recycled; and the nature of the waste forms that would require disposal.

2.12 Impact Mitigation and Compensation

See Section 3.12 of the Rail Alignment EIS Comment-Response Document.

2.13 DOE Credibility

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS on this subject.

2.14 Comments Outside the Scope of the Nevada Rail Corridor SEIS

DOE did not receive any comments directed toward the Nevada Rail Corridor SEIS that were outside the scope of the SEIS.

2.15 Presentation

2.15 (146)

<u>**Comment**</u> – 2 comments summarized

Commenters found the Index in the Draft Nevada Rail Corridor SEIS and Draft Rail Alignment EIS inadequate because it failed to cover terms of interest such as terrorism, radioactivity, radiological region of influence, and radiological risk.

Response

DOE added these and other terms to the Index.

2.15 (147)

<u>**Comment**</u> – 2 comments summarized

In Table S-2 of the Nevada Rail Corridor SEIS, DOE should have included costs to construct the corridors. Lander County has prepared more recent cost estimates for the Carlin Corridor

Response

DOE has not developed construction cost estimates for the Carlin, Jean, and Valley Modified rail corridors. The Department based the cost estimates in the Rail Alignment EIS for the Caliente and Mina rail alignments on a level of design that included estimates of earthworks, quarries, and facilities. The Department has not developed that level of design for the Carlin, Jean, and Valley Modified rail corridors because it did not select them for analysis at the rail alignment level.

2.15 (1879)

<u>Comment</u> - RRR000682 / 0035

Page 2-14, Summary of Impacts: The summary generally lacks sufficient qualitative or quantitative analysis.

Response

The Summary provides a high-level overview of the Nevada Rail Corridor SEIS and the Rail Alignment EIS. Its purpose is not to provide qualitative or quantitative analysis. The individual chapters of the SEIS and EIS provide the detail the commenter seeks.

2.15 (3801)

Comment - RRR000191 / 0001

Summary, page S-2, fourth paragraph: In the interest of complete disclosure, the veto by the Governor of Nevada and the subsequent override by Congress should be included in the Background.

Response

DOE added the following to Section S.1.1 of the Summary: "On April 8, 2002, the Governor of Nevada submitted to Congress a notice of disapproval of the Yucca Mountain site designation. On May 8 and July 9, 2002, the House of Representatives and the Senate, respectively, passed a joint resolution that overrode the notice of disapproval and approved the development of a repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain."

2.15 (3802)

Comment - RRR000191 / 0002

Summary, page S-38, Table S-5, first entry: The conversion from meters to feet is incorrect in both the Caliente and Mina columns.

Response

DOE revised Table S-5 of the Summary to reflect the correct data.

2.15 (4034)

<u>Comment</u> - RRR000671 / 0018

Page 1-18, Section 1.5.3, Tribal Interaction Meetings: Various typographical errors are noted throughout the document however one in particular is found in Volume I for Rail Alignment -- Page 1-18 (3rd Paragraph) that misspells "Consolidate" which should be corrected to "Consolidated."

Response

DOE corrected the typographical error in Section 1.5.3.

2.16 General Participation in the NEPA Process

2.16 (755)

<u>Comment</u> - RRR000451 / 0001

The State Clearinghouse of the State of Nevada, Department of Administration reviewed the rail corridor/alignment proposal and had no comments.

Response

Thank you for your comment.



Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada – Nevada Rail Transportation Corridor DOE/EIS-0250F-S2

and

Final Environmental Impact Statement for a Rail Alignment for the Construction and Operation of a Railroad in Nevada to a Geologic Repository at Yucca Mountain, Nye County, Nevada DOE/EIS-0369

Rail Alignment EIS

Comment-Response Document



U.S. Department of Energy Office of Civilian Radioactive Waste Management

June 2008

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3. RAIL ALIGNMENT EIS COMMENT-RESPONSE DOCUMENT

INTRODUCTION

Background

This volume of the *Final Environmental Impact Statement for a Rail Alignment for the Construction and Operation of a Railroad in Nevada to a Geologic Repository at Yucca Mountain, Nye County, Nevada* (DOE/EIS-0369) (Rail Alignment EIS) consists of responses to comments the U.S. Department of Energy (DOE, or the Department) received on the Draft Rail Alignment EIS. DOE prepared this EIS consistent with the Nuclear Waste Policy Act, as amended (NWPA; 42 United States Code [U.S.C.] 10101 *et seq.*), the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations that implement NEPA (40 Code of Federal Regulations [CFR] Parts 1500 to 1508), and the Department's procedures for implementation of NEPA (10 CFR Part 1021), as applicable.

The following paragraphs describe the public-comment and related processes.

DRAFT ENVIRONMENTAL IMPACT STATEMENT

DOE issued the Draft Rail Alignment EIS in October 2007 for public comment. The Department announced the availability of the Draft EIS for public review and comment in the *Federal Register* (*FR*) on October 12, 2007 (72 *FR* 58071); this announcement began a 90-day comment period, which ended on January 10, 2008. At the same time, DOE issued the *Draft Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada – Nevada Rail Transportation Corridor (DOE/EIS-0250F-S2D; the Nevada Rail Corridor SEIS) and the <i>Draft Supplemental Environmental Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada (DOE/EIS) and the Draft Supplemental Environmental Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada (DOE/EIS) and the Draft Supplemental Environmental Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada (DOE/EIS-0250F-S1D; the Repository SEIS).*

This Rail Alignment EIS and the Nevada Rail Corridor SEIS evaluate the potential environmental impacts of constructing and operating a railroad for shipments of spent nuclear fuel and high-level radioactive waste from an existing rail line in Nevada to the repository at Yucca Mountain.

The Repository SEIS supplements the Yucca Mountain FEIS by considering the potential preclosure and postclosure environmental impacts of constructing and operating the repository, and the environmental impacts of national transportation of spent nuclear fuel and high-level radioactive waste.

This Comment-Response Document addresses comments on the Rail Alignment EIS. Each of the other NEPA analyses has its own Comment-Response Document. As described below, DOE received some comments that apply to more than one of the three analyses. When this occurred, the Department addressed the comment in only one of the Comment-Response Documents.

The October 12, 2007, DOE Notice of Availability (72 FR 58071) invited commenters to submit their comments on the NEPA documents by regular mail, facsimile transmission (faxes), electronic mail (e-mail), and at public hearings at eight locations:

- Hawthorne, Nevada November 13, 2007
- Caliente, Nevada November 15, 2007
- Reno/Sparks, Nevada November 19, 2007

- Amargosa Valley, Nevada November 26, 2007
- Goldfield, Nevada November 27, 2007
- Lone Pine, California November 29, 2007
- Las Vegas, Nevada December 3, 2007
- Washington, D.C. December 5, 2007

In addition, on November 27, 2007, DOE held a meeting with representatives of American Indian tribes and organizations to solicit their comments.

DOE received more than 4,000 comments on the NEPA documents from federal agencies; state, local, and tribal governments; public and private organizations; and individuals. These comments were in statements transcribed by a court reporter at the American Indian meeting and at the public hearings (the statement of each speaker is a separate comment document), or in written documents submitted at those hearings or sent to DOE by regular mail, e-mail, and fax.

Although the closing date of the public comment period was January 10, 2008, DOE was able to process all comments that it received and to prepare responses for inclusion in the three Comment-Response Documents.

As part of the Final Rail Alignment EIS, DOE has included compact disks that contain electronic images of the certified transcripts of the American Indian meeting and all public hearings held during the public comment period. These compact disks also contain electronic images of all comment documents (including transcripts for each commenter at the public hearings) that DOE received on the Draft Rail Alignment EIS; these images include brackets that identify the comments to which DOE has responded in this Comment-Response Document. In addition, DOE has placed this material on the Internet site for the proposed Yucca Mountain Repository (*www.ymp.gov*). Tables CR-1 and CR-2 (at the end of this volume) provide pointers to all comments received from organizations and individuals, respectively. These tables point to the locations in this or one of the other two Comment-Response Documents where the reader can find particular comments and the DOE responses. On several occasions, speakers at public hearings represented other individuals. In such cases, the tables list the person for whom the representative spoke. Table CR-3 is a cross-reference from the comments and responses back to the commenter(s); it identifies who made each comment and, for summary comments, the group of commenters.

HOW DOE CONSIDERED PUBLIC COMMENTS

DOE assessed and considered public comments on the Draft Rail Alignment EIS, both individually and collectively. Some comments led to EIS modifications; others resulted in a response to explain DOE policy, to refer readers to information in the EIS (or to the Repository SEIS or Nevada Rail Corridor SEIS), to answer technical questions, to explain technical issues, to correct reader misinterpretations, or to provide clarification.

A number of comments provided valuable suggestions on improving the Rail Alignment EIS. As applicable, the responses in this volume identify changes DOE made to the EIS as a result of comments.

Methodology

Because of the large number of submittals (letters, e-mails, faxes, comment forms, public hearing transcripts) that DOE received during the public comment period on the Draft Rail Alignment EIS, the Department elected to extract and categorize comments and, as appropriate, group the same or similar

comments for response. This approach enabled the Department to consider, individually and collectively, all comments it received on the Draft EIS in an efficient manner, and to respond to those comments.

The following list highlights key aspects of the DOE approach to capturing, tracking, and responding to public comments on the Draft Rail Alignment EIS:

- DOE read all comment documents and their attachments to identify and extract comments. As a part of this process, DOE reviewed technical attachments (for example, reports) for potential applicability to the EIS. After comment identification, DOE grouped individual comments by categories and assigned each comment to an expert in the appropriate discipline to prepare a response. Senior-level experts reviewed each response to ensure technical and scientific accuracy, clarity, and consistency, and to ensure that the response addressed the comment.
- Frequently, more than one commenter submitted identical or similar comments. In such cases, DOE grouped the comments and prepared a single summary response for each group. Summarizing comments was appropriate because of the large number of similar comments received.
- To the extent practicable, DOE presented the comments in this document by topic. Each commentresponse pair, individual or summary, consists of three parts: (1) information on the source of the comment, including the number of the submitted comment document and the comment number, or for summary comments, the number of comments summarized, (2) the individual or summary comment, and (3) the response.
- To the extent practicable, this Comment-Response Document presents the comments extracted from comment documents as stated by the commenters (see next bullet). In some cases, however, DOE paraphrased individual comments to capture their meaning if they were general in nature (for example, for or against an activity or action), if they indicated something was incomplete or insufficient but did not provide specific examples (for example, "cumulative impacts are inadequate"), or if they indicated something was not safe (for example, transportation of spent nuclear fuel) but provided no specific information. Comments grouped and summarized for response are, of necessity, paraphrased, but DOE made every effort to capture the essence of every comment included in a comment summary.
- DOE did not modify certified transcripts of public hearings. However, some transcripts (and letters, e-mails, and faxes) contained obvious errors (for example, misspelled names or words). For this Comment-Response Document, DOE corrected such errors in the extracted comments. Similarly, DOE deleted extraneous material (such as repeated words) from extracted comments whenever such a deletion would not alter the meaning of the comment. The compact disk included with this Final EIS contains an image of the text of each hearing transcript as certified by the court reporter.
- If the meaning of a comment was not clear, DOE made a reasonable attempt to interpret the comment and respond based on that interpretation.
- Some commenters incorporated comments by reference to other documents. DOE handled such comments in one of three ways: (1) For a comment submitted under a separate process that was complete, which includes scoping for the three NEPA documents under consideration, DOE did not provide a response because it had already considered the matter. (2) For a comment submitted under a separate process that was not complete (for example, an environmental assessment on repository infrastructure), DOE considered changed circumstances and responded by discussing in general what it had done. (3) For comments submitted previously and submitted again under the current process

with additional information, DOE responded to the current comment and reevaluated the earlier submittal.

• DOE determined that some comments it received for one of the EISs were more suited for response in another document (for example, some comments on the Nevada Rail Corridor SEIS or Rail Alignment EIS fit better in the Repository SEIS responses); in these cases, the Department provided its response in the appropriate Comment-Response Document.

Key Issues Raised in Comments

The Proposed Action of the Rail Alignment EIS is to determine an alignment (within a corridor) and construct and operate a railroad in Nevada to transport spent nuclear fuel, high-level radioactive waste, and other Yucca Mountain Project materials to a repository at Yucca Mountain, thereby providing the necessary background, data, and analyses to help decisionmakers and the public understand the potential impacts.

This section provides short summaries of a variety of key issues raised by commenters (presented in *italics*) during the public comment process for the Draft Rail Alignment EIS. It also provides DOE responses to those key issues. DOE identified the issues as "key" based on the following factors :

- The extent to which an issue concerned fundamental aspects of the Proposed Action;
- The nature of the comments as characterized by the commenters; and
- The extent to which DOE changed the EIS in response to the issue.

The main body of this Comment-Response Document contains all the comments DOE received on the Draft Rail Alignment EIS, and the DOE responses to those comments. DOE encourages readers to review the specific comments and DOE responses for particular areas of interest.

I. MINA RAIL CORRIDOR

Study of the Mina rail corridor is unwarranted.

In the Yucca Mountain FEIS, DOE evaluated in detail five potential rail corridors in the State of Nevada in which DOE could construct a rail line to link an existing rail line to Yucca Mountain. In the Yucca Mountain FEIS, DOE considered, but eliminated from further study, several other potential rail corridors. The Department eliminated one of those, the Mina rail corridor, because it crosses the Walker River Paiute Reservation and the Tribe had previously stated that it would not allow DOE to transport nuclear waste across the Reservation.

During initial scoping for the Rail Alignment EIS in 2004, DOE received comments that identified the Mina rail corridor for consideration as an alternative to the Caliente rail corridor. DOE subsequently held discussions with the Tribe on the availability of the Mina rail corridor, and in May 2006 the Tribe informed DOE that it would not object to the Department studying the potential impacts of constructing and operating a railroad across its Reservation. In response, DOE prepared a preliminary feasibility study of the Mina rail corridor. On October 13, 2006, based on the results of the study, DOE issued an Amended Notice of Intent to expand the scope of the Rail Alignment EIS to include the Mina rail corridor (71 *FR* 60484).

In April 2007, the Walker River Paiute Tribal Council passed a resolution and announced that it was withdrawing from participation in the EIS process. The Tribe renewed its prior objection to

the transportation of nuclear waste across the Reservation. At the time the Tribe announced its withdrawal from the EIS process, DOE had completed the fieldwork and engineering studies necessary to conclude that it should include the Mina rail corridor in both the Nevada Rail Corridor SEIS and the Rail Alignment EIS. The studies indicated that construction and operation of a railroad along the Caliente or Mina rail alignment would have similar but generally small environmental impacts. On balance, however, the Mina rail corridor would be environmentally preferable because, in general, it would present fewer private-land conflicts, less surface disturbance, and smaller impacts to wetlands and air quality than the Caliente rail corridor would. In addition, based on preliminary estimates, the total cost to construct the railroad along the Mina rail corridor would be approximately 20 percent less than to construct along the Caliente rail corridor.

For the reasons stated above, DOE has included the Mina rail corridor in the Nevada Rail Corridor SEIS and Rail Alignment EIS but, in light of the Walker River Paiute Tribe's current position on the shipment of nuclear waste across its Reservation, DOE has identified the Mina rail corridor as a nonpreferred alternative.

II. LEAD AGENCY

The Surface Transportation Board should be the lead agency for the Rail Alignment EIS not DOE.

CEQ regulations (40 CFR 1501.5, 1501.6) address the issue of lead and cooperating agencies. DOE has adopted the CEQ NEPA regulations and implemented its own regulation on interagency cooperation (10 CFR 1021.342). The role of a federal agency in the NEPA process is a function of the agency's expertise and relationship to the proposed action. If more than one federal agency is involved in an undertaking that requires an EIS, CEQ regulations provide for the designation of a lead agency to supervise preparation of the environmental analysis (40 CFR 1501.5). The lead agency, which is generally the agency with major responsibility for the proposed action [40 CFR 1501.5(c)], is responsible for the preparation of the EIS and for compliance with other NEPA procedural requirements (40 CFR 1508.16).

A federal, state, tribal, or local agency with special expertise on an environmental issue or jurisdiction by law can be a cooperating agency in the NEPA process. A cooperating agency has the responsibility to assist the lead agency by participating in the NEPA process at the earliest possible time; by participating in the scoping process; in developing information and preparing environmental analyses including portions of the environmental impact statement for which the cooperating agency has special expertise; and in making available staff support at the lead agency's request to enhance the lead agency's interdisciplinary capabilities (40 CFR 1501.6). A cooperating agency can adopt the EIS prepared by the lead agency and use it in its own decisionmaking (40 CFR 1506.3).

DOE is the lead agency for this Rail Alignment EIS. Under the Nuclear Waste Policy Act, the Department is responsible for the disposal of spent nuclear fuel and high-level radioactive waste to protect public health, safety, and the environment, and for the development and implementation of a plan to transport spent nuclear fuel and high-level radioactive waste to a repository at Yucca Mountain. The Rail Alignment EIS appropriately tiers from the broader corridor analysis in the Yucca Mountain FEIS, consistent with CEQ regulations (40 CFR 1508.28) and the court's decision in <u>State of Nevada v. DOE</u>, 457 F.3d 78 (D.C. Cir. 2006).

Consistent with CEQ and DOE regulations, DOE has requested the assistance of other agencies that have management or regulatory authority over lands and resources that the proposed railroad could affect or that have special expertise related to the proposed action in the Rail Alignment EIS. One of those agencies is the Surface Transportation Board (STB), which has exclusive jurisdiction over common-carrier rail lines that are part of the interstate rail network. The STB accepted cooperating agency status in the preparation of the Rail Alignment EIS. During the preparation of the NEPA analyses, DOE met with the STB to discuss project direction and coordination, as Appendix B, Section B.1 of the EIS describes.

If the proposed railroad were to be operated as a common-carrier railroad (referred to as shared use in this Rail Alignment EIS), the Department would have to obtain a certificate of public convenience and necessity from the BLM to construct and operate the railroad from the STB. As part of its review process, the STB would need to consider the environmental effects of railroad construction and operation. Although DOE has not made a decision whether to construct and operate a railroad, DOE filed an application for a certificate of public convenience and necessity with the STB on March 17, 2008 (DIRS 185339-Vandeberg 2008, all). As part of the consideration of that application, the STB Section of Environmental Analysis is responsible for preparing the appropriate NEPA documentation for railroad construction and operation cases under the jurisdiction of the STB. Consistent with CEQ regulations, the STB could adopt the Rail Alignment EIS in whole or in part and use it as a basis for its decision. If the STB determined that it needed NEPA documentation in addition to the Rail Alignment EIS to support its decision whether to issue a certificate of public convenience and necessity, the STB would prepare that documentation.

The STB has not requested lead agency status, nor has it expressed any disagreement with DOE's status as lead agency. Under these circumstances, where no federal agency has expressed disagreement with the decision on lead agency status, as the CEQ concluded in a letter dated February 8, 2005 (DIRS 185485-Connaughton 2005, all), the process outlined in its regulations (40 CFR 1501.5(e) for resolution of disagreements among agencies regarding lead agency status has not been triggered.

For these reasons, DOE is the appropriate lead agency for the Rail Alignment EIS and the Nevada Rail Corridor SEIS.

III. ALTERNATIVES ANALYZED

Cost seems to have driven the selection of alignment alternatives analyzed in the Rail Alignment EIS, resulting in an inadequate consideration and evaluation of all reasonable alternatives.

The CEQ has stated that "reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense" [*Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 Fed. Reg. 18026, 18027 (March 23, 1981)]. DOE analyzed the range of reasonable alternatives, which it developed through a rigorous process that is consistent with CEQ guidance. Appendix C of the Rail Alignment EIS describes this process in detail.

As described in Section C.1, to develop the range of alternative segments for evaluation in the Rail Alignment EIS, DOE evaluated a suite of potential alternative segments for the Caliente and Mina Implementing Alternatives to determine if they would be practical or feasible from a technical, environmental, and economic standpoint. As Sections C.1 and C.2 explain, the Department first identified preliminary alternative segments and common segments in the Notice

of Intent and Amended Notice of Intent (69 *FR* 18565, April 8, 2004; and 71 *FR* 60484, October 13, 2006) and invited public comment on the identified alternatives as part of the scoping process. DOE considered all comments on alternative segments, including those that suggested specific alternative segments or criteria for modifying the preliminary alternative segments and identifying new alternative segments.

As described in Section C.3, after the scoping process DOE used a computer-based modeling system to evaluate multiple alternative and common segments within the geographic areas of the Caliente and Mina rail corridors. DOE also used the modeling software to develop preliminary construction cost estimates. As Section C.3 explicitly states, the modeling software derived alternative segments and common segments that met the applicable design criteria while it addressed the need to minimize or avoid potentially adverse impacts. Table C-1 lists the specific primary engineering factors or standards related to the design and construction of a rail line that DOE considered in this analysis. Section C.3 identifies the environmental and land use features that DOE considered; they include, for example, springs, Wilderness Study Areas, cultural resources, mining claims, American Indian, and federally managed lands. Based on public scoping comments and the DOE analyses described above, DOE produced full suites of alternative and common segments for the Caliente and Mina rail corridors (as shown in Figures C-4 and C-5, respectively, of the Rail Alignment EIS).

Although Tables C-4 through C-10 contain preliminary construction cost estimates (which increase with the avoidance of environmental and land use features), the estimates did not serve as the sole basis for elimination of any alternative from detailed consideration. As Section C.4 states, the primary reasons for eliminating or adjusting an alternative segment included (1) environmental constraints, such as impacts to Wilderness Areas or wildlife preserves; (2) avoidance of private lands, mineral resources, or oil resources; (3) engineering considerations, such as steep grades, tight curvature, tunneling, or excessive excavation or placement of fill materials; and (4) public safety and national security issues associated with the Nevada Test and Training Range. Tables C-2 (Caliente rail alignment) and C-11 (Mina rail alignment) identify the alternative segments DOE analyzed in detail and those it eliminated from detailed analysis. For the latter, Tables C-2 and C-11 indicate the reason(s) for the elimination of such segments (for example, engineering criteria or land-use constraints).

The process described in Appendix C of the Rail Alignment EIS is fully consistent with all applicable NEPA requirements and CEQ guidance.

IV. NO-ACTION ALTERNATIVE

The No-Action Alternative for the Rail Alignment EIS should be the shipment of spent nuclear fuel and high-level radioactive waste by the mostly legal-weight truck scenario analyzed in the Yucca Mountain FEIS, and not that DOE would not construct and operate a rail line in Nevada.

DOE disagrees that the No-Action Alternative in the Rail Alignment EIS should be the mostly legal-weight truck scenario. DOE specifically considered the human health and environmental impacts associated with the mostly legal-weight truck scenario in the Yucca Mountain FEIS. In the Yucca Mountain FEIS, DOE analyzed two national transportation scenarios: mostly rail and mostly legal-weight truck. Based on the analyses in the FEIS, DOE made several decisions in a Record of Decision, one of which was selection of the mostly rail scenario as the transportation mode both on a national basis and in the State of Nevada (69 *FR* 18557, April 8, 2004). In the Record of Decision, DOE acknowledged that selection of the mostly rail scenario would ultimately require construction of a rail line in Nevada.

The Rail Alignment EIS "tiers" from the Yucca Mountain FEIS and the decisions DOE reached on the basis of the FEIS analysis. The CEQ NEPA regulations define tiering as:

... the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared (40 CFR 1508.28).

The CEQ regulations explicitly recognize the appropriateness of tiering by federal agencies "when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe" [40 CFR 1508.28(b)]. Because DOE, as lead agency, analyzed the mostly legal-weight truck scenario in the Yucca Mountain FEIS and did not select it as the preferred mode of transportation in its Record of Decision, it is an issue the Department has already decided and, therefore, excluded from further consideration in the Rail Alignment EIS.

In addition, the CEQ has stated that "no action" in cases that involve federal decisions on proposals for projects can mean that the proposed activity would not take place, and the agency should compare the environmental impacts of taking no action with the impacts of permitting the proposed activity. [See *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 *FR* 18026, 18027 (March 23, 1981)]. Therefore, it is appropriate that the No-Action Alternative for the Rail Alignment EIS assumes maintenance of the "status quo."

V. MITIGATION

DOE states that it will consider the implementation of mitigation measures but the Rail Alignment EIS lacks specific mitigation commitments and sufficient details on actual goals or methods.

DOE revised Chapter 7 of the Draft Rail Alignment EIS to reflect more clearly the Department's commitment to implement best management practices and mitigation measures and present its intent to develop and institute an ongoing mitigation process. The Department recognizes the impacts the rail line could have on a number of individuals and parties and would mitigate such impacts to the extent practicable. DOE appreciates the comments it received on best management practices and mitigation measures and has used these comments to develop a stronger mitigation policy. Chapter 7 expresses the policy and explains the steps DOE would follow in the longer-term mitigation process to develop, with its stakeholders, the measures it would implement, and the method it would use to monitor the effectiveness of those measures.

DOE expanded its range of best management practices and mitigation measures (see the revised tables in Chapter 7 of the EIS) to include measures that commenters suggested. Some commenters recommended alternatives to the measures DOE included in the Draft EIS. In addition, DOE added measures the STB sometimes requires, and measures the Bureau of Land Management uses in its Resource Management Plans. DOE anticipates that the railroad design would continue to evolve, which would create additional opportunities for mitigation and potentially eliminate the need for some of the best management practices and mitigation measures currently under consideration.

With these changes, DOE has identified the range of best management practices and mitigation measures and an ongoing process committed to applying mitigation in compliance with CEQ regulations (40 CFR 1508.20) by avoiding, minimizing, rectifying, or compensating for impacts.

VI. SABOTAGE AND TERRORISM

The consideration of terrorist attacks is incomplete and requires additional analysis.

Whether acts of sabotage or terrorism would occur, and the exact nature and location of the events or the magnitude of the consequences of such acts if they were to occur, is inherently uncertain—the possibilities are infinite. Nevertheless, DOE took a hard look at the consequences of potential acts of sabotage or terrorism at the repository and during the transport of spent nuclear fuel and high-level radioactive waste by evaluating two fundamentally different scenarios: one involving aircraft and one involving a weapon or device that struck a transportation cask loaded with commercial spent nuclear fuel. DOE estimated the consequences of these scenarios without regard to their probability of occurrence; that is, DOE assumed the scenarios would occur and under conditions that would reasonably maximize the consequences.

As with any aspect of environmental impact analysis, it is always possible to postulate scenarios that could produce higher consequences than previous estimates. In eliminating the requirement that agencies conduct a worst-case analysis, the CEQ has pointed out that "one can always conjure up a worse 'worst case'" by adding more variables to a hypothetical event, and that "'worst case analysis' is an unproductive and ineffective method…one which can breed endless hypothesis and speculation." As indicated in the CEQ regulations that implement NEPA, an agency has a responsibility to address reasonably foreseeable significant adverse effects. The evaluation of impacts is subject to a "rule of reason" ensuring analysis based on credible scientific evidence useful to the decisionmaking process. In applying the rule of reason, an agency does not need to address remote and highly speculative consequences in its EIS.

Since the terrorist attacks of September 11, 2001, the NRC has issued safeguards advisories and orders to enhance the security of spent nuclear fuel transportation and shipments of large quantities of radioactive material. Enhancements include more preplanning and coordination with affected states, additional advance notification of shipments, additional control and monitoring, trustworthiness checks for individuals who have access to a shipment or information about a shipment, and more stringent security measures for shipment routes and schedules. In addition, the NRC issued orders that require enhanced security measures for spent nuclear fuel shipments from reactors.

Failure to address the potential for a nuclear criticality during a terrorist attack.

The presence of water could increase the likelihood of criticality. Therefore, spent nuclear fuel shipping casks are specifically designed to remain subcritical, even when filled with water. It is highly unlikely that a terrorist event would cause the contents of a shipping cask to achieve a nuclear criticality, even if the event disrupted the contents of the cask.

In addition to the above, DOE received comments on a number of other key issues that apply to the Repository SEIS or the Nevada Rail Corridor SEIS. The Comment-Response Documents for those NEPA documents discuss these issues and include the DOE responses.

Organization of the Comment-Response Document

Because DOE issued the Repository SEIS, the Nevada Rail Corridor SEIS, and the Rail Alignment EIS simultaneously for public comment and the documents shared the same comment period and public hearings, most commenters provided their comments on the proposed repository and railroad projects and all three NEPA documents in a single comment document. Very often, particularly in relation to the Nevada Rail Corridor SEIS and the Rail Alignment EIS, commenters did not distinguish which NEPA analysis their comments concerned, or provided comments in a way that could make them applicable to more than one of the analyses.

In preparation for receipt and processing of public comments, DOE developed three parallel topical outlines (one for each of the NEPA analyses) for use in categorizing comments for response. In general, DOE based the topical outlines on the structure and contents of the NEPA analyses. Further, DOE used a database to capture and track comments according to the topical outlines, and ultimately to produce the Comment-Response Documents. Based on specifics provided by commenters or on an interpretation of the intent of the comment, the Department assigned each comment to the most appropriate topic in only one topical outline. The topical outline for the Repository SEIS Comment-Response Document begins with 1; the topical outline for the Nevada Rail Corridor SEIS Comment-Response Document begins with 2; and the topical outline for the Rail Alignment EIS Comment-Response Document begins with 3. Thus, in this Rail Alignment EIS Comment-Response Document, all sections begin with 3.

After the Department received and processed all the comment documents, the topical outline (and therefore, the database) had topics for which DOE did not receive any comments; there also were numbered placeholders the Department did not use. This Comment-Response Document identifies topics for which the Department did not receive comments and numbered sections not used. This approach maintains the parallel structures of the three comment-response documents.

Because a number of comments were similar, the Department has combined and summarized them.

The compact disks that are part of this Final EIS contain electronically scanned images of the transcripts of all the public hearings along with scanned images of all letters, e-mail, faxes, etc., for the Draft Rail Alignment EIS.

How To Use this Comment-Response Document

Tables CR-1 and CR-2 provide alphabetical guides to the location of comments by organizations and individuals, respectively. Table CR-2 lists anonymous submittals as "Anonymous"; lists as "Illegible" submittals for which DOE could not read the signature; and lists as "No last name given" submittals from those who provided only a first name. To find a comment and the DOE response, locate the commenter's name (by individual or organization) in the appropriate table and turn to the index location listed. The identification number in parentheses after the index location identifies the comment-response pair.

As an actual example, Alice Bartholomew submitted a letter (comment document RRR000529) that contains 14 identified comments. To read the DOE responses to Ms. Bartholomew's comments, first find her name in Table CR-2. In addition to her name, the table includes the locations of her 14 comments and the DOE responses to those comments.

Note that Ms. Bartholomew submitted comments on (or DOE interpreted her comments to apply to) all three of the NEPA analyses. The Repository SEIS Comment-Response Document responds to comments beginning with 1; the Nevada Rail Corridor SEIS Comment-Response Document responds to comments

beginning with 2; and the Rail Alignment EIS Comment-Response Document responds to comments beginning with 3.

To read the response to Ms. Bartholomew's first comment, turn to Section 1.1.3 of the Repository SEIS Comment-Response Document, response number (15); to read the response to her twelfth comment, turn to Section 2.1.2 of the Nevada Rail Corridor SEIS Comment-Response Document, response number (1418); and to read the response to her thirteenth comment, turn to section 3.2.4.2 of the Rail Alignment EIS, response number (7).

To read Ms. Bartholomew's comments in the context of her original letter, find comment document RRR000529 on the compact disk included with this Comment-Response Document, on the Yucca Mountain Project's Internet web site (http://www.ymp.gov), or in the copy at the nearest DOE Reading Room. Comment document RRR000529 is a scanned image of Ms. Bartholomew's letter with brackets around each identified comment.

Table CR-3 is a cross-reference from the comments and responses back to the commenter(s). This table identifies who made each comment and, for summary comments, the group of commenters.

Comments and Responses

3.1 Proposed Action

3.1 (933)

<u>Comment</u> - RRR000663 / 0011

The Draft Rail Alignment EIS fails to provide the detailed information on proposed rail alignments necessary for the assessment of impacts required under NEPA. Specifically, DOE has failed to present detailed rail alignment design maps and plan views, including vertical profiles, for the Caliente and Mina preferred alignments and alternative segments. Certain references, such as the Nevada Rail Partners reports, refer to "conceptual rail plan-and-profile drawings (based on the 5-foot contour mapping)," [DIRS 182777, 182778] but the plan and profile information is not included in the Draft Rail Alignment EIS or any of the references provided on the DOE website.

Detailed information on the vertical profile of the finished track-bed structure is critical for assessing impacts on humans, livestock, and wildlife. The top of rail elevation above the adjacent land surface, and the width and slope of the ballast shoulders, are essential for determining the extent to which the railroad presents a barrier to movement at any specific location along the alignment. Based on the limited information provided in the Draft Rail Alignment EIS, it appears that the top of rail elevation may range from 18 inches to ten feet or more above the adjacent land surface. Similar information is needed for those segments of the alignment constructed within cut-away areas.

Without detailed plan-and-profile drawings, potentially affected individuals and other reviewers cannot accurately determine the impacts of rail construction and operation on privately owned and leased lands traversed by the alignment.

Without detailed plan-and-profile drawings, reviewers cannot determine whether or not the proposed alignments comply with the design parameters established by DOE.

Without detailed plan-and-profile drawings, reviewers cannot independently verify the cut and fill requirements, the sub-ballast and ballast requirements, the right of way requirements, the disturbed area estimates, other major project attributes, and the resulting construction costs and impacts.

Response

DOE used the best available information in the Rail Alignment EIS to provide a reasonably thorough discussion of the potential environmental consequences of the Proposed Action. CEQ and DOE policies and procedures that implement the requirements of NEPA call for environmental impact analyses early in the process of development of a proposed federal project. In particular, the need to prepare an EIS early in the process is stressed throughout the CEQ regulations (40 CFR 1500.5; 40 CFR 1501.2; 40 CFR 1502.5; and 40 CFR 1508.23). In addition, there are processes for determining if there is a need for additional NEPA analyses if an agency proposes substantial changes to a proposed action or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

The analysis in the Rail Alignment EIS is based on a conceptual design of the rail line. DOE used the best available information to prepare the EIS. This information is sufficient to perform an adequate and meaningful evaluation of the proposed project. Detailed vertical profile drawings are provided in the Plan and Profile Drawings (DIRS 182674-Nevada Rail Partners 2007, all; DIRS 180871-Nevada Rail Partners 2007, all). Detailed map view drawings of the entire rail alignments are provided in the Caliente Map Atlas (DIRS 185492-DOE 2008, all) and the Mina Map Atlas (DIRS 185510-DOE, 2008, all).

3.1 (1962)

<u>Comment</u> - RRR000525 / 0023

The National Association of Regulatory Utility Commissioners has been an active stakeholder in the important matter of safe, long-term disposal of spent nuclear fuel in a geologic repository. We reviewed and commented upon the Draft Environmental Impact Statement for the repository in 1999 and provided scoping comments for the Supplemental EIS as well as for the Rail Alignment EIS.

While fulfillment of the proposed action considered in the 2002 Yucca Mountain Repository EIS and the Supplemental EIS being concurrently reviewed is contingent on approval of a license to be issued by the Nuclear Regulatory Commission, construction and operation of a railroad to the geologic repository site at Yucca Mountain is within DOE'S authority, provided Congress appropriates necessary funding and DOE adheres to applicable federal laws and regulations.

Response

Thank you for your comment.

3.1.1 Purpose and Need for Agency Action

3.1.1 (1043)

<u>Comment</u> - RRR000617 / 0037

DOE's statement of purpose and need does not adequately describe the decisions requiring NEPA compliance under each of the NEPA documents.

Page 1-1, Section 1.1: The following sentence, found in the Repository EIS, must be included in the Rail Alignment EIS, "DOE has prepared this Draft Environmental Impact Statement for a Rail Alignment for the Construction and Operation of a Railroad in Nevada to a Geologic Repository at Yucca Mountain, Nye County, Nevada (DOE/EIS-0369D) ("Rail Alignment DEIS") to assist the U.S. Nuclear Regulatory Commission (NRC) in adopting, to the maximum extent practicable, any environmental impact statement (EIS) prepared pursuant to Section 114(f) of the Nuclear Waste Policy Act, as amended." (NWPA, 42 U.S.C. 10101 et seq.)

Response

DOE plans to submit the Repository SEIS to the U.S. Nuclear Regulatory Commission (NRC) pursuant to Section 114(f) of the NWPA. Because the Repository SEIS incorporates by reference portions of the Rail Corridor SEIS and the Rail Alignment EIS, DOE will also provide copies of those documents to the NRC. The NRC will determine which of these documents (or portions thereof) it will consider for adoption pursuant to Section 114(f).

3.1.2 Decision on Proposed Action

3.1.2 (2)

Comment - 3 comments summarized

Commenters stated that DOE should not abandon the rail line at some point in the future. Some noted the potential value of the rail line to the communities and businesses along the selected route. Commenters suggested that when nuclear waste shipment operations cease, the value of the railroad should be assessed and its ownership and operations optioned to the state, local authorities, or a private rail operator. Some suggested that DOE should stipulate a process to work with users, private entities, and governments in the area to change ownership and operational responsibility.

Response

Any DOE decision regarding the future disposition of the proposed railroad after the end of the nuclear waste shipping campaign is premature. Following completion of the shipping campaign, the Department could consider abandoning the rail line or transferring ownership and maintenance responsibilities for the rail line to local communities or the private sector.

3.1.2 (3)

<u>Comment</u> – 2 comments summarized

Nye County stated that the County would probably recommend that, after railroad construction is complete, DOE transfer some of the construction camps and facilities to County ownership rather than remove them. In addition, Nye County suggested that DOE involve local governments early in the decisionmaking process for camp locations and future use.

Response

The Department's proposal is that following the completion of construction, DOE would consult with the Bureau of Land Management (BLM) regarding abandonment and reclamation of the construction camps. The abandonment process would include dismantling each camp, dismantling the electrical substation,

removing the temporary wastewater-treatment facility, and reclaiming the land by returning it to as natural a state as practicable. In addition, DOE is committed to involving Nye, Esmeralda, and Lincoln Counties in decisions on the future use of construction camps and the associated infrastructure to provide lasting benefits to the communities (see Table 7-2 of the Rail Alignment EIS). In the case of proposed construction camp locations on BLM-administered land, the BLM would have decision-making authority regarding the permanency of camp facilities.

3.1.2 (604)

<u>Comment</u> - RRR000015 / 0002

The commenter stated that the documents do not explain the nexus between the railroad and the repository and whether the railroad could be approved, funded, and built but no nuclear waste ever go to the repository.

Response

As described in Section 2.1 of the Repository SEIS, the Proposed Action in that document is to construct, operate, monitor, and eventually close a repository at Yucca Mountain. In conjunction with that Proposed Action, DOE would transport most spent nuclear fuel and high-level radioactive waste by rail (the mostly rail scenario) from 76 sites to the repository. Section 2.1.7.3 of the Repository SEIS explains that DOE, under the mostly rail scenario, would transport these materials by rail in the Caliente or Mina rail corridor in the State of Nevada. The Forewords to the Repository SEIS and the Rail Alignment EIS explain the relationship between these documents.

Speculation regarding how Congress would fund the railroad and whether DOE would construct the railroad but never use it for its intended purpose is not relevant to estimating potential environmental impacts, and is outside the scope of the analyses of the Repository SEIS and Rail Alignment EIS.

3.1.2 (4083)

<u>Comment</u> - RRR000671 / 0027

Page 1-28, Table 1-3, NEPA Documentation Related to the Proposed Railroad: The text provides a summary of NEPA documents that were identified relating to the proposed railroad but fails to mention the Environmental Impact Statement relating to the Storage of Greater-than-Class-C Low-Level Radioactive Waste that evaluates geologic disposal similar to and possibly at Yucca Mountain. The text should be revised to include Greater-than-Class-C Low-Level Radioactive Waste.

Response

Table 1-3 of the Rail Alignment EIS cites the *Notice of Intent to Prepare an EIS for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste* (72 *FR* 40135, July 23, 2007). The Draft EIS for that action has not yet been published. The Rail Alignment EIS analyzes potential cumulative transportation impacts that would result from shipping Greater-Than-Class-C (GTCC) low-level radioactive waste to Yucca Mountain for disposal.

3.1.3 General Opposition to the Proposed Action

3.1.3 (53)

<u>Comment</u> – 9 comments summarized

Commenters expressed broad opposition to the construction and operation of a railroad in either the Caliente or Mina rail alignment. Commenters stated that construction and operation in either corridor would result in severe impacts to ranchers and public lands, would pose a very real threat to the health and safety of the residents of Nevada, and would impose an exorbitant cost on taxpayers that will not solve the problems of nuclear waste disposal.

Response

Because of the number of comments DOE received that opposed construction and operation of a railroad in general and for a range of specific reasons, the Department refers commenters who submitted comments summarized here to the discussion of issues in the introduction to this Comment-Response Document and to other comments and responses on specific topics that cover the range of topics summarized here (see the Comment-Response Document Table of Contents).

3.1.4 General Support for the Proposed Action

3.1.4 (69)

Comment - 11 comments summarized

Commenters expressed broad support for the Proposed Action and cited the extensive information in the Draft Nevada Rail Corridor SEIS and Draft Rail Alignment EIS as providing a sound foundation on which DOE can finalize a decision on the rail corridor and rail alignment and begin construction as soon as possible. Commenters stated that with these draft documents DOE has demonstrated there are no significant adverse environmental impacts from constructing and operating a railroad to Yucca Mountain in the Caliente or Mina rail alignment. Some commenters noted that impacts to Nevada would be small, which is consistent with industry experience. A commenter suggested that DOE continue with construction and operation of the railroad because the analyses indicated there would be no disproportionately high and adverse human health and environmental impacts to minority or low-income populations. Commenters stated that, based on the information presented, DOE should finalize these documents and make a final decision on the corridor and alignment of the rail line. Construction should then begin as soon as possible so a rail line would be available for use in repository construction and well before repository operations are scheduled to begin. Commenters noted that DOE's current schedule fully supports this goal, and industry encourages DOE to maintain the rail construction schedule to the best of its ability. Commenters suggested that having a rail line available for infrastructure improvements and repository construction would minimize disruption of traffic in the vicinity of the repository and otherwise minimize environmental impacts to residents near the repository. Commenters expressed support for the use of rail and dedicated trains as the best and most efficient method to ship spent nuclear fuel and high-level radioactive waste to Yucca Mountain. Other commenters expressed support for construction of a rail line because of potential benefits to Esmeralda, Nye, and Lincoln Counties. Other commenters expressed support for the Shared-Use Option.

Response

Thank you for your comments.

3.2 NEPA Process

3.2 (11)

<u>Comment</u> – 6 comments summarized

Several commenters referenced scoping comments they submitted during one or both of the scoping periods for the Rail Alignment EIS. Some commenters resubmitted their scoping comments and others incorporated them by reference in their comments on the Draft Rail Alignment EIS. Other commenters referenced scoping comments and other comments submitted during the Repository FEIS public comment periods.

Response

DOE acknowledges these comments. The CEQ guidance for the scoping process (DIRS 185292-CEQ 1981, all) identifies the following objectives: (1) identify the concerns of the affected public and the agency; (2) facilitate an efficient EIS preparation process; (3) define the issues and alternatives that the EIS will examine in detail, and simultaneously devote less attention and time to issues that cause no

concern; and (4) save time in the overall process by helping to ensure that draft EISs adequately address relevant issues, reducing the possibility that new comments will cause the agency to rewrite or supplement a statement. The DOE scoping process and the resulting Rail Alignment EIS were consistent with these objectives.

DOE carefully considered all comments (oral and written) it received during the two scoping periods for the Rail Alignment EIS in the development of the scope of the EIS analysis. Tables 1-1 and 1-2 of the EIS list the comments that caused DOE to change the scope of the EIS. The Department prepared two summaries of scoping comments, one for each scoping period. Sections 1.6.2.1 and 1.6.2.2 of the Rail Alignment EIS describe these summaries.

3.2 (237)

Comment - RRR000075 / 0003

The commenter asserted that DOE has picked the longest, most expensive rail alignment that disturbs the most ground.

Response

DOE selected the Caliente rail corridor as the corridor in which to study possible alignments for a rail line in its April 8, 2004, *Record of Decision on Mode of Transportation and Nevada Rail Corridor for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, NV* (69 *FR* 18557). The Department based that decision on the analysis of five rail corridors in the Yucca Mountain Final Environmental Impact Statement (FEIS). DOE selected the Caliente rail corridor in part because it appeared that, among the corridors analyzed in the Yucca Mountain FEIS, that rail corridor would have the fewest land-use or other conflicts that could lead to substantial delays in acquiring the necessary land and rights-of-way or that could lead to substantial delays in beginning construction. DOE's preferred alternative is to construct and operate a railroad along the Caliente rail alignment and implement the Shared-Use Option for the reasons described in Section 2.4 of the Rail Alignment EIS.

3.2 (575)

<u>Comment</u> - RRR000028 / 0001

The commenter stated that the [NEPA] process is useless because DOE has predetermined the outcome (including already deciding on a route) and DOE fails to answer comments.

Response

The outcome of this NEPA process is not predetermined. In Section 2.4 of the Rail Alignment EIS, DOE describes its preferred alternative, which is to construct and operate a railroad along the Caliente rail alignment and implement the Shared-Use Option. All the information in the public record for this project, including the Rail Alignment EIS and all public and agency comments will be available to the DOE decisionmaker. DOE will announce its decision on the railroad proposal in a Record of Decision that will follow publication of this Final EIS by at least 30 days. DOE is addressing public comments in this Comment-Response Document.

3.2 (1053)

<u>Comment</u> - RRR000617 / 0042

Pages 1-19 through 1-22: DOE discusses (Page 1-19) how DOE and BLM solicited comments from grazing permittees, and cites RCI's [Resource Concepts, Inc., 2005 report under DIRS 173845. It indicates that grazing permittees included "...suggested measures DOE could consider to mitigate potential impacts." The DOE response summary indicates that the Caliente Corridor was chosen "...in part to minimize private land-use conflicts," that the EIS analyzes impacts to ranching, and that detailed maps have been provided showing grazing allotments.

DOE further states (on Page 1-22) that "more than 200 commenters indicated that the Rail Alignment EIS should address how ranchers and miners would be compensated for loss of grazing...rights, either financially or through granting of new grazing rights in other areas." The DOE response summary states that "DOE developed a series of mitigation measures to avoid, minimize, rectify, reduce, or compensate for potential impacts associated with construction and operation of the proposed railroad. DOE and BLM solicited comments on potential mitigation measures from grazing permittees along the rail alignment and considered these comments when developing mitigation measures. Chapter 7 describes potential mitigation measures."

However, Table 1-1 appears to omit key comments to the scope of the EIS provided to DOE. For example, Lincoln County is aware that by letter dated May 4, 2007, the Humboldt River Basin Water Authority (HRBWA) recommended that in response to the April 15, 2007, action by the Walker River Tribal Council to formally oppose transportation of nuclear waste across its Reservation that DOE note in the DEIS "that the Mina rail corridor was no longer being carried forward for detailed analysis in the rail alignment EIS; and that DOE intends to address the Mina rail corridor in the forthcoming rail alignment to the scope of the Rail Alignment EIS submitted by HRBWA is not summarized or responded to by DOE in Table 1-1.

Moreover, DOE's response summary does not say anything with regard to recommended mitigation actions identified by the 2005 RCI report, nor does it reference Chapter 7, which discusses mitigation. Were the mitigation measures discussed in the RCI 2005 report (DIRS 173845) included as part of the comments on potential mitigation measures? If so, what are the reasons for not including them within Chapter 7? Nothing within this chapter indicates that the DOE considered the concerns of grazing permittees. The specific purpose of the 2005 RCI study, conducted under contract with the BLM, was to present these concerns and identify a baseline set of appropriate mitigations. This document was provided to DOE and cited within this DEIS, yet none of the mitigation measures it suggested have been incorporated.

DOE must:

- 1. Address each of the issues and questions raised above.
- 2. Disclose whether this map atlas was available to permittees at the time BLM and DOE solicited comments from permittees.
- 3. Disclose what changes, if any, resulted from meetings with permittees and since development of this atlas.
- 4. Include an appendix which describes in detail the solicitation of and nature of comments received by BLM and DOE from grazing permittees.

Response

DOE expanded its range of preliminary best management practices and mitigation measures (see the revised Tables 7-1 and 7-2 of the Rail Alignment EIS) to include suggested measures from commenters and offer alternative mitigation measures to those proposed. The Department expanded Chapter 7, which describes its longer-term process to develop, with input from directly affected parties, measures it would implement and how it would monitor their effectiveness.

Chapter 7 of the Rail Alignment EIS discusses how DOE, throughout the advancement of the rail design and compliance with regulatory requirements, would endeavor to avoid, minimize, or otherwise reduce impacts to directly affected parties. The development of additional mitigation measures beyond compliance with regulations, which is also discussed in Chapter 7, would involve consultation with directly affected parties, including grazing permittees. This process would be iterative in that DOE would consult with directly affected parties as the rail line engineering advanced from preliminary through final design, during construction of the rail line, and during operation of the railroad (see Section 7.1).

Table 1-1 in the Rail Alignment EIS summarizes the comments that address the questions listed in the Notice of Intent and other comments that led to changes in the scope of the EIS. Table 1-2 focuses on comments that changed the scope of the EIS beyond those listed in Table 1-1. Tables 1-1 and 1-2 do not provide responses to all the comments DOE received during the two public scoping periods for the EIS.

DOE made Map Atlases for the Caliente and Mina rail alignments available to the public along with the Draft Rail Alignment EIS in October 2007 (DIRS 185492-DOE 2008, all; DIRS 185510-DOE, 2008, all).

This Comment-Response Document contains the comments DOE received on the Draft Rail Alignment EIS and DOE's responses to those comments.

3.2 (1239)

<u>Comment</u> - RRR000656 / 0002

The total transportation system to support the repository program should be optimized from logistical and economic, rather than political perspectives. Transportation options that are operationally superior, or that offer mitigating economic benefit to the affected population, should not be rejected for politically expedient reasons.

Response

Thank you for your comment.

3.2 (1328)

<u>Comment</u> - RRR000617 / 0261

Identification of the number, approximate locations and environmental consequences of constructing and operating any rail sidings proposed for possible use by DOE or its contract carrier as safe parking areas for spent nuclear fuel and other high-level radioactive waste rail shipments along the entire rail study route (including companion Union Pacific mainline segments) for each alternative considered.

The October 2007 NEPA documents do not address this topic.

Response

The Rail Alignment EIS considers the environmental consequences of constructing and operating rail sidings for the Caliente and Mina rail alignments. Section 2.2.2.8 of the EIS describes sidings, which would be about every 25 miles along the rail line. The Map Atlases (DIRS 185492-DOE 2008, all; DIRS 185510-DOE, 2008, all) show proposed siding locations. DOE did not consider sidings on Union Pacific Railroad mainlines in the EIS because they are outside the scope of the analysis.

3.2 (1360)

Comment - RRR000617 / 0244

In describing each alternative, the EIS should indicate unique challenges, requirements, or costs, and if necessary, expand the categories used to evaluate transportation alternatives in the Repository FEIS. For example, according to the May 2006 letter from the Walker River Tribe, the Mina Route would require that DOE provide equipment and training for tribal emergency first responders or that DOE fulfill other similar obligations to cross the Walker River Indian Reservation. Such obligations should be described in detail and made a part of the alternative analyzed in the EIS.

The October 2007 NEPA documents do not appear to indicate "unique challenges" outside of the site specific information provided in terms of the areas studied for specific impacts. See, for example, the information in Land Use and Ownership and Aesthetic Resources contained in Volume III of DOE/EIS-0369D.

Response

The Rail Alignment EIS provides a much greater level of detail for railroad design and contains more detailed analyses of environmental impacts than the analysis of the five rail corridors in the Yucca Mountain FEIS. The EIS highlights issues related to construction and operation of the railroad, including the opposition of the Walker River Paiute Tribe. In this respect, the EIS contains analyses of challenges that could be unique to this project. Appendix L, Section L.7 of the EIS provides information on technical assistance and funding for training state and American Indian public safety officials.

3.2 (1361)

Comment - RRR000617 / 0245

Both the Caliente and Mina routes are located in remote, rugged, and arid locations. The EIS should provide a more informative description and characterization of each route than what has been provided to date. For example, for each proposed route, the EIS should provide information on expected grades, difficult terrain such as mountains, and expected engineering challenges, and should include a sufficient number of photographs of representative or unique areas of each route to adequately characterize the routes. The EIS must consider the comparative contribution to accident risk associated with grades and difficult terrain.

Volume IV, Appendix C of EIS-0369D provides the most complete description of the engineering data used in analyzing the Caliente and Mina Corridors. Specifically, the EIS includes the primary engineering factors considered in the identification and analysis of Caliente and Mina alternative segments and common segments. Volume I, page 307 of 446 of EIS-0369D includes baseline information as to construction specifications required for the proposed rail corridors. Volume II, Chapter 3.2.1 and 3.3.1 and Volume III, Chapter 4.2.1 and 4.3.1 of EIS-0369D describe in detail the physical setting for both the Caliente and Mina Corridor. Notably, these descriptions of physical setting and engineering data do not specially provide the detailed information requested in the comment.

Response

The description of the proposed railroad and the characterization of the Caliente and Mina rail alignments are consistent with the level of detail required for a NEPA analysis. Reference materials cited in the Rail Alignment EIS contain the details sought by the commenter; DOE has tried to balance the need to be informative without being encyclopedic. Chapter 2 of the EIS contains references to railroad engineering documents in the discussion of construction and operation of the proposed railroad. DOE prepared a Map Atlas (DIRS 185492-DOE 2008, all; DIRS 185510-DOE, 2008, all) for the Caliente and Mina rail alignments that includes more than 500 aerial photographs for each rail alignment with overlays of the rail line and its support facilities. Appendix D of the EIS contains photo simulations of the Caliente and Mina rail alignments that show representative and unique areas.

3.2 (1366)

<u>Comment</u> - RRR000617 / 0249

The action alternatives must include a clearly defined "bounded" or "worst case" with regard to the maximum number of shipments of spent nuclear fuel and/or high-level radioactive waste which might be transported along the entire study route (including companion Union Pacific mainline segments) for both the Caliente and Mina alternatives.

The documents discuss approximately 9,500 total shipments containing casks of spent nuclear fuel and high-level waste over an operations period of 50 years. DOE/EIS-0369D, Summary, S-32. A search of the documents did not reveal a clearly defined "bounded" or "worst case scenario."

Response

DOE is proposing to construct, operate, monitor, and eventually close a geologic repository at Yucca Mountain for the disposal of up to 70,000 metric tons of heavy metal of spent nuclear fuel and high-level radioactive waste. The portion of the spent nuclear fuel and high-level radioactive waste inventory that DOE proposes to ship by rail equates to approximately 9,500 casks. Therefore, it is appropriate that the Rail Alignment EIS analyzes the shipment of 9,500 casks by rail.

In Chapter 5 of the Rail Alignment EIS (and Chapter 8 of the Repository SEIS), DOE considers the cumulative impacts of two additional inventories called Modules 1 and 2. Because Modules 1 and 2 would exceed the NWPA disposal limit of 70,000 metric tons of heavy metal for Yucca Mountain, the emplacement of such waste at Yucca Mountain would require legislative action by Congress. Nevertheless, DOE has analyzed the transportation and disposal of these inventory modules, which provide an upper boundary for reasonably foreseeable impacts.

3.2 (1830)

<u>Comment</u> - RRR000674 / 0002

The commenter asserted that DOE has ignored specific requests to not run the Caliente corridor through Garden Valley, and that DOE has ignored the intent of the EIS process and has been oblivious to public comment and its democratic process. The commenter further stated that DOE has failed to recognize the broad public support of and important cultural contribution of the "City" sculpture.

Response

Section 1.6 of the Rail Alignment EIS describes the process by which DOE processed and considered scoping comments. Table 1-1 provides a response to scoping comments pertaining to Garden Valley and the *City* sculpture. As described in Table 1-1 and based on scoping comments, DOE considered several alternative segments in the Caliente rail corridor that would bypass Garden Valley. The Department mapped these alternative segments and analyzed their feasibility but determined that they were not reasonable and eliminated them from further study (also see Appendix C, Section C.4.1.3, of the Rail Alignment EIS). DOE added and studied in detail Garden Valley alternative segments 3 and 8 to provide more alternatives in Garden Valley. The Department has identified Garden Valley alternative segment 3 as its preferred alternative, in part because it is farthest from the *City* sculpture.

3.2 (3387)

<u>Comment</u> - RRR000694 / 0003

DOE is now choosing the Caliente rail corridor without considering the shortest route and safest for members of the public in Nevada through the Nevada Test Site and Training Range.

Response

DOE analyzed the Caliente-Chalk Mountain rail corridor, which runs through the Nevada Test and Training Range, in the Yucca Mountain FEIS. DOE eliminated this corridor from further consideration because of U.S. Air Force concerns that a rail line in the corridor could adversely affect the national-security related activities of the Nevada Test and Training Range.

3.2 (4144)

<u>Comment</u> - RRR000072 / 0001

The commenter stated that the Caliente rail alignment runs directly through her business, including 17 privately owned water rights. The commenter stated that she was not notified by DOE, but read about the

rail route in a newspaper. The commenter was not part of the NEPA process at that time. The commenter then prepared what she describes as her own EIS to understand how the project would impact her business.

Response

DOE efforts to publicize the Rail Alignment EIS scoping meetings and inform the public of the project included advertising in local newspapers; sending press releases to media outlets, industry, and stakeholders; mailing letters to known stakeholders, members of the public, and other interested parties; and distributing handbills in Lincoln, Nye, and Esmeralda Counties. This process is described in Section 1.6.1 of the Rail Alignment EIS. DOE reviewed the materials submitted by the commenter during the scoping periods for the Rail Alignment EIS (in 2004 and 2006) and re-submitted during the public comment period on the Draft Rail Alignment EIS. DOE considered the information supplied by the commenter in developing the scope of the EIS, as described in Section 1.6 of the Rail Alignment EIS.

3.2 (4215)

<u>Comment</u> - RRR000668 / 0004

In light of the environmental concerns we [U.S. Environmental Protection Agency] identified with respect to the Rail Alignment draft EIS, we have rated it as Environmental Concerns/Insufficient Information (EC-2).

Response

DOE discussed U.S. Environmental Protection Agency comments with Agency staff to ensure that the Department fully understood why the Draft Rail Alignment EIS had received a rating of EC-2. In response to Environmental Protection Agency comments, DOE took several actions to address the Agency's concerns over wetland impacts from the Caliente alternative segment, Indian Cove option for the Staging Yard and the CA-8B quarry rail siding. These actions included moving the proposed location of the rail siding out of the wetland area at Indian Cove and designating the Upland option for the Staging Yard the DOE preferred alternative (see Section 2.4 of the Rail Alignment EIS). DOE made substantial changes to Sections 4.2.5, 4.3.5, and Appendix F of the Rail Alignment EIS to clarify the potential impacts to wetlands and other surface waters and to explain how impacts to wetlands and aquatic resources would be avoided, minimized, and mitigated. Based on discussions with Environmental Protection Agency representatives, DOE believes these efforts to reduce potential wetland impacts address the environmental concern.

3.2.1 NEPA Adequacy

3.2.1 (47)

Comment – 21 comments summarized

Commenters stated that the Rail Alignment EIS is inadequate and fails to identify, analyze, or report the direct effects, indirect effects, cumulative effects, conflicts with plans, unavoidable adverse environmental effects, differences between the short-term effects, what effects are irreversible or irretrievable, energy requirements, economic and social effects, impact on quality of life, impacts on communities, and historic and cultural resources of the Mina rail alignment, Caliente rail alignment, Caliente alternative segment, Eccles alternative segment, and all the other alternatives. Commenters also stated that most of the impact analyses are cursory discussions with little or no real analysis and that DOE based impacts largely on qualitative judgments. A commenter stated that DOE must assess an adequate range of alternatives for each of the issues and resources subject to analysis.

Commenters stated that the Rail Alignment EIS omits critical information on geologic and seismic impacts. Commenters called for DOE to provide maps of surface or buried faults, which they stated could threaten the integrity of the railroad. Other commenters expressed their opinion that the

occupational and public health and safety sections are inadequate; contain inconsistencies; and inadequately consider uncertainties, justification of assumptions, and claims of future actions. Other commenters suggested that impacts to cultural resources are largely unknown and that this subject received only cursory treatment. Commenters stated that the EIS provides inadequate analysis of groundwater effects, socioeconomic impacts, the quarry near Caliente, impacts to the Timbisha Shoshone Tribe, land ownership issues, military overflights and airspace jurisdiction, and baseline soil and water data.

Other commenters stated that DOE has not presented information to support the selection of the Caliente rail alignment as preferred. Commenters also stated that the Rail Alignment EIS fails to clearly answer questions on impacts to ranchers and public land. Other commenters were concerned that the EIS will not support DOE and NRC decisions on the Yucca Mountain repository system.

Response

The Rail Alignment EIS is consistent with the requirements of NEPA and the NWPA. General information provided by the commenters was not adequate for DOE to provide a detailed response. To the extent that commenters provided greater detail elsewhere in their comments, those comments are addressed elsewhere in this Comment-Response Document. The level of information and analyses, the analytical methods and approaches DOE used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions to address incomplete or unavailable information or uncertainties provide an assessment of environmental impacts consistent with the applicable requirements. DOE used the best reasonably available information to prepare the EIS, which analyzes a variety of implementing alternatives and a No-Action Alternative.

3.2.1 (3141)

Comment - RRR000524 / 0017

Some of the discussions of certain aspects of the affected environment and analyses of potential impacts are not sufficiently complete. DOE should ensure that its final corridor SEIS and final rail EIS present complete discussions of the affected environment and potential impacts.

Response

DOE reviewed the Rail Alignment EIS and Rail Corridor SEIS to ensure that descriptions of the affected environment and the analyses of potential environmental impacts are complete. The specific examples provided by the commenter are addressed in the appropriate resource sections of this Comment-Response Document.

3.2.1 (3142)

<u>Comment</u> - RRR000524 / 0018

The technical bases supporting descriptions of the affected environment and the analyses of impacts need to be clear. DOE should ensure that the final rail EIS provides supporting statements or references as bases for conclusions. DOE should ensure that assertions or quantitative estimates are appropriately referenced with supporting citations.

Response

DOE reviewed the Rail Alignment EIS to ensure that all conclusions and statements of fact were adequately supported. The appropriate resource sections of this Comment-Response Document address the examples provided by the commenter.

3.2.2 Comments Regarding Structure of the Nevada Rail Corridor SEIS and Rail Alignment EIS

DOE did not receive any comments directed at the Rail Alignment EIS related to this subject.

3.2.3 Agency Coordination

3.2.3 (59)

<u>Comment</u> - 2 comments summarized

A commenter suggested that Nye County, as the siting county of the repository and the bearer of most of the burden associated with repository development, should receive special consideration to mitigate the profound localized impacts. The Rail Alignment EIS should recognize existing DOE/Nye County cooperative activities and commit to preferential employment, procurement, and placement of ancillary facilities through a dedicated partnership agreement. In addition, Nye County recommended the involvement of its planners in a cooperative effort with DOE to ensure full recognition and integration of the positive impacts of the shared use of the railroad in the design and construction process.

Response

DOE invited and Nye County accepted cooperating agency status on the Rail Alignment EIS and DOE is committed to continuing its cooperative relationship with the county as the repository and rail projects progress. As explained in new section 7.1.1 of the Rail Alignment EIS, DOE proposes to charter one or more Mitigation Advisory Boards, each to be lead by the governmental entities through which the rail line would pass. The mission of the board(s) would be to provide independent advice and recommendations to assist DOE, the BLM, and the STB in developing, detailing, and implementing and monitoring best management practices and mitigation measures during construction and operation of the proposed. DOE would also invite the BLM and the STB to serve as ex-officio members. In the future, DOE would determine the exact structure of the Mitigation Advisory Board(s) and the processes under which they would operate.

3.2.3 (890)

<u>Comment</u> - RRR000641 / 0001

The City of Caliente (the "City") has reviewed the subject three documents prepared by the Department of Energy (DOE) and is offering the following comments thereto in hopes that decisions made by DOE regarding Yucca Mountain repository system development, including transportation, will be well informed as to minimization of system related impacts and risks and maximization of system related benefits in the Caliente area. Accordingly, the City encourages DOE to fully consider the following comments as it works to finalize each of the environmental documents and makes decisions related thereto.

Since 1984, the City has actively participated with DOE in seeking to resolve this Nation's commitment to effectively managing spent nuclear fuel and other high-level radioactive waste. The City's involvement in this process has been driven primarily by a fiduciary responsibility to protect the health, safety and welfare of residents of the community. As a consequence, the City has consistently sought to understand and minimize the impacts of the repository system; to understand and minimize the risks of the repository system; to understand and fiscal benefits of the repository system to the Caliente area.

The City has recognized that the Nation, through directive of the United States Congress, is committed to constructing and operating the Yucca Mountain repository as necessary to safely manage spent nuclear and other high-level radioactive wastes. The City has further recognized the critical role that nuclear

energy is likely to play in meeting our Nation's energy requirements in the future, especially given growing concerns with fossil fuel-related carbon emissions and climate change. It has now become apparent that these mutually dependent national goals may depend upon the placement and operation of repository system transportation infrastructure in the Caliente area. The City intends to continue an active dialogue with the DOE to ensure that the development, operation and possible decommissioning of any such facilities is done in a manner which minimizes local impacts and risks and maximizes local economic benefits and risks. The following comments to the DOE'S environmental documents are a continuation of that on-going dialogue.

Response

DOE acknowledges the comments from the City of Caliente and provides responses to those comments in this Comment-Response Document. After the release of the Draft Rail Alignment EIS, DOE invited and the City of Caliente accepted cooperating agency status on the Rail Alignment EIS; if the Department decided to construct and operate a railroad along the Caliente rail alignment, it would continue the ongoing dialogue with the City of Caliente.

3.2.3 (1050)

<u>Comment</u> - RRR000663 / 0028

In the Draft EISs, DOE continues to ignore other obvious responsible agencies in transportation. Although the STB [Surface Transportation Board] is now included as a cooperating agency (although it should be the lead agency ...), DOE fails to include the Federal Railroad Administration -- responsible for railroad operations and safety; various administrations within the U.S. Department of Transportation, including the Pipeline and Hazardous Materials Safety Administration (PHMSA) -- responsible for rules for transportation of hazardous materials, the Federal Highway Administration (FHWA), and the National Highway Traffic Safety Administration (NHTSA); and the Department of Homeland Security -- responsible for the security of transportation modes, systems, and infrastructure. 10 CFR 1021.103, 40 CFR 1501.6, 1508.5 and .26.

While acknowledging that the Department of Interior (DOI) Bureau of Land Management (BLM) is properly a "cooperating agency" for land-use related purposes, DOE fails to recognize and include other DOI bureaus, specifically, Fish and Wildlife Service (FWS), Office of Surface Mining (OSM), and Bureau of Indian Affairs (BIA), notwithstanding the obvious statutory authority, responsibility, and expertise in the environmental issues addressed. 10 CFR 1021.103, 40 CFR 1501.6.

In addition, there are numerous State of Nevada agencies with statutory, regulatory, or oversight roles and responsibilities for rail and highway activities contemplated by the Draft EISs. These include, but are not necessarily limited to, the Nevada Public Utility Commission (rail regulations), the Nevada Department of Transportation, the Nevada Department of Public Safety (especially the Nevada Highway Patrol and the Nevada Division of Emergency Management), the Nevada Division of Health, the Nevada Department of Conservation and Natural Resources (especially the divisions of Environmental Protection, State Lands, State Parks, Wildlife, Water Resources, etc.), the Nevada Department of Museums, Library and Arts (Historic Preservation Office), and others. The Draft EISs should have assessed roles of and impacts to each of the affected State of Nevada agencies.

Response

Appendix B of the Rail Alignment EIS describes DOE's interactions with federal, state, and local agencies and American Indian tribes. DOE met or consulted with at least six federal agencies and seven state agencies during development of the Rail Alignment EIS. The Department updated Appendix B to reflect additional consultations that have occurred since publication of the Draft EIS. DOE plans to consult further with federal and state agencies as appropriate.

3.2.3 (1178)

<u>Comment</u> - RRR000663 / 0054

It was recommended during scoping comments that the Draft EIS specify a local stakeholder committee that can participate directly with the DOE on all aspects of construction and running of the rail line. As activities proceed, this committee can participate by recommending changes based on their local observations. This committee should be comprised of local elected officials, community leaders and other residents, and representatives of appropriate state agencies.

Response

DOE is committed to continuing consultation with elected officials and other stakeholders as the project progresses. As explained in new section 7.1.1 of the Rail Alignment EIS, DOE proposes to charter one or more Mitigation Advisory Boards, each to be lead by the governmental entities through which the rail line would pass. The mission of the board(s) would be to provide independent advice and recommendations to assist DOE, the BLM, and the STB in developing, detailing, and implementing and monitoring best management practices and mitigation measures during construction and operation of the proposed. DOE would also invite the BLM and the STB to serve as ex-officio members. In the future, DOE would determine the exact structure of the Mitigation Advisory Board(s) and the processes under which they would operate.

3.2.3 (3417)

<u>Comment</u> - RRR001082 / 0005

BLM advises if any work is to occur within ephemeral channels, the Army Corp of Engineers and the Nevada Department of Environmental Protection need to be consulted.

Response

DOE is consulting with the U.S. Army Corps of Engineers, as described in Appendix B, Section B.2.2, of the Nevada Rail Corridor SEIS and Rail Alignment EIS. Section B.3 describes DOE's consultations with State of Nevada agencies. DOE would obtain the necessary permits from these regulatory agencies prior to the start of construction.

3.2.4 Cooperating Agencies

3.2.4 (19)

Comment - 3 comments summarized

The N-4 State Grazing Board requested cooperating agency status for a second time, citing its expertise with public land grazing, the local environment, and animal husbandry. The Board noted the DOE denial of a prior request for cooperating agency status.

Response

DOE reviewed the N-4 State Grazing Board request for cooperating agency status and has concluded that neither the Nevada Department of Agriculture nor the state grazing boards meet the eligibility requirements in the CEQ regulations (CFR 40 Parts 1500-1508) and the CEQ Guidance Memorandum on Cooperating Agency Status dated January 30, 2002. This memorandum includes "Factors for Determining Whether to Invite, Decline or End Cooperating Agency Status"; the ninth factor states: "Can the Cooperating Agency(s) accept the lead agency's final decision-making authority regarding the scope of the analysis, including the authority to define the purpose and need for the proposed action?" As state entities, and given the opposition of the State of Nevada to the Yucca Mountain Project, we believe that neither the Nevada Department of Agriculture nor the grazing boards meet this requirement.

3.2.4 (1009)

<u>Comment</u> - RRR000617 / 0011

Lincoln County requested cooperating agency status for the Rail Alignment EIS, citing CEQ regulations and guidance that directs federal agencies responsible for the preparation of NEPA analyses to do so in cooperation with state and local governments and other agencies with jurisdiction by law or special expertise.

Response

DOE invited and Lincoln County accepted cooperating agency status on the Rail Alignment EIS. The Department updated Section 1.5 of the Rail Alignment EIS to reflect the inclusion of Lincoln, Nye, and Esmeralda Counties and the City of Caliente as cooperating agencies.

3.2.4.1 Bureau of Land Management

3.2.4.1 (17)

Comment - 2 comments summarized

Commenters stated that the Draft Nevada Rail Corridor SEIS and Draft Rail Alignment EIS fail to resolve many of the factual and legal deficiencies noted in the Previous Colvin Comments. The DOE draft documents continue DOE's practice of conducting environmental reviews and making decisions (such as eliminating alternative rail routes from further consideration) affecting public land within the BLM Tonopah Planning Unit in contradiction to the Standard Operating Procedure for "Environmental Review and Management" established in the October 1997 Approved Tonopah Resource Management Plan and Record of Decision (1997 RMP/ROD), which requires that the BLM prepare such environmental reviews and management decisions before approval of a project on public lands. The 1997 RMP/ROD requirement obliges the BLM to act as the lead agency for any evaluation, review, and decisions affecting public land in the Tonopah Planning Unit, not merely participate as a "cooperating" agency.

DOE continues a process through which it is preparing EIS documents and generating decisions affecting the use and management of public land in the Tonopah Planning Unit when the BLM, not DOE, must prepare such documents and decisions. Ultimately, EIS documents and decisions prepared by the BLM must evaluate, select, and approve every site-specific environmental impact and right-of-way across public land in the Tonopah Planning Unit associated with the construction and operation of the Caliente Implementing Alternative. See 43 U.S.C. 1761(a)(6) (wherein the authority to grant a rail right-of-way on public land is vested in the Secretary of the U.S. Department of the Interior, also known as the BLM). Because no railway in the Tonopah Planning Area was contemplated on the approval of the 1997 RMP/ROD, the Caliente Implementing Alternative would require the BLM to prepare an amendment to the Resource Management Plan before DOE could construct and operate the railroad. (Note: Because the mitigation measures discussed for Forest Service allotments require only the assignment of the preference for vacant allotments to qualified livestock operations and the adjustment of Appropriate Management Levels in wild horse territories, there is no need to amend the applicable Forest Service Land Use Plan in conjunction with such mitigation.) Accordingly, any DOE Record of Decision that stems from DOE EIS documents cannot implement an action in the Tonopah Planning Unit unless the BLM reviews and approves such action through EIS documents and decisions in conformance with its amended 1997 RMP/ROD.

Response

The *Tonopah Resource Management Plan and Record of Decision* (DIRS 173224-BLM 1997, p. 26) states that the BLM will prepare site-specific environmental reviews before actions proposed in the Resource Management Plan are implemented or prior to approval of any project authorized on public lands. DOE has submitted an application to the BLM for a right-of-way to construct and operate the proposed railroad. The BLM will process the application in accordance with 43 CFR Part 2800, Rights-

of-Way, and, as specified, issue a Record of Decision. CEQ regulations (40 CFR 1506.3) and the BLM NEPA Handbook (H-I 790-I) allow the Bureau to adopt all or part of an EIS that another agency prepared if it meets certain conditions, which include participation of the BLM in the preparation of the EIS as a cooperating agency. The BLM is a cooperating agency in the preparation of the Rail Alignment EIS. Consistent with the NEPA Handbook, the BLM would address the adoption of all or part of the EIS in its Record of Decision on the right-of-way application.

The BLM is not required to address the proposed railroad specifically in a resource management plan; rather, the Proposed Action must only be "not inconsistent" with that plan (43 CFR 2804.26). Sections 4.2.2.2.3.1 and 4.3.2.2.3.1 of the Rail Alignment EIS describe consistency with BLM resource management plans. The analysis in the EIS concluded that neither the Caliente and nor the Mina rail alignment would be inconsistent with applicable land-use plans and policies.

3.2.4.1 (629)

<u>Comment</u> - RRR000017 / 0001

The commenter suggested that some people are under the impression that the BLM is responsible for all of the mitigation for the rail line. The commenter clarified that the BLM is not responsible for mitigations for the DOE rail line.

Response

DOE clarified the role of stakeholders, including the BLM, in the mitigation development process (see Chapter 7 of the Rail Alignment EIS). DOE is responsible for developing and ultimately funding measures to mitigate impacts associated with the Proposed Action. The BLM has a substantial role in assisting DOE in identifying mitigation measures associated with impacts to BLM-administered federal lands. The BLM will determine whether to grant a right-of-way for proposed railroad construction and operations and, as part of that right-of-way grant, would impose mitigation requirements on DOE.

3.2.4.1 (1047)

<u>Comment</u> - RRR000617 / 0038

Page 1-10, Section 1.5.1.1: Reference to and reliance upon the BLM's Draft Ely Resource Management Plan is inappropriate as the plan is not yet in effect. Rather, the Caliente rail alignment alternatives must be analyzed against the existing BLM land use plan guidance found in the Caliente MFP [Management Framework Plan] and related amendments.

The EIS should indicate that the BLM's Caliente MFP and related amendments are the guiding land use plan for portions of the Caliente rail alignment.

Response

The Ely Resource Management Plan has been undergoing revision for several years. In November 2007, the BLM issued its *Ely Proposed Resource Management Plan/Final Environmental Impact Statement* (DIRS 184767-BLM 2007, all). DOE recognizes that this resource management plan does not come into effect until the BLM issues a Record of Decision. The BLM expects to issue a Record of Decision for the Ely Resource Management Plan/Final EIS shortly after publication of the Rail Alignment EIS. Therefore, DOE has used the Ely Proposed Resource Management Plan/Final EIS as the reasonably foreseeable management plan against which to analyze the potential impacts of the proposed railroad.

3.2.4.1 (1052)

<u>Comment</u> - RRR000663 / 0029

The Draft EISs fail to address all needed changes to the affected BLM resource management plans and the appropriateness of those changes. The fact that BLM is currently in the process of revising its Ely RMP makes communication and coordination among the two federal agencies even more imperative.

Response

Section 1.5.1 of the Rail Alignment EIS states that right-of-way grants on public lands must be consistent with the applicable resource management plans. Section 1.5.1 also states that the BLM will determine if the proposed railroad is consistent with applicable resource management plans, and if not, whether it should amend them. Sections 4.2.2.2.3.1 and 4.3.2.2.3.1 of the EIS describe consistency with BLM resource management plans. As part of the BLM review of the right-of-way application, the Bureau would determine consistency with its resource management plans. The analysis in the EIS concludes that both the Caliente and Mina rail alignments would not be inconsistent with applicable land-use plans and policies. The BLM is a cooperating agency in the preparation of the Rail Alignment EIS and could adopt all or part of the EIS to meet its NEPA requirements for the right-of-way application.

DOE is aware of the status of the Ely Proposed Resource Management/Final EIS and has updated the Rail Alignment EIS in coordination with the BLM to reflect that status. See Sections 3.2.2 and 4.2.2, Sections 3.2.3 and 4.2.3, and Sections 3.2.7 and 4.2.7.

3.2.4.1 (1750)

Comment - RRR000686 / 0003

The commenter expressed concern that related Resource Management Plans do not include the rail project and its potential impacts, including transportation of nuclear waste. The commenter suggested that for any project to be considered on public lands the proposed activity and its impacts must be mentioned in the Resource Management Plans.

Response

A resource management plan does not have to address the proposed railroad specifically; rather, the Proposed Action must be "not inconsistent" with the plan (43 CFR 2804.26). Sections 4.2.2.2.3.1 and 4.3.2.2.3.1 of the Rail Alignment EIS describe consistency with BLM resource management plans. The analysis in the EIS concluded that the Caliente and Mina rail alignments would not be inconsistent with applicable land-use plans and policies.

3.2.4.2 Surface Transportation Board

3.2.4.2 (7)

Comment - 17 comments summarized

Several commenters submitted comments on the role of the STB in the preparation of the Rail Alignment EIS and stated that, because DOE has announced the proposed rail line would be a shared-use line open to general commerce, the STB (an independent branch of the U.S. Department of Transportation) should be the "lead agency" for the preparation of the EIS. Commenters asserted that in assigning itself lead agency status for this massive transportation project, DOE appears to have preempted the exercise of STB regulatory authority over this new rail line and the activities DOE proposed in the Draft EIS.

Commenters noted that long-standing precedent establishes that the STB has jurisdiction and prior approval authority over activities proposed by DOE (that is, the construction and operation of rail lines within the national railroad system. [49 U.S.C. Part 10901]). STB jurisdiction includes primary responsibilities for such activity under NEPA that may not be delegated to others [Harlem Valley Transportation Association v. Stafford, 500 F.2d 328, 336 (2nd Cir. 1974); State of Idaho v. ICC, 35 F.3d 585, 595 (D.C. Cir. 1994)]. DOE cannot, and should not, attempt to preempt the STB role of lead agency for evaluation of the environmental impacts of the proposed railroad activity.

Commenters stated that DOE admits to the commercial shared use of the rail line it intends to construct and operate in Nevada, a line that would be an integral extension of the Nation's existing interstate commercial rail system. However, DOE fails to acknowledge that the STB has, by statute, exclusive jurisdiction and corresponding special environmental expertise over such transportation activity [49 U.S.C. 10501(b)] and fails to establish for NEPA purposes the STB as the lead agency over the environmental impact issues of such activities [10 CFR 1021.103; 40 CFR 1501.5].

Response

CEQ regulations (40 CFR 1501.5, 1501.6) address the issue of lead and cooperating agencies. DOE has adopted the CEQ NEPA regulations and implemented its own regulation on interagency cooperation (10 CFR 1021.342). The role of a federal agency in the NEPA process is a function of the agency's expertise and relationship to the proposed action. If more than one federal agency is involved in an undertaking that requires an EIS, CEQ regulations provide for the designation of a lead agency to supervise preparation of the environmental analysis (40 CFR 1501.5). The lead agency, which is generally the agency with major responsibility for the proposed action [40 CFR 1501.5(e)], is responsible for the preparation of the EIS and for compliance with other NEPA procedural requirements (40 CFR 1508.16).

A federal, state, tribal, or local agency with special expertise on an environmental issue or jurisdiction by law can be a cooperating agency in the NEPA process. A cooperating agency has the responsibility to assist the lead agency by participating in the NEPA process at the earliest possible time; by participating in the scoping process; in developing information and preparing environmental analyses including portions of the environmental impact statement for which the cooperating agency has special expertise; and in making available staff support at the lead agency's request to enhance the lead agency's interdisciplinary capabilities (40 CFR 1501.6). A cooperating agency can adopt the EIS prepared by the lead agency and use it in its own decisionmaking (40 CFR 1506.3).

DOE is the lead agency for this Rail Alignment EIS. Under the Nuclear Waste Policy Act, the Department is responsible for the disposal of spent nuclear fuel and high-level radioactive waste to protect public health, safety, and the environment, and for the development and implementation of a plan to transport spent nuclear fuel and high-level radioactive waste to a repository at Yucca Mountain. The Rail Alignment EIS appropriately tiers from the broader corridor analysis in the Yucca Mountain FEIS, consistent with CEQ regulations (40 CFR 1508.28) and the court's decision in <u>State of Nevada v. DOE</u>, 457 F.3d 78 (D.C. Cir. 2006).

Consistent with CEQ and DOE regulations, DOE has requested the assistance of other agencies that have management or regulatory authority over lands and resources that the proposed railroad could affect or that have special expertise related to the proposed action in the Rail Alignment EIS. One of those agencies is the Surface Transportation Board (STB), which has exclusive jurisdiction over common-carrier rail lines that are part of the interstate rail network. The STB accepted cooperating agency status in the preparation of the Rail Alignment EIS. During the preparation of the NEPA analyses, DOE met with the STB to discuss project direction and coordination, as Appendix B, Section B.1 of the EIS describes.

If the proposed railroad were to be operated as a common-carrier railroad (referred to as shared use in this Rail Alignment EIS), the Department would have to obtain a certificate of public convenience and necessity from the BLM to construct and operate the railroad from the STB. As part of its review process, the STB would need to consider the environmental effects of railroad construction and operation. Although DOE has not made a decision whether to construct and operate a railroad, DOE filed an application for a certificate of public convenience and necessity with the STB on March 17, 2008 (DIRS 185339-Vandeberg 2008, all). As part of the consideration of that application, the STB Section of Environmental Analysis is responsible for preparing the appropriate NEPA documentation for railroad construction and operation cases under the jurisdiction of the STB. Consistent with CEQ regulations, the STB could adopt the Rail Alignment EIS in whole or in part and use it as a basis for its decision. If the STB determined that it needed NEPA documentation in addition to the Rail Alignment EIS to support its

decision whether to issue a certificate of public convenience and necessity, the STB would prepare that documentation.

The STB has not requested lead agency status, nor has it expressed any disagreement with DOE's status as lead agency. Under these circumstances, where no federal agency has expressed disagreement with the decision on lead agency status, as the CEQ concluded in a letter dated February 8, 2005 (DIRS 185485-Connaughton 2005, all), the process outlined in its regulations (40 CFR 1501.5(e) for resolution of disagreements among agencies regarding lead agency status has not been triggered.

For these reasons, DOE is the appropriate lead agency for the Rail Alignment EIS and the Nevada Rail Corridor SEIS.

3.2.4.2 (8)

<u>Comment</u> – 2 comments summarized

The commenter noted that the STB is the federal agency that normally regulates railroad construction. In addition, the commenter stated that when a railroad company wants to build a railroad in the United States, it has to receive construction authorization from the STB. The fact that DOE is considering the Shared-Use Option indicates that the STB should be in charge of preparing this EIS and making the final selection on the routes. The commenter also stated that there would be economic benefits associated with building the railroad and operating it as a common carrier, but that raises an issue of jurisdiction.

The commenter does not believe the STB would stop DOE from building a railroad. Quite the contrary, STB is in the business of determining the least bad impacts of building railroads. The commenter has studied the way the STB looked at the last two big railroad projects in Montana and the Dakotas. The process the Board used would be much fairer for the affected stakeholders. The STB knows about railroad building and recently issued construction authorizations for the Tongue River Railroad in Montana and the Dakota and Minnesota Eastern Railroad across Wyoming, South Dakota, and Minnesota, where a number of issues are the same as those affecting Yucca Mountain, for example, impacts on American Indian lands, ranching, and mining.

When the STB prepares an EIS, it looks at the alternative routes, and it has to approve the selection of the preferred route. The commenter asserts that DOE is making that decision on its own for Yucca Mountain.

Further, the STB looks after impacts on stakeholders. Essentially, this is what you would do at the county level, only it is done at the federal level as a big conditional use permit.

The STB issues a construction authorization, which has conditions attached, and it usually establishes provisions that indicate how it expects the railroad company to meet those conditions and for reporting back on them, so it knows the people who are building the railroad and are having adverse impacts on people along the line are doing what the STB told them to do.

If DOE goes forward and issues a final EIS and a Record of Decision that endorses the Shared-Use Option and does not ask the STB to intervene, "we certainly will be doing that in federal court."

Response

DOE's preferred alternative includes operating the proposed railroad as a common-carrier rail line (referred to as "shared use" in the Rail Alignment EIS). DOE has applied to the STB for a certificate of public convenience and necessity to construct and operate the railroad. As part of its review process, the STB would have to consider the environmental effects of railroad construction and operation. The STB Section of Environmental Analysis is responsible for preparing the appropriate NEPA documentation for railroad construction and operation cases under STB jurisdiction. The Section of Environmental Analysis

has been involved in the preparation of this EIS as a cooperating agency and has provided its expertise to assist DOE in analyzing the potential environmental impacts of the Proposed Action. Consistent with CEQ regulations, the STB could adopt the Rail Alignment EIS in whole or in part and use it as a basis for its decision. If the STB required any NEPA documentation in addition to the Rail Alignment EIS to support an STB decision on whether to issue certificate, the STB would prepare that additional documentation.

DOE maintains that naming the STB lead agency for the Rail Alignment EIS is not warranted. In addition, the STB has not requested lead agency status and does not disagree with DOE being the lead agency. CEQ regulations (40 CFR 1501.5) describe how to resolve disagreements between agencies over lead agency status. However, there is no such disagreement in this case. Pursuant to its NWPA authority, DOE will continue to make transportation-related decisions as the federal agency charged by statute with the development of the repository, which includes the responsibility for transportation of spent nuclear fuel and high-level radioactive waste to a repository. As part of its transportation responsibilities, DOE must make a decision on whether or where it would prefer to build a branch rail line to provide shipping capacity. Although the construction of the rail line could require authorizations from regulatory agencies, this does not negate the DOE authority and responsibility to plan and construct the new rail line, subject to necessary approvals, and to act as lead agency in the preparation of associated NEPA analyses.

3.2.4.2 (1048)

<u>Comment</u> - RRR000617 / 0039

Page 1-12, Section 1.5.1.2: The DEIS does not provide sufficient information on the process and timing for Surface Transportation Board (STB) licensing of the selected rail alignment and whether said process fits into DOE's timeline for rail line.

The EIS should provide a detailed description of the process and timing of the STB licensing of the rail alignment.

Response

The timing of an STB decision on the DOE application to construct and operate the railroad as a common carrier rail line is uncertain at this time. If any NEPA documentation was required in addition to the Rail Alignment EIS to support an STB decision on whether to issue a certificate of public convenience, the STB would prepare that additional NEPA documentation

3.2.4.3 U.S. Air Force

DOE did not receive any comments related to the U.S. Air Force as a cooperating agency.

3.2.5 Regions of Influence

3.2.5 (166) Comment – 4 comments summarized

Commenters are concerned that the DOE preferred alternative comes into the City of Caliente. A commenter stated that the Rail Alignment EIS shows a region of influence for radiological impact during incident-free transportation of a half-mile on each side of the track and that this would affect 279 people. The commenter mentioned that she is in the real estate business and that every house seller within a half-mile of the track would have to disclose the radiological region of influence to potential buyers. She suggested that 279 people in the region of influence seems low. She asserted that the Caliente Youth Center is in the region of influence and wondered if the state could continue to house students in that area. She suggested that the radiological region of influence would be associated with the Interchange Yard in Caliente and that it would be there forever.

Response

DOE used the radiological region of influence for the radiological impact analysis in the Rail Alignment EIS and to identify the population potentially affected by exposure to radiation from routine operation of the rail line and in the event of an accident. The 0.5-mile distance DOE applied in the EIS to estimate the affected population for incident-free transportation of spent nuclear fuel casks (see Appendix K, Section K.2.1.1) and the 50-mile distance to estimate the potentially affected population for accident analyses (see Section K.2.4) are standard distances the Department has used in previous transportation EISs and other analyses of impacts of radiological materials transportation. DOE used the 0.5-mile distance solely for purposes of analysis of radiological impacts from the Interchange Yard and other proposed facilities. The region of influence does not represent a land-use designation and would neither establish nor affect property rights.

DOE does not intend for the radiological region of influence, which is a conservative analytical construct, to have an effect as a land-use designation or to have legal meaning or relevance to property law. The Department is not aware of instances in which a region of influence in an EIS for radiological impact analysis was legally determined to affect property rights or land-use designations. The Department would gain access to and alter land use in the rail alignment right-of-way only for the construction and operation of the proposed railroad. Therefore, the region of influence would not affect current and future land uses such as the housing of students at the Caliente Youth Center.

3.2.5 (167)

<u>Comment</u> – 5 comments summarized

Commenters stated that the Rail Alignment EIS fails to describe and assess an adequate region of influence for land use and ownership, and improperly and erroneously assumes that the nominal width of the railroad in the construction phase represents the upper bound of the impact area. Commenters also stated that DOE has unreasonably and arbitrarily limited the scope of the region of influence to just the nominal width of the construction corridor, apparently to minimize the discussion of negative impacts to livestock operations along the length of the corridor. Commenters suggested that because the construction and operation of the railroad would affect entire allotments, the EIS should have analyzed entire allotments for impacts. Commenters stated the EIS fails to account for the critical periods of livestock operations, the most critical of which is the calving season. Commenters also stated that any construction activity during this period would have the likelihood of increasing the number of orphaned and dead calves.

Commenters suggested that DOE expand the region of influence for mobile biological resources such as wildlife to include the habitat area the rail alignment would intersect.

Response

DOE evaluated land use and ownership in the construction right-of-way to characterize the direct impacts to land that DOE would access. Commenters are correct that indirect impacts from the rail line outside the construction right-of-way would affect current grazing practices on allotments, particularly where the rail line acted as a barrier and "isolated" a portion of land. DOE revised the land-use sections in the Rail Alignment EIS to acknowledge impacts from potential fragmentation of grazing allotments; see Sections 4.2.2.3.2 and 4.3.2.2.3.2. The Department would work with affected permittees to mitigate adverse impacts. DOE also revised Chapter 7 of the EIS to describe how it would work with affected permittees and the BLM and to describe measures DOE would consider for mitigation; these include the potential to support the development of Interim Grazing Management Plans and Allotment Management Plans and provide compensation or range improvements for direct loss of crops, pastures, rangelands, or reductions in animal unit months. In addition, Chapter 7 describes how DOE would take measures to minimize disruption to ranching operations and cattle movement during construction, such as providing temporary feed, water, and assistance in movement for livestock that could be isolated from normal feed and water

sources. These measures would assist ranchers in keeping livestock away from the rail line during construction. DOE would coordinate with the permittees and the BLM on specific mitigation measures for each allotment.

DOE generated wildlife, terrestrial, and aquatic species lists for habitat and species occurrence along the construction right-of-way and for a wider study area (a 10-mile-wide search on either side of the rail alignment centerline; see Sections 3.2.7.1.1 and 3.2.8.1.1, and Sections 3.2.7.1.2 and 3.2.8.1.2 of the Rail Alignment EIS for a description of the construction right-of-way and study area). These investigations incorporated literature and database searches and consultation with land and resource agencies and authorities, including the BLM, the U.S. Fish and Wildlife Service, the Nevada Natural Heritage Program, and the Nevada Department of Wildlife. This information includes Nevada game species. DOE incorporated additional ground surveys in the construction right-of-way to provide a comprehensive understanding of the habitats and species the project could affect. In addition, Section Sections 4.2.7.2.1.2 of the EIS discuss how this project would affect movement corridors as one of the criteria for impact assessment. The final determination of impacts considered this criterion.

3.2.5 (941)

<u>Comment</u> - RRR000663 / 0016

The Draft Rail Alignment EIS must be revised to apply a minimum 5 mile region of influence regarding impacts to land use and ownership; aesthetic resources; biological resources; socioeconomics; occupational and public health and safety; utilities, energy, and materials; cultural resources; and environmental justice.

Response

DOE has defined the region of influence as the physical area that bounds the environmental, sociologic, economic, or cultural features of interest for analysis purposes. In general, the regions of influence reflect the physical/geographic area in which direct and indirect impacts would be most likely to occur. As noted in Sections 3.2 and 3.3 of the Rail Alignment EIS, resource area regions of influence vary depending on the nature and type of the resource. Sections 3.2 and 3.3 summarize the region of influence for each resource area. For some resources, the region of influence is less than 5 miles and for others it is greater, as described in Sections 3.2 and 3.3. These regions of influence are appropriate for the analyses in the EIS and are consistent with the requirements of NEPA and the NWPA. The level of information and analyses, the analytical methods and approaches DOE used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions to address incomplete or unavailable information or uncertainties provide an assessment of environmental impacts consistent with the applicable requirements.

3.2.5 (2612)

<u>Comment</u> - RRR000523 / 0046

Page 5-1: Cumulative impacts are not necessarily limited to the region of influence. Future radioactive waste shipments are an example. This is probably only true for construction and not operations.

Response

There would be no shipments of radioactive waste or the potential for occupational or public radiation exposure associated with the construction phase. The Rail Alignment EIS analyzes potential future shipments of radioactive waste during the operations phase and the impacts of such shipments. DOE based the EIS analysis of radiological impacts for workers and the public on the shipment of 9,495 casks along the rail line. There are a number of regions of influence, depending on the resource in question. Cumulative impacts on all these resources are analyzed in Chapter 5 of the Rail Alignment EIS.

3.2.6 Perceived Risk

3.2.6 (94)

<u>**Comment**</u> – 11 comments summarized

Commenters, including the State of Nevada and other affected units of local government, stated that the Rail Alignment EIS should analyze the impacts of stigma or risk perception. They stated that DOE has dismissed this important issue in a cavalier fashion and that the Department should undertake a serious good faith analysis of these impacts. Commenters stated that people would avoid places and products associated with nuclear risk or stigma, which would result in decreased property values; less business expansion or new development; location of businesses away from the area; loss of tax revenues; reduced income from existing businesses; loss of new investments; inability to ensure adequate cleanup costs; higher insurance rates; decreased crop, product, and service prices, which would include effects on the marketability of local specialty agricultural products; decreased business diversification; inability to retain existing businesses; unused infrastructure or infrastructure of questionable value; migration of people from an area; increased population and activity in one county that would cause a subsequent decrease in neighboring counties; environmental justice impacts due to decreased property values; and an exodus of residents from a contaminated area. Commenters also stated that the perceived risk of serious harm from the proposed repository or transportation activities would affect people's health care systems, quality of life, and spiritual well-being. In particular, commenters stated that the existence of a nuclear waste repository at Yucca Mountain would have a significant adverse impact on the tourist and gaming industries. Other commenters pointed out that the Draft EIS did not provide the impacts of stigma or perceived risk for American Indians.

Response

Section 4.1.3 of the Rail Alignment EIS discusses perceived risk and stigma. DOE has considered these issues, guided by the results of its own research and that of the State of Nevada, and by appropriate conclusions from reviews of this subject by the Nuclear Waste Technical Review Board in 1995 and other research that includes an independent economic study prepared in 2003 (DIRS 172307-Riddel et al. 2003, all). DOE concluded that, at least temporarily, a small relative decline in residential property values might result from the designation of transportation corridors in urban areas. While stigmatization of southern Nevada can be envisioned under some scenarios, it is not inevitable or numerically predictable. DOE has acknowledged that, while in some instances risk perceptions could result in adverse impacts on portions of a local economy, there are no reliable methods for quantification of such impacts from risk perceptions or stigma in the Rail Alignment EIS.

3.2.7 Miscellaneous NEPA Comments

3.2.7 (40)

<u>Comment</u> – 2 comments summarized

Commenters requested DOE inform them of future developments related to the proposed railroad. In addition, commenters requested notification to the communities of Indian Ridge, Beaver Dam, Panaca, and Pioche.

Response

DOE added the names of commenters who requested future notification of project developments to the project mailing list. In addition, the Department will continue to use customary means to notify the public (advertisements, press releases, and public service announcements) of project developments.

3.3 Legal, Regulatory, and Policy

3.3.1 Nuclear Waste Policy Act

3.3.1 (169)

Comment - 6 comments summarized

Commenters stated that the Rail Alignment EIS fails to disclose that existing volunteer fire departments in Caliente and other Lincoln County communities are not adequately trained or equipped to handle the myriad of existing rail shipments of hazardous materials through their area and to respond to the planned DOE shipments of spent nuclear fuel and high-level radioactive waste through the area. Chapter 4 of the EIS fails to disclose impacts to existing volunteer fire departments that would require training and equipment to be able to provide adequate emergency first response to rail incidents and accidents that involved shipments of spent nuclear fuel and high-level radioactive waste. Commenters asked that the EIS disclose impacts to the volunteer fire departments that would require training and equipment to be able to provide adequate emergency. This analysis should describe training requirements and staffing and impacts to volunteers and related recruitment issues, equipment requirements, and related costs to local jurisdictions.

Response

Appendix L, Section L.6, of the Rail Alignment EIS describes the emergency response responsibilities of federal, state, and local governments and the requirements DOE would place on transportation carriers. The NWPA requires DOE to provide technical assistance and funds to states and American Indian tribes for training public safety officials of appropriate units of local government through whose jurisdictions it would transport spent nuclear fuel or high-level radioactive waste. Section 180(c) of the Act mandates the training must cover procedures for safe routing and emergency response situations. Section 180(c) encompasses all modes of transportation, and funding would come from the Nuclear Waste Fund. Once implemented, this program would provide funding and technical assistance to train firefighters, law enforcement officers, and other public safety officials in preparation for repository shipments through their jurisdictions. Section L.7 of the EIS describes the availability of technical assistance and funding for training public safety officials under the NWPA. Funding for training would be made available well in advance of the start of shipments to the repository.

3.3.1 (826)

<u>Comment</u> - RRR000641 / 0011

The Rail Alignment DEIS description of the Proposed Action provides no commitment by DOE to provide Payments Equal to Taxes (PETT) as required by the NWPA, as amended. Such funds would be significant to the City (approaching several hundred thousand dollars annually) in the event that DOE were to locate the interchange and/or staging yards and related facilities in the City. The FEIS must include as a component of the Proposed Action a commitment by DOE to provide PETT to the State of Nevada and appropriate local governments. The analysis in Chapter 4 of the DEIS must provide an estimate of the PETT (including ad valorem or real property tax, sales tax, personal property tax and fuel tax based amounts, among others) that may accrue to the City of Caliente annually.

Response

Payments-equal-to-taxes are pursuant to Section 116(c)(3)(A) of the NWPA, which states: "the Secretary [of Energy] shall grant to the State of Nevada and any affected unit of local government, an amount each fiscal year equal to the amount such State or affected unit of local government, respectively, would receive if authorized to tax site characterization activities at such site, and the development and operation of such repository, as such State or affected unit of local government taxes the non-Federal real property

and industrial activities occurring within such State or affected unit of local government." The issue of payments-equal-to-taxes is beyond the scope of the Rail Alignment EIS.

3.3.2 Legal Issues

3.3.2 (161)

<u>Comment</u> – 7 comments summarized

Commenters stated the description of the Proposed Action in the Rail Alignment EIS is inadequate in relation to the manner in which DOE plans to secure access to the extensive number of private parcels the Caliente rail alignment must cross. They stated it is entirely unclear if DOE intends to acquire easements or rights-of-way for the temporary construction and permanent rail alignment disturbance area only, or if it would acquire each entire parcel the alignment crossed. In addition, it is not clear if DOE would acquire access only from willing sellers or if it would pursue condemnation as an alternative to secure needed access to private parcels. The manner in which DOE intends to secure access to private property is critical to the evaluation of impacts to such property and the feasibility of the alignment itself. If DOE intends to acquire access only from willing owners, the EIS must recognize that one refusal could render an alternative infeasible. If DOE intends to secure access through condemnation as necessary, the EIS must disclose this because condemnation proceedings could represent a financial hardship on property owners faced with the prospect of a prolonged court battle over access rights. The EIS is silent on these important aspects of the Proposed Action and related disclosure of impacts (and related mitigation). One commenter stated that the U.S. Constitution provides that the Federal Government shall own no land without the express consent of the legislature of the state in which the ownership occurs. The commenter noted that the Nevada Legislature has not given consent to this ownership and that the project should not continue until the Legislature gives its consent.

Response

DOE has not determined the precise location of the rail line; it based the location of the rail line in the Rail Alignment EIS on a conceptual design and would determine the precise location during final design. Therefore, the Department is not in a position to determine how much of a property interest (of each private parcel) would be necessary for it to construct a rail line that connected a repository at Yucca Mountain with an existing rail line in Nevada. DOE should be able to reach mutually beneficial agreements with landowners. If this was not possible, the Department would consider other options. DOE has appropriate legal authority and, depending on its specific plans, would use such authority as necessary. Under Section 647 of the Department of Energy Organization Act, the Secretary of Energy has the authority to acquire (by purchase, lease, condemnation, or otherwise) and construct facilities the Secretary deems necessary (42 U.S.C. Section 7257). The rail line would be a DOE facility. Under this authority, DOE could purchase real property, acquire easements (such as a right-of-way), and condemn property.

3.3.2 (1018)

<u>Comment</u> - RRR000663 / 0032

The Draft EISs fail to sufficiently evaluate the full implications of the Price Anderson Act liability system in terms of its effects and impacts on the national transportation system, rail operations, Nevada transportation, states and communities along shipping routes, property values along shipping routes, and host communities for generator sites, the repository site, other facilities where nuclear waste would be stored or handled.

Response

The commenter did not identify in what way the Rail Alignment EIS is deficient with respect to the "Price Anderson Act liability system." Appendix L, Section L.9 of the Rail Alignment EIS discusses the Price-

Anderson Act, which provides indemnification to contractors for third-party claims for nuclear incidents associated with the Proposed Action.

3.3.2 (1031)

Comment - RRR000617 / 0069

Page 2-39, Section 2.2.2: It is stated that the drilling of wells will take less than a year. However, the time needed to obtain water permits for these wells isn't included on the schedule and will result in a longer construction schedule.

The EIS should provide a realistic estimate of the time required to secure necessary water permits from the State of Nevada, including the resolution of likely legal challenges to actions by the Nevada State Engineer regarding granting of said permits.

Response

As with all major construction projects, construction and operation of the proposed repository and railroad would require an adequate supply of water. This water would be necessary for construction materials such as concrete, and to protect the health and safety of workers through control of dust, and for emergency use such as fire suppression. The time necessary to obtain water permits from the State of Nevada would not affect the consideration of impacts in the Rail Alignment EIS, although DOE agrees that it could take more than a year to obtain these permits.

3.3.2 (1474)

<u>Comment</u> - RRR000737 / 0004

The commenter suggested that the Mina rail corridor is not viable and a detailed analysis of it is a waste of the public's time. The commenter stated that even a nonpreferred alternative must be viable. The commenter expressed concern that DOE will continue to be interested in the Mina alignment and will possibly reverse its previous decision on the Caliente alignment. The commenter asked if DOE could return to the Mina alignment after licensing has begun, or later.

Response

The Mina rail alignment is a feasible alternative and is one of three alternatives (the Mina Implementing Alternative, the Caliente Implementing Alternative, and the No-Action Alternative) considered in the Rail Alignment EIS. DOE plans to issue a Record of Decision in which it will select one of the alternatives presented in the Rail Alignment EIS. DOE's preferred alternative is to construct and operate a railroad along the Caliente rail alignment and to implement the Shared-Use Option, as presented in Section 2.4 of the Rail Alignment EIS.

During initial scoping for the Rail Alignment EIS in 2004, DOE received comments that identified the Mina rail corridor for consideration as an alternative to the Caliente rail corridor. DOE subsequently held discussions with the Walker River Paiute Tribe on the availability of the Mina rail corridor, and in May 2006 the Tribe informed DOE that it would not object to the Department studying the potential impacts of constructing and operating a railroad across the Walker River Paiute Reservation. In response, DOE prepared a preliminary feasibility study of the Mina rail corridor. Based on the results of the study, on October 13, 2006, DOE issued an Amended Notice of Intent to expand the scope of the Rail Alignment EIS to include the Mina rail corridor (71 *FR* 60484, October 13, 2006).

In April 2007, the Walker River Paiute Tribal Council passed a resolution and announced that it was withdrawing from participation in the EIS process. The Tribe renewed its past objection to the transportation of nuclear waste across the Reservation. At the time the Tribe announced its withdrawal from the EIS process, DOE had completed the fieldwork and engineering studies necessary to conclude that it should include the Mina rail corridor in both the Nevada Rail Corridor SEIS and the Rail

Alignment EIS. The studies indicated that construction and operation of a railroad along the Caliente rail alignment or the Mina rail alignment would have similar but generally small environmental impacts. On balance, however, the Mina rail corridor is environmentally preferable because, in general, it would present fewer private-land conflicts, less surface disturbance, and smaller impacts to wetlands and air quality than the Caliente rail corridor. In addition, based on preliminary estimates, the total cost to construct the railroad in the Mina rail corridor would be approximately 20 percent less than to construct in the Caliente rail corridor.

For the reasons stated above, DOE has included the Mina rail corridor in the Nevada Rail Corridor SEIS and the Rail Alignment EIS; however, in light of the Walker River Paiute Tribe's current position on the shipment of nuclear waste across its Reservation, DOE has identified the Mina rail alignment as a "nonpreferred" alternative.

Following completion of the Rail Alignment EIS, DOE plans to issue a Record of Decision the Department would announce its selection of one of the alternatives evaluated in the Rail Alignment EIS. Until the EIS is complete, it is premature to discuss what the DOE decision will be.

3.3.2 (2327)

<u>Comment</u> - RRR000836 / 0017

Land along the Caliente route has been withdrawn from mineral exploration using a U.S. regulation for withdrawal of land. How can a regulation trump a U.S. law, the Mining Law? If it can, why have Western Shoshone tribes and environmental groups been unable to use the same withdrawal to preserve water and cultural sites and Native cemetery locations?

Response

This comment does not identify a deficiency in the Rail Alignment EIS and is outside the scope of NEPA.

The Secretary of the Interior issued Public Land Order No. 7653, withdrawing the requested public lands within the Caliente rail corridor from surface and mineral entry for 10 years to allow DOE to evaluate the lands for the potential construction, operation, and maintenance of the proposed railroad (Public Land Order No. 7653, Withdrawal of Public Lands for the Department of Energy to Protect the Caliente Rail Corridor; Nevada, 70 *FR* 76854, December 28, 2005). The Public Land Order does not affect existing mining claims or other activities such as grazing rights, water rights, and recreational uses.

The BLM authority to manage federal land is primarily established in the Federal Land Policy and Management Act (43 U.S.C. 1701 *et seq.*). Section 204 of the Act authorizes the Secretary of the Interior to "make, modify, extend, or revoke withdrawals...."

3.3.2 (4133)

<u>Comment</u> - RRR000691 / 0008

The main points of our [Timbisha Shoshone Tribe] opposition are based on: (1) title issues, failure to provide promised responses and failure to address cultural resource damages and (2) environmental sustainability and lack of U.S. legal compliance. There is no valid extinguishment title to this area and we have not given approval of this activity. On March 10, 2006 in Geneva, Switzerland, an historic and strongly worded decision by the United Nations Committee for the Elimination of Racial Discrimination (CERD) and the United States was urged to "freeze," "desist" and "stop" actions being taken or threatened to be taken against the Western Shoshone Peoples of the Western Shoshone Nation, of which the Timbisha Shoshone are a part. In its decision, CERD stressed the "nature and urgency" of the Shoshone situation informing the U.S. that [it] goes "well beyond" the normal reporting process and warrants immediate attention under the Committee's Early Warning and Urgent Action Procedure.

And finally, referencing once again the title issue which cannot be ignored; the 1863 Treaty of Ruby Valley recognizes and follows a clear chain of title, excepting Western Shoshone lands out of the State of Nevada and any claim of "federal" title.

The 1787 Northwest Ordinance (still in effect) states that: "The utmost good faith shall always be observed toward the Indians; their land and property shall never be taken from them without their consent."

The 1834 Trade and Intercourse Act (still in effect) restricts authority to make land transactions with Indian Nations. Section 11 prohibits any person from making a settlement on any lands "belonging, secured, or granted by treaty with the United States to any Indian tribe." Section 12 provided that "no purchase, grant lease, or other conveyance of lands, or of any title or claim thereto, from any Indian Nation or tribes of Indians, shall be of any validity in law or equity, unless the same is made by treaty or convention entered into pursuant to the Constitution."

The 1861 Nevada Territorial Act referred to in the 1787 Northwest Ordinance and stipulated that Indian lands "shall be excepted out of the boundaries, and constitute to part of the territory of Nevada."

Article 6 of the US Constitution confirms the authority of the Ruby Valley Treaty upon all entities of the United States: "This Constitution, and the Law of the United States which shall be made in pursuance thereof; and all shall be the supreme Law of the Land; and the Judges in every state shall be bound thereby, anything in the Constitution or Laws of any state to the contrary notwithstanding." Clearly the Treaty of Ruby Valley is such a document and appropriates Western Shoshone land.

Therefore, any considerations concerning YMP [Yucca Mountain Project] land use and ownership concerns must include a full assessment and consideration of indigenous peoples and communities views of the potential environmental impacts arising due to the proposed YMP activities.

Response

The Western Shoshone people maintain that the Ruby Valley Treaty of 1863 gives them rights to 37,000 square miles in Nevada, including the Yucca Mountain region. In 1977, the Indian Claims Commission granted a final award to the Western Shoshone people, who dispute the Commission's findings and have not accepted the monetary award for the lands in question. A U.S. Supreme Court decision [United States v. Dann, 470 U.S. 39 (1985)] held that the Western Shoshone claim to land associated with the Ruby Valley Treaty has been extinguished, and that the United States had made fair compensation. In <u>United States v. Dann</u>, the Supreme Court ruled that even though the money has not been distributed, the United States has met its obligations with the Indian Claims Commission's final award and, as a consequence, the aboriginal title to the land has been extinguished. While DOE notes the United Nations Committee for the Elimination of Racial Discrimination ruing, the Supreme Court decision is binding.

3.3.3 Regulations

3.3.3 (1954)

<u>Comment</u> - RRR000710 / 0048

Page 6-32, Section 6.3.7.8: The DEIS erroneously states that no protected species would be hunted, taken, or possessed.

The DEIS states, "Nevada Revised Statute, Chapter 527, Protection and Preservation of Timbered Lands, Trees, and Flora, also applies to the permit requirement. No protected species would be hunted, taken, or possessed during construction or operation of the proposed railroad." However, see page 4-196, wherein the DEIS states:

"It is possible that some individual cacti and yucca plants would be removed during the construction phase...."

See also page 2-233, wherein the DEIS states:

"Overall, there would be a loss of conifer habitat and individual conifer trees. There would also likely be a net loss of cacti and yucca along the proposed rail line."

Therefore, the DEIS at page 6-32 through 6-33 erroneously states that no protected plant will be taken. Cacti, yucca, and Christmas trees will all be taken.

Response

There was an inconsistency between two sentences in Section 6.3.7.8 and text elsewhere in the Draft Rail Alignment EIS. The presence of these sentences was an error, and DOE deleted them.

Although the deletion of these two sentences removes the inconsistency the commenter observed, the comment drew attention to a need for additional clarification about the requirements for removal of cacti, yucca, or Christmas trees. Thus, DOE revised Sections 2.2.2.10, 3.2.7.3.3.2, 3.3.7.3.3.2, 4.2.7.2.1.3, 4.2.7.4, 4.3.7.2.3.3, and 4.3.7.4 of the Rail Alignment EIS.

3.3.3 (2063)

<u>Comment</u> - RRR000710 / 0047

Pages 6-4 through 6-6, Table 6.1: The DEIS at this table fails to list the pertinent State of Nevada NAC [Nevada Administrative Code] regarding the protection of cactus, yucca, and Christmas trees.

Table 6-1 should include permits and authorizations that may be necessary to obtain under NAC 527.

Response

DOE listed Nevada Administrative Code 527, "Protection and Preservation of Timbered Lands, Trees, and Flora," in Table 6-3 of the Rail Alignment EIS. Section 6.3.7.7 of the EIS discusses Nevada Revised Statute 527. Nevada Revised Statutes 527.060 through 527.120 pertain to the protection of Christmas trees, cacti, and yucca.

3.3.3 (3189)

<u>Comment</u> - RRR000524 / 0023

The draft rail EIS does not state whether Section 4(f) of the Department of Transportation (DOT) Act needs to be applied in assessing and mitigating transportation impacts on cultural resources. The final rail EIS should clarify DOT's role with regard to the EIS and should clarify whether Section 4(f) is applicable to the proposed action. If Section 4(f) is applicable, the final EIS should include a discussion of how DOE intends to meet the associated requirements.

Section 4(f) of the Act states that DOT should make special effort to preserve natural and cultural properties that are present in public park and recreation lands, wildlife and waterfowl refuges, and historic sites. Section 4(f) also requires DOT coordination with the Department of Interior in developing transportation plans involving public lands, such as parks, recreation areas, wildlife refuges, or land from historic sites of national, State, or local significance.

Additionally, the regulations implementing the National Historic Preservation Act (36 CFR 800.3(b)) state that the agency official should coordinate Section 106 consultation with other reviews required under other authorities and agency-specific legislation, such as 4(f) of the Department of Transportation

Act. As stated in the Handbook on Departmental Review of Section 4(f) Evaluations (Department of the Interior, Office of Environmental Policy and Compliance, 2002), Section 4(f) "requires a more rigorous level of consideration for historic properties than does Section 106. Section 106 requires only that the effects on historic properties be considered and commented upon, while Section 4(f) requires that historic properties be used only if there is no feasible and prudent alternative."

Response

The substantive provisions of Section 4(f) apply only to agencies within the U.S. Department of Transportation. By way of background, "Section 4(f)" of the Department of Transportation Act refers to statutory requirements that Congress originally enacted in 1966. A 1983 rewriting of the Act amended Section 4(f) and recodified it as Section 303. Tradition within the environmental community, however, has resulted in the continued reference to the program as Section 4(f).

Section 4(f) does not apply to the STB decisionmaking process. As stated at 49 U.S.C. Part 303, the Section 4(f) program directs the Secretary of Transportation to ensure that transportation plans and programs protect publicly owned parks, recreation areas, and wildlife and waterfowl refuges, and publicly or privately owned historic sites. Although organizationally housed within the U.S. Department of Transportation, the STB is an independent regulatory agency with its own decisionmaking capability [49 U.S.C. 703(c)]. Applications before the STB are not subject to review by or approval of the Secretary of Transportation. Therefore, neither the STB nor DOE is required to comply with Section 4(f).

3.3.3 (3984)

<u>Comment</u> - RRR000671 / 0053

Page 6-30: The commenter suggested the addition of a Section 6.3.6.4.1, Nevada Revised Statute 383.160, Protection of Indian Burials on Private and State Lands, because, although the text identified the provisions promulgated under the Native American Graves Protection Act (NAGPRA), there is no mention of Nevada Revised Statute 383.160. The commenter stated that the EIS text should be revised to include this statutory requirement.

Response

Nevada Revised Statutes 383.150 to 383.190, Protection of Indian Burial Sites, specify procedures for the discovery of an American Indian burial site, and the duties of the State Historic Preservation Office to protect such sites and provide the sensitive treatment and disposition of such burial sites and any associated artifacts and human remains consistent with the planned use of the land. In response to this comment, DOE added the following entry to Table 6-3 of the Rail Alignment EIS: "NRS 383.150 to 383.190," "Protection of Indian Burial Sites," and "Procedures upon discovery of an Indian burial site."

3.3.3 (3985)

Comment - RRR000671 / 0054

Page 6-30, Section 6.3.6.8, Consultation and Coordination with Indian Tribal Governments: The text states that the DOE will continue "regular" consultation with the Consolidated Group of Tribes and Organizations. There is no definition of the term "regular" and based on past performance with the DOE the text needs to be clarified to add clarity and commitment.

Response

Sections 1.6.3 and B.6 of the Rail Alignment EIS provide details of tribal update meetings and outline the long-time ongoing relationship of DOE with the Consolidated Group of Tribes and Organizations, from its beginning in 1987. DOE is committed to continuing the consultation process throughout the development of the proposed railroad and will continue consultation with American Indians to ensure that it considers tribal concerns and perspectives.

3.4 Alternatives

3.4 (24)

$\underline{Comment} - 9$ comments summarized

Commenters expressed support for the construction of Goldfield alternative segment 4 along the Caliente rail alignment and stated that Goldfield 4 should become DOE's preferred alternative segment in the Goldfield area. Commenters stated that they support the alternative segment because it would be easier to construct and would affect fewer mining claims. One commenter expressed opposition to the eastern Goldfield alternative segments because the local municipalities would have the added burden of maintaining roads to access the rail line. Commenters indicated that they are in favor of implementing the Shared-Use Option along Goldfield 4 because it would provide economic benefits to Esmeralda County, would be beneficial to Chemetall Foote Corporation's Silver Peak operations, and would be beneficial to D.C. Minerals' Silver Peak operations. Commenters also stated that Goldfield 4 is the preferred alternative segment of Esmeralda County residents and officials.

Response

In the Draft Rail Alignment EIS, DOE identified Goldfield 3 as the preferred alternative segment in the Goldfield area. However, in the Final EIS, DOE has changed its preference to Goldfield alternative segment 4 because it would be the easiest to construct and operate and would avoid significant mineralized zones of the mining district. Section 2.4 of the EIS contains additional details on the DOE preferred alternative segments.

3.4 (462)

<u>Comment</u> - RRR000002 / 0001

The commenter expressed concerns that the operation of a rail line along certain alternative segments near Goldfield, Nevada, would result in loss of mineral resources and create a severe economic hardship to Metallic Goldfield Inc. He stated that Montezuma alternative segment 2, and Goldfield alternative segments 1, 3, and 4 would have a negative economic impact on the company's mining activities in Goldfield. Of those four alternative segments, Goldfield alternative segment 3 would have the smallest economic impact, while Goldfield alternative segment 4 and Montezuma alternative segment 2 would create a severe economic hardship. Further, the commenter expressed a preference for Montezuma alternative segment 1, which he stated should not have a negative economic impact on the company. The second choice he identified was Montezuma alternative segment 3. The commenter indicated that Montezuma alternative segments 1 and 3 best address the company's concerns.

Response

DOE would employ mitigation and avoidance strategies, as discussed in Chapter 7 of the Rail Alignment EIS, and would work with the BLM and mining lessees, claimants, and/or owners to minimize impacts to mine-related operations, as described in Table 7-2. DOE updated the land-use sections of the Rail Alignment EIS to include a discussion of the mining activity that could occur within the Gemfield mining deposit along Goldfield alternative segment 4 and within the footprint of the Maintenance-of-Way Facility. Were Metallic Ventures Gold, LLC, to move forward with plans to develop this location, the Department would be prepared to revise its right-of-way grant to move its rail line infrastructure to the degree necessary to accommodate this mineral development.

Railroad planners have evaluated the proposed Maintenance-of-Way Facility site along Goldfield alternative segment 4 and believe that if the Gemfield Project is implemented, the gentle topography along Goldfield 4 could allow for relatively easy relocation of the Maintenance-of-Way Facility and rail line, taking into account the proposed relocation of U.S. Highway 95.

The Department acknowledges the commenter's support for Montezuma alternative segments 1 and 3 along the Mina rail alignment and opposition to Goldfield alternative segments 1, 3, and 4 along the Caliente rail alignment. At present, the Mina rail alignment is DOE's nonpreferred alignment. Along the Caliente rail alignment, DOE has identified Goldfield 4 as its preferred alternative segment in the Goldfield area. Section 2.4 of the Rail Alignment EIS provides additional details about DOE's preferred alternative segments along the Caliente rail alignment.

3.4 (584)

<u>Comment</u> - RRR000105 / 0003

The commenter supports siting of the transportation operations center and cask maintenance facilities in rural Nevada.

Response

The Cask Maintenance Facility would be collocated with the Rail Equipment Maintenance Yard inside the Yucca Mountain Site boundary in Nye County. The National Transportation Operations Center and Nevada Railroad Control Center would be collocated with the Rail Equipment Maintenance Yard or the Staging Yard in Lincoln, Nye, or Mineral County. See Section 2.2.4 of the Rail Alignment EIS for more information.

3.4 (1966)

Comment - RRR000525 / 0024

We [National Association of Regulatory Utility Commissioners] agree with the 2004 decision selecting the "mostly rail" transport mode and the decision to use dedicated trains. We would have preferred the shorter, less-expensive, easier to build and operate rail routes to the repository site; either the Caliente-Chalk Mountain, Jean or Valley Modified corridor over the Caliente corridor that DOE selected. It was appropriate to re-open the corridor selection when it appeared that there was a possibility that a Mina route might be feasible, as evaluated in this Draft SEIS.

Response

The Department acknowledges the commenter's preference for the Caliente-Chalk Mountain, Jean, and Valley Modified rail corridors over the Caliente rail corridor. These rail corridors were originally evaluated in the 2002 Yucca Mountain FEIS. In the Nevada Rail Corridor SEIS, the Department updated information relevant to environmental concerns for the Jean and Valley Modified rail corridors to determine if they warranted further evaluation at the alignment level. In addition, it restates why DOE dismissed the Caliente-Chalk Mountain rail corridor from further consideration. As discussed in Chapter 6 of the Nevada Rail Corridor SEIS, the Department concluded that there were no new circumstances or information bearing on environmental concerns that warranted further consideration of these rail corridors at the alignment level in the Rail Alignment EIS.

3.4 (2085)

<u>Comment</u> - RRR000525 / 0035

DOE Preferred Alternative, Section S.3.7 states that DOE's preferred alternative is to construct and operate a railroad along the Caliente rail alignment and to implement the Shared-Use Option. We [National Association of Regulatory Utility Commissioners] agree with the shared use on a not-to-interfere basis. We can support the Caliente Corridor, but in view of the potential economic development benefits to Nevada, to say nothing of the lower cost of construction, we urge continued investigation of the possibility of building in the Mina corridor. Perhaps there could be a "win-win" outcome if the Walker River Paiute Tribe could share in the savings.

Response

DOE acknowledges support for, as well as opposition to, the proposed railroad in the Mina rail corridor and the associated analyses in the Rail Alignment EIS. In the Rail Alignment EIS, the Mina rail corridor is DOE's nonpreferred alternative because the Mina rail corridor would cross the Walker River Paiute Reservation and the Tribe has withdrawn its participation in the EIS process.

3.4 (3589)

<u>Comment</u> - RRR000176 / 0003

The rail corridors studied in Nevada are mostly remote, far from most inhabited areas and overall the environmental impacts due to the rail projects will be very minimal and easily mitigated.

Response

Thank you for your comment.

3.4.1 Caliente Rail Alignment

3.4.1 (18)

<u>Comment</u> – 4 comments summarized

Commenters expressed concern that DOE had inappropriately applied the costs of construction in its alternatives analyses. Commenters asserted that it appeared as though the Department eliminated some alternative segments from further analysis due to cost considerations, when they were actually preferable from an environmental perspective. Commenters also stated that costs were not appropriate grounds to eliminate an alternative under NEPA.

Response

The CEQ has stated that "reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense" [Forty *Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations* (46 *FR* 18026, March 23, 1981)]. DOE analyzed a range of reasonable alternatives it developed through a rigorous process that is consistent with CEQ guidance. Appendix C of the Rail Alignment EIS describes this process in detail.

As described in Section C.1 of the Rail Alignment EIS, to develop the range of alternative segments for evaluation, DOE evaluated a suite of potential alternative segments for the Caliente and Mina Implementing Alternatives to determine if they would be practical or feasible from a technical, environmental, and economic standpoint. As Sections C.1 and C.2 explain, the Department first identified preliminary alternative segments and common segments in the Notice of Intent and Amended Notice of Intent (69 *FR* 18565, April 8, 2004; and 71 *FR* 60484, October 13, 2006) and invited public comment on the identified alternatives as part of the scoping process. DOE considered all comments on alternative segments, including those that suggested specific alternative segments or criteria for modifying the preliminary alternative segments and identifying new alternative segments.

As described in Section C.3, after the scoping process DOE used a computer-based modeling system to consider multiple alternative and common segments within the geographic areas of the Caliente and Mina rail corridors. DOE also used the modeling software to develop preliminary construction cost estimates by considering cost factors for construction-related items and design features. However, as Section C.2 states, the modeling software derived alternative and common segments that met the applicable design criteria while it addressed the need to minimize or avoid potentially adverse impacts. Table C-1 lists the specific primary engineering factors or standards related to the design and construction of a rail line that DOE considered in this analysis. Section C.3 identifies the environmental and land-use features DOE considered, which include, for example, springs, Wilderness Study Areas, cultural resources, mineral resources, and private, American Indian, and federally managed lands. Based on the public scoping

comments and the analyses described above, DOE produced full suites of alternative and common segments for the Caliente and Mina rail corridors (shown in Figures C-4 and C-5, respectively, of the Rail Alignment EIS).

While Tables C-4 through C-10 contain preliminary construction cost estimates (which increase with the avoidance of environmental and land-use features), the estimates did not serve as the sole basis for elimination of any alternative from detailed consideration in the EIS. As Section C.4 states, the primary reasons for eliminating or adjusting an alternative segment included (1) environmental constraints, such as impacts to Wilderness Areas or wildlife preserves; (2) avoidance of private lands, mineral resources, or oil resources; (3) engineering considerations, such as steep grades, tight curvature, tunneling, or excessive excavation or placement of fill materials; and (4) public safety and national security issues associated with the Nevada Test and Training Range. Tables C-2 (Caliente rail alignment) and C-11 (Mina rail alignment) identify the alternative segments DOE analyzed in detail and those DOE eliminated from detailed analysis. Regarding the latter, Tables C-2 and C-11 indicate the reason(s) for the elimination of such alternative segments from detailed analysis (for example, engineering criteria or land-use constraints).

3.4.1 (21)

<u>Comment</u> – 5 comments summarized

Commenters expressed opposition to the transportation of spent nuclear fuel and high-level radioactive waste through the City of Caliente. One commenter noted that construction of the rail line through Caliente would be difficult and dangerous because Clover and Rainbow Canyons are prone to flooding. The same commenter noted that Caliente is a very geologically active area. One commenter noted that construction would result in the destruction of the Hot Springs Hotel and the history associated with the hot springs in Caliente. One commenter noted the Caliente alternative segment would require the greatest amount of federal condemnation of private lands to acquire the right-of-way and the greatest number of cuts, fills, and bridges. A commenter also noted that DOE select the Eccles alternative segment because no one lives along that segment and it would avoid the City of Caliente.

Response

Because of the number of comments DOE received that opposed construction of the rail line through Caliente in general and for a range of specific reasons, the Department refers the commenters who submitted the comments summarized here to the discussion of issues in the introduction to this Comment-Response Document and to other comments and responses on specific topics that cover the range of topics summarized here (see the Comment-Response Document Table of Contents).

In the Rail Alignment EIS, DOE identified the Caliente alternative segment as the preferred alternative segment in the Caliente area. The Eccles alternative segment would require construction in Clover Creek and would present greater engineering challenges because there would not be sufficient room for a wye track, which would make it difficult to handle train switching operations in the Interchange Yard. In addition, a 2-percent grade leaving the Eccles Interchange Yard would require trains to park with their brakes on, presenting a safety risk during operations. The Caliente alternative segment would have easier access to a nearby ballast quarry and would be easier to operate.

Section 2.4 of the Rail Alignment EIS contains additional details on DOE's preferred alternative segments.

The parking lot and access road to the Caliente Hot Springs Motel would lie within the Caliente alternative segment construction right-of-way. While the ownership of this land along the former Pioche and Prince Branchline is uncertain, the motel has used this land for many years. The motel could be

adversely affected by the proximity of the rail line. If DOE selected the Caliente alternative segment, the Department would work with the land owner to mitigate the impacts to the motel through the process described in Chapter 7 of the Rail Alignment EIS. Through this process, DOE would develop specific measures that could avoid, reduce, or mitigate impacts to this property, including measures to maintain access to the motel during rail line construction. Finally, DOE could also negotiate compensation with the land owner if the design, construction, or operational accommodations were not sufficient to mitigate the impacts.

3.4.1 (22)

<u>Comment</u> – 5 comments summarized

Commenters expressed support for the construction of the Caliente alternative segment along the Caliente rail corridor. Commenters also expressed support for construction of the rail line along the existing rail roadbed and indicated that construction would be less costly and would have less impact on the community than construction of the Eccles alternative segment. Commenters noted that construction of the Eccles alternative segment would occur through acreage Lincoln County has designated as a much-needed community expansion area.

Response

Section 2.4 of the Rail Alignment EIS identifies the Caliente alternative segment as DOE's preferred alternative segment in the Caliente area. The Eccles alternative segment would require construction in Clover Creek and is operationally challenging because there would not be sufficient room for a wye track, which would make it difficult to handle train switching operations in the Interchange Yard. A 2-percent grade leaving the Interchange Yard would require trains to park with their brakes on, presenting a safety risk during operations. The Caliente alternative segment would have easier access to a nearby ballast quarry and would be easier to operate.

3.4.1 (23)

<u>Comment</u> – 9 comments summarized

Commenters expressed general support for the DOE preferred alternative to construct and operate a railroad along the Caliente rail alignment. Commenters stated they were in favor of the Caliente rail alignment for a variety of reasons, which included that it would be the most cost-effective and least intrusive of the options; would provide an opportunity for economic growth in Nevada and the local communities affected by the railroad; would not pass through any American Indian lands; would not pass near any large bodies of water; and would not pass through any areas with a large population. One commenter stated a preference for the use of dedicated trains along the Caliente rail alignment.

Response

Because of the number of comments DOE received in general support of implementing the Proposed Action along the Caliente rail alignment, the Department refers the commenters who submitted the comments summarized here to the discussion of issues at the beginning of this Comment-Response Document and to other comments and responses related to specific topics of interest (see the Comment-Response Document Table of Contents).

3.4.1 (34)

<u>Comment</u> – 8 comments summarized

Commenters expressed broad opposition to the construction and operation of a railroad along the Caliente rail alignment. While many commenters did not identify specific deficiencies or problems with the Proposed Action and only stated their opposition to the proposal, others expressed specific opposition by stating their support for the No-Action Alternative. Specific issues included concerns about health and safety, construction through riparian areas, negative impacts on property values along the rail line, proximity of houses to the constructed rail line, impacts on grazing allotments, impacts on recreational

opportunities along the rail line (for example, hunting), impacts on wildlife and vegetation, and the lack of emergency planning for shipments of spent nuclear fuel and high-level radioactive waste. One commenter noted that other options other than the rail line would result in fewer impacts and would cost the taxpayers less to construct.

Response

DOE acknowledges the commenters' opposition to and range of concerns about the construction and operation of a railroad along the Caliente rail alignment. Because of the number of comments opposing the DOE proposal in general or for a range of specific reasons, the Department refers the commenters who submitted the comments summarized here to the discussion of issues in the introduction to this Comment-Response Document and to other specific comments and responses that cover the range of topics summarized here (see the Comment-Response Document Table of Contents).

3.4.1 (35)

<u>Comment</u> – 4 comments summarized

Commenters expressed opposition to construction of a rail line along the Caliente rail alignment because of the detrimental impacts it would have on the "City" sculpture in Garden Valley. Construction of any of the Garden Valley alternative segments, particularly Garden Valley 1, would result in unacceptable noise and visual impacts to the sculpture and ecological damage to the desert environment. Commenters stated that the sculpture would be permanently marred by the regular sounds of train service, the visual presence of the rail line, the utility corridor, parallel roads, wellheads, and induced development that resulted from these improvements.

Response

DOE analyzed the aesthetic and noise impacts (Sections 4.2.3 and 4.2.8, respectively, of the Rail Alignment EIS) of constructing and operating a railroad along the Caliente rail alignment. The Department performed the noise analysis in conformance with STB noise standards and the aesthetics analysis in conformance with BLM visual resource management standards. In both cases, DOE used the best available information to address the potential impacts of rail line construction in Garden Valley.

In the Final Rail Alignment EIS, DOE identifies Garden Valley 3 as the preferred alternative segment in the Garden Valley area, in part because it is the alternative segment farthest from the *City* sculpture.

3.4.1 (38)

<u>**Comment**</u> – 5 comments summarized

Commenters expressed support for constructing the proposed Staging Yard at Indian Cove along the Caliente alternative segment. They stated that Indian Cove would be closer to the Union Pacific Railroad mainline and thus easier to operate. In addition, commenters questioned the definition of the Indian Cove site as a wetland, stating that it would dry up unless there was a diversion of water from Meadow Valley Wash. One commenter asserted that the Upland option for the Staging Yard would require displacing an active farm and several dwellings.

Response

In the Draft Rail Alignment EIS, DOE did not identify a preferred location for the Staging Yard along the Caliente rail alignment. However, in the Final Rail Alignment EIS, DOE has identified the Upland option as the preferred alternative. Section 2.4 of the Rail Alignment EIS describes the DOE preferred rail alignment alternative, preferred alternative segments, and options, including the location of the Staging Yard.

As defined in the regulations that implement Section 404 of the Clean Water Act, the amount of water present is not always a good indicator of a wetland, and the effects of upstream dams, drainage ditches,

dikes, irrigation, and other modifications must be considered when defining a wetland. Therefore, the EIS appropriately identifies Indian Cove as a wetland. The Indian Cove option for the Staging Yard would require filling approximately 47 acres of wetlands, while construction of the Upland option would require filling less than 2 acres of wetlands.

Section 404 of the Clean Water Act requires selection of the practicable alternative with the least impacts to wetlands. Thus, the Indian Cove option might not be permittable under Section 404.

3.4.1 (602)

<u>Comment</u> - RRR000115 / 0005

The commenter expressed broad support for siting the Track Maintenance Facility in Caliente.

Response

DOE acknowledges support for locating the Maintenance-of-Way Trackside Facility in Caliente. Section 2.2.4 of the Rail Alignment EIS describes potential locations for all railroad operations support facilities. The Maintenance-of-Way Trackside Facility would be near the middle point of the rail line near Goldfield. Caliente would be the site of one of two Satellite Maintenance-of-Way Facilities (the other would be collocated with the Rail Equipment Maintenance Yard).

3.4.1 (1021)

<u>Comment</u> - RRR000617 / 0059

Page 2-8, Section 2.2: The DEIS states, "DOE wants to minimize potential impacts to wetlands". Due to the existence of wetlands in and near the site, the proposed staging yard location at Indian Cove does not accomplish this.

The EIS should consider alternatives for staging yards which truly avoid or minimize impacts to wetlands and private property including possible sites in Dry Lake Valley.

Response

In the Draft Rail Alignment EIS, the Department did not identify a preferred location for the Staging Yard along the Caliente rail alignment. However, in Section 2.4 the Final Rail Alignment EIS, DOE has identified the Upland option for the Staging Yard as its preferred alternative. The Upland Staging Yard option and its associated ballast quarry siding would require filling of less than 2 acres of wetlands. The Indian Cove option would require filling of approximately 47 acres of wetlands. Section 404 of the Clean Water Act requires selection of the least environmentally damaging practicable alternative with the least impacts to wetlands; therefore, selection of the Indian Cove option might not be permittable under Section 404.

The impacts to private lands from construction of the rail line and facilities are considered in Section 4.2.2 of the Rail Alignment EIS. DOE considered the Eccles-North option of the Staging Yard along the Eccles alternative segment, which would not impact private lands. However, DOE does not prefer the Eccles alternative segment, in part because of operational challenges along the segment. The site for the Eccles Interchange Yard would not have sufficient room for a wye track, which would make it difficult to handle train switching operations in the Interchange Yard. There would be a 2-percent grade leaving the yard, which would require trains to park with their brakes on and present a safety risk during operations. Additionally, the site of the Eccles interchange yard would require construction within Clover Creek, which is a flood-prone area. For these reasons, DOE identified the Caliente alternative segment, which would not have any of these issues, as the preferred alternative segment.

DOE did not consider a potential location for the Staging Yard in Dry Lake Valley in the Rail Alignment EIS because the site would be too far from both the Caliente alternative segment and the Union Pacific Mainline to be operationally feasible.

3.4.1 (1504)

<u>Comment</u> - RRR000656 / 0055

Section 2.4, page 2-114, DOE Preferred Alternative: Nye County is particularly pleased that a rail transportation alternative and the shared use option is preferred. These decisions are consistent with Nye County policy and needs.

Response

Thank you for your comment.

3.4.1 (3382)

<u>Comment</u> - RRR000666 / 0006

The Commissioners are pleased to acknowledge the Department of Energy for including in the EIS the Maintenance-of-way Headquarters Facility to be located in Esmeralda County (EIS Summary S.3.2.3, Table S-6) and the ballast quarries, one to be located west of Goldfield, and two northeast of Goldfield (EIS Summary S.3.2.1 Table S-5). Esmeralda County looks forward to working constructively with DOE in assisting with the development of these facilities and activities.

Response

Thank you for your comment.

3.4.1 (3395)

Comment - RRR000012 / 0006

Facilities such as the transportation operations center, rail maintenance center, cask maintenance facilities, and others should be best in class regarding emergency response training and equipment.

Response

As discussed in Appendix L of the Rail Alignment EIS, states, tribes, and local jurisdictions would have the primary responsibility for protecting the public and the environment in their jurisdictions. If there was an emergency that involved a DOE shipment of radioactive materials, incident command would be established based on the procedures and policies of the state, tribe, or local jurisdiction. Emergency response operations would be coordinated from the Nevada Railroad Control Center. In addition, as required by Section 180(c) of the NWPA, DOE would provide training to local jurisdictions in accident and emergency response procedures.

3.4.1 (3737)

<u>Comment</u> - RRR000317 / 0010

When asked at the meetings why DOE prefers to construct the proposed railroad directly into Caliente, over private lands, through the largest populated city in all of Lincoln County, across the confluence of the two major drainages in the area, over a known geothermal field and resource, when the Eccles alternative segment would involve none of these impacts or risks, DOE officials responded that the Eccles alternative segment would be "more difficult and expensive." Lacking any real information, data, sampling, study and detail of design and engineering and, therefore, knowledge of risks and costs of engineering and construction for either alternative segment, the DOE's answer is patently unfounded and very potentially false. The bottom line is that the DOE prefers the Caliente alternative segment over the Eccles alternative segment to be "cheaper." DOE officials said at the meetings that they thought the Caliente alternative segment would be cheaper by "\$10 million to \$20 million." A few years ago, DOE estimated

that the proposed railroad would cost \$800 million. Recently, DOE estimated the cost to be between \$2.5 billion and \$3.15 billion, a variance of between 312.5% and 393.75%. DOE is simply not credible when it comes to: (i) cost estimates for the proposed project; (ii) cost estimates for any of the rail alignments and alternative segments; and (iii) identification and choice of least costly alternatives.

As a former owner-operator of a railroad, and as a geologist and attorney with more than 30 years' experience, and as a court-qualified expert on the value of land and water rights I do not hesitate to write that, in my expert opinion, for the reasons stated above, it is more likely that the Caliente alternative segment will be much more expensive and difficult of engineering, construction, and maintenance, and riskier to operate, than the Eccles alternative segment. While it is true that a railroad once occupied that stretch, it was a sub-standard railroad built early in the last century, without the demands of 125-ton car weights and the projected high utilization of the proposed railroad. It was built at a time when cultural and historic values were not of serious concern and there was practically no tourism. It was sited, engineered and built without the benefits of scientific knowledge and data obtained over the past nearly 100 years, built without the benefit of engineering sophistication and construction techniques developed over the same 100 years, and without modern excavation, earth moving and road-building equipment and materials. It was built at a time when Las Vegas hardly even existed at all. In any event, the rail has been pulled-up, the right-of-way abandoned, wildlife and vegetation returned and the right-of-way put to non-railroad uses by others. The fact of its former existence is nearly irrelevant for 2007 NEPA and project purposes.

Response

In Section 2.4 of the Rail Alignment EIS, DOE identifies the Caliente alternative segment as its preferred alternative segment in the Caliente area. The Eccles alternative segment would be operationally challenging and difficult to construct. The site would be operationally challenging because there would not be sufficient room for a wye track, which would make it difficult to handle train switching operations in the Interchange Yard. There would be a 2-percent grade leaving the yard, which would require trains to park with their brakes on and present a safety risk during operations. In addition, the site of the Eccles Interchange Yard would require construction in Clover Creek, which is a flood-prone area. For these reasons, DOE identified the Caliente alternative segment, which would not have any of these issues, as the preferred alternative segment.

3.4.1 (3739)

Comment - RRR000317 / 0012

The study fails to report any significant level of engineering completed by DOE to compare the potential impacts of the Eccles alternative segment and the Caliente alternative segment. DOE personnel at the meetings admitted that engineering for the Eccles alternative segment and the Caliente alternative segment has not been based on a complete reading of the study. It is apparent that the DOE does not know, does not report and cannot report in the study, the environmental effects, socioeconomic effects, conflicts with plans, energy requirements, and effects on quality of life and historical and cultural resources of either the Eccles alternative segment or the Caliente alternative segment.

Even simple matters are not addressed. For example, the DOE does not really have any reliable idea how much gravel and ballast, concrete and steel, cut and fill, energy, bridging and caissons, and the like, either alternative segment will require. As a result, the DOE's determination that the Caliente alternative segment is "preferred" is unfounded, without science or logic, and is incomplete and inaccurate, and therefore premature.

Lacking geologic and hydrologic detail, field measurements and sampling, data collection, samples analysis, seismic study, and design-level engineering, the study does not and cannot analyze or report potential and comparative engineering, construction and maintenance costs, construction and operational risks, and environmental, economic, energy, planning, social and cultural effects of any route or any alternative segment.

Response

DOE engineering studies evaluated the Caliente and Eccles alternative segments with a level of detail necessary to assess the environmental impacts of proposed railroad construction and operations along either alternative segment. Section 2.2.2.4 of the Rail Alignment EIS describes the materials required for construction; Section 2.2.2.5 describes the bridges DOE would construct; Section 2.2.2.6 describes the amount of cut, fill, and disturbed surface area. Section 2.2.2 contains additional details about construction of the rail line. Chapter 4 of the EIS describes the environmental impacts of railroad construction and operations.

3.4.1 (4212)

<u>Comment</u> - RRR001084 / 0002

From recent information received from the Lincoln County Oversight Program, it appears the preferred rail route will be through the City of Caliente and north via the abandoned, and now primarily privately owned, old Union Pacific grade. Caliente City's spokesperson, Mayor Phillips, has always maintained publicly the canyon descending into Caliente was hazardous for rail transport of nuclear waste, and had a history or derailments. Now the "hazardous" route seems to be preferred. Why the change of attitude? As previously under consideration, why not branch the rail route off the main Union Pacific line prior to descending into the canyon? There would not be nearly as much private property to purchase, and the residents of Caliente would not live in fear of a mishap. Ask individually the citizens of Caliente their preference. Do not let a few special interest individuals represent themselves as speaking for the majority!

Response

DOE considered potential hazards of shipping spent nuclear fuel and high-level radioactive waste in its design of the rail line (see Chapter 2 of the Rail Alignment EIS) and the transportation casks (see Chapter 2 of the Repository SEIS). The citizens of Caliente had the opportunity to present their opinions about the proposed project during the public scoping meetings in May 2004 and November 2006 and during the public comment period on the draft documents from November 2007 to January 2008, and a number of Caliente citizens provided comments. DOE considered the Crestline, Eccles, and Elgin alternative segments due in part to comments it received during this process. As discussed in Appendix C of the Rail Alignment EIS, the Department eliminated Crestline because it did not meet engineering criteria for the rail line, and eliminated Elgin because it exceeded the maximum allowable grade. The Department investigated but could not identify a feasible route similar to that suggested by the commenter, because the alternative would have required crossing several canyons.

3.4.2 Mina Rail Alignment

3.4.2 (42)

Comment - 30 comments summarized

Commenters expressed opposition to the inclusion and analysis of the Mina rail alignment in the Rail Alignment EIS following the Walker River Paiute Tribal Council's May 2007 resolution that the Tribe would no longer support the transportation of spent nuclear fuel and high-level radioactive waste across reservation lands. Commenters stated that NEPA requires analysis of reasonable or viable alternatives (in other words, those alternatives capable of being selected). One commenter noted that the Ninth Circuit Court made it quite clear in Tenake Springs v. Claugh that "NEPA requires that an agency rigorously explore and objectively evaluate all reasonable alternatives to the proposed action." Because the Mina rail alignment requires the consent of the Walker River Paiute Tribal Council, DOE cannot consider it a reasonable alternative and, therefore, should not have analyzed it in the Draft Rail Alignment EIS and should not carry it forward into the Final Rail Alignment EIS. Some commenters recommended classification of the Mina rail alignment as an alternative that DOE considered but eliminated from detailed analysis in the Final Rail Alignment EIS.

Response

In the Yucca Mountain FEIS, DOE evaluated in detail five potential rail corridors in the State of Nevada in which it could construct a rail line to link an existing rail line to Yucca Mountain. In the FEIS, DOE considered but eliminated from further study several other potential rail corridors. The Department eliminated one of those, the Mina rail corridor, from further study because it crosses the Walker River Paiute Reservation and the Tribe had previously stated that it would not allow DOE to transport nuclear waste across the Reservation.

During initial scoping for the Rail Alignment EIS in 2004, DOE received comments that identified the Mina rail corridor for consideration as an alternative to the Caliente rail corridor. DOE subsequently held discussions with the Walker River Paiute Tribe on the availability of the corridor, and in May 2006 the Tribe informed DOE that it would not object to the Department studying the potential impacts of constructing and operating a railroad across the Reservation. In response, DOE prepared a preliminary feasibility study of the Mina rail corridor. Based on the results of the study, on October 13, 2006, DOE issued an Amended Notice of Intent to expand the scope of the Rail Alignment EIS to include the Mina rail corridor (71 *FR* 60484, October 13, 2006).

In April 2007, the Walker River Paiute Tribal Council passed a resolution and announced that it was withdrawing from participating in the EIS process. The Tribe renewed its past objection to the transportation of nuclear waste across the Reservation. At the time the Tribe announced its withdrawal from the EIS process, DOE had completed the fieldwork and engineering studies necessary to conclude that it should include the Mina rail corridor in both the Nevada Rail Corridor SEIS and the Rail Alignment EIS. The studies indicated that construction and operation of a railroad along the Caliente or Mina rail alignment would have similar but generally small environmental impacts. On balance, however, the Mina rail corridor is environmentally preferable because, in general, it would present fewer private-land conflicts, less surface disturbance, and smaller impacts to wetlands and air quality than the would the Caliente rail corridor. In addition, based on preliminary estimates, the total cost to construct the railroad along the Mina rail alignment would be approximately 20 percent less than to construct along the Caliente rail alignment.

For the reasons stated above, DOE included the Mina rail corridor/alignment in the Nevada Rail Corridor SEIS and the Rail Alignment EIS. However, in light of the Walker River Paiute Tribe's current position on the shipment of nuclear waste across the Reservation, the Department has identified the Mina rail alignment as a nonpreferred alternative.

3.4.2 (542)

Comment - RRR000390 / 0002

The commenter expressed support for building the proposed railroad in the Mina rail corridor.

Response

DOE acknowledges support for, as well as opposition to, the proposed railroad in the Mina rail corridor and the associated analyses in the Rail Alignment EIS.

3.4.2 (643)

<u>Comment</u> - RRR000006 / 0009

The commenter does not believe that DOE has adequately evaluated the environmental impacts of constructing the Schurz alternative segments, removing the existing Department of Defense Branchline

through Schurz, impacts to communities along the existing rail lines in northern Nevada, and the numbers of shipments through the Reno/Sparks area.

Response

Chapter 4 of the Rail Alignment EIS discusses the impacts from constructing the Schurz alternative segments and removing the existing Department of Defense Branchline through Schurz. DOE used the best available information to document and account for any potential impacts of rail line construction and removal through this area.

In the Repository SEIS, DOE analyzed impacts to capture the likely upper range of impacts that could occur to any community along a road or rail line. These impacts are representative of the likely maximum impacts that would occur in communities along existing rail lines in northern Nevada. The transportation impacts presented in Chapter 6 of the Repository SEIS include the radiological and nonradiological transportation impacts along the existing rail lines in Northern Nevada. In addition, Section 6.4.1.11 of the Repository SEIS presents the radiological impacts for a person located near the Reno Trench who could be exposed to passing shipping casks. This person was estimated to receive a radiation dose of 0.0049 rem over a period of up to 50 years of shipments to the repository. The probability of a latent cancer fatality for this individual was estimated to be 0.0000029, or about one chance in 300,000.

3.4.2 (669)

<u>Comment</u> - RRR000314 / 0002

By way of this letter, I again request that the City of Reno's comments in opposition to Yucca Mountain, and any possible Mina route alignment, be included as part of your official record. This follows my earlier letter dated December 12, 2006.

The City of Reno has a long history of vigorously opposing any nuclear waste shipments to Nevada. Over the past 20 plus years, the Reno City Council has adopted no less than four Resolutions, publicly stating its opposition to the location of a high-level nuclear waste deposit facility in Southern Nevada and further opposing any transportation of waste through Reno and Washoe County.

The present Reno City Council feels strongly that Yucca Mountain is not the appropriate repository for these materials, and that transporting hazardous materials throughout our State greatly endangers the lives of our residents. The City of Reno, once again, strongly urges the Department of Energy to consider other options and locations for this project.

Response

DOE acknowledges the commenter's opposition to and range of concerns about proposed railroad construction and operations along the Mina rail alignment.

3.4.2 (2040)

<u>Comment</u> - RRR000680 / 0005

It appears that the Mina alternative remains the non-preferred alternative solely due to the objection of the Walker River Paiute Tribe. The City of Reno objects to the Mina route in its entirety and believes the EIS provides inadequate analysis of potential environmental impacts to major population centers under the Mina route. Additionally, the Mina route is identified as running from Hazen to Yucca Mountain, yet there is no reference as to how materials would first get to Hazen (including the possibility of rail shipments directly through Reno).

Response

Under the Mina Implementing Alternative, trains would arrive on the Union Pacific Mainline near Hazen and proceed to the Staging Yard along the Union Pacific Railroad Hazen Branchline. Impacts to population centers that are not along the Mina or Caliente rail corridor are outside of the scope of the Rail Alignment EIS. The Yucca Mountain FEIS discusses railroad transportation prior to arriving at the beginning of the Mina rail corridor; the Repository SEIS updates this information.

3.4.2 (2067)

Comment - RRR000680 / 0006

The Mina corridor should not be considered as an alternative (even as the non-preferred alternative). Although the Mina route may be more direct and cost effective, the potential harm to citizens of the Reno area is greatly magnified by the increased use of the Union Pacific railway. The City of Reno feels that the potential danger to major population centers should be more heavily weighted in any alignment decisions.

Response

The potential impacts of shipping spent nuclear fuel and high-level radioactive waste along the Union Pacific Mainline in Nevada were analyzed in the 2002 Yucca Mountain FEIS under Nevada Transportation. The Nevada Rail Corridor SEIS and the Rail Alignment EIS analyze impacts that would occur within the proposed rail corridors and rail alignments in which DOE proposes to construct a railroad.

The transportation impacts presented in Chapter 6 of the Repository SEIS include the radiological and nonradiological transportation impacts along the existing rail lines in Northern Nevada. Section 6.3 of the Repository SEIS presents the consequences of maximum reasonably foreseeable transportation accidents for urban and rural areas. The estimated consequences of the maximum reasonably foreseeable transportation accident are 0.012 latent cancer fatality for the population in rural areas and 9.4 latent cancer fatalities for the population in urban areas.

DOE updated Appendix G, Section G.9.8 of the Repository SEIS to include a discussion of the consequences of the maximum reasonably foreseeable transportation accident in specific urban locations. For these specific locations (including Reno), the most severe accident that would be reasonably foreseeable (with an annual probability greater than 1×10^{-7}) would not result in the release of any radioactive material from the cask, and thus would result in smaller consequences than the maximally reasonably foreseeable transportation accident that DOE evaluated. The Department concluded that there would be less than one latent cancer fatality (0.0005) as compared to 9.4 latent cancer fatalities for the maximum reasonably foreseeable transportation accident in an urban area.

In addition, Section 6.4.1.11 of the Repository SEIS presents the radiological impacts for a person located near the Reno Trench who could be exposed to passing shipping casks. This person was estimated to receive a radiation dose of 0.0049 rem over up to 50 years of shipments to the repository. The probability of a latent cancer fatality for this individual was estimated to be 0.0000029, or about one chance in 300,000.

3.4.3 Shared-Use Option

3.4.3 (1)

<u>**Comment**</u> – 8 comments summarized

Commenters expressed support for the Shared-Use Option. Commenters based their support on optimism about the potential economic benefits this option would afford communities along the rail alignment. In

addition, most of these commenters stated that shipments of spent nuclear fuel and high-level radioactive waste should receive priority over commercial shipments.

Response

Section 2.4 of the Rail Alignment EIS identifies the DOE preference for implementation of the Shared-Use Option. As discussed in Section 2.2.6 of the EIS, commercial railcars would be hauled in trains that were separate from trains that carried spent nuclear fuel and high-level radioactive waste. Trains carrying spent nuclear fuel and high-level radioactive waste would have priority over commercial trains.

3.4.3 (20)

Comment - 5 comments summarized

Commenters expressed concerns about the implementation of the Shared-Use Option because of potential security and safety risks. Commenters stated that it was a bad idea to ship nuclear materials on the same rail line as commercial freight and that the risks related to security, terrorism, and public health were too great.

Response

As described in Section 4.2.10.3 of the Rail Alignment EIS, implementation of the Shared-Use Option would not result in occupational health and safety impacts significantly different from those under the Proposed Action without shared use. Radiological and nonradiological impacts would be similar to those described for the Proposed Action without shared use. During operations, shared use would result in the addition of as many as 8 one-way commercial trains per week to the 17 one-way trains for shipments of spent nuclear fuel and high-level radioactive waste. During peak years, the transportation safety impacts associated with nonradiological risks could increase by approximately 50 percent. However, the overall number of trains operating on the proposed railroad would still be low and DOE would minimize the risk of accidents and maintain security by controlling all operations on the railroad (nuclear and commercial shipments) through the Nevada Railroad Control Center.

3.4.3 (354)

Comment - RRR000285 / 0002

The commenter supports the Shared-Use Option and suggested including parallel routes north/south and east/west to get some commercial and passenger traffic.

Response

In the Yucca Mountain FEIS, the Department evaluated various modes of transportation, including mostly rail, and presented five rail corridors as alternatives. Subsequently, in accordance with the Yucca Mountain FEIS Proposed Action, DOE announced its preference for the Caliente rail corridor in the *Federal Register* (68 *FR* 74951, December 29, 2003). DOE then selected the mostly rail scenario as the mode of transportation (69 *FR* 18562, April 8, 2004) to ship spent nuclear fuel and high-level radioactive waste to the repository at Yucca Mountain.

In the Rail Alignment EIS, the Department analyzed the Shared-Use Option of the Proposed Action, which would allow commercial shippers to utilize the rail line. DOE has identified shared use as its preference; however, the Department does not propose to construct an additional rail line beyond what is included as part of the Proposed Action. The NWPA does not authorize DOE to construct a rail line or portions thereof solely for purposes suggested by the commenter.

3.4.3 (605)

<u>Comment</u> - RRR000015 / 0003

Right now there's a few users potentially of rail other than the military at the Nevada Test Site. This rail is practically going to go around that situation. So by default, is this a military railroad? I haven't seen anything about the Department of Defense involved here or see those sorts of comments.

Response

DOE would establish the Shared-Use Option so commercial shippers could use the rail line. Section 2.2.6 of the Rail Alignment EIS provides information about potential shippers. With the exception of shipments of naval spent nuclear fuel, DOE does not anticipate that military shippers would use the rail line.

3.4.3 (914)

<u>Comment</u> - RRR000641 / 0009

While the Rail Alignment DEIS indicates a DOE preference for shared-use of the Caliente route, it does not specifically indicate whether either the interchange or staging yards would also be available for use by commercial rail operations. This is a very important omission in that the City of Caliente has entered into a letter of intent with a pipe coating manufacturer interested in locating in the City's Meadow Valley Industrial Park and said firm is proposing to develop a set of rail sidings to stage deliveries of materials at the same location as DOE interchange yard in Caliente.

Response

Commercial trains would use the Interchange Yard to move to/from the Union Pacific mainline from/to the proposed railroad. Neither the Staging Yard nor the Interchange Yard would be available for commercial shippers to use as a commercial or team track siding (in other words, to stage materials for delivery). However, the location mentioned by the commenter would have sufficient room for sidings, and the Interchange Yard and would be compatible with its planned use. Section 2.2.6 of the Rail Alignment EIS contains additional details on the Shared-Use Option.

3.4.3 (919)

<u>Comment</u> - RRR000663 / 0023

As part of the evaluation of alternatives, and the assessment of impacts related to identified alternatives, the Draft Rail Alignment EIS should have thoroughly discussed options for operation and management of the proposed rail line. These include at least two major options: (1) a dedicated, single-purpose rail line owned and operated by DOE for the sole purpose of shipping SNF [spent nuclear fuel] and HLW [high-level radioactive waste] to Yucca Mountain, and (2) a multi-use/shared-use rail line that would be used for the movement of other cargoes in addition to SNF and HLW to Yucca Mountain.

A thorough and comprehensive assessment of impacts arising from each alternative must be conducted in a fashion that allows for direct comparisons. The Draft Rail Alignment EIS should have contained an adequate feasibility analysis documenting the full range of currently planned, and potential future, shared uses for the rail spur, identifying pros and cons of such uses, and assessing cumulative impacts of multiple-use operations (i.e., increased traffic; increased risk from operations and/or from other cargoes such as toxics, explosives, and the like; etc.). For example, shared use could result in a massive increase in traffic, and a dramatic change in train characteristics, if the rail line were used for delivery of coal to one or more coal-fired electric generating plants. Such potential impacts are not assessed in the Draft RA EIS.

The potential for unplanned expansion of a shared use railroad, for uses such as multiple daily round-trip deliveries of coal in mile-long dedicated trains, is part of what transportation planners refer to as "induced traffic." Research into travel behavior has consistently shown that expanding infrastructure capacity leads

to additional travel demand. The degree to which this "induced traffic" occurs varies according to the congestion on the corridor; however, it is clear that the problem of induced traffic is real. The Draft Rail Alignment EIS does not address the problem of increasing traffic and increased impacts due to shared use of the proposed Caliente rail line. This calls into question wisdom of the DOE's role as the agency with lead jurisdiction. The STB is much better equipped to understand and examine the entire range of implications of a shared use rail line and the likelihood and severity of the induced traffic that will follow.

Response

The current analysis of the Shared-Use option is a conservative estimate of the potential shippers that could operate along the proposed railroad. It is based upon interviews with and studies of the business and industry along the rail line that have the potential to utilize the railroad. While there would be some limited potential for induced growth impacts, the specific locations and scope of these actions is unknown at this time and any such actions should be small because DOE would construct the rail line through rural areas of Nevada with limited future prospects for development. Future construction along the rail line as a result of implementing the Shared-Use Option could trigger NEPA action if there was Federal agency involvement (for example, if the BLM had to issue a right-of-way grant to another party).

The STB is a cooperating agency in the preparation of the Rail Alignment EIS. If the proposed railroad were to be operated as a common-carrier rail line, the Department would have to obtain a certificate of public convenience and necessity from the STB to construct and operate the railroad. As part of its application review process, the STB must consider the environmental effects of railroad construction and operation. If the STB required any NEPA documentation in additional to the Rail Alignment EIS, the STB would prepare that additional documentation.

3.4.3 (1010)

Comment - RRR000617 / 0049

Page 2-2: DOE's preference of the Shared-Use Option would need to resolve the following issues: (1) what is the maximum speed for commercial trains; (2) need for set-out track for bad order cars; (3) number of commercial siding and location of these sidings; (4) determine the need for remote controlled power operated switches at sidings?

The EIS should provide additional detail on the following:

- 1. Commercial trains need to be able to go the designed speed of sixty miles per hour.
- 2. There should be a set-out track each passing siding for bad order cars.
- 3. The number of commercial customers have to determine the number of commercial siding(s) and locations of said sidings.
- 4. Each end of each passing siding needs to have remote controlled power operated switches, this will expedite train movement.

Response

As discussed in Section 2.2.6 of the Rail Alignment EIS, DOE cannot define the exact operating characteristics of commercial trains at this time; however, commercial trains would have to operate within the design characteristics of the rail line. The Nevada Railroad Control Center would control train movements, and trains carrying spent nuclear fuel and high-level radioactive waste would receive precedence over commercial trains.

If DOE implemented the Shared-Use option, team track and industry track sidings could be installed as a third track parallel to passing sidings along either implementing alternative. The decision to construct and design individual team track and industry track sidings would be made by the industry or individuals installing the sidings, within characteristics made reasonable by the design of the DOE railroad and

passing sidings. The demand for team or industry track sidings would dictate the exact locations and number of commercial access sidings.

3.4.3 (1061)

<u>Comment</u> - RRR000617 / 0048

Page 2-2: DOE appears to prefer implementation of the Shared-Use Option, however, there is no explanation given as to what benefits shared-use affords DOE.

The EIS should disclose those factors which DOE believes warrant selection and implementation of the Shared-Use Option (for example as a way to offset operating and maintenance costs of the railroad).

Response

DOE is considering the Shared-Use Option because of the potential economic benefits to the residents of the State of Nevada. Under the Shared-Use Option, the Department would charge commercial shippers a fee, known in the industry as a tariff, for the movement of commercial goods not related to the Department's core mission. The Department might also establish trackage agreements with other rail carriers to provide freight services on the constructed rail line.

Fees for tariffs and trackage rights would be based on railroad industry commercial practices. Tariffs or trackage-right fees established under the Shared-Use option would offset increases in maintenance costs that would result from commercial operations on the rail line. The Department is not considering implementation of the Shared-Use Option as a means of offsetting any of the construction and operations costs associated with shipping spent nuclear fuel and high-level radioactive waste.

3.4.3 (1375)

Comment - RRR000621 / 0017

Many communities are remote or isolated in parts of rural Nevada. Will the railroad be made available to access for potential commercial (mining, agriculture, etc) uses by some of these rural communities or used strictly for DOE purposes?

Section 2.2.6, pages 2-108 to 2-113 discusses the "Shared-Use Options." This would allow for the use of the rail for commercial shipments of freight. However, added facilities required for this type of use would need to be funded by other government programs or private industry. The shared-use option is the DOE'S preferred alternative.

The shared-use option would require further land disturbance for the installation of commercial sidings. This would result in increased impacts to natural resources and livestock operations. The shared-use option will result in higher train frequencies and potentially higher speed trains. This would likely result in increased livestock loss due to commercial operations. Chapter 3 "Affected Environment" and Chapter 4 "Environmental Impacts" recognized, but did not quantify, the potential effects and impacts of the increased facilities and operations. Whose responsibility is it to assess the effects and impacts?

It should be the DOE'S responsibility to identify and quantify the effects and impacts of the shared use option, as it is their preferred alternative. The effects and impacts should include those associated with land-use operations, such as grazing, and impacts to natural resources, such as increased land disturbance for appropriate facilities.

Response

The railroad would be available for commercial shipping if DOE decided to implement the Shared-Use Option (which is its preferred alternative). Chapter 4 of the Rail Alignment EIS discusses the impacts of implementing the Shared-Use option. In general, these impacts would only be incrementally greater than

those for the Proposed Action without shared use. Land disturbance and impacts from the construction of shared-use facilities would occur in the construction right-of-way and would not result in impacts beyond those described for the Proposed Action without shared use. As described in Section 4.2.2.4 of the EIS, the increase in rail traffic on the rail line under the Shared-Use Option could result in an increase in livestock mortality in active grazing allotments. However, because of the preliminary nature of information regarding shared use of the rail line, it is not practical at this time to quantify this potential increase in livestock mortality.

3.4.3 (1502)

<u>Comment</u> - RRR000656 / 0053

Section 2.2.6.2.2, page 2-112, Shared use facilities: As noted in this EIS and by other studies, the shared use of this rail road is important and the usage appears to be significant. As plans go forward with regard to rail design and the location of rail facilities, it will be extremely important for DOE to work in conjunction with Nye County in planning and designing the railroad to accommodate shared use.

Response

To the extent practicable, DOE would work with local municipalities and local industry in the planning and implementation of the Shared-Use Option. Section 2.6 of the Rail Alignment EIS discusses the Shared-Use Option in detail.

3.4.3 (1876)

<u>Comment</u> - RRR000656 / 0096

Section 5.2.2.1.1, page 5-19, Disturbance of physical resources: In this section, as in others above, there needs to be the recognition that shippers may want spurs in locations outside of the ROW [right-of-way], and DOE needs to allow for this.

Response

DOE does not have the jurisdiction to restrict the construction of rail spurs outside the rail line right-ofway. As discussed in Section 2.2.6 of the Rail Alignment EIS, facilities constructed outside the operations right-of-way would need the appropriate approval from the BLM.

3.4.3 (1912)

<u>Comment</u> - RRR000682 / 0031

Pg 2-7 Shared Use Option DOE needs to select the shared use option for either corridor and clearly state that the rail corridor will be open to this use. The EIS should clearly state that under a shared use scenario, commercial (non-nuclear) shipments will increase substantially.

Response

The preferred alternative in the Rail Alignment EIS is to construct and operate a rail line along the Caliente rail alignment and to implement the Shared-Use Option. Section 2.2.6.3.1 of the EIS describes the number of operating trains under this option. Along the Caliente rail alignment, the Shared-Use Option would result in the addition of approximately eight one-way commercial trains per week. Along the Mina rail alignment, it would result in the addition of approximately 18 one-way commercial trains per week.

3.4.3 (2402)

<u>Comment</u> - RRR000681 / 0032

Section 4.2.10.3: The Draft Rail EIS repeatedly lists the impact for Shared-Use option for all criteria to be "approximately the same...as for the Proposed Action" (4.3.12.4, pg 4-715, 4.3.13.3, pg 4-727, 4.2.10.3.1.1, 4.2.10.3.1.2, pg 4-321). The shared use of the rail facilities should be addressed with a new operational procedure for sharing the lines and yards. Diagrams showing the operational connection and

physical movements on lines in the yards for the trains and cars carrying the radioactive and other materials should be developed and included in the reports. Conflicts of paths of the rail vehicles on rail lines in the yards should be analyzed through graphical simulations, and explanations should be provided on how these conflicts are eliminated with the indication of possibility of crashes. While illustrative sketches like Figure 2-43 (pg 2-92) offer a preliminary visualization of the complexities involved with the Shared-Use option, these need to be refined showing critical area analysis and addressing overlapping zones with detail. Further, a description of the system-wide policies and procedures for dealing with delayed or disabled trains should be provided.

Response

DOE based the analysis of the Shared-Use option in the Rail Alignment EIS on an accounting of potential shippers along the rail line, which is sufficient for assessing reasonably foreseeable environmental impacts. The specific operational characteristics of commercial traffic along the rail line are unknown at this time; however, the Nevada Railroad Control Center would control all train movements along the railroad, and would therefore maintain overall safety during operations (see Sections 2.2.4.3.3 and 2.2.6.3.1). The increase in traffic would not be beyond the safety capacity of the rail line. The operational analysis described by the commenter is outside the scope of this EIS; however, such analyses would be part of the specific operational plans for shared-use trains that DOE would develop after it constructed the rail line and implemented the shared-use option. Neither the Staging Yard nor the Interchange Yard would be available for commercial shippers to use as a commercial or team track siding (in other words, to stage materials for delivery).

3.4.3 (3171)

<u>Comment</u> - RRR000691 / 0056

The EIS is absent information concerning the additional potential effect on the environment, specifically, air quality that may result from the proposed shared use option. The EIS is also absent information concerning the potential safety concerns that may result by the implementation of the shared use option.

Response

Chapter 4 of the Rail Alignment EIS describes potential impacts to air quality and occupational and public health and safety under the Shared-Use Option.

3.4.4 No-Action Alternative

3.4.4 (36)

<u>Comment</u> – 25 comments summarized

Commenters stated that DOE has erroneously characterized the No-Action Alternative in the Rail Alignment EIS as not selecting the Caliente or Mina Implementing Alternative for the construction and operation of a railroad. Commenters stated that the No-Action Alternative should be the analysis of an alternative method for transporting spent nuclear fuel and high-level radioactive waste to the repository at Yucca Mountain. Most commenters believe that this method would be by legal-weight or overweight truck, as DOE analyzed for the mostly truck scenario in the 2002 Yucca Mountain FEIS. Some commenters believe that the No-Action Alternative must include an analysis of the other rail corridors. Commenters stated that DOE must analyze the impacts of implementing a redefined No-Action Alternative transportation scenario in the Final EIS to meet the spirit of NEPA and provide an adequate basis of comparison to the Proposed Action.

Response

In the Yucca Mountain FEIS, DOE analyzed two national transportation scenarios: mostly rail and mostly legal-weight truck. DOE considered the specific human health and environmental impacts from the mostly legal-weight truck scenario. Based on the analyses in the Yucca Mountain FEIS, DOE

announced several decisions in a Record of Decision, one of which was selection of the mostly rail scenario as the transportation mode, both nationally and in Nevada (69 *FR* 18557, April 8, 2004). In the Record of Decision, DOE acknowledged that selection of the mostly rail scenario would ultimately require construction of a rail line in Nevada.

The Rail Alignment EIS tiers from the Yucca Mountain FEIS and the decisions DOE reached on the basis of the FEIS analysis. CEQ NEPA regulations define tiering as:

"...the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared" (40 CFR 1508.28).

The CEQ regulations explicitly recognize the appropriateness of tiering by federal agencies "when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe" [40 CFR 1508.28(b)]. Because DOE, as lead agency, analyzed the mostly legal-weight truck scenario in the Yucca Mountain FEIS and did not select it as the preferred mode of transportation in its Record of Decision, it is an issue the Department has already decided and, therefore, excluded from further consideration in the Rail Alignment EIS.

In addition, the CEQ regulations state that "no action" in cases that involve federal decisions on proposals for projects can mean that the proposed activity would not take place, and the agency should compare the environmental impacts of taking no action with the impacts of permitting the proposed activity. [See *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations* (46 *FR* 18026, March 23, 1981)]. Therefore, it is appropriate that the No-Action Alternative for the Rail Alignment EIS assumes maintenance of the status quo.

3.4.4 (273)

Comment - RRR000305 / 0002

The commenter stated that he does not believe the Proposed Action of building a railroad will happen, and that DOE has the No-Action Alternative as a fallback if the Proposed Action does not occur.

Response

DOE included the No-Action Alternative in the Rail Alignment EIS to provide a basis for comparison to the Proposed Action. Chapter 4 of the EIS analyzes the No-Action Alternative.

3.4.4 (2059)

Comment - RRR000525 / 0033

Regarding the No-Action Alternative, Section S.3.2.5 states that, "In the event that DOE were not to select a rail alignment in the Caliente corridor or the Mina corridor, the future course it would pursue to meet its obligations under the NWPA is uncertain," is insufficient given the importance of this railroad to the repository program. It seems to us [National Association of Regulatory Utility Commissioners] that if neither Caliente nor Mina were to prove infeasible, DOE would have to backtrack to either reconsideration of the Carlin, Jean or Valley Modified corridors or reevaluation of the whole "mostly rail" transport mode and even the TAD-based repository system.

Response

If DOE were to not select a rail alignment in the Caliente or Mina rail corridor, the future course that it would pursue to meet its obligations under the NWPA is highly uncertain. DOE recognizes that other possibilities could be pursued, including evaluating the Carlin, Jean, or Valley Modified rail corridors to

determine an alignment for the construction and operation of a railroad to transport spent nuclear fuel and high-level radioactive waste to the repository at Yucca Mountain. These possibilities were analyzed in the Yucca Mountain FEIS and in the Nevada Rail Corridor SEIS. Further consideration of these possibilities might require additional NEPA reviews, as appropriate.

3.4.5 Cost of Proposed Action or No-Action Alternative

3.4.5 (937)

Comment - RRR000663 / 0012

The Draft Rail Alignment EIS fails to provide credible information of the cost of constructing the Caliente and Mina preferred rail alignments. The cost estimates provided (Vol. I, page 2-5) -- \$2.2 billion (2005\$) for Caliente and \$1.7 billion (2005\$) for Mina -- are lower than the cost estimates in the July 2007 draft of the DOE National Transportation Plan (NTP). The draft NTP states: "A range of estimated costs have been developed to describe the financial commitments necessary to execute the Nevada Rail Infrastructure Project through March 2017." The cost estimates, in constant 2006 dollars, range from a "Low Point" of \$1.7 billion, a "Mid Point" of \$2.4 billion, to a "High Point" of \$3.2 billion. The NTP cost estimates "are based on the Caliente Corridor." [Draft NTP, page 52]

The Draft Rail Alignment EIS provides no explanation for the rapid escalation in the estimated cost of constructing a railroad along the Caliente corridor since publication of the Yucca Mountain FEIS in 2002. The FEIS estimated the Caliente construction cost at about \$800 million.

The Draft Rail Alignment EIS provides no information updating the construction costs for the Carlin, Jean, and Valley corridors.

The two references cited in the Draft Rail Alignment EIS, DIRS 182777 and 182778, provide almost no meaningful information on the methodology and data used to develop the Caliente and Mina construction cost estimates. The estimated construction costs cannot be independently verified based on the cited references. The cited references provide absolutely no information on the unit prices assumed for right-of-way acquisition, earthwork, ballast, concrete ties, rails, bridges, culverts, etc. The references do explain that the construction cost estimates do not include any costs "to mitigate impacts." [DIRS 182777, page 13]

The Draft Rail Alignment EIS should have provided an alternative cost estimate for the 10-year construction schedule. The references concede that under the extended construction schedule "additional costs would be incurred." The additional costs would include: "escalation, extended overhead costs, maintenance of constructed facilities not in use, and security." [DIRS 182777, page 13]

The Draft Rail Alignment EIS should have provided an alternative cost estimate for construction of the Caliente and Mina alignments using ballast shipped in from existing quarries in Utah, Wyoming, and other states. The Draft Rail Alignment EIS should have assessed whether elimination of the need for construction of new quarries along the proposed alignments could significantly reduce adverse environmental impacts.

Response

DOE updated the Rail Alignment EIS to present cost values in 2008 dollars. The Department based this update on escalating the 2005 dollar values in the EIS to 2008 values. As stated in Section 2.2 of the EIS, the Caliente Implementing Alternative would cost approximately \$2.57 billion in 2008 dollars and the Mina Implementing Alternative would cost approximately \$2.03 billion in 2008 dollars (DIRS 185365-Garfield 2008, all).

The estimates in the National Transportation Plan represented the calculated value of \$2.4 billion with a 30-percent contingency factor. This factor accounted for the uncertainty of the estimate. The slight difference between the value in the Rail Alignment EIS and the value in the National Transportation Plan is due to slight differences in methodology and differences in the year for which the value is presented; however, because both values are estimates, they are within an acceptable range of potential costs.

The change in the cost estimate for the construction of a railroad in the Caliente rail corridor from the Yucca Mountain FEIS to the Rail Alignment EIS occurred because DOE was able to more accurately estimate costs in the Rail Alignment EIS. In the Yucca Mountain FEIS, the Department had not examined a detailed design for the rail line; however, in the Rail Alignment EIS, the Department was able to more accurately calculate the costs of implementing the Proposed Action along either the Caliente rail alignment or the Mina rail alignment.

In the Nevada Rail Corridor SEIS, the Department concludes that there are no significant new circumstances or information bearing on environmental concerns that warrant further consideration of the Carlin, Jean, or Valley Modified rail corridors at the rail alignment level; therefore, the Rail Alignment EIS does not evaluate the costs of constructing a rail line in these corridors.

The DOE cost estimates for the Caliente and Mina rail alignments are based the best available information about the cost to construct a rail line along either alignment. DOE would not finalize these costs until final design of the rail line was complete. The unit prices in each reference were redacted because they are proprietary industry sensitive information.

As part of the DOE Proposed Action, the Department would develop new quarries to construct a rail line along either the Caliente or the Mina rail alignment, and for this reason, did not determine the cost to ship in ballast from existing quarries in Utah, Wyoming, and other states, as this commenter suggested.

DOE considered whether it would be feasible to obtain ballast from existing commercial ballast quarries such as those in Milford, Utah; Cheyenne, Wyoming; and Oroville, California. At this time, although potentially technically feasible, commercial quarries are unable or unwilling to provide information as to their ability to supply the necessary quantity of ballast several years in the future and whether meeting DOE's needs would require an expansion of capacity. Accordingly, DOE is unable to evaluate further the impacts of obtaining commercially supplied ballast. For this reason, it is not clear whether obtaining ballast from commercial quarries would reduce or increase the environmental impacts and costs compared to those from obtaining ballast from new quarries.

3.4.5 (939)

<u>Comment</u> - RRR000663 / 0014

The Draft Rail Alignment EIS fails to discuss the overall implications of rail construction costs for program decisions, such as the selection of the preferred corridor or the preferred shipment mode. The estimated construction cost of the Caliente rail line increased from \$800 million in 2002, to \$2 billion in 2005, and to more than \$2 billion in 2007. Additional cost increases could occur when the Final EIS is published. Is there some cost threshold where construction cost would become the major factor in selecting the preferred rail corridor? Is there some cost threshold for rail access that would trigger a reconsideration of the preferred transportation mode?

Response

DOE performed alternative screening and identification processes in the development of the Rail Alignment EIS. Appendix C of the EIS describes this process. Using computer modeling programs, DOE used the above criteria and cost to evaluate potential alternative segments. Costs were typically defined by the amount of earthwork required, among other elements. Tables C-2 and C-11 in the Rail

Alignment EIS indicate that cost was not a primary decision-making factor in the selection of DOE's preferred alternative.

Following the issuance of this Final Rail Alignment EIS, DOE will decide whether to implement the Proposed Action and, if so, will select a rail alignment. Cost could become a factor in the Department's decision, which would be documented in a Record of Decision.

3.4.5 (1014)

<u>Comment</u> - RRR000617 / 0053

Page 2-5, Section 2.2: DOE uses 2005 construction figures in the DEIS. These figures are seriously outdated. The EIS should provide inflation factors needed to estimate the construction costs in 2011 or 2012 dollars.

Response

In the Final Rail Alignment EIS, DOE updated the cost values from 2005 to 2008 dollars. The Department based this update on escalating the 2005 dollar values in the EIS to 2008 values. As presented in Section 2.2 of the EIS, the Caliente Implementing Alternative would cost approximately \$2.57 billion (in 2008 dollars) and the Mina Implementing Alternative would cost approximately \$2.03 billion (in 2008 dollars). DIRS 185365-(Garfield 2008, all) contains details about the cost escalation factors DOE used in this calculation.

3.4.5 (1983)

<u>Comment</u> - RRR000682 / 0024

Page S-67, Section S.3.10: The cost estimates are suspicious given that the Caliente corridor is longer, more difficult to construct, has more bridges and crosses far more difficult terrain as compared to the Mina Corridor. Cost estimates to develop other alternatives should have been included.

Response

DOE estimated that the cost to construct a railroad along the Caliente and Mina rail alignments would be \$2.57 billion (in 2008 dollars) and \$2.03 billion (in 2008 dollars), respectively. The Caliente rail alignment would be more expensive because (1) the alignment is longer than the Mina rail alignment, (2) it would cross more mountain ranges than the Mina alignment, and (3) it would require more bridges than the Mina alignment. DOE provided cost estimates only for the Caliente and Mina rail alignments because those are the only alignments it analyzed in the Rail Alignment EIS.

3.4.5 (2054)

<u>Comment</u> - RRR000525 / 0030

Not mentioned in the DEIS is the financial management for a several billion dollar capital investment in building a railroad. The repository program throughout its history has been on a year-to-year budget basis with annual appropriations from Congress. The Fiscal Year 2008 budget uncertainties of constrained obligation rates under a series of continuing resolutions and finally having a 22 percent cut made three months into the fiscal year is hardly the way a capital project could be funded. Congress, it seems to us [National Association of Regulatory Utility Commissioners], should authorize the capital costs of the repository program, such as the building of the railroad as a vital segment of the program, and then appropriate the annual amounts needed to meet the cash flow requirements of meeting a milestone schedule. That calls for a project management approach that Congress has yet to indicate it intends to apply to the repository program.

Response

Funding mechanisms for proposed railroad construction are outside the scope of the Rail Alignment EIS.

3.4.5 (2055)

<u>Comment</u> - RRR000525 / 0031

The Mina route is both shorter (and would use some existing Department of Defense trackage) and less costly to construct than the preferred Caliente corridor (\$1.7 billion in year 2005 dollars compared to \$2.2 billion.) We are aware of contentions by the State of Nevada that the Caliente corridor could cost even more than \$2.2 billion as the alignment traverses challenging terrain in remote sections of the State.

Response

DOE based the cost estimate for the construction of the Caliente rail corridor on a conceptual design of the rail line. The cost estimate provided specifically accounts for the challenging terrain that the Caliente rail corridor would pass through on the way to the repository at Yucca Mountain. As the design advances, DOE will refine the cost estimate.

In the Final Rail Alignment EIS, DOE updated the cost to construct the Caliente and Mina rail alignments to 2008 dollars. The Caliente rail alignment would cost approximately \$2.57 billion and the Mina rail alignment would cost approximately \$2.03 billion (DIRS 185365-Garfield 2008, all).

3.4.6 Alternatives Suggested by Commenters

3.4.6 (98)

Comment - 8 comments summarized

Commenters suggested an alternative through-going rail line that would run north and south from Yucca Mountain. The rail line would run to the south from Yucca Mountain, bypassing the Las Vegas Valley and connecting to the existing Union Pacific Railroad mainline south of Las Vegas. Commenters expressed support for this rail line because it would open the potential for transport between central Nevada and the ports of San Francisco and Los Angeles. Commenters stated that this through-going rail line would provide many economic benefits to the State of Nevada.

Response

In the Rail Alignment EIS, DOE evaluated the potential for commercial shippers to ship materials along the rail line under the Shared-Use Option. As stated in Chapter 1 of the EIS, the Department's obligations under the NWPA and its decision to select the mostly rail scenario for the transportation of spent nuclear fuel and high-level radioactive waste dictate that it needs to ship materials by rail to a repository at Yucca Mountain. However, the Department does not propose to construct an additional rail line beyond what is included as part of the Proposed Action. The NWPA does not authorize DOE to construct a rail line or portions thereof solely for purposes suggested by the commenter.

3.4.6 (99)

<u>Comment</u> – 10 comments summarized

Commenters suggested that DOE analyze an alternative segment in the Mina rail corridor that would bypass the Walker River Paiute Reservation. Because the Walker River Paiute Tribal Council passed a resolution forbidding the shipment of spent nuclear fuel and high-level radioactive waste across the reservation, commenters suggested that DOE work around the resolution by constructing an alternative segment that would avoid the Reservation altogether.

Response

In the *Preliminary Rail Access Study* (DIRS 104792-YMP 1990, all) and the *Nevada Potential Repository Preliminary Transportation Strategy, Study 1* (DIRS 104795-CRWMS M&O 1995, all), DOE considered a variation of the Mina rail corridor that would avoid the Walker River Paiute Tribe Reservation. This variation included the addition of 130 to 160 miles of track (to the approximately 200 miles of the Mina corridor). This large increase in mileage would be due to land-use conflicts in the northern section of the

route and the somewhat complex terrain that a rail line would have to negotiate as it approached Tonopah from the north. Land-use conflicts in the north would be primarily with private lands and military installations. The route would have to pass between U.S. Navy bombing ranges, which the Navy plans to expand. Topography on the southern end would require the alignment to cross the rugged terrain of the Gabbs Valley or Monte Cristo range before it connected with the current alignment of the Mina corridor. This route would total about 360 miles (30 miles longer than the Caliente rail corridor). The combination of land-use conflicts and alignment length resulted in DOE concluding that this alternative would not be feasible.

3.4.6 (911)

<u>Comment</u> - RRR000641 / 0007

The range of alternatives analyzed by DOE in the Rail Alignment DEIS is not sufficient to adequately provide options which serve to avoid or significantly minimize impacts, particularly to private property. In particular, DOE has previously considered location of a rail-to-truck intermodal facility just south of city-owned land just south of the Caliente city-center. The City has completed a conceptual engineering feasibility study which demonstrates that DOE and Meadow Valley Industrial Park related rail infrastructure could be co-located at this site. The Final Rail Alignment EIS should analyze in detail location of the interchange and staging yards at this location. Such an alternative would minimize impacts to private property in the Indian Cove and Upland areas as well as minimize noise, radiation exposure and indirect private property impacts within the center of Caliente.

Response

DOE considered a possible location for the Staging Yard south of Caliente near the wastewater treatment site and determined that the slope in the area is too steep for the facility.

3.4.6 (1058)

<u>Comment</u> - RRR000617 / 0045

The range of alternatives analyzed by DOE in the DEIS is not sufficient to adequately provide options which serve to avoid or significantly minimize impacts (taking) of private property.

As a means to avoid or minimize impacts to private property in Meadow Valley the following Modified Eccles-Antelope Valley alignment alternative should be analyzed in detail in the EIS:

Segment 1: Connect to Eccles alignment southeast of Meadow Valley at approximate elevation of 4,900 feet, continue west to Indian Cove and cross over Highway 93 with a bridge at approximate elevation 4,700 feet, continue roughly west to elevation 4,841 feet, start tunnel at this elevation going west to elevation 4976 feet, grade 1.5 percent to Antelope Valley to elevation 5,095 feet.

Segment 2: Antelope Valley to Dry Lake Valley has four different route options that could be explored. Two routes connecting to the DOE route that presently goes over Bennett Springs Pass, and two routes that go into Dry Lake Valley. One of these would require a tunnel.

Response

DOE investigated this recommendation, which would pass through Antelope Canyon to avoid the private land-use conflicts associated with an alignment through Meadow Valley. An alignment through Antelope Canyon would have an elevation change of approximately 1,400 feet over 9 miles (from the start of Antelope Canyon to the crest to the northwest). This, combined with many curves (which decrease the maximum grade allowable and compromise train performance), would require the use of tunnels, some very long, in all potential alignments. Tunnels have high capital costs and long tunnels have high operational costs. Therefore, DOE determined that tunnels would be undesirable in the alignment design.

The commenter also suggested that DOE use a bridge about 200 feet high to span the Indian Cove area. This would be very expensive to construct and maintain, and would likely be incompatible with BLM Visual Resource Management objectives in the area. Implementing a route through Antelope Canyon would be problematic because a staging yard and a quarry loading siding would still be necessary to support rail operations. This would necessitate locating the Staging Yard at Indian Cove, which is not the DOE preferred location option for the Staging Yard (Section Section 2.4 of the Rail Alignment EIS). For these reasons, DOE determined that all alternatives utilizing Antelope Canyon would not be feasible.

3.4.6 (1241)

<u>Comment</u> - RRR000656 / 0004

The EIS is predicated on only one implementation and ownership alternative, assuming that DOE is the sole entity engaged in specifying and procuring the line, facilities, equipment and services. Given that shared use is part of the definition of the preferred alternative, alternative implementation and ownership models may afford greater advantage to state and local entities, may be more economical and efficient of public expenditure for construction and operation, and may engender greater public support for the facility. Other implementation and ownership models should be considered among the alternatives and/or addressed in the socioeconomic effects section of the EIS, to more thoroughly quantify the potential benefits and economies of the facility.

Response

The primary purpose of the proposed railroad would be to ship spent nuclear fuel and high-level radioactive waste; therefore, DOE is not considering alternative ownership or implementation models. Following completion of its shipping campaign, DOE could transfer ownership and maintenance responsibilities for the rail line to local communities or the private sector.

3.4.6 (1362)

<u>Comment</u> - RRR000656 / 0006

We [Nye County Board of Commissioners] do not believe that that Congress is likely to fund construction of Nevada Rail until it has greater assurance that DOE will receive a license to construct. If that proves to be true, there is time to consider and select a transportation system, especially a Nevada Rail system that is optimized from logistical and economical perspectives. Considering the unknown costs and impacts of the Caliente Route, the DOE needs to further examine the entire Mina Route, including further mitigation with the Walker River Paiute Tribe, greater consideration of alternative routes around the Walker River Paiute Reservation, and adding the Jean corridor to complete a throughgoing route. To this end, Nye County suggests that DOE keep its options open and use the next three years to put together an integrated transportation system that satisfies the concerns outlined above.

Response

In the Yucca Mountain FEIS, the Department evaluated various modes of transportation, including mostly rail, and presented five rail corridors as alternatives. Subsequently, in accordance with the FEIS Proposed Action, DOE announced its preference for the Caliente rail corridor in the *Federal Register* (68 *FR* 74951, December 29, 2003). DOE then selected the mostly rail scenario as the mode of transportation (69 *FR* 18562, April 8, 2004) to ship spent nuclear fuel and high-level radioactive waste to a repository at Yucca Mountain. For the Rail Alignment EIS, DOE designed the rail line so as not to preclude shared use. This allows for the potential for subsequent rail construction to connect to the DOE rail line. As a shared-use line, DOE would have to allow commercial freight to operate on the DOE rail line. However, the Department does not propose to construct an additional rail line beyond what is included as part of the Proposed Action. The NWPA does not authorize DOE to construct a rail line or portions thereof solely for purposes suggested by the commenter.

Variations of the Mina route could include an additional 130 to 160 miles of track (added to the approximately 200 miles of the Mina rail corridor) that would be necessary to negotiate an alignment that avoided the Walker River Paiute Reservation. This large increase in mileage would be due to land-use conflicts in the northern section of the route and the somewhat complex terrain that DOE would have to negotiate as the route approached Tonopah from the north. Land-use conflicts in the north would be primarily with private lands and military installations. The route would have to pass between U.S. Navy bombing ranges, which the Navy plans to expand. Topography on the southern end would require the alignment to cross the rugged terrain of the Gabbs Valley or Monte Cristo range before connecting with the existing Mina rail corridor. The total length of this alignment would be about 360 miles (30 miles longer than the Caliente rail alignment). DOE eliminated this variation because of these land-use conflicts and the increased length and cost. DOE evaluated this rail route (DIRS 104792-YMP 1990, all) and reevaluated it in the *Nevada Potential Repository Preliminary Transportation Strategy, Study 1* (DIRS 104795-CRWMSM&O 1995, all). The Department concluded that this alternative would not be feasible.

3.4.6 (1511)

<u>Comment</u> - RRR000656 / 0062

Section 4.2.1.2.3.3, page 4-28: It is recommended that DOE consider having a private operator perform the maintenance described here. Such a facility could be located in the Crater Flat industrial park outside the land withdrawal area. One advantage of such a location is that the workers would not have to be badged, thus facilitating daily operations.

Response

A decision on who would perform maintenance activities along the rail line is outside the scope of the Rail Alignment EIS. DOE is not considering Crater Flat as a potential location for the Maintenance-of-Way Facility. By design, the Maintenance-of-Way Facility must be centrally located so it can serve both ends of the rail line.

3.4.7 Other Comments on Alternatives

3.4.7 (78)

<u>Comment</u> – 4 comments summarized

Commenters made a number of statements on alternative segments in the Caliente rail corridor, as follows:

Section C.3.1 of the Rail Alignment EIS begins with a discussion of how DOE used computer modeling to consider multiple routes in the area of the Caliente Corridor. This might work well from an engineering standpoint but it reveals nothing about land use conflicts and natural resources that each route would affect. DOE needs to consider more than just topography when it selects a rail corridor alternative.

DOE should consider the analysis of impacts in the Draft Rail Alignment EIS and those by BLM and Lincoln County in the identification of additional alternative alignment segments for further detailed analysis in a supplemental Draft EIS.

DOE should reconsider the conclusion on the DOE Preferred Alternative in the Draft EIS and verify it through consideration of comments on the Draft EIS, the availability of new information, and a supplemental analysis that DOE could complete.

DOE should reconsider the range of potential alternative alignments by including private property rights, including water rights and grazing related base property rights, as additional screening criteria.

DOE needs to define the design criteria it used to determine the route to haul nuclear waste better in the Rail Alignment EIS. If DOE used tunneling or 10 miles of maximum uphill grade, the costs would be less expensive if the route was shorter. The Rail Alignment EIS should analyze this alternative fully.

DOE should consider the analysis of impacts in the Draft Rail Alignment EIS and in the BLM and Lincoln County reports cited above in identifying additional alternative alignment segments for further detailed analysis in a supplemental Draft EIS.

Response

CEQ regulations that implement the procedural requirements of NEPA (40 CFR 1502.14) and DOE regulations (10 CFR Part 1021) require the identification and evaluation of the range of reasonable alternatives that accomplish the objectives for taking the agency action. CEQ states that reasonable alternatives include those that are practical or feasible from a technical, economic, and common sense standpoint (See CEQ 40 Most Asked Questions). Unreasonable alternatives might be those that are unreasonably expensive or that a federal agency cannot implement for technical or logistical reasons.

Appendix C of the Rail Alignment EIS describes the process DOE used to identify the range of reasonable alternatives. The Department reviewed this process and concluded that it is adequate under the requirements of the above regulations. As described in Appendix C, the Department considered millions of possible alternatives and, according to CEQ guidance (see CEQ's 40 Most Asked Questions), analyzed a reasonable number of examples within this full spectrum of possible alternatives.

DOE performed alternative screening and identification processes in the development of the Rail Alignment EIS. Appendix C, Section C.4 of the EIS describes this process. DOE addressed a suite of criteria in the process for identification of reasonable alternatives. The initial criteria included primary engineering factors (Table C-1) and environmental and land-use features (Section C.3.1). Failure to meet primary engineering factors made an alternative segment unreasonable. DOE identified land-use features in which the rail alignment would not be allowed (for example, Wilderness Areas and the Nevada Test and Training Range). Passing through these areas would be unfeasible; therefore, DOE classified them as strict avoidance areas.

Using computer modeling programs, DOE used the above criteria and cost estimates to evaluate potential alternative segments. Costs were typically defined by the amount of earthwork required, among other elements. Tables C-2 and C-11 in the Rail Alignment EIS indicate that cost was not a primary factor in decisionmaking.

After DOE identified potential new alternative segments, it analyzed them to determine if they were reasonable. The analysis included additional criteria that were not in the initial alignment development stage, such as:

- Avoidance of tunnels.
- Avoidance of private lands and mineral/oil resource.
- Engineering considerations, such as steep grades, tight curvature, longer route, or excessive excavation and placement of fill material. For example, long grades and longer routes make routes less desirable due to potential operational constraints such as transit time and number of crew changes. The *Operations and Maintenance Report* (DIRS 182826-Nevada Rail Partners 2007, all) analyzes railroad operations with a one-shift transit time from the Staging Yard to the Rail Equipment Maintenance Yard based on the 2005 Nevada Transportation Requirements Document (DIRS 175036-BSC 2005, all). DOE could operate all alternative combinations for Caliente and Mina to complete the Staging Yard-to-Rail Equipment Maintenance Yard trip in one shift.

Tables C-2 and C-11 identify the source of each alternative segment (Notice of Intent, Yucca Mountain FEIS, or the scoping process) that DOE identified and indicate if the alternative segment was subjected to or eliminated from detailed analysis. The third column in these tables describes whether the alternative was analyzed in detail or eliminated from detailed study, and the primary factors influencing this decision, such as engineering, operational, and environmental factors. The tables do not list cost as a factor.

Tables C-2 and C-11 summarize the findings in each subsection in Sections C.4.1 and C.4.2, respectively, and the associated tables. In each table, the only items that discuss constraints or issues are in the environmental and engineering comparison areas.

As described above and in Appendix C of the Rail Alignment EIS, based on the criteria DOE used to identify and evaluate alternative segments, there is no need to analyze additional alternative segments in a supplemental EIS.

3.4.7 (1051)

<u>Comment</u> - RRR000617 / 0041

Page 1-18, Table 1-1: DOE's arbitrary approach to eliminating alternatives from detailed study is illuminated in the description here of the decision to eliminate from detailed analysis alternative segments that would avoid Garden Valley due to "feasibility and cost" issues. The Mina route certainly has "feasibility" issues (due to Tribal opposition) but was not eliminated from detailed analysis. This inconsistent approach to selecting alternatives for detailed analysis must be rectified. Either the Mina route should be eliminated from detailed consideration or the Garden Valley route should be similarly analyzed.

The EIS must explicitly state and consistently apply the criteria used for selecting for detailed evaluation alternatives rail routes (i.e. Mina, Caliente-Chalk Mountain) and alternative segments within alignments.

Response

DOE based its approach to determining the range of reasonable alternative segments on a combination of engineering and environmental factors, as well as associated construction costs. Appendix C of the Rail Alignment EIS outlines the reasons DOE eliminated alternative segments from detailed analysis. The Department eliminated the Garden Valley 4, 5, 6, and 7 segments because they did not meet DOE's engineering design criteria. For example, Garden Valley 4 and 5 would exceed maximum allowable grade for more than 10 miles.

In the Yucca Mountain FEIS, DOE evaluated in detail five potential rail corridors in the State of Nevada in which it could construct a rail line to link an existing rail line to Yucca Mountain. In the FEIS, DOE considered but eliminated from further study several other rail corridors. The Department eliminated one of those, the Mina rail corridor, from further study because it crosses the Walker River Paiute Reservation and the Tribe had previously stated that it would not allow DOE to transport nuclear waste across the reservation.

During initial scoping for the Rail Alignment EIS in 2004, DOE received comments that identified the Mina Corridor for consideration as an alternative to the Caliente Corridor. DOE subsequently held discussions with the Walker River Paiute Tribe on the availability of the corridor, and in May 2006 the Tribe informed DOE that it would not object to the Department studying the potential impacts of constructing and operating a railroad across its reservation. In response, DOE prepared a preliminary feasibility study of the Mina Corridor. Based on the results of the study, on October 13, 2006, DOE

issued an Amended Notice of Intent to expand the scope of the Rail Alignment EIS to include the Mina Corridor (71 *FR* 60484, October 13, 2006).

In April 2007, the Walker River Paiute Tribal Council passed a resolution and announced that it was withdrawing from participation in the EIS process. The Tribe renewed its past objection to the transportation of nuclear waste across the reservation. At the time the Tribe announced its withdrawal from the EIS process, DOE had completed the fieldwork and engineering studies necessary to conclude that it should include the Mina Corridor in both the Nevada Rail Corridor SEIS and the Rail Alignment EIS. The studies indicated that construction and operation of a railroad along the Caliente or Mina rail alignment would have similar but generally small environmental impacts. On balance, however, the Mina rail corridor is environmentally preferable because, in general, it would present fewer private-land conflicts, less surface disturbance, and smaller impacts to wetlands and air quality than the Caliente rail corridor would. In addition, based on preliminary estimates, the total cost to construct the railroad along the Mina rail corridor would be approximately 20 percent less than to construct along the Caliente rail corridor.

For these reasons, DOE included the Mina rail corridor in the Nevada Rail Corridor SEIS and Rail Alignment EIS but, in light of the Walker River Paiute Tribe's current position on the shipment of nuclear waste across its reservation, the Department has identified the corridor as a nonpreferred alternative.

3.4.7 (1075)

<u>Comment</u> - RRR000617 / 0117

Page C-14, Table C-2: The table says that the Garden Valley 6 Alternative was eliminated because engineering criteria were not met. There should be more specific information as to how the route failed to meet these criteria. If the design speed wasn't 60 mph would it fail the engineering criteria? This route and variations of it reduce land use conflicts.

The DOE should include more specific information in the EIS as to why the Garden Valley 6 Alternative alignment was eliminated.

Response

Table C-5 in Appendix C of the Rail Alignment EIS indicates that Garden Valley Alternative Segment 6 would require extensive tunneling to exit Caliente and then through three passes west of Caliente. As discussed in Section C.4 of the EIS, if an alternative segment required tunneling DOE either eliminated it or adjusted it to avoid the tunneling requirement.

3.4.7 (2565)

<u>Comment</u> - RRR000675 / 0025

Page 2-108, Section Railroad Abandonment: The Draft Rail Alignment EIS indicates provisions for the abandonment that could occur following the completion of shipments to the repository. The text states that the DOE would relinquish its regulatory right-of-way to BLM and consult with the same agency and other land-management entities, as appropriate. Currently there is no provision to consult with the CGTO [Consolidated Group of Tribes and Organizations] or other Indian Tribes that may be inadvertently impacted by railroad abandonment.

Response

A DOE decision on future abandonment of the railroad would be premature. DOE would make a decision on the future of the railroad after shipments to the repository were complete. The Department would develop and implement a process to make that decision near the conclusion of the shipping campaign. Any abandonment of the railroad would be conducted in consultation with local governments, the BLM, and other land-management entities, as appropriate, at the time of abandonment.

3.4.7 (4074)

<u>Comment</u> - RRR000995 / 0015

Has a final decision been made on where the Cask Maintenance Facility is to be located? Has a final decision been made on where the Staging Yard is to be located?

Response

DOE has not made final decisions concerning the locations of the Cask Maintenance Facility and the Staging Yard. Section 2.2.4 of the Rail alignment EIS describes the potential location of both facilities. The Department would make final decisions only after completion of the Rail Alignment EIS.

3.5 Purpose and Need for Agency Action

DOE did not receive any comments directed to the Rail Alignment EIS related to this subject.

3.6 Design and Performance

3.6 (92)

Comment - 9 comments summarized

Commenters stated that DOE should use stakeholder input to locate construction camps and maintenanceof-way facilities. The Department also should coordinate reclamation with landowners.

Response

Construction camps, maintenance-of-way facilities, and other rail support facilities would be near the rail line. DOE updated the Rail Alignment EIS to indicate that the locations analyzed for each facility were chosen based primarily on finding a location that best suited the operational characteristics of each facility after considering environmental criteria (for example, flood plains). A secondary consideration was locating the facilities close to existing public roads for ease of access.

DOE determined the potential location of the Maintenance-of-Way Facilities along the Caliente rail alignment (the Maintenance-of-Way Headquarters Facility and the Trackside Facility if DOE selected Goldfield alternative segment 1 or 3; the Maintenance-of-Way Facility of DOE selected Goldfield alternative segment 4) based on the need to locate the facilities near the mid point of the rail alignment. DOE also selected options for the location of the Maintenance-of-Way Facility along the Mina rail alignment near the mid point of the rail alignment.

DOE acknowledges the benefit of stakeholder input in siting rail-related facilities and infrastructure. Based on comments that DOE received on the Rail Alignment EIS, the Department has relocated construction camp 12 outside the Yucca Mountain Site boundary (see Section 2.2.2.2 and Figure 2-21 of the Rail Alignment EIS). This relocation would allow the future use of this site without the restrictions associated with being located within the Yucca Mountain Site boundary.

Construction camps would be located on BLM lands and within the construction right-of-way Section 2.2.2.2 of the Rail Alignment EIS states that the reclamation of those lands would involve direct consultation with the BLM. The BLM right-of-way application and granting process would ensure that all actions within the right-of-way, including reclamation activities, would conform to BLM land-use management plans.

The final siting of construction camps would occur as the rail design advanced from the conceptual phase through final design. Facilities would benefit from locally available utilities (power, water, propane or natural gas, water treatment, and sewage systems) and, therefore, would be placed near utilities if possible. The design would incorporate the best management practices and consider the mitigation

measures described in Chapter 7 of the Rail Alignment EIS. Chapter 7 discusses how DOE, throughout the advancement of the rail design and in compliance with regulatory requirements, would endeavor to avoid, minimize, or otherwise reduce impacts to directly affected parties. The development of mitigation measures beyond compliance with regulations would involve consultation with directly affected parties. This process would be iterative in that DOE would consult with these parties as rail line engineering advanced from preliminary through final design, during construction of the rail line, and during railroad operations.

3.6 (93)

<u>**Comment**</u> – 5 comments summarized

Commenters stated that fencing, where employed, should be based on communication and coordination with existing users of lands, in particular, ranching. One commenter mentioned that viable fencing is critical to grazing operations and suggested that the Rail Alignment EIS clarify who would have the responsibility to maintain fencing along the rail line. Another commenter suggested that DOE consider livestock crossings or underpasses to maintain the viability of existing grazing activities.

Response

DOE agrees with the commenters and acknowledges the benefit of consulting with directly affected parties. The Department would base the extent to which the rail line, or parts of the rail line, might be fenced in part on communications with grazing allotment permittees that occur as a result of interactions on best management practices and mitigation measures described in Chapter 7 of the Rail Alignment EIS. Chapter 7 discusses how the Department, throughout the advancement of the rail design, would endeavor to avoid, minimize or otherwise reduce impacts to directly affected parties. Section 7.3.3 of the EIS describes the development of a Mitigation Action Plan. This process would be iterative in that DOE would consult with directly affected parties as the rail line engineering advanced from preliminary through final design to operations. Examples of design considerations that could be employed to mitigate adverse impacts to grazing operations include providing underpasses for livestock, fencing temporary water storage reservoirs needed for construction, fencing of sensitive areas to restrict access, and relocation of existing grazing infrastructure to maintain access.

Maintenance of rail rights-of-way, such as rebuilding damaged or destroyed fences, is the responsibility of the railroad. If DOE decided to build and operate the proposed railroad, it would be DOE's responsibility to maintain the right-of-way.

Appendix E (Consideration for Fencing along the Nevada Rail Line) of the Operations and Maintenance Report (DIRS 182826-Nevada Rail Partners 2007, Appendix E), which is a supporting document for the Rail Alignment EIS, contains an analysis of fencing, including maintenance obligations, along the rail corridor.

3.6 (105)

<u>Comment</u> – 3 comments summarized

Airspace security restrictions in the vicinity of the rail line could adversely affect current land use activities. What changes to existing airspace security measures would DOE implement (if any)?

Response

The Federal Aviation Administration determines airspace restrictions, and airspace control is the responsibility of the managing agency for the airspace in question. DOE is not the controlling agency for airspace over the proposed rail corridors and defers to the Federal Aviation Administration (and the U.S. Department of Defense in Military Operations Areas or Restricted Airspace Areas) for airspace use and scheduling. (See the Federal Aviation Administration (See the Federal Aviation Administration Administra

information on types of airspace and the control of airspace. Also, see Section 3.2.2.4.3 of the Rail Alignment EIS for a description of airspace over the Caliente rail alignment).

A small portion of the rail alignment would be under preexisting special use airspace over the Nevada Test Site that the Department of Defense controls for DOE based on a memorandum of agreement. Because this is a preexisting airspace restriction, DOE would not expect additional impacts on public aviation activities.

The frequency of train traffic would be unlikely to cause an impact on local aviation activities, including those of the U.S. Department of Agriculture Wildlife Services (formerly the Animal Damage Control Unit). Wildlife Services would continue to handle its activities through Nevada Wildlife Services policies.

3.6 (107)

<u>Comment</u> – 2 comments summarized

Commenters suggested that the Proposed Action would produce considerable impacts to grazing permittees. Commenters would like DOE to consult with them in the determination of the final rail alignment. The Department should consider the potential for minor alignment adjustments that could avoid or reduce impacts.

Response

The Department acknowledges the potential for impacts to grazing activities along the corridor. DOE would consult with directly affected parties as the rail design advanced beyond the conceptual design presented in Chapter 2 of the Rail Alignment EIS. Consultation would take place in consideration of the best management practices and potential mitigation measures described in Chapter 7. Chapter 7 discusses how the Department, throughout the advancement of the rail design, would endeavor to avoid, minimize, or otherwise reduce environmental impacts. Section 7.3.3 discusses the development of a Mitigation Action Plan. The process would involve consultation with directly affected parties. This process would be iterative in that DOE would consult with directly affected parties as the rail line engineering advanced from conceptual through final design to operations.

3.6 (109)

Comment - 2 comments summarized

The development of communication infrastructure to support the construction and operation of the rail line could benefit the public. Commenters suggested that DOE should determine the extent to which it will make these facilities available to the public.

Response

DOE would base the extent to which the railroad communications infrastructure would be open to public access and use on the mitigation process in Chapter 7 of the Rail Alignment EIS. Chapter 7 discusses how the Department would implement a long-term iterative process through which it would develop the preliminary best management practices and mitigation measures identified in the EIS through consultation with directly affected parties. Consultation would continue as the practices and measures advanced from the conceptual to the more detailed. Public use of fiber-optic communication lines and communications towers would be open to discussion within this process.

3.6 (112)

<u>Comment</u> – 3 comments summarized

Commenters expressed concern about the protection and maintenance of existing infrastructure and utilities.

Response

Where the location of the rail alignment affected underground or overhead utilities, DOE would discuss with the respective utility companies or other directly affected parties potential relocation or in-place protection of lines to prevent and minimize damage to utilities and disruptions to service. In most cases, the utility companies would relocate or ensure protection of their utilities to their specifications. At some locations, the rail alignment could affect the infrastructure of private property owners and grazing allotment permittees. Table 2-31 of the Rail Alignment EIS acknowledges the potential for short-term interruption of service during the construction phase. DOE would deal with these impacts on a case-by-case basis; in most cases it would require design solutions similar to those of the utility companies. *Route Sections and Structures – Typical Concepts of Structural Features, Caliente Rail Corridor* (DIRS 182824-Nevada Rail Partners 2007, all) discusses a typical pipeline crossing, which would be applicable for both the Caliente and Mina rail alignments.

Additional maintenance of public roads would be necessary in areas that required access by construction vehicles and equipment during the construction phase. During the railroad operations phase, infrastructure such as fencing, cattle guards, culverts, and drainage channels would require maintenance. DOE would base the extent of public roads maintenance and infrastructure maintenance on the mitigation process described in Chapter 7 of the Rail Alignment EIS. Chapter 7 describes how the Department, throughout the advancement of the rail design and in compliance with regulatory requirements, would endeavor to avoid, minimize, or otherwise reduce impacts to directly affected parties. The development of mitigation measures beyond compliance with regulations (best management practices), also discussed in Chapter 7, would involve consultation with directly affected parties. This process would be iterative in that DOE would consult with these parties as rail line engineering advanced from preliminary through final design, during construction of the rail line, and during railroad operations.

3.6 (120)

Comment - 13 comments summarized

Commenters requested clarification on the policy DOE would implement for rail line crossings of existing roads. A commenter suggested that DOE build road crossings consistent with the latest standard Federal Railroad Administration safety techniques. Another commenter asked how unmaintained access roads along the rail line would improve access. The commenter called on DOE to clarify regulations, requirements, and policy on roadways both crossed and created.

Response

DOE would design and construct all road crossings in accordance with American Association of State Highway and Transportation Officials requirements, and with Nevada Department of Transportation, BLM, American Railway Engineering and Maintenance-of Way Association, Manual of Uniform Traffic Control, National Public Utilities Commission, county, and municipality road standards as applicable. Requirements for signaling devices would comply with the same standards listed for crossings.

The Rail Alignment EIS discusses two categories of access roads. One is the rail alignment service road that DOE would construct parallel to the rail line within the construction right-of-way. Along most of the length of the rail alignment, the service road would be 14 feet wide. Some sections of service road might not be suitable for public access, and DOE would post signs in these sections to warn travelers that the road is not for public use. In some locations, the service road would be utilized as a public road. In these locations, the service road would be two lanes and 24 feet wide.

The Department would maintain access to existing roads along the rail line by providing a crossing where the road and rail intersect or by rerouting the existing road along the service road until a point where a crossing has been constructed. Existing roads that the rail alignment crossed would be facilitated by atgrade or grade-separated crossings. The Rail Alignment EIS states that there could be temporary small impacts to access during construction in some areas due to road closures and detours (see Sections 4.2.2.2.7 and 4.3.2.2.7)

The second category of access roads would be those from primary roads to facilities, construction camp sites, quarries, or wells. These would primarily be preexisting roads that DOE would improve to accommodate the additional traffic. Because these would be improvements to public roads, the public would benefit from improved access in these areas.

DOE would work with the BLM and local governments to identify road-crossing mitigation measures that best preserved public access to the road and public land. The Department would base the design of such measures on interaction with directly affected parties and established design criteria through the development of a Mitigation Action Plan, as discussed in Section 7.3.3 of the Rail Alignment EIS. DOE, throughout the advancement of the rail design, would avoid, minimize, or otherwise reduce impacts to directly affected parties. The development of the Mitigation Action Plan would be iterative in that DOE would consult with directly affected parties as rail line engineering advanced from preliminary through final design to operations.

3.6 (124)

<u>**Comment**</u> – 3 comments summarized

Commenters noted that Sections 4.2.1 and 4.3.1 discuss potential impacts of geologic hazards on the rail line. DOE received comments about the lack of a geologic hazard inventory and approaches for mitigating those hazards along the rail line. Commenters stated that the impact analysis of disruptive geologic events and related hazards on the rail system, shipments, and system safety appears to be incomplete. Commenters stated that the Nevada Rail Corridor SEIS and the Rail Alignment EIS should include maps that identify potential geologic hazards (buried faults, mined land subsidence, existing mines, etc.) in relation to the rail corridor. Commenters also stated that the Rail Alignment EIS should include a technical basis for the seismic safety standards DOE intends to implement for the Caliente rail alignment. One commenter also suggested that the EIS does not completely address mining activities that could impact the railroad operations. The commenter stated that, in particular, the stability of existing underground workings have not been addressed and that the Rail Alignment EIS should discuss the extent and characterization of mines and tunnels below the alignment.

Response

DOE inventoried geologic hazards and documented the inventory in *Geotechnical Report – Caliente Corridor*, which is referenced in the Rail Alignment EIS (DIRS 183639-Shannon & Wilson 2007, all). This document addresses geologic hazards such as rockfalls, earthquake hazards, low-load-bearing capacity soils, debris flows, surface erosion and mined land subsidence. The *Geotechnical Design Criteria Manual* (DIRS 174296-Shannon & Wilson 2005, all) discussed potential mitigation for such hazards. These documents enumerate typical geologic hazards and discuss some of the techniques DOE could implement as the rail line design advanced and the Department gathered additional geotechnical information along the selected rail alignment. Section 2.2.2.1 of the Rail Alignment EIS discusses the need for additional geotechnical information as the rail design advanced.

Sections 3.2.1.2.2.1 and 3.3.1.2.2.1 of the Rail Alignment EIS present regional shaking-hazard maps for the Caliente and Mina rail alignments, respectively. DOE would use these maps as rail line design advanced to ensure that the design met modern seismic design provisions for the construction of buildings, bridges, roadbed, and utilities.

Rail industry standard practice is to design detection equipment into the rail system. These asset protection systems would detect disruptive geologic events that affected the rail line during operations. This would enable operators to detect symptoms such as broken rail, washouts, and mechanical failures.

The Nevada Railroad Control Center, which would oversee proposed railroad operations, would monitor these systems continuously. In addition, DOE could implement a monitoring regimen for regional seismic events. The Department would respond to detected seismic activity in a manner that met or exceeded American Railway Engineering and Maintenance-of-Way Association standards. Sections 4.2.1.2.1.2 and 4.3.1.2.1.2 of the Rail Alignment EIS state that, at a minimum, DOE would design and operate the proposed railroad to be consistent with American Railway Engineering and Maintenance-of-Way Association seismic guidelines (DIRS 162040-AREMA 2001, Chapter 9) and could decide to implement additional, more stringent standards.

Based on information obtained to support the Rail Alignment EIS, the rail line would not cross any areas of active commercial mineral extraction. The rail line would, however, cross historic mining operations that might have subsurface features. Section 2.2.2.1 of the Rail Alignment EIS describes geotechnical investigations still needed to assess the extent of geologic hazards, including mines. The *Caliente Rail Corridor – Geotechnical Report* (DIRS 183639-Shannon & Wilson 2007, all) provides a current inventory of those mining areas, sources for additional information, and plans for subsequent studies prior to construction. DOE updated Section 2.2.2.1 of the Rail Alignment EIS to present greater detail related to the extent of geotechnical investigations planned as part of the advancement of the rail line design.

3.6 (129)

Comment - 3 comments summarized

Commenters expressed concern about the number of trains and train speeds through open-range BLM grazing allotment areas, and that at high speeds the trains would be a serious threat to livestock. Commenters recommended that each allotment permittee be included in the mitigation design process and be consulted prior to approval of any mitigation action plan. Further recommendations included that DOE disclose the anticipated train frequencies and speeds across each allotment in order to assess the true impacts and required mitigation actions to reduce livestock versus train incidents for the economic wellbeing of the permittee and the safe operation of the railroad. Mitigation actions could include a combination of fencing of the right-of-way, livestock underpasses, or at-grade crossings.

Response

Trains carrying general freight along the rail line are anticipated to operate at a maximum speed of 60 miles per hour and cask trains at a maximum speed of 50 miles per hour. Train speed would be reduced in areas of the alignment where there were curves, grades, and municipalities. General freight would include traffic supporting construction and operations materials for the rail line and the repository at Yucca Mountain and, if DOE implemented the Shared-Use Option, local commerce.

The current design of the railroad does not require fencing along the alignment, nor does it require cattle crossings at each road crossing. The state does not require fencing along the alignment, but the owner of the railroad would be responsible to pay a fair market price for any cattle or domestic animal killed or maimed in the rail line right-of-way in accordance with Nevada Revised Statue 705, "Railroads and Monorails" (see Rail Alignment EIS, Sections 4.2.2.2.3.2, 4.2.2.3, 4.3.2.2.3.2, and 4.3.2.3).

The extent to which the rail line or parts of the rail line might be fenced would be based on best management practices and mitigation described in Chapter 7 of the Rail Alignment EIS. Chapter 7 discusses how DOE, as rail line design advanced, would endeavor to avoid, minimize, or otherwise reduce impacts to directly affected parties. Section 7.3.3 of the EIS discusses the development of a Mitigation Action Plan, which would involve consultation with directly affected parties. This process would be iterative in that DOE would consult with directly affected parties as rail line engineering advanced from preliminary through final design to operations. Consultations would include the BLM and the owners of grazing allotments and rights-of-way.

Train frequencies identified by category, especially shared-use information about commercial use of the rail line, are very preliminary at this time, and represent a bounding condition. At present, it is not possible to refine train volume numbers and speeds through grazing allotments to determine the level of threat to livestock that would warrant fencing.

3.6 (132)

Comment - 7 comments summarized

New water wells for construction, mitigation, and operations will require permitting with the State of Nevada. DOE should explain the permitting strategy it would use. In addition, DOE should consider using existing sources of water.

The Nevada Department of Environmental Protection regulates the use of effluent and gray water. DOE should clarify compliance with existing regulations when the Proposed Action includes the use of gray water.

Response

The water needs described in the Rail Alignment EIS represent the total need for construction and operation of the proposed railroad, and include water for compaction, dust suppression, temporary construction camps, and permanent facilities. DOE considers the water demand associated with reclamation activities to be part of the construction and operations phases and included them in the demand totals.

As described in Section 2.2.2.4.1 of the Rail Alignment EIS, DOE conservatively assumed it would obtain all necessary water from newly constructed groundwater wells. While there are other approaches for obtaining some of the water, only new well construction would affect existing water rights along the alignment. Sections 4.2.6 and 4.3.6 of the EIS discuss potential impacts to water resources of well construction. DOE established water demand and the locations of the wells in supporting technical documents. The Department sited most new wells within the 1,000-foot-wide construction right-of-way (Rail Alignment EIS, Section 2.2.2) where hydrogeologic conditions were favorable (Rail Alignment EIS, Sections 4.2.6 and 4.3.6).

The Rail Alignment EIS identifies potable and nonpotable water sources for the construction and operations phases. Potable sources would be necessary at permanent facilities such as the Staging Yard and Maintenance-of-Way Headquarters Facility. These sources would have to meet the quality standards established by the U.S. Environmental Protection Agency Drinking Water Standards and the Nevada Department of Human Resources, Health Division-Consumer Health Protection primary drinking water standards, which are at least as rigorous as those of the U.S. Environmental Protection Agency.

DOE would address ground-disturbing activities for well development, operation, and abandonment in the BLM right-of-way application process. If the BLM granted the right-of-way, it would indicate whether proposed activities, including well development activities, were consistent with BLM land management plans.

Permitting for new wells would occur in accordance with Nevada Revised Statute Chapter 533 – "Adjudication of Vested Water Rights; Appropriation of Public Water"; the state would regulate drilling activities under Nevada Revised Statute Chapter 534 – "Underground Water and Wells." Any conveyance of water rights from existing owners or changes in use would occur under the appropriate processes in the Nevada Revised Statues. Table 6-1 of the Rail Alignment EIS lists these regulations.

The use of gray water in construction activities would be subject to Nevada Department of Environmental Protection regulations, in particular NAC 444.750, as discussed in Chapter 6 of the EIS.

3.6 (133)

<u>Comment</u> – 6 comments summarized

Commenters expressed concern about the establishment and spread of noxious weeds and invasive species during proposed railroad construction and operations and stated that DOE should commit to a program to monitor and control weeds. They suggested that such a program should include an inventory of weeds along the alignment before construction, control of weeds more often than annually if necessary, cleaning of vehicles to remove plant seeds, and use of weed-free straw and mulch during reclamation. Commenters requested more information on how DOE would develop and implement a weed-control program. One commenter stated that DOE failed to provide information on how it would address the conflict between control of weeds and application of water to disturbed sites to control dust.

Response

Sections 2.2.10 and 2.2.3.2.1, and Table 7-1 of the Rail alignment EIS described the DOE program to monitor and control noxious weeds and invasive species. The Department has clarified these descriptions in the EIS to better describe how it would develop and implement weed control measures during railroad construction and operations. DOE would develop a weed-management plan that met BLM requirements for monitoring and control of weeds, and would consult with other directly affected parties during the development of the plan. Further, the Department would develop and implement a program to monitor and control weeds. This program would include an inventory of the alignment before construction, monitoring of disturbed sites and control of weeds throughout the construction and operations phases, and reclamation of disturbed sites no longer necessary for railroad operations. The weed-management plan would include details on how and when DOE would monitor and control weeds. As listed in Table 7-1 of the EIS, DOE would limit application of water to disturbed sites to that necessary to meet requirements for the control of fugitive dust; it would control weeds that grew as a result of applying water for dust control.

3.6 (177)

<u>**Comment**</u> – 2 comments summarized

DOE must assess the traffic delays associated with the Union Pacific Railroad and DOE trains accessing the Interchange Yard in downtown Caliente during the construction and operations phases of the Caliente rail alignment. Union Pacific Railroad trains entering the Interchange Yard could block the single crossing while accomplishing switching and car coupling and decoupling activities. DOE locomotives arriving at or departing from the Interchange Yard could block the Union Pacific Railroad mainline crossing.

Response

DOE would conduct rail operations in a manner that minimized the interruption of traffic in the Caliente business district. The primary flow of east-to-west traffic in Caliente would be disrupted if the signaled grade crossing between Main Street and U.S. Highway 93 was blocked for an extended period. DOE would design train operations to minimize the time the grade crossing would be blocked by a passing train.

DOE recognizes that an off-normal train operating condition could close the grade crossing for an extended period. An off-normal closure of the grade crossing could result from equipment failure or a nonstandard train configuration. If the primary grade crossing was unavailable, alternative access to the east side of Caliente would be available by the exit from State Route 317, traveling under an existing grade separation. The additional distance to access the east side of Caliente on this route could be as long as 1.5 miles.

During a subsequent design phase, DOE would evaluate the suitability of the alternative route to support emergency response vehicles and local traffic. DOE would upgrade the alternative route if necessary to support the operation of emergency vehicles and to facilitate local traffic flows.

3.6.1 Nevada Rail Corridors

DOE did not receive any comments directed to the Rail Alignment EIS on this subject.

3.6.2 Nevada Rail Line Design

3.6.2 (87)

<u>**Comment**</u> – 3 comments summarized

Commenters suggested that the Rail Alignment EIS does not clearly delineate the design of rail hydrological structures. The design of these structures should consider 100-year flood events, minimum channel scour, and access for local grazing activities.

Response

DOE would perform detailed hydrological studies as a part of the advancement of the rail design. These studies would determine probable maximum discharges at stream (perennial and ephemeral) crossings and the type of structure best suited to minimize channel scour and sedimentation. DOE would use modeling techniques approved by the U.S. Army Corp of Engineers to perform the studies, which would determine locations and types of crossing structures along the rail line. The Department would base the integration of the studies in the rail design on the best management practices and mitigation process in Chapter 7 of the Rail Alignment EIS. Chapter 7 discusses how DOE, throughout the advancement of the rail design and in compliance with regulatory requirements, would endeavor to avoid, minimize, or otherwise reduce stakeholder impacts. The development of mitigation measures beyond compliance with regulations would involve consultation with directly affected parties. This process would be iterative in that DOE would consult with these parties as rail line engineering advanced from preliminary through final design, during construction of the rail line, and during railroad operations. DOE could use large box culverts or similar structures to maintain vehicular and livestock access.

The final design would incorporate asset protection (stream gages and broken-rail detection) along the rail line that would monitor the effectiveness of hydrologic structures and help ensure safe rail operations.

3.6.2 (88)

<u>**Comment**</u> – 7 comments summarized

Commenters expressed concern about the adequacy of the design criteria DOE implemented in the conceptual design of the railroad. Commenters suggested using industry standard practices for both the rail roadbed and the rail design. One commenter suggested that the design should incorporate Union Pacific Railroad Standards.

Response

DOE based the analysis in the Rail Alignment EIS on a conceptual design of the railroad that it would refine during preliminary and final design. American Railway Engineering and Maintenance-of-Way Association manuals provide the recognized guideline for rail design; these manuals contain data and specifications that railroad industry experts have developed over many years. In addition, DOE would use industry codes and standards or requirements such as those of the Association of American Railroads; DOE has adopted Association Circular OT-55-F, *Recommended Railroad Operating Practices for Transportation of Hazardous Materials*, which limits the speed to 50 miles per hour. The Department has designed the rail line for a maximum design speed of 60 miles per hour for general freight, as allowed

under 49 CFR 213.9. Some design criteria for the rail line originated from industry standards for a Class 1 freight railroad. Regarding concerns about design criteria, the design would advance through preliminary to final design, and DOE would make additional refinements before construction. The design criteria DOE used to develop the Proposed Action results in a level of design appropriate to evaluate the environmental impacts of proposed railroad construction and operation.

3.6.2 (90)

<u>**Comment**</u> – 5 comments summarized

Some commenters stated that the Rail Alignment EIS needs a greater level of detail. They stated that details of the later stages of design were examples of detail that DOE should include in the EIS.

Response

NEPA requires that the evaluation of a proposed federal project's environmental impacts take place at an early stage in the project's planning process. The suggestion that DOE must await the availability of final design and operational details is counter to the requirements of NEPA and its implementing regulations. It is well established under NEPA that the lack of final design plans does not excuse an agency from conducting the most thorough analysis possible of a proposed action. DOE used the best available information in the Rail Alignment EIS to evaluate the reasonably foreseeable environmental impacts of the Proposed Action. Highly specific details of a final design are not needed because available information is adequate to support DOE's analyses of the potential impacts of the Proposed Action and a reasoned choice among alternatives. DOE's analyses are conservative (tend to overstate or "bound" potential impacts). As long as the impacts in the EIS bound those associated with the actual design and operation of the railroad, the NEPA evaluation is adequate. In addition, there are processes for determining if there is a need for additional NEPA analysis if an agency proposes substantial changes to a proposed action or there are significant new circumstances or information relevant to environmental concerns and bearing on the Proposed Action or its impacts.

3.6.2 (91)

<u>**Comment**</u> – 3 comments summarized

One commenter suggested that DOE consider using longer cask trains to minimize traffic. Other commenters suggested that DOE adopt the restrictions used by the Union Pacific Railroad for the cask car weight with respect to both train speed and rating of rail.

Response

DOE agrees with comments that it should design and operate the proposed railroad in accordance with industry standard practices. The conceptual design of the rail line in the Rail Alignment EIS would become more refined during the preliminary and final design phases and, therefore, the Department would develop engineering studies to provide additional data that would allow it to optimize the design.

DOE is aware of the Field Manual of the Association of American Railroads Interchange Rules restrictions for total weight on rail, which states that cars may be operated only under controlled interchange conditions agreed to by participating railroads. It might be necessary to place buffer cars between cask cars to enable shipment over existing bridges in the railroad network that currently have weight restrictions.

3.6.2 (102)

<u>**Comment**</u> – 3 comments summarized

Commenters stated that DOE needs to clarify the design and design criteria for the road that would be on one side of the rail roadbed to allow railroad maintenance vehicles access to the track for periodic inspection and maintenance. Commenters requested that DOE address impacts to public use, existing land use, and operations and maintenance.

Response

The location of the service road would be in the rail line right-of-way. DOE would extend culverts necessary for rail line construction to include the service road. At some locations, the Department would use the bottoms of washes as the service road rather than building a bridge or multiple culverts. In some cases, it would perform rail inspections and track maintenance from track-mounted equipment. The current level of detail for the service road is conceptual and subject to change as the design matures.

DOE realizes there would be areas where the rail line would require special designs to accommodate directly affected parties, such as fencing and cattle crossings. Discussions and agreements on these matters would be part of the mitigation plan the Department would use as input for the preliminary and final designs.

3.6.2 (106)

<u>**Comment**</u> – 4 comments summarized

Commenters expressed concern about the need to develop quarries along the rail alignment for ballast and subballast, and suggested that DOE could obtain this material from existing quarries.

Response

Based on preliminary geotechnical information (surface sampling and laboratory analysis), DOE has identified locations of potentially favorable ballast sources near the rail alignments. However, without characterization of these potential quarry sites in more detail, there is uncertainty that they would yield the volume and quality that would be necessary for rail line construction. If DOE developed one or more quarry sites, it would minimize impacts to the environment to the extent possible by keeping land disturbance to a minimum.

Quarry permitting and development on public land would occur in accordance with 43 CFR Part 3600. The BLM would have to approve the application; acceptance would indicate that the quarry plan of operations was not in conflict with BLM land-use planning objectives. BLM acceptance would require DOE to obtain permits from other regulatory agencies for quarry development, operation, and abandonment.

DOE considered whether it would be feasible to obtain ballast from existing commercial ballast quarries such as those in Milford, Utah; Cheyenne, Wyoming; and Oroville, California. At this time, although potentially technically feasible, commercial quarries are unable or unwilling to provide information as to their ability to supply the necessary quantity of ballast several years in the future and whether meeting DOE's needs would require an expansion of capacity. Accordingly, DOE is unable to evaluate further the impacts of obtaining commercially supplied ballast. For this reason, it is not clear whether obtaining ballast from commercial quarries would reduce or increase the environmental impacts and costs compared to those from obtaining ballast from new quarries.

3.6.2 (122)

<u>**Comment**</u> – 6 comments summarized

The typical cross-section (Figure 2-37 in the Draft Rail Alignment EIS) shows two access roads, one on each side of the rail. This increases impacts overall rather significantly. DOE should consider, as a best management practice, having a road on only one side of the rail line, possibly on the same raised bed as the rail line, to minimize impacts.

Response

DOE modified Figure 2-37 in the Rail Alignment EIS to depict only one rail alignment service road. DOE would implement best management practices to minimize land disturbance to the extent practicable through the use of a single service road (14 feet wide) except in areas where the road would be utilized as a public road (24 feet wide) or where it was not feasible to include a service road. The road would follow existing topography and would be designed to account for unique drainage conditions, wetlands, or other sensitive areas.

3.6.2 (127)

Comment - 2 comments summarized

Commenters pointed out that facilities placement and the planning of emergency response activities could result in a mutually beneficial arrangement if DOE coordinates these tasks with local governments.

Response

DOE agrees that coordination with local governments regarding emergency response could be mutually beneficial. The Rail Alignment EIS describes Department coordination with agencies, local and county governments, and other directly affected parties that would continue through the construction phase and into the operations phase.

Chapter 2 of the Rail Alignment EIS describes the location and function of rail line facilities. Tables 7-1 and 7-2 list preliminary mitigation measures and best management practices, which include emergency response activities. Section 7.2.1 describes the development of a Mitigation Action Plan, which would involve consultation with directly affected parties. This process would be iterative in that DOE would consult with directly affected parties as the rail line engineering advanced from preliminary through final design to operations.

3.6.2 (130)

Comment - 12 comments summarized

Commenters stated that the Rail Alignment EIS description of the right-of-way says it is designed to minimize impacts, but the criteria used to create it is not described in any detail. Some commenters stated that the EIS should discuss right-of-way abandonment. One commenter stated that the EIS should indicate where large cuts and fills may require a larger operations right-of-way.

Response

The criteria DOE employed to determine the construction right-of-way is described in Section 2.2 of the Rail Alignment EIS and in *Route Sections and Structure - Typical Concepts of Structural Features, Caliente Rail Corridor* (DIRS 182824-Nevada Rail Partners 2007, p. III). The Route Sections and Structure document describes the process used to create the right-of-way and how the footprint of the proposed right-of-way and the rail line itself were minimized in areas to limit disturbance. The potential construction right-of-way is shown in substantial detail in the Map Atlases referenced in the EIS. DOE would reduce the operations right-of-way to 200-feet wide, with exceptions that would include wider areas, such as in areas requiring deep cuts and fills or construction of drainage structures, or narrower areas to avoid, if practicable, sensitive environmental resources or private property. The cut and fill footprint of the alignments is depicted in the Map Atlases and is also presented in the *Engineered Plan and Profile Drawing Set, Caliente Rail Corridor* (DIRS 182674-Nevada Rail Partners 2007, all).

As rail line design advanced, DOE would consult with land owners and users as part of the process described in Chapter 7 of the EIS. DOE would apply for a right-of-way grant from the BLM in accordance with 10 CFR Part 2800. As part of the application process, DOE would provide the BLM a Plan of Development in which the Department would describe details pertaining to construction activities, reclamation, operations, and potential abandonment of the rail line. BLM acceptance of the Plan of Development and subsequent right-of-way grant would ensure that the rail line was consistent with BLM land-use plans. If the BLM granted the right-of-way, DOE would be required to obtain any needed permits from other regulatory agencies (see Chapter 6 of the Rail Alignment EIS) before proceeding with

any activities within the right-of-way. Conducting construction activities in accordance with the applicable requirements would ensure that overall impacts were minimized.

3.6.2 (131)

<u>Comment</u> – 5 comments summarized

One commenter recommended that DOE use a siding spacing of 10 miles. Another commenter suggested that the Rail Alignment EIS clarify the method DOE would use to determine siding locations and discuss the potential to relocate sidings based on environmental factors and stakeholder input. A centralized traffic center should control these sidings.

Response

Section 2.2.2.8 of the Rail Alignment EIS explains that sidings would be located approximately every 25 miles along the rail alignment. The parameters DOE used to run the Train Performance Calculator (a computer program that determines when and where trains could "meet") are described in *Operations and Maintenance Report – Caliente Corridor* (DIRS 182826-Nevada Rail Partners, all) and in the *Operations and Maintenance Report – Mina Corridor* (DIRS 180876-Nevada Rail Partners, all), which are referenced in the Rail Alignment EIS. Siding spacing is heavily influenced by train traffic projections and the geometry of the rail alignment. DOE would monitor variables in siding spacing, such as changes in alignment design and traffic expectations, throughout the evolution of the design from conceptual to final to ensure that siding spacing in the final design was appropriate for the rail line.

The sidings would be in the proposed construction right-of-way. If the BLM approved a right-of-way grant, DOE would have to obtain needed permits from other regulatory agencies (see Chapter 6 of the Rail alignment EIS) before it could proceed with activities in the right-of-way.

The Nevada Railroad Train Control Center would control train operations, including sidings switching.

3.6.2 (1091)

<u>Comment</u> - RRR000617 / 0078

Will the access roads be viewed as a security liability? Any travel restriction on these access roads could result in significant negative impacts to land management agencies and land users. The Union Pacific alignment in Lincoln County has recently been locked off due to Homeland Security concerns. Will this rail follow suit given the nature of the freight?

The EIS must disclose the potential/likelihood that public use of access roads will be restricted due to Homeland Security issues.

Response

DOE does not anticipate Homeland Security issues that would limit access to the service road; however, the Department would have to comply with any new legislation that affected railroad operations and security.

3.6.2 (3114)

<u>Comment</u> - RRR000691 / 0018

Support Facility Design, Mina Corridor and Rail Alignment: The EIS is incomplete as it was presented with incomplete rail corridor support facility designs in addition to incomplete construction and operations plans. Additionally, facility design and construction plans are not complete without the input of Native American persons or designers familiar with Native American construction or design concerns.

Response

The Rail Alignment EIS presents design details and construction and operations plans at a level of detail sufficient for identification and evaluation of impacts. DOE would use applicable regulations and industry standards for further design and construction and planning operations details. The Department would use input from the EIS across all resource areas, as applicable, in the final design, construction, and operations plans for the railroad. The final alignment design before construction would be consistent with the Programmatic Agreement and DOE would continue to solicit input from tribal representatives (see Table 7-1 of the Rail Alignment EIS) to minimize impacts to cultural resources and American Indian interests.

3.6.3 Nevada Rail Line Construction

3.6.3 (85)

<u>Comment</u> – 5 comments summarized

Several commenters expressed concern that the presence of a construction workforce would have an adverse impact on rangeland and local communities. Commenters also expressed concern about the potential destruction of private property, harassment of livestock, and inappropriate recreational use of trails outside of the construction right-of-way on nearby public lands.

Response

DOE would establish policies that defined expectations on environmental matters. The Department would establish personnel policies to minimize recreational activity outside construction camps, avoid the creation of new trails, and avoid damage to property, wildlife, and cattle. The workforce would remain in the construction camp during off-duty hours, except as noted below, and DOE would prohibit recreation outside the construction right-of-way for the safety of the worker and for protection of the environment.

Workers would travel to the construction camps in buses or similar vehicles. DOE would not allow workers to commute or bring personal vehicles to the job site. This would assist in achieving dust control objectives and would eliminate the need to store vehicles at the job site. Because workers would use mass transit to access the job site, the ability of a worker to leave the construction camp or engage in local recreation would be significantly diminished. The composition of the workforce would be primarily regional, with most from outside the local area. DOE would not require workers who were local residents to live in the construction camps and would transport them daily in contractor-provided vehicles.

DOE would establish a security force at the job sites and in construction camps. The security force would work closely with local law enforcement personnel to ensure observance of policies on employee conduct.

Before beginning work, all employees would receive training on job-site policies and environmental practices and would understand expectations for their conduct. They would accept the policies on conduct as a condition of employment and would understand that failure to observe these policies could be grounds for dismissal. The training would include a discussion of private property, rangeland improvements, avoidance of wildlife and cattle operations, policies on recreation, and cultural and biological sensitivities.

Following completion of construction, DOE would consult with the BLM regarding abandonment and reclamation of the construction camps. The abandonment process would include dismantling each camp and reclaiming the land by returning it to as natural a state as practicable. The Department would also remediate damage adjacent to the construction right-of-way that noncompliance with camp policies created.

3.6.3 (86)

<u>**Comment**</u> – 2 comments summarized

Commenters suggested that DOE has not clarified the balance of cuts and fills (quantities) for the placement of spoil and the need for borrow. What is the basis for the balance, environmental impacts, and cost?

Response

DOE based earthworks and water-need calculations on the three-dimensional rail alignments it developed as part of the conceptual design process. The Department used the InRoads computer program to calculate cuts and fills. The alignment development reports for the Caliente and Mina rail corridors (DIRS 180916-Nevada Rail Partners 2007, all; DIRS 180872-Nevada Rail Partners 2007, all) describe this process (see Chapter 2, Section 2.2.2.6 and Tables 2-24 and 2-25 of the Rail Alignment EIS). The Engineered Plan and Profile Drawing Sets for the two rail corridors (DIRS 182674-Nevada Rail Partners 2007, all; DIRS 180871-Nevada Rail Partners, all) contain the plan and profile drawings. As DOE refined the alignment during the advancement of the overall rail design (with more resolute topographical, geotechnical, and hydrological data), it would implement the iterative process it used in the creation of the current set of rail alignments. The last iteration that led to the alignments in the EIS, for example, resulted in an increase in overall distances of the alignments to minimize earthwork and balance cuts and fills. In most cases, DOE would locate borrow areas and dispose of the unused excavated materials in the construction right-of-way, and would implement applicable best management practices (see Chapter 7 of the Rail Alignment EIS). The BLM would have to approve the DOE right-of-way application; BLM acceptance would indicate that the construction plan did not conflict with the Bureau's land-use planning objectives.

3.6.3 (96)

<u>**Comment**</u> – 6 comments summarized

Commenters expressed concern about the lack of detail in the Rail Alignment EIS description of plans to restore sites after completion of construction. They raised questions about how DOE would decide what sites it would restore, how it would determine if restoration was successful and complete, how it would control soil erosion, and where it would use fencing. Commenters stated that DOE must restore all sites not necessary for operations, including those outside the right-of-way; that it ask experts from outside the Department to provide input on restoration plans; that it use nonnative plant species when appropriate; and that it limit the use of rock cover rather than vegetation to steep slopes.

Response

Section 2.2.2.10 and Table 7-1 of the Rail Alignment EIS describe the DOE proposal to restore all sites not necessary for railroad operations. The Department clarified these descriptions in the EIS to better describe how it would plan and implement site restoration. DOE would develop site-specific restoration plans that met its requirements and those of the BLM, and it would consult with other directly affected parties during the development of the plans. The plans would include quantitative criteria for determining the successful restoration of vegetation. DOE would restore all disturbed sites not necessary for operation, including those outside the alignment right-of-way, such as quarries and well drill pads. It would monitor soil and vegetation after restoration, and would remediate sites that experienced soil erosion or did not meet planned success criteria. The Department would determine the appropriate types of plants, the use of irrigation and fencing, appropriate use of rock cover in specific locations, and other details during development of the restoration plans.

3.6.3 (108)

<u>**Comment**</u> – 2 comments summarized

Commenters expressed concern that the location of the construction right-of-way with respect to rangeland improvements, cattle operations, and environmentally sensitive areas would create the potential

for long-term damage to the interests of local residents. Commenters expressed concern that DOE has not adequately defined safeguards it would use to avoid damage to property in the areas adjacent to the railroad and construction rights-of-way.

Response

DOE would establish policies to define expectations for worker activities, require training of all workers before they began work, and employ a security force to ensure compliance.

DOE would define the boundaries of the railroad and construction rights-of-way. The Department would use stakes, fencing, or a combination to delineate these boundaries. It would establish job sites in a manner that facilitated entry to and exit from the construction right-of-way and construction camps with minimal impact on ranching operations and the environment.

DOE would establish and thoroughly enforce policies to protect the environment. These would include processes for appropriate handling of hazardous materials and stewardship in the use of groundwater resources, and practices to protect biological resources from noxious weeds and chemicals.

In addition, DOE would adopt policies and practices to protect private property, including protection of ranchland adjacent to the boundaries of the construction right of way. The Department would remediate or mitigate unintentional damage that could occur to private property near the right-of-way.

DOE would establish and enforce policies to protect wildlife and cattle operations in the area adjacent to the construction right-of-way. These policies would focus on the identification and avoidance of situations that could result in contact between cattle operations and construction personnel or construction equipment.

Training for employees before they started work would include a review of all policies of conduct and training on environmental practices. This training would clearly define DOE expectations for employee conduct at the job sites and would discuss private property, rangeland improvements, avoidance of wildlife and cattle operations, and cultural and biological sensitivities.

DOE would establish a security presence at the job sites and in construction camps. The security force would work closely would local law enforcement personnel and would ensure observance of policies on employee conduct. Employees who did not adhere to established policies of conduct would be subject to disciplinary action up to and including dismissal.

3.6.3 (110)

Comment - 3 comments summarized

Commenters stated that borrow and fill activities in the construction right-of-way would be ground disturbing and that the Rail Alignment EIS does not discuss them consistently in different chapters. The Proposed Action does not identify specific borrow areas and, therefore, does not implement best management practices to avoid impacts.

Response

A focus of the geotechnical exploration program, described in Section 2.2.2.1 of the Rail Alignment EIS, is to determine the engineering properties of soils along the right-of-way and assess their suitability for use as subballast or fill material. Sections 4.2.1.2.1.2 and 4.3.1.2.1.2 of the EIS discuss local sources of construction materials for the Caliente and Mina implementing alternatives, respectively. The topography the Caliente rail alignment crosses would result in the generation of excess material in the areas that required cuts that DOE could use as fill or subballast material elsewhere along the alignment. The Mina

rail alignment crosses large areas where there would be no cuts; as a result, these areas could require DOE to obtain fill or subballast material from areas outside the construction right-of-way.

DOE would determine final borrow sites, including their design and operation, as design progressed and would address them as part of the BLM right-of-way grant application. The BLM right-of-way application and granting process would ensure that all actions in the right-of-way conformed to BLM land-use plans. If the BLM granted the right-of-way, DOE would obtain necessary permits from other regulatory agencies, as needed (see Chapter 6 of the Rail Alignment EIS for more information), before proceeding with construction activities.

3.6.3 (467)

Comment - RRR000396 / 0006

The draft Rail EIS gives no impact assessment of construction equipment and personnel traveling on Inyo County highways for construction of the portion of the Caliente Rail Corridor which parallels Nevada Highway 95, south from Tonopah, Nevada to the repository site. The County believes it is highly likely that the DOE will move construction equipment along California Highways 127 and 178 because of their close proximity to the Caliente Rail Corridor. This has the potential to increase the volume of traffic on these County highways and impact air quality, yet the draft Rail Alignment/Construction EIS makes no such prediction or assessment of potential impacts. The DOE should analyze the impacts of increased traffic volumes to Inyo County on Highways 127 and 178 in the Final Rail EIS.

Response

DOE would obtain most of the materials for rail roadbed construction locally (for example, from concrete batch plants and quarries) or would have these materials shipped by rail. Therefore, anticipated increases to traffic volumes on highways would be local (see Sections 4.2.9 and 4.3.9 of the Rail Alignment EIS).

Chapter 7 of the EIS describes DOE coordination with agencies, local and county governments, and other directly affected parties that would apply to road wear due to DOE construction operations. To the extent there were any such impacts in Inyo County, Table 7-2 lists compensation for affected counties or the performance of maintenance on existing roads as a preliminary measure to mitigate potential environmental impacts.

3.6.3 (1032)

Comment - RRR000617 / 0070

Page 2-39, Section 2.2.2: Extensive geotechnical exploration will take place along the Corridor, yet this activity is not listed on the schedule. Neither does the DEIS describe how drill rigs will access remote areas or whether rail access roads will need to be built for exploration purposes. Geotechnical exploration will result in the disturbance of vegetation, soils, and livestock operations.

The EIS needs to include the following steps to be taken to minimize these impacts:

- Minimization of disturbed areas
- Reclamation of disturbed areas
- Use of existing roads and avoid pioneering new roads
- Steam-clean all equipment to reduce the chances of spreading noxious weed.
- Proper disposal of any waste materials.
- Coordination with all grazing permittees prior to the start of work.

Response

Geotechnical exploration activities would occur in the construction right-of-way. DOE would perform these activities under a BLM right-of-way grant in accordance with applicable regulations (for example, 43 CFR Part 2800). The BLM right-of-way application and granting process would ensure that all actions in the right-of-way conformed to BLM land-use plans. If the BLM granted the right-of-way, DOE would obtain required permits from other regulatory agencies, as needed (see Chapter 6 of the Rail Alignment EIS for more information), before proceeding with the geotechnical exploration program. Conducting exploration and construction activities in accordance with the applicable requirements would ensure minimization of overall impacts.

Chapter 7 of the Rail Alignment EIS discusses DOE coordination with agencies, local and county governments, and other directly affected parties, which would apply to geotechnical exploration activities. Section 7.3.3 discusses the development of a Mitigation Action Plan, which would involve consultation with directly affected parties. This process would be iterative in that DOE would consult with directly affected parties as rail line engineering advanced from preliminary through final design to operations.

3.6.3 (1102)

<u>Comment</u> - RRR000617 / 0083

DOE states that all water from wells will be piped to lined reservoirs in the construction corridor. Some wells will be maintained for operations, while others will be "closed" in accordance with Nevada State Law. New well pads, access roads, and reservoirs will increase disturbance of native vegetation as will water exploration activities. Disturbances must be kept to a minimum, as the primary BMP and means of mitigation through either avoidance or minimization. Why can't standpipes replace reservoirs in an effort to minimize the disturbance area? The use of above-ground storage tanks with standpipes would reduce the level of disturbance and conserve water by minimizing leakage and evaporation.

The EIS should analyze the use of above-ground water storage tanks with standpipes to reduce the level of disturbance and conserve water by minimizing leakage and evaporation.

Response

Sections 4.2.6.2.1 and 4.3.6.2.1 of the Rail Alignment EIS state that there would be several approaches to providing water-storage capacity to meet daily rail line construction needs. The EIS considers the use of temporary water-storage reservoirs for planning purposes because this approach represents the largest amount of ground disturbance. DOE would probably implement different methods at different sites along the rail roadbed. The need to equalize the well production rate to daily construction activity demand would dictate the reservoir capacity at a site. The specific storage method DOE implemented during construction would depend on the method that best met the daily demand and the primary best management practice for minimizing impacts.

3.6.3 (1105)

<u>Comment</u> - RRR000617 / 0091

Page 2-66, Section 2.2.2.4.5, discussion of bridge steel and concrete, particularly with regard to portable concrete batch plants: Batch plants will result in disturbance of more area. All areas should be identified prior to construction and analyzed for impacts. Reclamation plans should be developed for each plant site prior to construction. BMPs such as contained concrete washout should be included in the EIS. The EIS should disclose whether SWPPPs and or air permits will be required for concrete batch plants.

Response

DOE would place portable batch plants for the rail line near the construction sites, in the construction right-of-way (see Section 2.2.2 of the Rail Alignment EIS). The Department would include these activities as part of the right-of-way application to the BLM. BLM acceptance of the right-of-way Plan of

Development and subsequent right-of-way grant would ensure that DOE developed the rail line according to BLM land-use plans. If the BLM granted the right-of-way, DOE would obtain necessary permits from other regulatory agencies, as needed (see Chapter 6 of the Rail Alignment EIS for more information), before proceeding with activities in the right-of-way. This would include Storm Water Pollution Prevention Plans and air quality permits. The performance of construction activities in accordance with applicable requirements would ensure minimization of overall impacts. For instance, DOE estimated that adhering to U.S. Environmental Protection Agency guidance on the use of water to suppress fugitive dust emissions would result in a 62-percent reduction in fugitive dust emissions from batch plant operations (see Appendix E, Section E.2.1.1.2 of the Rail Alignment EIS).

3.6.3 (1155)

<u>Comment</u> - RRR000617 / 0150

There is no section on Construction Access Roads (i.e. those that are not contained within the construction right-of-way); however, the Caliente Corridor Construction Plan shows them. The DEIS should contain a section on this so that environmental impacts away from the Corridor can be addressed. The roads shown in the Caliente Corridor Construction Plan would also impact areas and several grazing allotments that aren't directly impacted by the Rail Corridor itself, and would add to impacts of some of the areas and allotments along the corridor.

Response

Section 2.2.2.2 describes access roads to construction camps and Section 2.2.2.4.2 describes access roads to ballast quarries. The potential impacts associated with these access roads are discussed throughout Chapter 4 of the EIS. To minimize the impacts of temporary access roads, the Department proposed access roads that would utilize the existing road network where possible and, where that was not possible, roads that covered the least distance to facilities from existing paved roads. Improvements to these existing roads would benefit public users. DOE would base improvements to existing roads on the Bureau of Land Management Roads Manual Handbook.

3.6.4 Railroad Operations and Maintenance

3.6.4 (83)

<u>Comment</u> – 2 comments summarized

Commenters indicated that the Rail Alignment EIS needs to provide more detail on how DOE would handle derailments and in-line locomotive or rolling stock failure. One commenter suggested that a derailment that involved a cask car could require special handling because cask weight could be an issue in rerailing.

Response

DOE would minimize locomotive and rolling stock failures with an industry standard maintenance regimen. Section 2.2.3.2 of the Rail Alignment EIS addresses maintenance of the rail line, which would include the fleet of locomotives and railcars and responding to minor accidents or derailments. Locomotive repair would occur at a locomotive light repair facility (see Section 2.2.3.2.2) at the Rail Equipment Maintenance Yard or, for major repairs, at an offsite commercial locomotive repair facility. Rolling stock repairs could be performed at the Staging yard or at the locomotive light repair facility. Major repairs would necessitate offsite commercial support.

Section 2.2.3.2.1 of the Rail Alignment EIS specifies that staff at the Maintenance-of-Way Facilities would respond to minor rail accidents or derailments. An accident requiring additional capability would require the services of an outside contractor. Section 2.2.3.2.1 of the EIS references Section 10 of the Operations and Maintenance Report (DIRS 182826-Nevada Rail Partners 2007, Section 10.0), which discusses DOE's response in a derailment or other emergency. The emergency response process reflects

typical rail industry practices. As the project progressed, DOE would further develop the emergency response plan to include integration with DOE Orders and procedures on alerts, site area emergencies, and general emergency situations (see Chapter 7 of the Rail Alignment EIS). In addition, this plan would include close coordination and preparedness drills with first responders in the area (see Chapter 6 of the EIS).

3.6.4 (95)

<u>Comment</u> – 2 comments summarized

Commenters stated that DOE did not adequately discuss the impacts of wildfire on biological resources and livestock habitat outside the construction right-of-way and that the Department should develop and describe fire avoidance strategies in the Rail Alignment EIS.

Response

Sections 4.2.7.2.1 and 4.3.7.2.1 of the Rail Alignment EIS discuss impacts of wildfires on biological resources and grazing habitat. DOE expanded these sections of the EIS to provide a better description of the potential impacts on resources of wildfires that the Proposed Action could cause.

DOE added fire-avoidance best management practices to Table 7-1 in the Rail Alignment EIS. These practices would include control of brush and weeds along the rail roadbed, monitoring to identify overheated wheel bearings, use of spark arrestors (as appropriate to the rail equipment in use), and development of water sources at sidings for use in fighting fires.

3.6.4 (126)

<u>Comment</u> – 2 comments summarized

Commenters proposed that asset protection and track inspection strategies mimic industry standard practices. The commenters provided specific design and maintenance criteria they believe the Rail Alignment EIS should reflect.

Response

DOE would perform railroad maintenance and asset protection, as other mainline railroads in the United States do, consistent with Federal Railroad Administration requirements (see Section 2.2.3.2.1 of the Rail Alignment EIS). Rail line design would become more refined during final design phases. DOE would develop engineering trade studies to optimize the design. As rail line design advanced, the details of the asset protection program would become more defined. DOE would base asset protection program development on American Railway Engineering and Maintenance-of-Way Association guidelines and industry standard practices, which would include wheel bearing detectors and other equipment.

The annual performance of rail testing mentioned in Section 2.2.3.2.1 of the Rail Alignment EIS represents the conceptual level of maintenance and operations. The scheduling of ultrasonic rail testing to detect flaws in the rail would depend on a number of factors that included the age of the rail in cumulative million gross tons, annual traffic density, class of track, and type of traffic. As the rail line approached the operations phase, these variables would become better defined and DOE would perform rail testing accordingly.

3.6.4 (1063)

Comment - RRR000617 / 0105

Page 2-82, Section 2.2.3.1.1. DOE says that, in accordance with U.S.D.O.T. regulations, rail cars containing spent nuclear fuel or high-level radioactive waste cases will be moved within 48 hours after arriving at the Staging Yard. However, the DOE fails to note that there is very likely to be spent nuclear fuel or high-level radioactive waste sitting in the Staging Yard virtually continuously for a period of 50 years. Consequently, the proposed Staging Yard qualifies as a Monitored Retrievable Storage ("MRS")

Installation requiring a license that meet the terms of NRC's regulations under 10 C.F.R. Part 72. As the NRC has stated, an MRS can "serve primarily as a warehouse operation, limited solely to accepting, sorting and later transshipping" casks of waste. 1995 WL 509710, June 16, 1995. These are precisely the functions that the proposed Staging Area would serve. Accordingly, the DOE must acknowledge and disclose that the proposed Staging Area, wherever located, will require a license pursuant to 10 C.F.R. Part 72.

Response

DOE disagrees that the Staging Yard would constitute a monitored retrievable storage facility. The NWPA envisions monitored retrievable storage as long-term storage (NWPA 114(a)). U.S. Department of Transportation regulations (49 CFR 174.14), which DOE would follow, require that each shipment of hazardous material be forwarded within 48 hours of arriving at the Staging Yard.

3.6.4 (1982)

<u>Comment</u> - RRR000682 / 0025

Page S-39, Staging yards and other facilities: Were they evaluated in terms of the following issues: security, proximity to populations, and cost to secure the sites?

Response

DOE determined facility locations, listed in Table 2-27 of the Rail Alignment EIS, in accordance with their operational functions; vehicle access was a secondary consideration. The Department evaluated several alternative locations in relation to their design and operational feasibility and environmental impacts. The analysis of environmental factors included noise and vibration, aesthetics (visual impacts), socioeconomic impacts, land use, and others (see Chapters 3 and 4 of the EIS).

DOE based its concept of all the facilities on conventional freight rail operations. While the Department considered typical security staffing in the design of the facilities and employment estimates, the current facility design concepts include no specific security components, infrastructure, or systems. Escorts would provide security at all times for each dedicated train. As described in Section 2.2.3.1.1 of the EIS, a typical dedicated train would include an escort car with armed security personnel.

Section 2.2.3.1.1 of the Rail Alignment EIS discusses the operation of trains that would carry spent nuclear fuel and high-level radioactive waste, including the coordination of shipments with government personnel.

Section 2.1.7.2 of the Repository SEIS discusses the security of shipments at a national level as part of the National Transportation Plan.

3.6.4 (2400)

<u>Comment</u> - RRR000681 / 0031

The Draft Rail EIS briefly touches upon the subject of providing rigorous training to employees in order to prepare them for unforeseen incidents such as the 2007 rail tank incident in the Las Vegas Valley in August 2007 where a rail tank car ran loose for 22 miles from a rail yard in southern Clark County through downtown Las Vegas and into North Las Vegas. In dealing with radioactive waste, it must be ensured that probability and risk of such incidents is minimized through clearly outlined policies, and by pinpointing precise operational procedures such as a no switch policy for rail lines on the line segment as well as within the yard.

Response

The long-term railroad operations plan would include training on emergency situations. DOE designed the yard facilities to be at zero grade, or flat, which would serve to prevent incidents such as the August

2007 runaway in the Las Vegas area. As an additional failsafe to prevent runaways, DOE could include split switch derails in the yard design. The possibility of runaway trains would be further minimized by the fact that cask trains would stop only at the Staging Yard and the Rail Equipment Maintenance Yard because in transit they would receive operational preference.

3.7 Existing Environment and Environmental Consequences

3.7 (1030)

<u>Comment</u> - RRR000617 / 0068

Page 2-39, Section 2.2.2, discussion of construction timing and timeline: The longer construction continues, the more impacts the resources and land users will experience. The construction schedule results in disturbance along the entire length of the Corridor from the start of construction. Any disturbed areas that are not revegetated promptly will result in the establishment of invasive and noxious weeds. Management of these weeds would result in a significant project cost increase.

The EIS must consider the extent to which a prolonged construction schedule may serve to exacerbate impacts to the environment.

Response

DOE agrees that if construction took longer, impacts for some resource areas could occur for longer durations. The Rail Alignment EIS includes a qualitative assessment of such impacts in the resource sections of Chapter 4. In general, the impacts of a longer construction schedule would not be different than under the proposed 4-year schedule.

3.7 (1079)

Comment - RRR000617 / 0121

Page 3-2, Section 3.1: The DEIS dos not describe how the selection of resource areas for which environmental and existing conditions data was compiled was made by DOE. There appear to be several relevant topics missing. What role did scoping play to inform the DOE selection of resource topics to be included?

The EIS should describe the process whereby DOE selected the resource topics for which environmental setting and existing conditions are described.

The description of affected environment in the EIS and related environmental impact analysis should be expanded to specifically include the following resource areas among others that may have been identified during scoping: institutional uncertainty (i.e. Mina Route and Walker River Paiute Tribe); state and local revenues; community attributes and various social characteristics at the county/community level.

Response

DOE developed the resource topics it addresses in the Rail Alignment EIS by following Departmental NEPA guidance, reviewing comments from the two scoping periods, considering resources managed by cooperating agencies (the BLM in particular), and carrying forward applicable resource areas that it analyzed in the Yucca Mountain FEIS. Of the "resource areas" recommended in the comment, institutional uncertainty is not a resource area. The Land Use sections in the Nevada Rail Corridor SEIS and the Yucca Mountain FEIS addressed institutional uncertainty as land use conflicts. Sections 3.2.9, 3.3.9, 4.2.9, and 4.3.9 of the Rail Alignment EIS address some aspects of state and local revenues and community attributes. In general, DOE EISs do not address social characteristics at the community and county levels.

3.7 (1213)

Comment - RRR000617 / 0181

Page 4-143, Section 4.2.5.2.3.1: The first sentence of this section does not accurately describe the subject building and leaves a possible impression that it might be unused or vacant. This is incorrect.

The first sentence of Section 4.2.5.2.3.1 should be revised in the EIS as follows, "The Interchange Yard on the Caliente alternative segment would be in the City of Caliente, directly across from the City of Caliente administrative complex which houses City offices, a public library, Community College of Southern Nevada classrooms, meeting rooms and a senior center."

Response

DOE revised the text in Section 4.2.5.2.3.1 of the Rail Alignment EIS.

3.7 (4109)

<u>Comment</u> - RRR000524 / 0014

The analyses of the potential impacts from the operation of borrow sites and quarrying operations for rail line construction appear to be incomplete. The final rail EIS should provide an analysis of the potential long-term impacts of quarrying operations. The final rail EIS should also provide the approximate locations and amounts of sand and gravel needed for subballast, concrete plants, and any other operations, and describe the associated impacts (or state why the assessment is bounding).

Section 2.2.2.4.2 indicates that DOE is evaluating six potential quarry sites along the Caliente rail alignment. The draft rail EIS provides little or no description of the longer-term impacts of quarrying operations on air quality, water supplies and quality, drainage, or aesthetics. There is also little or no discussion of the potential restoration of the pit, piles and ponds, or hazards associated with abandoning these sites.

Sand and gravel from alluvial fans could be used for subballast material and as an aggregate for concrete. As stated in Section 3.2.1.2.2.3, DOE has not evaluated sand and gravel sources with regard to subballast suitability or determined the potential locations of suitable borrow sites. Further, Section 4.2.11.2.1.4 of the draft rail EIS does not fully evaluate the impact of sand and gravel production, given that both the location of the sources of the material and the amount of material needed for the batch plants over the construction phase have not been provided.

Response

Different sections of the Rail Alignment EIS discuss impacts from constructing and operating ballast quarries. Tables 2-17 and 2-18 of the EIS list the quarry sites along the Caliente and Mina rail alignments. DOE updated the Rail Alignment EIS Index to include listings for key sections that address quarries.

Table 2-31 of the Rail Alignment EIS summarizes the impacts of the quarry operations, including the longer-term impacts, as part of the comparison of the impacts of the Proposed Action and the No-Action Alternative. Chapters 3 and 4 of the Rail Alignment EIS include descriptions of the existing environment at the quarry sites and the impacts of operating the quarries.

DOE evaluated and describes impacts to aesthetic resources from key observation points. Appendix D of the Rail Alignment EIS contains a simulation of one of the conveyors from quarry CA-8B, where the Proposed Action could be inconsistent with BLM visual resource management goals.

DOE included quarry operations personnel in its runs of Regional Economics Model, Inc., discussed in Sections 4.2.9 and 4.3.9 of the Rail Alignment EIS (see EIS Table 2-3 for quarry staffing assumptions).

DOE addressed air quality impacts associated with the potential quarries in Table 2-31 and Sections 4.2.4 and 4.3.4 of the Rail Alignment EIS.

The development of quarry sites will require a plan of operations as part of the BLM permitting process (43 CFR Part 3600) for free use. This plan will require descriptions of plant development, operation, and restoration/reclamation/abandonment activities in detail.

Chapter 6 of the EIS identifies 43 CFR Part 3600 as a regulatory requirement for quarry operations on BLM-administered land. As described in Section 2.2.2.1 of the EIS, DOE would determine final quarry locations in the potential quarry areas after a geotechnical exploration program.

While sand and gravel sources for subballast suitability and determination of potential locations of suitable borrow sites are not discussed in detail in the Rail Alignment EIS, the cited references provide information on the evaluation of borrow sites. Sections 3.2.11.1.3 and 3.3.11.1.3 of the EIS cite the Shannon & Wilson reference to the construction aggregate reports for the Caliente and Mina rail alignments directly (DIRS 183643-Shannon & Wilson 2007, all; DIRS 183638-Shannon & Wilson 2007, all). As discussed in Chapter 6, the development of these sites is subject to 43 CFR Part 3600, which involves BLM approval of a plan of operations. This plan will describe in detail the processing plant development, operation and restoration/reclamation/abandonment activities.

DOE developed a new map (Figure 2-33a) that shows tentative locations of subballast borrow pits for the Mina rail alignment. The Caliente rail alignment would not need such borrow pits because of the relatively close balance of cuts and fills during construction.

3.7.1 Land Use and Ownership

3.7.1 (116)

Comment – 24 comments summarized

Commenters expressed concern about impacts to grazing operations from the Caliente alternative alignment. These concerns included how the railroad would affect movements of livestock and grazing patterns, result in loss of forage, breach fences, result in livestock mortality, and damage pipelines. In addition, commenters stated that the estimated loss of animal unit months should consider the type, quality, and quantity of forage in the construction right-of-way for each allotment.

Commenters also stated that impacts to grazing operations would extend outside the footprint of the railroad due to changes in grazing patterns, forage loss due to loss of access (forage isolation), the need to use pasture rotation systems, impacts to stockwater sources and conveyance mechanisms, and changes to livestock performance (for example, weight gain and reproduction). Commenters stated that the rail line and areas of cut and fill would create substantial barriers to livestock movement.

Some commenters stated that the Proposed Action should not result in any loss of animal unit months and some stated that it could put several ranchers out of business and the rail line could seriously hamper the operations of many others. Commenters stated that the rail line could adversely affect the livelihood of each permittee if it hampered or lost their ability to cross the rail corridor. One commenter stated that impacts to ranching would be unavoidable and permanent, and no mitigation would allow them to maintain the ability to graze at current rates.

Commenters recommended that the Rail Alignment EIS include a DOE commitment to coordinate with grazing permittees before any construction activities to determine how to minimize or mitigate impacts. Other commenters stated that an interdisciplinary team that included allotment permittees must develop

Interim Grazing Management Plans for every affected allotment for the construction phase to maintain a viable grazing operation during construction of the rail line. Similarly, they stated the need to develop new or revised Allotment Management Plans due to the drastic changes that would occur from the presence and operation of the rail line.

Response

The Rail Alignment EIS acknowledges that the Proposed Action could alter grazing patterns. DOE revised the text to Sections 4.2.2 and 4.3.2 to describe further potential alterations of grazing pastures and patterns through Interim Grazing Management Plans and Allotment Management Plans, which could result in additional loss or unavailability of some current grazing land. These plans would outline and authorize grazing schedules, stocking rates, stockwater sources, or pasture boundaries to minimize impacts of the railroad, such as mortality from train strikes or reductions in livestock performance. The BLM would determine details of these changes in coordination with the permittee during BLM processing of the DOE right-of-way application.

The Rail Alignment EIS states that the method of calculating animal unit month losses did not consider allotment-specific characteristics, such as topography and the quality and quantity of grass cover. Other rights-of-way EISs, such as the 2004 Tracy-Silver Lake Transmission Line Project Final EIS by the BLM Carson City Office, have used this method to calculate losses of animal unit months. The commenters made a valid point that, where the rail alignment crossed high-quality forage areas, DOE could underestimate animal unit month losses. DOE revised Sections 4.2.2.3.2 and 4.3.2.2.3.2 of the Rail Alignment EIS to acknowledge that the method does not consider possible isolation of forage or reduction of animal unit months from reduced access due to the rail alignment. Therefore, these animal unit month loss estimates would not be appropriate for determining levels of mitigation or compensation. DOE revised Chapter 7 of the EIS to state more clearly the method it would use to consult with affected permittees and the BLM to minimize adverse impacts to grazing operations and compensate ranchers for rail line-related losses.

3.7.1 (117)

Comment - 9 comments summarized

Commenters stated the Rail Alignment EIS figures and tables showing stockwater sources and pipelines were incomplete. Some commenters provided instances with specific omissions for certain allotments. Some stated that the figures do not show the point of use of stockwaters such as water troughs, water hauls, reservoirs, and tanks, and that these features, if within a mile of the rail track, would result in increased probability of train-livestock collisions because cattle tend to congregate around and travel to water. Commenters stated that the EIS did not address the number of intersected fences, maintenance of the integrity of existing fences, and infrastructure, and asked DOE to consider the impacts of breach of allotment boundary or pasture fences. One commenter stated that the figures did not include chutes and corrals. Another stated that the EIS failed to assess an ongoing need to access under-railbed sections of pipelines for future repair, replacement, or cleaning, and DOE failed to commit to repair or replace underrailbed portions of pipelines in a timely manner that would not disrupt livestock operations.

Some commenters stated that whether DOE fenced the right-of-way would have a major influence on the impacts and mitigation actions for each allotment and that identification of fencing requirements during the final design would be a mistake. They asked that DOE consult with allotment permittees when making the determination on fencing the right-of-way and that the Department develop a protocol to identify areas that would require right-of-way fencing. This protocol should include consultation with the permittees and the BLM and a discussion of required mitigation actions. One commenter stated that fencing the right-of-way would be extremely detrimental to wildlife migration as well as to grazing permittees, private property owners, and the general public.

Response

DOE revised figures in the Rail Alignment EIS to show existing fences and other allotment infrastructure based on data from Lincoln County, but some Geographic Information System-based information might be outdated or incomplete. DOE is committed to work with affected permittees and the BLM to address and mitigate adverse impacts to grazing operations and infrastructure from the rail line. In addition to sleeving pipelines for protection, DOE would ensure there was access to maintain these pipeline sections. The BLM would outline specific measures to provide this access in the right-of-way grant it issued to DOE. In relation to fencing on public land, DOE would consult with grazing permittees and the BLM to determine and implement a fencing plan that best balanced the needs of the ranchers and BLM public land management goals, which include but are not limited to public access, wildlife migration, and public safety. The Department has incorporated the method it would use to consult with permittees and the BLM in Chapter 7 of the EIS. DOE would also consult with private owners about the fencing plan on or near their properties. Chapter 7 describes this process.

3.7.1 (118)

Comment - 2 comments summarized

Commenters stated that the Rail Alignment EIS did not describe the locations and characteristics of base private property that grazing permittees have established as a condition to use public lands for grazing. They asked that the EIS discuss impacts related to the use and value of this property as a result of losses in animal unit months due to the rail line. Similarly, commenters stated there is no discussion on how DOE will address water base property, such as conveyance structures, that the rail line would affect and how it would address these items during the construction and operations phases. Specifically, commenters stated that the EIS did not acknowledge private property rights delegated by the Taylor Grazing Act. Commenters stated that DOE must conduct an impact analysis for all base property along the length of the rail alignment and develop mitigation actions that would avoid or minimize impacts to base property.

Response

In the Caliente rail alignment, the rail line would not cross land base property but would cross pipelines on five allotments that convey water to base property. DOE revised Table 3-7 of the Rail Alignment EIS to indicate base water pipelines. Section 3.2.2.5.1 of the EIS contains information about the Taylor Grazing Act and definitions of base property. DOE revised Section 4.2.2.3.2 of the EIS to acknowledge base water property. In addition to sleeving pipelines for protection, DOE would ensure that there would be access to maintain these sections of pipeline. The BLM would outline specific measures to provide this access in its right-of-way grant to DOE. DOE would mitigate losses in animal unit months. The Department revised Chapter 7 of the EIS to address these concerns.

Chapter 7 of the Rail Alignment EIS describes the process DOE would use to mitigate impacts to base property.

3.7.1 (428)

<u>Comment</u> - RRR000290 / 0007

It is troubling that DOE's analysis fails to adequately consider the impacts that the Caliente rail alignment, the DOE preferred route, would have on Nevadans. Specifically, DOE has not fully considered land-use conflicts with ranching, mining, and recreation in Nevada.

Response

DOE has worked closely with the BLM to develop methods to determine impacts to public use of land, such as grazing, mining, and recreation. The Department received many comments on impacts to grazing operations and would address these concerns through coordination with the BLM and affected permittees, as outlined in Chapter 7 of the Rail Alignment EIS. The EIS identifies potential impacts to mining; DOE

would work with affected holders of mining claims and energy leases to minimize impacts. For recreation and access, the EIS states DOE's commitment to maintain access across the rail line at or near all road intersections.

3.7.1 (566)

<u>Comment</u> - RRR000013 / 0006

The commenter does not believe that DOE has adequately addressed impacts to land use along the Caliente rail alignment, particularly with regard to ranching, mining, recreation, and cultural resources.

Response

DOE has worked closely with the BLM to develop methods for determining potential impacts to public land uses such as grazing, mining, and recreation, and impacts to visual and cultural resources. DOE received many comments on impacts to grazing operations and would address these concerns through coordination with the BLM and affected permittees, as outlined in Chapter 7 of the Rail Alignment EIS. The EIS identifies potential impacts to mining; DOE would work with affected holders of mining claims and energy leases to minimize impacts, as outlined in Chapter 7. For recreation and access, the EIS states DOE's commitment to maintain access across the rail line at or near all road intersections. The Department has consulted with the BLM and the State Historic Preservation Office on potential disturbance of cultural resources and would work closely with both agencies to protect such resources.

3.7.1 (801)

<u>Comment</u> - RRR000056 / 0010

We [State of Nevada Agency for Nuclear Projects] are not convinced that DOE has done an adequate job of fully assessing the impacts on ranching and mining. Ranchers need to look at the methodology that's used to figure out what the impact of building the railroad across a grazing allotment will be on the animal production units.

Response

DOE worked closely with the BLM to develop methods to determine impacts to public uses of land, such as grazing and mining. DOE received many comments on impacts to grazing operations and would address these concerns through coordination with the BLM and affected permittees, as discussed in Chapter 7 of the Rail Alignment EIS. The EIS identifies potential impacts to mining; DOE would work with affected holders of mining claims and energy leases to minimize impacts.

3.7.1 (888)

<u>Comment</u> - RRR000034 / 0001

The commenter is concerned that DOE would acquire his land and home along the former Pioche branchline for construction of the proposed rail line and he would no longer be able to live in his home.

Response

As acknowledged in the Rail Alignment EIS, there is private property in the rail line construction rightof-way. In relation to the former Pioche branchline, the DOE analysis assumed that all the land along the abandoned rail line is privately owned. The EIS identifies the number of structures in the construction right-of-way that DOE would need to acquire and demolish. DOE would compensate property owners accordingly. The Department revised Chapter 7 of the EIS to outline more clearly the process it would follow to negotiate with property owners affected by the Proposed Action.

3.7.1 (940)

<u>Comment</u> - RRR000663 / 0015

The Draft Rail Alignment EIS fails to adequately consider the substantial disruption of access to, and use of, public lands, leased lands, and private property due to the construction of the proposed rail alignment.

The region of influence for such impacts would be a minimum of 5 miles on each side of the rail alignment centerline, and along some segments of the proposed alignments, the region of influence could be 10 miles or more, depending upon topography, and upon seasonal road use restrictions. The disruption of access would directly affect farming, ranching, mining, residential developments, seasonal home developments, recreation, and emergency services.

This is particularly the case with the Caliente preferred rail alignment. The Draft Rail Alignment EIS documents the connections made by some of the rural roads between certain points in the region. However, the Draft Rail Alignment EIS does not examine the implications of the need to restrict access at areas where rural Class 3 and 4 roads are bisected by the proposed rail line. Likely impacts will be to (1) effectively restrict access to wide areas south of the proposed rail line; (2) increase travel time for rural residents traveling through rural Nevada; and (3) the proposed action creates a barrier that impacts private property by restricting access to it.

Response

Access to the rail line construction right-of-way and construction camps would use existing public paved and unpaved roads. Access to these roads would not be restricted for public use (see Sections 2.2.2.2 and 2.2.2.3 of the Rail Alignment EIS). Where DOE used existing unpaved roads, road improvements could increase their quality for public use. Section 2.2.2.5 indicates that DOE would build rail line crossing features before other infrastructure for the rail alignment. The Department would maintain access to existing private and public roads that the proposed rail alignment crossed through the installation of atgrade or grade-separated crossings (Tables 2-22 and 2-23 of the EIS). DOE would maintain passive or direct methods for road crossings along the length of the rail alignment. At locations with several road crossings in proximity, there could be minor rerouting and consolidation of crossings. DOE would work in consultation with the BLM and county and local governments to ensure access.

3.7.1 (1027)

<u>Comment</u> - RRR000617 / 0065

Page 2-17, Figure 2-6: Shows a map depicting a construction camp in White River Valley. The construction camp could have profound effects on the Sunnyside Allotment. Increased disturbance, restricted access and potential for vandalism and harassment of livestock are concerns. No access road is currently depicted. Depending on the road that is chosen, it could have significant impact on cattle distribution and use patterns. Access could segregate the critical forage areas within the Allotment from the water resources. DOE should coordinate with the Permittee ahead of any construction activities in order to discuss how to minimize or mitigate these impacts.

The EIS should include a commitment by DOE and a description of how DOE would coordinate with the permittees ahead of any construction activities to determine how to minimize or mitigate these impacts.

Response

One of the factors the Department considered in locating potential construction caps was to minimize the creation of new roads. Construction camps would be accessed by a combination of existing public roads and newly constructed roads. Table 2-8 of the Rail Alignment EIS lists proposed Caliente rail alignment construction camp access road locations. DOE would provide access along these public roads at all times. DOE is committed to minimizing the potential for vandalism and harassment of livestock and wildlife by construction camp workers. Therefore, each camp would be fenced and staffed with security personnel. The security personnel would coordinate with local law enforcement to monitor worker conduct to help prevent adverse impacts to land and wildlife outside the camps.

Chapter 7 of the Rail Alignment EIS describes the process DOE would use to coordinate with permittees ahead of construction activities and mitigate impacts that could result from construction. Any decision

related to mitigation measures for any individual directly affected party would be handled during ongoing development of the Mitigation Action Plan.

3.7.1 (1028)

Comment - RRR000617 / 0066

Page 2-19, Figure 2-7: Shows a map depicting construction camp in Garden Valley. The construction camp could have profound effects on the Cottonwood, Pine Creek and Batterman Wash Allotments. Increased disturbance, restricted access and potential for vandalism and harassment of livestock are concerns. The Cherry Creek Road is a critical access way for livestock operation in the area. The Uhalde family operates a six-allotment complex headquartered out of the Batterman Wash Allotment. Increased traffic or restricted access in this area would have a profound effect on their operations. DOE should coordinate with the Permittees ahead of any construction activities in order to discuss how to minimize or mitigate impacts.

The EIS should analyze an alternate location for the construction camp in Garden Valley.

The EIS should include a commitment by DOE and a description of how DOE would coordinate with the permittees ahead of any construction activities to determine how to minimize or mitigate these impacts.

Response

One of the factors the Department considered in locating potential construction caps was to minimize the creation of new roads. Construction camps would be accessed by a combination of existing public roads and newly constructed roads. Table 2-8 of the Rail Alignment EIS lists Caliente rail alignment construction camp access road locations and shows that the Cherry Creek Road is not the primary identified road it would use to access the proposed Garden Valley construction camp. DOE would provide access along these public roads at all times. DOE is committed to minimizing the potential for vandalism and harassment of livestock and wildlife by construction camp workers. Therefore, each camp would be fenced with security personnel stationed at the main gate. The security personnel would monitor worker conduct to prevent adverse impacts to land and wildlife outside the camps.

Chapter 7 of the Rail Alignment EIS describes the process DOE would use to coordinate with permittees before construction activities and mitigate impacts that could result from construction. Any decision related to mitigation measures for any individual directly affected party would be handled during ongoing development of the Mitigation Action Plan.

3.7.1 (1083)

Comment - RRR000617 / 0129

Pages 3-38 and 3-39, Sections 3.2.2.2.1 and 3.2.2.2.2: The most current version of the Lincoln County Master Plan is dated December 2006. The DOE has used a City of Caliente master plan which is 18 years old. Use by DOE of dated land use planning information in the DEIS has resulted in mischaracterization of impacts in chapters 4 and 5. For example, the DEIS fails to recognize that two planned-use developments located in the southeastern and southwestern corners of Lincoln County will add in excess of 400,000 new residents to the County during the 50-year emplacement period for the Yucca Mountain repository. Already, planned development in southern Lincoln County is affecting County land-use planning in other areas of the County. At the County's request BLM has agreed to sell 866 acres in the Alamo area, 638 of which will be for residential development of up to 1,900 dwelling units. The County is also developing the 228-acre Alamo Industrial Park. In the past few years, the City of Caliente has developed the Meadow Valley Industrial Park, rail access to which may conflict with or may be enhanced by DOE-planned rail improvements in the area. Pursuant to the Lincoln County Conservation, Recreation and Development Act of 2004, Lincoln County is working with BLM to identify 90,000 acres of public land to be transferred by BLM to private and local government public uses during the next 30-50 years. The Caliente rail alignment alternatives pass through or near to areas of BLM land the County has identified for disposal/transfer. None of this evolving land use in Lincoln County is reflected in the DEIS. Having been designated, pursuant to the Nuclear Waste Policy Act, as amended, by the Secretary of Energy as Affected Unit of Local Government, Lincoln County has prepared in excess of 83 reports describing existing conditions and potential repository system impacts in Lincoln County. During preparation of the DEIS, DOE staff did not contact Lincoln County Repository Oversight Program staff to identify or obtain County-specific reports. None of these reference documents appear to have been utilized by DOE in preparing the DEIS.

The EIS must use the most current versions of county land use plans and other documents available, particularly those developed through Lincoln County's comprehensive DOE-funded Yucca Mountain repository oversight and independent impact alleviation planning program. The EIS must account for planned land uses and related increases in population, demand for outdoor recreation, increased traffic and other changes in baseline conditions which will attend planned land uses.

Response

DOE revised Sections 3.2.2.2.1 and 3.2.2.2.2 of the Rail Alignment EIS to incorporate relevant elements of the latest Lincoln County and Caliente Master Plans. These sections also incorporate elements of the Proposed Ely Resource Management Plan, recognizing that the plan probably will not be finalized until later in 2008. This includes descriptions and maps of public lands identified for disposal, designated Off-Highway Vehicle areas, and new Areas of Critical Environmental Concern. DOE revised Section 5.2 of the EIS to address planned land uses, increases in population, demand for outdoor recreation, increased traffic, and other changes associated with long-term land-use planning endeavors outlined in these latest planning documents.

3.7.1 (1123)

<u>Comment</u> - RRR000617 / 0163

Page 4-40, Section 4.2.2.2.1.1: The DEIS indicates DOE does not anticipate potential land-use conflicts in relation to future county projects and planning. . . . Possible future residential clustering near the Caliente alternative segment within or north of the city may be deemed an incompatible land use due to train noise. DOE recognizes that future land use conflicts very well may exist. This is particularly true given the amount of new development occurring in this area as well as the substantial land and water holdings of a prominent housing developer in this area.

The EIS should better reflect the nature and magnitude of future county projects and planning that may be impacted by the rail line.

Response

DOE revised Section 4.2.2, Land Use and Ownership, and Chapter 5, Cumulative Impacts, to discuss planned developments that the latest versions of the Lincoln County Master Plan and Caliente Master Plan describe.

3.7.1 (1127)

<u>Comment</u> - RRR000617 / 0166

Page 4-45 Section 4.2.2.2.3.2 (Alternative Segments at the Interface with UP Mainline). DOE estimates AUM [animal unit month] loss and tallies the number of impacted stockwater sources for each segment. Once again the AUM numbers create the false impression of a very limited impact. In addition, the following errors were found relating to stockwater impacts in Tables 4-24 and 4-25 (page 4-63):

- Common segment 1 crosses 7 pipelines (the table shows 3)
- Common segment 2 crosses 5 pipelines in Lincoln County alone (the table shows 2 total)

- GV1 crosses 2 pipelines (the table shows 1)
- GV3 crosses 2 pipelines (the table shows 1)

The data in Tables 4-24 and Table 4-25 should be corrected and the analysis of impacts adjusted accordingly.

Response

DOE updated pipeline tallies in Tables 4-24 and 4-25 of the Rail Alignment EIS based on data from the BLM. Although some Geographic Information System-based information might be outdated or incomplete in relation to these allotment features, DOE is committed to work with affected allotment permittees and the BLM to address and mitigate adverse impacts to grazing operations and infrastructure from the rail line.

DOE revised Sections 4.2.2.2.3.2 and 4.3.2.2.3.2 of the Rail Alignment EIS to include potential mitigation measures to address impacts to grazing allotment operations and infrastructure, and to reference Chapter 7, which outlines these measures. If the location of an infrastructure feature was contested, DOE would establish its location using a global positioning system.

3.7.1 (1136)

<u>Comment</u> - RRR000617 / 0136

Pages 3-71 and 3-72, Table 3-7: The listing of impacted stockwater sources and pipelines within the 1000 ft. construction right-of-way (ROW) is inaccurate. Errors are as follows:

- Ely Springs Allotment: 5 pipelines are crossed (table shows 2)
- Wilson Creek Allotment: One well is also within the 1000 ft. ROW
- Needles Allotment: 1 pipeline crossed, one well in ROW (table shows no impacts)
- Pine Creek Allotment: GV1, 2, and 3 cross the pipeline (table shows only GV2). GV8 intersects a spring.
- Cottonwood Allotment: Omitted from table. One pipeline is crossed by all Garden Valley Alternatives.
- Sand Springs Allotment: Six pipelines are crossed (table says 2)

Complete information regarding stockwater sources and pipelines should be incorporated into the EIS. This more complete information should be factored into revised impact analyses to be provided in Chapter 4 of the EIS.

Response

DOE revised Table 3-7 and Figures 3-27 through 3-33 of the Rail Alignment EIS to show existing fences and other allotment infrastructure (pipelines and wells) based on data provided by the BLM. While DOE acknowledges that some Geographic Information System-based information might be outdated or incomplete in relation to allotment features, DOE is committed to working with affected allotment permittees and the BLM to address and mitigate rail line-related adverse impacts to grazing operations and infrastructure. The Department has revised Sections 4.2.2.2.3.2 and 4.3.2.2.3.2 of the EIS to include potential mitigation measures to address impacts to grazing allotment operations and infrastructure, and to reference Chapter 7, which outlines these measures.

3.7.1 (1153)

<u>Comment</u> - RRR000663 / 0041

DOE concludes in the Rail Corridor Draft SEIS that land use impacts will be insignificant, based primarily on disturbed acreage. Although the number of disturbed acres is one measure of land use impacts, it is not the only one. For linear facilities such as a rail line, an assessment of land use impacts should also include an evaluation of the impacts of bisecting current and future land uses. For example, splitting a ranching operation with a rail line can have significant impacts on the entire operation, not just the area within the right-of-way. Similar impacts will be felt by other types of businesses and government operations. These impacts should have been fully assessed in the Draft Rail Alignment EIS.

Response

DOE acknowledges that the rail line would travel through grazing allotments and pasture boundaries, which would require permittees to alter their ranching operations. DOE also acknowledges that grazing patterns could be altered and revised the text in Sections 4.2.2.2.3.2 and 4.3.2.2.3.2 to indicate that grazing pastures and patterns could be altered through Interim Grazing Management Plans and Allotment Management Plans. These plans would outline and authorize grazing schedules, stocking rates, stockwater sources, or pasture boundaries to minimize impacts of the railroad, such as mortality from train strikes or reductions in livestock performance.

DOE would ensure access across the rail line at or near all road crossings. For overall public access (for example, recreation and hunting), the road crossings would be sufficient to maintain land uses. If the availability of these crossings was not sufficient to sustain current land uses of private property, DOE would negotiate with private landowners to develop mitigation measures to minimize impacts. DOE revised Chapter 7 of the Rail Alignment EIS to clarify the process through which it would consult with BLM, affected permittees, and landowners to develop strategies to minimize impacts to land use and access.

3.7.1 (1179)

Comment - RRR000663 / 0055

The Draft EIS does not clearly consider all impacts the rail line will have on local land use plans, zoning and existing land uses.

Response

The Final Rail Alignment EIS provides the DOE evaluation of the compatibility of the Proposed Action with all applicable land-use plans that have become available since the evaluation described in the Draft Rail Alignment EIS.

3.7.1 (1200)

<u>Comment</u> - RRR000617 / 0169

Page 4-59, Section 4.2.2.3: The public and in some cases private land surrounding the rail alignment will experience increased OHV [off-highway vehicle] traffic as a result of access and construction roads. While the DOE might not maintain these roads for the purpose of public access, they will almost certainly be used in any event. Increased use of public lands is not necessarily a bad thing if the BLM has enough personnel to monitor and control use, however this puts additional strain on an agency that is already stretched. Increased access to public lands will in some cases mean increased access to isolated private land holdings and with it the increased potential of impacts to private property. These impacts have not been adequately disclosed in the DEIS.

DOE must assess and disclose impacts to public and private property to result from enhanced access into currently inaccessible areas.

Response

Sections 4.2.2.3 and 4.3.2.3 of the Rail Alignment EIS acknowledge that off-road vehicle use, hunting intensity, and other recreational activities could increase along the rail line access roads. DOE would coordinate with representatives from the BLM and county law enforcement agencies to develop strategies that would help protect public and private lands from potential increased public access. The Department would monitor conditions and take appropriate actions, as described in Chapter 7 of the Rail Alignment EIS.

3.7.1 (1202)

<u>Comment</u> - RRR000617 / 0170

Page 4-59, Section 4.2.2.3: The DEIS indicates that land-use and ownership impacts would occur before or during the railroad construction phase. Further, the DEIS notes the operations right-of-way would be generally narrower than the construction right-of-way along most of the rail alignment, and some of the land could therefore be returned to its previous uses. Again, this seems to indicate that there will be some areas in which the operations right-of-way will exceed the width of the construction right-of-way.

If this is not the case, language in the EIS needs to be clarified by removing the word "generally". However, if it is true that in some instances the operations right-of-way will exceed the width of the construction right-of-way the additional impacts to land use and ownership must be clearly identified and quantified so appropriate mitigation can occur.

Response

DOE revised Sections 4.2.2.3 and 4.3.2.3 of the Rail Alignment EIS to state that the operational right-of-way would be narrower than the nominal 1,000-foot construction right-of-way.

3.7.1 (1427)

<u>Comment</u> - RRR000621 / 0011

The Federal Register publication indicates temporary (2 year/20 year) withdrawal as effective now. How will this withdrawal affect current permitted uses of the BLM managed lands?

Per Section 1.5.1.1, page 1-1 1 and Section 3.2.2.4.2, page 3-58, currently the BLM lands included in the 10 year withdrawal (ending in 2015) are considered to be in "casual use" by the DOE meaning that by the BLM definition, the DOE activities result in no negligible disturbance of the public land resources or improvements. The land within the withdrawal area is open to public use but cannot be sold and is closed to surface and mineral entry.

Concerns remain that the limited restrictions imposed by the current land withdrawal will be extended to include reduced public access or complete withdrawal of the land from BLM oversight. The livelihood of each permittee impacted by the Caliente Rail Corridor could be adversely affected if their ability to cross or access the proposed rail corridor was hampered or lost. In addition, permittees have invested a great deal of money in rangeland improvements, authorized by the BLM, which fall within the current land withdrawal. It is imperative that these improvements remain accessible for livestock use and regular maintenance.

Response

The current land withdrawal does not reduce public access and land would not be removed from BLM oversight. DOE would coordinate with permittees and the BLM to mitigate impacts from the rail line. DOE revised Chapter 7 of the Rail Alignment EIS to clarify the process the Department would use to address issues of concern to permittees. The land withdrawal would not affect access to rangeland improvements. During proposed railroad construction and operations, DOE would ensure that any access

needed to maintain pipelines and other improvements was provided. The BLM-issued right-of-way grant would outline specific measures to provide this access.

3.7.1 (1487)

Comment - RRR000656 / 0066

Section 4.2.2.4, page 4-60, Impacts under the Shared-Use Option: Impacts to land use and ownership under the Shared-Use Option would be similar to those described for the Proposed Action without shared use, with a small addition of impacts from the construction and operation of commercial sidings. DOE cannot predict the exact locations of these possible commercial use sidings, but they could include Caliente, Panaca/Bennett Pass, the Warm Springs Summit area, Tonopah, Goldfield, and the Beatty Wash/Oasis Valley area, and Crater Flat. The sidings would likely be constructed within the railroad operations right-of-way; if so, there would be no additional impacts to land use and ownership (see Figure 2-55). Because only approximately 1 percent of land within the rail line construction right-of-way is privately owned, any commercial sidings or commercial facilities that would be outside the construction right-of-way would likely be on BLM-administered land, and implemented under a separate BLM-issued right-of-way.

Implementation of the Shared-Use Option could have future, long-term impacts on land use.

Response

DOE revised Sections 4.2.2.4 and 4.3.2.4 of the Rail Alignment EIS to acknowledge that the implementation of the Shared-Use Option could have future long-term impacts on land use.

3.7.1 (1594)

<u>Comment</u> - RRR000555 / 0002

The commenter stated that some impacts to private lands were overlooked at the Coffer Ranch in Oasis Valley. He also said he disagrees with the statement in the DEIS that DOE's taking of 146 to 178 acres of private land would be a "small impact".

Response

Figures 3-25 and 3-143 of the Rail Alignment EIS show private land along Oasis Valley (including the Coffer Ranch). The Draft EIS incorrectly stated that 9.9 acres of land in Oasis Valley would be in the rail line construction right-of-way. Sections 4.2.2.2.1.2 and 4.3.2.2.1.2 of the EIS now indicate the correct value of 0.9 acre.

DOE developed the rail alignments and alternative segments with the aim of affecting the smallest amount of private land, and has reduced the construction right-of-way on and adjacent to private lands to the extent possible. The Department acknowledges that gaining right-of-way access or acquiring private land will affect individual landowners; however, it has characterized the impact to private land overall as small because of the relatively low percentage of private land in the entire rail corridor.

3.7.1 (1664)

<u>Comment</u> - RRR000710 / 0012

Page 3-83, Section 3.2.2.5.2.2: The DEIS fails to report the presence of geothermal resources at Warm Springs near the Warm Springs Summit.

Response

DOE revised Section 3.2.2.5.2.2 of the Rail Alignment EIS to state that there are geothermal resources at Warm Springs. Based on the "Mineral and Energy Resource Occurrence Report" (DIRS 183644-Shannon & Wilson 2005, all), the potential for conflict with the Warm Springs area would be low due to

the distance of the rail line from the hot springs area and the minimal development of known geothermal resources.

3.7.1 (1688)

<u>Comment</u> - RRR000836 / 0008

Describe the distance or radius from any rail line that is being used in your assessment of environmental effects. In a worst case scenario, how far from a rail right of way have environmental effects been measured? Does the rail line right of way width correspond with rail line specifications of the current Resource Management Plan in each area?

Response

DOE designed the radius for analysis to be specific to each environmental resource (refer to the region of influence descriptions at the beginning of each section). For land-use impacts, the Department considered the width of the proposed construction right-of-way as the region of influence. It designed the rail line routes to avoid environmentally sensitive areas, as identified in the relevant Resource Management Plans. The Rail Alignment EIS addresses compatibility with Resource Management Plans in Sections 4.2.2.2.3 and 4.3.2.2.3. The width of the proposed construction right-of-way would conform to all applicable Resource Management Plan guidelines for utility and transportation corridors. The sections address conformance with the corridor width for the pending Ely Resource Management Plan, and DOE revised them to provide similar statements for other Resource Management Plans.

3.7.1 (1845)

<u>Comment</u> - RRR000687 / 0005

Concerns remain that the limited restrictions imposed by the current land withdrawal will be extended to include reduced public access or complete withdrawal of the land from BLM oversight. The livelihood of each permittee impacted by the Rail Corridor could be adversely affected if their ability to cross or access the proposed rail corridor was hampered or lost. In addition, permittees have invested a great deal of money in rangeland improvements, authorized by the BLM, which fall within the current land withdrawal. It is imperative that these improvements remain accessible for livestock use and regular maintenance.

Response

The current land withdrawal does not reduce public access and there would be no removal of land from BLM oversight. DOE would coordinate with permittees and the BLM to mitigate impacts from the rail line. The Department has revised Chapter 7 of the Rail Alignment EIS to clarify the process it would use to address issues of concern to permittees. The land withdrawal would not affect access to rangeland improvements. During construction and operation of the railroad, DOE would ensure access necessary to maintain pipelines and other improvements. The Right-of-Way grant that BLM would issue to DOE would outline specific measures to provide this access.

3.7.1 (1952)

<u>Comment</u> - RRR000687 / 0019

Section 2.2.6, Pages 2-108 to 2-113. The shared-use option would require further land disturbance for the installation of commercial sidings. This would result in increased impacts to natural resources and livestock operations. The shared-use option will result in higher train frequencies and potentially higher speed trains. This would likely result in increased livestock loss due to commercial operations. Chapter 3 "Affected Environment" and Chapter 4 "Environmental Impacts" recognized, but did not quantify, the potential effects and impacts of the increased facilities and operations. Whose responsibility is it to assess the effects and impacts?

It should be the DOE'S responsibility to identify and quantify the effects and impacts of the shared use option, as it is their preferred alternative. The effects and impacts should include those associated with land-use operations such as grazing, and impacts to natural resources such as increased land disturbance for appropriate facilities.

Response

DOE acknowledges that implementation of the Shared-Use Option could have future long-term impacts on land use, and has revised Sections 4.2.2.2 and 4.3.2.2 of the Rail Alignment EIS to state this.

3.7.1 (2101)

<u>Comment</u> - RRR000710 / 0028

Pages 4-46 through 4-47 and Page 4-5, Tables 4-18, 4-19, 4-20: The DEIS fails to adequately assess on a site-specific basis the adverse impacts of the proposed Caliente rail line to the livestock operation of the Reveille Allotment.

The DEIS narrative and Tables report only as to assumed forage under the rail bed footprint, do not report other forage that may be lost due to loss of access and/or change in livestock use patterns, do not report forage lost due to curtailment of watering through pipelines during construction and if (when) pipes under the railbed become inoperable, and do not report as to reasonable expected loss of livestock performance due to construction and operation of the railroad. Further, these pages ignore completely the reasonably foreseeable likelihood that train operations vibrations will collapse the spring tunnel at Black Springs, making that water system, and the forage base it serves, unavailable to livestock.

Additionally, because of the failure of the DEIS to provide an allotment-by-allotment site-specific analysis of impacts to forage and operations, the DEIS fails to assess the impacts of construction and operation to the accomplishment of objectives and commitments to manage contained within a Stipulated Agreement relative to the Reveille Allotment. In short, the disruption of livestock activities will have the consequences of (1) changing livestock use levels and patterns, and; (2) depriving Fallini of the ability to properly respond to and alter such undesired levels or patterns such pattern changes, as committed to between BLM and Fallini.

For this reason alone the DEIS fails to adequately assess on a site-specific basis the impacts to livestock grazing within at least the Reveille Allotment, and likely the remainder of the rail line allotments.

Response

DOE acknowledges the commenter's concerns about the impacts of the Proposed Action on grazing operations, and has revised Sections 4.2.2.3.2 and 4.3.2.2.3.2 of the Rail Alignment EIS to indicate that Interim Grazing Management Plans and Allotment Management Plans, which could result in additional loss or unavailability of some grazing land, could further alter grazing pastures and patterns. DOE anticipates that these plans would outline and authorize grazing schedules, stocking rates, stockwater sources, or pasture boundaries to minimize railroad impacts, such as mortality from train strikes or reductions in livestock performance. Because the BLM would determine the details of these changes in coordination with permittees during its processing of the DOE right-of-way application (after DOE announced the selected alternative in a Record of Decision). DOE would sleeve stockwater pipelines so vibrations from train operations would not cause their collapse, and would ensure access to maintain these sections of pipeline. The BLM right-of-way grant would outline specific measures to provide this access.

3.7.1 (2103)

<u>Comment</u> - RRR000710 / 0026

Page 4-43: The DEIS erroneously concludes that, relative to transportation corridors, the proposed Caliente rail alignment is not in conflict with the Tonopah Resource Management Plan.

The DEIS states, "The Tonopah Resource Management Plan designates 1,075 kilometers (668 miles) for transportation and utility corridors (DIRS 173224-BLM 1997, p. 2). It also allows rights-of-way on more than 600 square kilometers (149,000 acres) if the land use is compatible with existing land values.... Because withdrawal for other federal use has precedence over potential land disposals, there would be no conflict with the Tonopah Resource Management Plan."

However, the conflict that must be addressed is not necessarily limited to land disposals, but must be assessed against "existing land values".

Response

The Rail Alignment EIS analysis of compatibility with existing land-use plans considered whether the Proposed Action is consistent with the information regarding potential land uses provided in those plans. The Tonopah Resource Management Plan specifically addresses allowance for transportation and utility corridors, with the caveat that the right-of-way should be compatible with existing land values. Sections 4.2.2 and 4.3.2 of the Rail Alignment EIS evaluate the potential impacts and identify conflicts with existing land uses, including impacts to private land, grazing land, mineral and energy resources, recreational and public access; compatibility with land-use plans is one of the factors considered.

3.7.1 (2300)

<u>Comment</u> - RRR000014 / 0002

The commenter expressed concern about Rail Alignment EIS statements that access to the Caliente Hot Springs Hotel would be limited during some phases of railroad construction and operations. She said that the EIS was in conflict with statements made during the public meeting in Caliente that access would not be restricted.

Response

If DOE selected the Caliente alternative segment, the Department would work with the land owner to mitigate the impacts to the motel through the process described in Chapter 7 of the Rail Alignment EIS. Through this process, DOE would develop specific measures that could avoid, reduce, or rectify impacts to this property, including measures to maintain access to the motel during the construction phase. DOE could also negotiate compensation with the land owner if design, construction, or operations accommodations were not sufficient to mitigate the impacts. Table 7-2 of the Rail Alignment EIS lists preliminary measures DOE could implement to mitigate impacts to private lands.

3.7.1 (3052)

<u>Comment</u> - RRR000664 / 0024

The Draft EIS concludes that the land-use impacts of the Caliente right-of-way are insignificant. Eureka County believes that this conclusion is in error. The impacts of the Caliente right-of-way are, in fact, significant.

Disturbed acreage is an inadequate measure of impacts. The Draft EIS conclusion that land use impacts of the Caliente right-of-way are insignificant is based primarily on the amount of disturbed acreage and lost forage from the permanent right-of-way. ... [A]lthough this is one measure of land-use impacts, it is not the only one. For linear facilities such as a rail line, an assessment of land-use impacts should also include an evaluation of the impacts of bisecting current and future land-uses. Splitting a ranching operation with a rail line can have significant impacts on the entire operation, not just the area within the right-of-way. Similar impacts will be felt by other types of businesses and government operations.

The rail line would travel through grazing allotments and pasture boundaries, which would require permittees to alter their ranching operations. The Rail Alignment EIS acknowledges the alteration of grazing patterns; DOE revised the text to indicate further that Interim Grazing Management Plans and Allotment Management Plans could alter grazing pastures and patterns. These plans would outline and authorize grazing schedules, stocking rates, stockwater sources, or pasture boundaries to minimize impacts of the railroad, such as mortality from train strikes or reductions in livestock performance.

DOE would ensure access across the rail line at or near all road crossings. For overall public access (for example, recreation and hunting), these crossings would be sufficient to maintain land uses. If the availability of these crossings was not sufficient to sustain current uses of private property, DOE would negotiate with the landowners to develop mitigation measures to minimize impacts. The Department has revised Chapter 7 of the Rail Alignment EIS to clarify the process through which it would consult with the BLM, affected permittees, and landowners to develop strategies to minimize impacts to land use and access.

3.7.1 (3106)

<u>Comment</u> - RRR000691 / 0010

The EIS does not discuss how the DOE would respond to land ownership issues if the project footprint exceeds expected uses of negotiated rights of ways.

Response

If DOE needed to amend its right-of-way, the BLM could require the Department to perform additional NEPA analysis to identify and mitigate potential impacts.

3.7.1 (3113)

Comment - RRR000691 / 0017

The EIS is absent the information concerning potential or anticipated environmental impacts to the Timbisha Shoshone lands that are nearest common segment 5 of the Caliente or Mina proposed rail corridor, closest to Scottys Junction.

Response

As stated in Section 4.2.2.2.2 of the Rail Alignment EIS, DOE eliminated alternative segments that would have crossed into Timbisha Shoshone Trust Land based on opposition from the Western Shoshone Nation. As a consequence, the rail line would have no direct impacts to land use and ownership on the Timbisha Shoshone Trust Land near Scottys Junction.

3.7.1 (3152)

<u>Comment</u> - RRR000671 / 0040

Page 3-384 3.3.2.2.2 Local Land-Use Planning: The text in this section does not identify nor mention the Timbisha Shoshone, Duckwater Shoshone and Yomba Shoshone Tribes. The text should be modified to include the tribes identified.

Response

Section 3.3.2.2.2 of the Rail Alignment EIS discusses county and local land-use plans that would not be applicable to Shoshone Trust Lands. Section 3.3.2.3 of the EIS discusses the Walker River Paiute Reservation land that the Mina rail corridor crosses and Timbisha Shoshone Trust Land that is 2 miles west of common segment 5, which would be the closest Timbisha Shoshone Trust Land to the rail alignment. Figure 3-242 in the EIS addresses the three tribes identified in the comment and their traditional boundaries and locations.

3.7.1 (3193)

<u>Comment</u> - RRR000671 / 0046

Page 4-406, Section 4.3.2.2.2.1, Walker River Paiute Reservation: Extensive text is developed describing various environmental impacts to the Walker River Paiute Reservation in comparison to the disproportionate and limited explanation provided in section 4.3.2.2.2.2 describing impacts to Timbisha Shoshone Trust Land.

Response

DOE provided more discussion about impacts to the Walker River Paiute Reservation because the Mina rail corridor crosses the Reservation. Conversely, the rail line would not directly affect land use in the Timbisha Shoshone Trust Land at Scottys Junction. The explanation is commensurate with the level of impacts that each property would experience.

3.7.1 (3486)

<u>Comment</u> - RRR000035 / 0003

The commenter expressed concern that the proposed rail line construction along the Caliente rail alignment would use a 1,000-foot width of land and would take out the highway from Caliente to Panaca.

Response

The construction right-of-way would have a nominal-width of 500 feet on either side of the centerline of the rail alignment. Where possible, DOE would reduce the width of the footprint to avoid impacts to private land, wetlands, and other environmental resources. The Caliente alternative segment would be in the former Union Pacific Railroad Pioche and Prince Branchline right-of-way and parallel U.S. Highway 95. The construction right-of-way along this segment would have an average width of 100 feet where it followed the Union Pacific Railroad right-of-way (see Section 3.2.2.2.4 of the Rail Alignment EIS). Figures 3-15 through 3-19 in the EIS show the proposed construction right-of-way and U.S. Highway 95.

3.7.1 (3679)

<u>Comment</u> - RRR000666 / 0009

The Draft EIS uses an estimate of potential impacts to mining properties drawn from a mineral assessment prepared by a DOE sub-contractor (Shannon and Wilson, 2005). Specifically, the Draft EIS reports the following tabulation of potentially impacted properties.

	Goldfield 3	Goldfield 4
EIS section estimate	14	19
EIS section estimate	359	538

The methodology used in the Shannon and Wilson report selected all Public Land Survey Sections (PLSS) intersected by the various rail alignments. The Bureau of Land Management (BLM) Lands Records database includes an on-line active mining claims report capability that queries mineral location claims by Township, Range, and Section (BLM, 2007). The digital reports include claim location, name, serial number, owner, status, location date, and date of last assessment.

In their 2005 report, Shannon and Wilson clearly state their methodology is based on a claim records search by section. However, the Draft EIS misstates the potential impact to mining claims in its tabular presentation. The Shannon and Wilson report estimates mining claim records by section, while the EIS reports this estimate as the number of claims potentially impacted. The EIS reference to the number of claims is not accurate.

There are two systematic errors that contribute to an over-estimation of impacts to unpatented mining claims. Where a claim spans multiple sections, a record is entered for the claim in each section.

Additionally, if there is more than one claimant, a record is entered for each owner. If a claim intersects more than one section and/or has more than one owner, many multiple records of the same claim are returned in the geosection search query.

The comparative results in the following presentation suggest both systematic errors were included in the tabular impacts in the Draft EIS. Using a similar methodology of claim record density, results are presented for all active mining claims in Townships 1N, 1S, 2S, 3S, 4S, 5S, and Ranges 42E and 43E, database queried on December 12, 2007 (BLM, 2007).

Figure 4 shows the map of mining claim records by section in the vicinity of Goldfield. The cluster of sections to the north represents claims in the Klondyke Mining District, while claims to the south are from the Stonewall Mining District. GF4 skirts the western portion of the historic Goldfield Mining District while GF3 penetrates the eastern portions of the Goldfield Mining District.

The highest density of claims in the area is in Section 27 of Township 2 South, Range 42 East. This is the center of the "Gemfield" deposit described in the following section. It should be noted that US Highway 95 traverses this section in close proximity to the east of the proposed GF4 rail alignment.

All the Active Mining Claim Records by section are selected for those sections intersected by the alternative rail corridors for GF3 and GF4. Multiple records are eliminated for all but a single record for each claim serial number. While spatial fidelity is lost for the sections involved, this procedure retains the actual number of claims in the sections intersected by the rail corridors.

Based on our [Esmeralda County Board of Commissioners] analysis of records extracted from the BLM Land Records System on December 20, 2007 (BLM, 2007), our findings indicate the mining claim density reported by Shannon and Wilson by section for GF3 is accurate. However, our analysis shows the number of mining claim records for GF4 is substantially less than was shown in the 2005 analysis conducted by Shannon and Wilson.

In their 2005 study, Shannon and Wilson reported 14 sections intersected by the GF3 route with 359 claim records. This investigation shows 14 sections with 357 records for GF3. In the 2005 study, the GF4 route intersected 19 sections with 538 claim records. However, the current investigation shows only 17 sections with 490 claims. The current investigation also eliminates duplicate claim records and shows a potential impact of 205 claims by GF3 and 334 claims by GF4 (see Table 1).

Table 1. Mining Claim Estimates (Dec 20, 2007)

	Goldfield 3	Goldfield 4
EIS section estimate	14	19
Our section estimate	14	17
EIS section estimate	359	538
Our section estimate	357	538
Multiple records reduction	152	-156
Claims	205	334

It is noteworthy that there is a substantial reduction in the number of claims and records along the Goldfield 4 Alignment. Specifically, 48 claims on GF4 lapsed, or were closed, and only 2 claims on GF3 lapsed since the 2005 Shannon and Wilson Report.

In conclusion, it is clear the unpatented mining claims along GF4 do not present a significant impact to construction of a rail line along this route. The Draft EIS clearly overstated the impacts to active mining activity along this route.

DOE reanalyzed the distribution of mining claims along the Goldfield alternative segments. The Department found that the Draft Rail Alignment EIS overstated the number of mining claims because some claims were counted twice. This occurred where a mining claim spanned across more than one Township, Range, or Section, and/or multiple owners are tied to a unique claim serial number. The Department revised Tables 3-4 and Table 4-14 and Sections 3.2.2.2.3, 4.2.2.2.1.2, and 4.2.2.2.6.7 of the Rail Alignment EIS with corrected data on the number of private parcels and mining claims in the construction right-of-way along the Goldfield alternative segments.

3.7.1 (3683)

<u>Comment</u> - RRR000666 / 0010

In the BLM records search, one claimant figures prominently in the Goldfield vicinity. Metallic Goldfield Ventures (MVG) is the largest claimholder on both GF3 [Goldfield alternative segment 3] and GF4 [Goldfield alternative segment 4]. All but 12 of the 205 claims recorded in the sections crossed by GF3 are held by MVG, and 190 of the 334 claims crossed by GF4 are held by MVG. From their website (MVG, 2007) and other Internet sources, it is possible to assess their local activities.

The Metallic position in the Goldfield area consists of 32 square miles of wholly owned or controlled mining properties. These properties include patented and unpatented claims and holdings. MVG acknowledges the company does not control all land within the exterior boundary of local holdings, but within the Goldfield District MVG controls 20,600 acres. Previous efforts to study the complex mineralogy of the district were stymied by fractured ownership of mineralized properties and poor accessibility to exposed ore bodies and drill-log records. Consolidation of holdings under MVG enables more careful evaluation of controlling geologic structures and deposition of mineral.

MVG's official filings report three distinct deposits of gold mineralization in their holdings near Goldfield. These areas are known as Gemfield, McMahon Ridge, and Goldfield Main. Of particular interest to these comments are characteristics of the Gemfield deposit, located approximately two miles north of Goldfield within the GF4 alignment. However, the flat terrain across the valley floor in this portion of the GF4 alignment provides flexibility for route modification.

MVG also controls most of the mining claims crossed by GF3. The difference in terrain between GF3 and GF4 is striking. The GF3 alignment is through difficult terrain with little option for route modification if constraints are encountered during design or construction. However, the flat terrain across the valley floor provides flexibility to adjust the route alignment during design and construction. The Esmeralda County support for GF4 includes an expectation that archeological resources will constrain the construction and operation of the GF3 alignment, and the potential to make route adjustments on the valley floor clearly show the GF4 alignment a better alternative for both DOE and the local community.

New materials documenting the location of the Gemfield ore deposit and plans for development have become available since the EIS analysis. This information is particularly important regarding the proposed plan for mine development. A preliminary assessment of the current exploration program on the Gemfield property has determined mine development should proceed (AMEC, 2006).

Details regarding the proposed open pit on the property, and the intent of the owner to relocate US Highway 95 to the west, clarify the mineral position on the GF4 rail route alternative and provide an opportunity to avoid the active mining (see Figures 5 and 6). The GF4 alternative can avoid active mining and still take advantage of the opportunity to utilize the route advantages.

AMEC E&C Services Inc. produced the technical report for MVG evaluating the Gemfield property, and the procedures undertaken to characterize and identify the deposit. Regarding the location of the deposit and configuration of the resultant open pit, several diagrams and design descriptions are particularly important regarding rail route alternatives. First, the Gemfield deposit underlies the current location of US Highway 95 approximately 2 miles north of Goldfield (AMEC, page 18-2). The AMEC Report provides the following description regarding the pit:

State Highway 95 runs north/south across the west portion of the Gemfield deposit and will have to be relocated to allow open pit mining of the deposit. It is proposed that initial mining of the Gemfield deposit will be east of the highway, allowing time for the relocation to be completed before expansion into the final pit (Figure 18-1). Optimized pits were therefore generated for two cases -- one with the highway in place, and a second with the highway relocated to the west, a deviation of some 2 miles (3.2 km). An offset of 46 m (150 ft) from the highway was used as the western limit for the first case, based on the preliminary geotechnical report prepared by Call & Nicholas.

Clearly, the mineral resource location is well enough established to determine where the highway relocation would be necessary to accommodate the mineral extraction. With that information available, the uncertainty regarding mining impacts is resolved for the GF4 route alternative. The rail alignment could be shifted to the immediate west of the relocated US Highway 95 and avoid disruptions to active mining.

In conclusion, the above referenced information, which was unavailable when the Shannon and Wilson report was prepared, provides a powerful and compelling reason to re-examine the selection of GF3 rather than GF4.

Response

DOE revised Sections 3.2.2 and 4.2.2, and Chapter 5 of the Rail Alignment EIS to reflect this new information. Based on discussions with Esmeralda County, DOE proposes to consolidate the Maintenance-of-Way facilities (Headquarters and Trackside facilities), and locate them along Goldfield alternative segment 4 near the potential quarry site and proposed Gemfield Phase II operations. Railroad planners have evaluated the new Maintenance-of-Way Facility site and believe that, if Metallic Goldfield Ventures implemented the Gemfield Project, the gentle topography along Goldfield alternative segment 4 would enable relatively easy relocation of the Maintenance-of-Way Facility and rail line, taking into account the proposed relocation of U.S. Highway 95. DOE would employ mitigation and avoidance strategies, as discussed in Chapter 7 of the Rail Alignment EIS, and would work with the BLM and mining lessees, claimants, and/or owners to minimize impacts to mine operations (see Table 7-2).

3.7.1 (4111)

Comment - RRR000524 / 0016

The draft rail EIS does not completely discuss potential impacts associated with mining rights and mining and energy leaseholders whose properties are near the Caliente rail alignment. The final rail EIS should discuss more completely the potential conflicts and impacts associated with existing and future mining and other resource activities. The final rail EIS should also discuss the impacts of any investigations that would be needed beyond the boundary of the rail line right-of-way.

Section 4.2.2.2.6 of the draft rail EIS states that rail construction and operations would not affect mining activity, access to mining activity, or energy resource extraction. It further states that DOE would negotiate the surface rights across unpatented claims with claim holders. However, potential impacts may not be fully evaluated in the draft EIS if DOE has not completed investigations of design and safety issues or developed engineering solutions to potential construction and design problems. For example, DOE indicates that the BLM could issue new unpatented mining and energy leases on lands near the rail line.

However, the rail draft EIS does not indicate whether BLM would require a mining or energy lease applicant to ensure non-interference with railroad construction or operations. Section 4.2.2.2.6.7 does not clearly indicate whether DOE needs to conduct invasive investigations outside the boundary of the construction right-of-way to determine the existence of any resource conflicts.

Response

Section 3.2.2.4.2 of the Rail Alignment EIS describes the project-related public land withdrawals DOE obtained to prevent new mining claims from being filed until the BLM issues a right-of-way grant for the rail line. If the BLM grants DOE a right-of-way for the rail line, the withdrawal would be rescinded, reopening that area to mineral entry. The development of new mining claims would be subject to valid existing rights, including the rail line right-of-way grant. DOE, in constructing and operating a railroad, would also be subject to valid existing rights, including previously established mining claims. The BLM requires in 43 CFR Part 3800 that the owner of a mining claim prepare a plan of operations and obtain BLM approval before mining operations can begin. The plan would include a description of the types of surface and subsurface operations that are proposed and proposed mitigation measures to reduce environmental and other impacts. In reviewing a plan of operations for a proposed mining operation near a rail line, the BLM would take into consideration potential adverse impacts to adjacent land users, including the operator of the rail line, assuming the rail line right-of-way was approved before the mining plan of operations.

Regarding multiple-use conflicts, 40 CFR 3802.4-3 states: "In the event that uses under any lease, license, permit, or other authorization pursuant to the provisions of any other law, shall conflict, interfere with, or endanger operations in approved plans or otherwise authorized by these regulations, the conflicts shall be reconciled, as much as practicable, by the authorized officer."

The only plan of operations near the Caliente rail alignment or the Mina rail alignment is for a mineral exploration drilling program in the Goldfield area. Drilling has been completed. DOE has filed a right-of-way application with the BLM for the rail line, which establishes a prior existing right should the mining company subsequently file a plan of operations to begin mining.

Table 7-2 of the Rail Alignment EIS lists the methods that would allow the coexistence of mining operations and the safe operation of the proposed railroad.

3.7.1 (4126)

Comment - RRR000671 / 0031

Page 3-39, Section 3.2.2.2.1, County Land-Use Plans: This section describes land-use plans of Lincoln, Nye and Esmeralda Counties but clearly absent is no mention of those tribal governments that are located within these counties. Further, there is no mention specifically relating to the Timbisha Tribe that recently received "Affected Status" under the provisions of the Nuclear Waste Policy Act and has lands located near the proposed rail corridor near Lida.

Response

County land-use plans would not have a bearing on tribal land. Sections 3.2.2.3 and 3.3.2.3 of the Rail Alignment EIS discuss American Indian lands. Neither rail corridor (Caliente or Mina) would be close to the Timbisha Shoshone Trust Land near Lida, although the rail line would be approximately 2 miles from the Timbisha Shoshone Trust Land near Scottys Junction. Section 3.4 of the EIS discusses American Indian interests in the Proposed Action.

3.7.1 (4185)

<u>Comment</u> – 2 comments summarized

Commenters stated that the DOE Draft EIS documents fail to describe adequately the affected environment associated with the rail alignment in Common Segment 3 under the preferred Caliente Implementing Alternative. Thus, DOE has not identified site-specific mitigation measures sufficient to offset or compensate for all the impacts that would result if it selected the Caliente Implementing Alternative. The previous Colvin comments raised a number of environmental issues, management objectives, and standard operating procedures that were established by the 1997 Resource Management Plan for BLM-administered lands in the Tonopah Planning Unit that the DOE planning documents for the Caliente Implementing Alternative have not analyzed adequately, if at all. The Draft EIS documents fail to address adequately significant impacts to private lands, BLM and Forest Service grazing preferences, Nevada grazing rights, livestock use patterns, range improvements, rights-of-way, federal grants, water rights, wildlife, recreation, aesthetics, cultural resources, mineral rights, and mining. In addition, the Draft EIS documents fail to analyze significant impacts associated with BLM Resource Management Plan objectives and standard operating procedures, wild horses, Wilderness Study Areas, and monitoring investments. Thus, the evaluation of many of the multiple-use relationships on public land that the Caliente Implementing Alternative is inadequate, or the Draft EIS documents do not addressed them at all.

Response

Chapter 2 of the Rail Alignment EIS describes the affected environment for the lands and features involved with each segment and proposed facility. DOE organized the chapter by resource area, so it describes common aspects of the environment for the proposed alignment or alternative segment for a resource first; then it describes the specific aspects of the resource area for each segment and facility area.

The resource impact sections for each resource area in Chapter 4 of the Rail Alignment EIS discuss the impacts for Caliente common segment 3. For example, Section 4.2.2.2 of the Rail Alignment EIS discusses land-use impacts to common segment 3. Table 4-12 lists all the acreage and ownership of the project segments, including common segment 3, that rail line construction and operation would directly affect. Section 4.2.2.2.3.1 describes consistency with BLM resource management plans, including the Tonopah Resource Management Plan, for all areas the rail alignment would cross. Section 4.2.2.2.3.2 discusses impacts to grazing allotments, including the Stone Cabin Allotment and Caliente common segment 3.

Chapter 7 of the Rail Alignment EIS contains a substantially expanded description of the process DOE would use to develop specific mitigation and compensation for impacts to grazing allotment permittees. It is premature to develop specific mitigation measures until the final design is complete.

DOE evaluated comments it received during the scoping periods in 2004 and 2006 and used that information to inform the scope of the impacts assessment in the Rail Alignment EIS. Sections S.3.3.1, 1.6.2 and C.2 of the EIS summarize the scoping comments. Some comments led to elimination of alternative segments or alteration of the path of a segment to avoid features that would present a conflict with rail construction and operation.

DOE has been in close communication with BLM offices about the compatibility of the proposed railroad with existing and proposed resource management plans. The BLM is a cooperating agency on the Rail Alignment EIS and is aware of the plans DOE is developing. An existing resource management plan that did not specifically describe and allow a rail line would not necessarily block the development of a rail line as long as the right-of-way application demonstrated compliance with the land management objectives of the resource management plan and the applicant would abide by conditions the BLM would

include in the right-of-way grant. The Caliente Rail Alignment would not cross lands managed by the Forest Service.

DOE reviewed BLM standard operating procedures and has cited relevant procedures in Chapter 6 of the Rail Alignment EIS. Sections 4.2.7.2.1.5 and 4.2.7.2.2.9 (specifically for Caliente common segment 3 and the Stone Cabin area) evaluate impacts to wild horses. The Caliente and Mina rail alignments both avoid crossing Wilderness Study Areas.

In relation to the potential for blocking existing roads and changing recreational pressure on some BLM lands, DOE would provide road crossings unless there was a compelling reason not to. DOE would design road crossings in accordance with American Association of State Highway and Transportation Officials requirements, and with Nevada Department of Transportation, BLM, American Railway Engineering and Maintenance-of-Way Association, Manual on Uniform Traffic Control Devices, Nevada Public Utilities Commission, and county and municipality road standards as applicable. Signaling device requirements would comply with the same standards as those for crossings.

The Rail Alignment EIS refers to two categories of access roads. One would be the service road that DOE constructed adjacent to the rail line for the length of the rail alignment (unless mitigation measures determined otherwise due to terrain, sensitive areas, and the like). This service road would be 14 feet wide and would not be suitable for public access along the entire length of the rail line. DOE would post signs on these sections of road to warn travelers that the road was not for public use. Because there is no road at present in these locations, there is no impact on public access. Other sections of this service road could be open to the public and would have appropriate maintenance with two 12-foot-wide (24-foot total) travel lanes for public use.

DOE would use the second category of access roads to travel from primary roads to facilities, construction camp sites, quarries, or wells. These would primarily be preexisting roads that DOE would improve where necessary to accommodate the additional traffic for rail construction. Improvements to these roads would benefit public travel on them.

DOE would work with the BLM and local governments to identify road crossing mitigation measures that best preserved public access to the road, public land, and recreational uses on public lands. The Department would base the road crossing mitigation design on interaction with directly affected parties and established design criteria through the development of a Mitigation Action Plan. Chapter 7 of the Rail Alignment EIS discusses how DOE, throughout the advancement of the rail design, would avoid, minimize, or otherwise reduce impacts to directly affected parties. Section 7.3.3 discusses the development of a Mitigation Action Plan. The development of this plan would involve consultation with directly affected parties. This process would be iterative in that DOE would consult with directly affected parties as the rail line engineering advanced from preliminary through final design an operations.

3.7.1 (4225)

<u>Comment</u> – 2 comments summarized

Commenters noted factual mistakes in the comparison of potential impacts between Goldfield alternative segments 3 and 4 and stated that the figures used for the numbers of private parcels, mining claims, and impacts are not accurate. Commenters asked that the final EIS reexamine these findings.

Response

DOE reanalyzed mining claims along the Goldfield alternative segments and found there was some duplication of mining claims in the Rail Alignment EIS (this occurred where a mining claim spanned across more than one Township, Range, or Section, and/or multiple owners are tied to a unique claim serial number). The Department revised Tables 3-4 and Table 4-14 and Sections 3.2.2.2.3, 4.2.2.2.1.2,

and 4.2.2.2.6.7 of the Rail Alignment EIS to correct the data on the number of private parcels and mining claims in the construction right-of-way along the Goldfield alternative segments.

3.7.2 Air Quality and Climate

3.7.2 (114)

<u>Comment</u> – 2 comments summarized

Commenters expressed concern that the air quality analysis in the Rail Alignment EIS was limited to National Ambient Air Quality Standard criteria pollutants and did not include identification of the increase in carbon dioxide emissions due to the project and the impact of those emissions on global warming. The commenters requested that the study include an analysis of carbon dioxide emissions from the construction, operations, and abandonment of the proposed railroad and the incremental impact such emissions would have on concentrations of greenhouse gas in the atmosphere and related contributions to global warming. They also requested that Chapter 7 of the EIS include a discussion of measures to mitigate production of carbon dioxide.

Response

DOE added new Sections 4.2.4.5 and 4.3.4.5 to Chapter 4 of the Rail Alignment EIS for the Caliente and Mina rail alignments, respectively, that quantify the total carbon dioxide emissions from proposed railroad construction and operations. DOE based the analysis on U.S. Environmental Protection Agency carbon dioxide emission factors from the NONROAD and MOBILE6.2 emission factor computer models. The models reported both peak year and total carbon dioxide emissions. The analysis compared these emissions to the most current U.S. and State of Nevada carbon dioxide emission inventories. It based its identification of consequences of climate change for the region on the findings for North America and globally, as applicable, from assessments of the Working Group II Report of the Intergovernmental Panel on Climate Change's 4th Assessment Report.

3.7.2 (360)

<u>Comment</u> - RRR000101 / 0014

The commenter said that some tribal members have noticed changes in precipitation in the region over many years that resulted in changes to plants, animals, and birds. Tribal members can be considered a resource when considering such changes.

Response

DOE based its assessment on the best available information. If a tribe had additional studies on changes in precipitation or other climate conditions in the Yucca Mountain region, DOE would be interested in reviewing them. If the observations were substantially different from the reference documents it has used, the Department would seek to understand the differences and decide if changes to potential air quality impacts assessments would be necessary.

3.7.2 (1088)

Comment - RRR000617 / 0125

Page 3-3, Table 3-1: The political boundaries for Lincoln, Nye and Esmeralda counties are not synonymous with air basins. A more appropriate definition of air basins within the study area would have been hydrographic basins defined by the Nevada State Engineer within which air quality conditions will tend to be similar and/or confined.

A justification for the selection of county boundaries versus hydrographic boundaries for air quality impact analysis is required in the EIS.

While the use of hydrographic areas to define air quality management areas is an accepted practice for planning in western states, the lack of air quality data or emission inventories at corresponding scale makes the use of hydrographic boundaries unsuitable for assessing potential air quality impacts. In addition, the air basins in each county are probably similar due to the similar emission characteristics in each basin. The limited historical data on pollutant emission inventories and compliance status for the State of Nevada (other than Clark and Washoe Counties), which are calculated at the county level, provide a basis for determining existing air quality in the region and for analyzing potential impacts to air quality.

3.7.2 (1330)

Comment - RRR000617 / 0262

A comparative analysis of all analyzed routes with regard to sensitive populations such as children.

A key word search for "sensitive population" in the documents revealed one reference. The reference simply states that the National Ambient Air Quality Standards sets limits to protect public health including sensitive populations such as children. This reference is made in relation to the repository and not the rail line. DOE/EIS-0250F-S1D, 4.1.2.

Response

DOE estimated the most likely existing background concentrations along both alignments in Sections 3.2.4 and 3.3.4 of the Rail Alignment EIS and conducted air quality modeling along those sections of the alignments where emissions from the proposed project would be highest to determine if the values could exceed National Ambient Air Quality Standards. The purpose of these Standards is to protect, with an adequate margin of safety, human health including sensitive populations such as children and individuals suffering from respiratory disease. Only during construction near the two quarries (Garfield Hills and South Reveille Valley), construction of the Staging Yard in Hawthorne, and construction of the rail alignment east of Schurz could pollutant concentrations exceed the Standards. However, as noted in Section 4.3.4.3.1.3 of the EIS, the exceedences near Hawthorne and Schurz would apply only at the edge of the construction right-of-way and would only occur during the relatively short period of construction activities (less than 6 months).

Only the 24-hour PM_{10} and $PM_{2.5}$ showed the potential for exceedence of National Ambient Air Quality Standards. Air quality dispersion modeling for Schurz showed that the highest modeled 24-hour PM_{10} and $PM_{2.5}$ concentrations in the Town of Schurz, including the highest measured background concentration, would be 105 and 25 micrograms per cubic meter, respectively, both of which are below Standard levels. However, for construction of the rail alignment, the Staging Yard, and the quarry, DOE would have to obtain a Surface Area Disturbance Permit Dust Control Plan, which would address in detail the best fugitive dust control methods to limit these emissions so they did not exceed the Standards. The Permit Plan could require such measures as the paving of roads, cessation of operations if winds made control of fugitive dust difficult, and temporary particulate matter monitoring to ensure that no violations occurred during construction. Therefore, there should be impacts from the release of air pollutants on sensitive populations along any portion of either alignment.

3.7.2 (1565)

<u>Comment</u> - RRR000555 / 0004

The commenter requested more information on the amount of dust that rail line construction would generate.

Construction-related fugitive dust is the amount of particulate matter suspended in the air from construction activities. Tables 4-36, 4-40, and 4-42 of the Rail Alignment EIS summarize the amount of fugitive dust such activities would generate in Lincoln, Nye, and Esmeralda Counties, respectively, for the Caliente rail alignment. Sections 4.2.4.3.1.1, 4.2.4.3.1.2, and 4.2.4.3.1.3 of the EIS discuss the source contributions of fugitive dust emissions from these activities. Section 4.3.4.3 provides similar information for the Mina rail alignment.

3.7.2 (1872)

<u>Comment</u> - RRR000677 / 0019

The Dixie National Forest and two Utah counties (Iron and Washington) abut Lincoln County, Nevada, and the town of Modena, Utah, is less than 35 miles east of Caliente. Given that air contaminates will not stop at the Nevada-Utah state line, DOE must also address air quality impacts in Utah.

Response

The region of influence includes the air basin in Lincoln County, Nevada. DOE could build the proposed railroad in this area in hydrographic area 203 – Panaca Valley; for the Eccles alternative segment, a small segment would be in hydrographic area 204 – Clover Valley. Clover Valley extends to the area just beyond the Utah-Nevada border but is south of Modena and north of Dixie National Forest. At this distance, emissions from rail activity would be greatly diluted and air impacts in Utah would be much less than those in Caliente, which would be well below National Ambient Air Quality Standards for all pollutants.

3.7.2 (2531)

<u>Comment</u> - RRR000681 / 0040

Maintaining a satisfactory attainment status for air quality is critical for Clark County. Potentially, air quality problems during the rail construction phase could impact Clark County's ability to maintain its favorable status. It is important for Clark County to know whether the DOE has quantified, process by process, the total potential to emit for the repository including railroad construction, what emission units have been identified for the construction of the repository and the railroad and operation of the repository, and what emission factors will be used to quantify potential to emit for the repository including railroad construction. The DSEIS only evaluates $PM_{2.5}$ emissions. This project could be a major source of PM_{10} . It is unclear whether DOE has adequately evaluated PM_{10} emissions, particularly whether fugitive emissions have been evaluated and quantified. DOE should describe what kind of controls will be implemented to control PM_{10} emissions from mining, construction, road travel, stockpiling of material and disturbing vacant land.

Response

DOE looked at PM_{10} and $PM_{2.5}$ construction and operations emissions in the rail alignment region of influence, which extends to a distance of 30 miles from the southern end of rail alignment (see Table 4-40 of the Rail Alignment EIS for construction emissions and Table 4-47 for operations emissions). Air quality modeling of particulate matter emissions from the rail alignment activity shows that they would all be low-level emissions sources with a reach that would not extend beyond a few miles from the facility, as shown in Figure 4-11 for the Interchange Yard in Caliente and in Figure 4-28 for the Staging Yard near Hawthorne, Nevada. Thus, impacts from proposed railroad construction and operations would not affect Clark County.

3.7.2 (2754)

<u>Comment</u> - RRR000688 / 0057

The commenter wants to know what the rail construction emissions are in total and the effect on total air quality.

The rail construction emissions are reported in Tables 4-36, 4-40 and 4-42 for each county through which the rail alignment would be constructed for the Caliente rail alignment. These tables can be summed to estimate the total emissions for construction, but would represent a small over- and under- estimate as the total length of the rail alignment is not at a maximum or minimum in each county. However, the air quality assessment can only be made at various locations along the alignment as emissions are distributed over the entire length of the alignment and not concentrated at any one location. Air quality modeling as reported in Tables 4-37, 4-38, 4-39 and 4-41 summarize the air quality construction impacts at various locations along the alignment during construction. These locations were selected either as locations with population located in the vicinity of the alignment or where emissions were potentially high (for example, quarry operation). Similar sets of tables are available for the Mina rail alignment (Tables 4-172 through 4-186).

3.7.2 (2757)

<u>Comment</u> - RRR000688 / 0054

The commenter wanted to know how much pollution the use of fossil fuels would generate.

Response

Sections 4.2.4.3 and 4.3.4.3 of the Rail alignment EIS describe air pollution emissions from the combustion of fossil fuels during construction and operation of a rail line in the Caliente and Mina rail alignments, respectively. Tables 4-36, 4-40, and 4-42 summarize construction-related exhaust emissions from the combustion of fossil fuels, primarily diesel, for Lincoln, Nye, and Esmeralda counties, respectively. Tables 4-44, 4-47, and 4-48 summarize operations-related exhaust emissions for the three counties, respectively. Similar sets of tables are available for the Mina rail alignment (Tables 4-172 through 4-186).

3.7.2 (2759)

<u>Comment</u> - RRR000688 / 0052

The commenter wanted to know the long-term effects to air quality from transportation.

Response

The Proposed Action is primarily a transportation project, and DOE assessed its long-term air quality impacts as part of the air quality impact assessment. For the Caliente rail alignment, Tables 4-45, 4-46, and 4-49 of the Rail Alignment EIS quantify operational (long-term) air quality impacts for the rail line near Caliente, the Interchange Yard in Caliente, and Goldfield, respectively, for each pollutant for which the U.S. Environmental Protection Agency has established a National Ambient Air Quality Standard. In all cases, the increase would be a small fraction of the air quality standards. The impacts along other segments of the rail alignment would be the same or smaller than those at Caliente or Goldfield. Section 4.3.4.3 of the EIS contains similar tables for the Mina rail alignment (Tables 4-184 through 4-186).

3.7.2 (3120)

<u>Comment</u> - RRR000691 / 0024

The Rail EIS does not address the accuracy of the air quality simulations that the DOE conducted to determine county-level increases in air pollutant emissions.

Response

DOE used the U.S. Environmental Protection Agency AERMOD air quality dispersion model (DIRS 174202-EPA 2002, all) to perform air quality simulations, as discussed in Appendix E, Section E.1 of the Rail Alignment EIS. The Environmental Protection Agency has documented the accuracy of AERMOD in a number of evaluation papers that compared the model with observational data. Appendix E of the Rail Alignment EIS provides Additional details.

3.7.2 (3121)

<u>Comment</u> - RRR000691 / 0025

The Rail EIS does not address information concerning whether the construction of either rail line result[s] in an obstruction to the implementation of a state or regional air quality plan.

Response

As noted in Sections 4.2.4.6 and 4.3.4.6 of the Rail Alignment EIS, the Proposed Action would not cause a conflict with state or regional air quality management plans.

3.7.2 (3122)

Comment - RRR000691 / 0026

The Rail EIS does not address information concerning the AERMOD dispersion modeling system version 07026, the modeling unit used to perform air quality simulations for both rail lines, the most technologically advanced dispersion model.

Response

Appendix E, Section E.1 of the Rail Alignment EIS describes the AERMOD modeling system (DIRS 174202-EPA 2002, all; DIRS 181090-EPA 2007, all). The model is a state-of-the-science air quality dispersion model based on the current understanding of the planetary boundary layer turbulence structure. AERMOD became the U.S. Environmental Protection Agency preferred air dispersion model in December 2005.

3.7.2 (3123)

<u>Comment</u> - RRR000691 / 0027

The Rail EIS does not address whether AERMOD models were used for modeling all quarry sites along both proposed rail lines.

Response

AERMOD modeling of potential quarry sites along the Mina rail alignment was limited to two locations near population centers, Garfield Hills (near Hawthorne) and Malpais Mesa (near Goldfield). For the Caliente rail alignment, two locations were modeled, CA-8B northwest of the City of Caliente and NN-9B near South Reveille Valley.

3.7.2 (3159)

<u>Comment</u> - RRR000691 / 0029

The Rail EIS does not address whether the AERMOD system was used to model the Shared-Use Option for both the proposed Caliente and Mina routes.

Response

Under the Shared-Use Option, operational emissions would increase marginally beyond those for railroad operations under the Proposed Action. Because the maximum air pollutant concentrations modeled under the Proposed Action (see Tables 4-45, 4-46, and 4-49 of the Rail Alignment EIS for the Caliente rail alignment and Tables 4-187, 4-188, 4-189, and 4-192 for the Mina rail alignment) showed a very small increase in ambient concentration levels, the anticipated increase under the Shared-Use Option would be similarly small. Therefore, DOE did not perform separate AERMOD modeling of air pollutant concentrations for that option.

3.7.3 Physical Setting

3.7.3 (173)

<u>Comment</u> – 2 comments summarized

Commenters expressed concern about the lack of a comprehensive geologic hazard inventory and approaches for mitigating those hazards along the rail alignment. Commenters stated that the impact analysis of disruptive geologic events and related hazards on the rail system, shipments, and system safety appears to be incomplete. The Nevada Rail Corridor SEIS and Rail Alignment EIS should include maps that identify potential geologic hazards (buried faults, mined land subsidence, existing mines, etc.) related to the rail corridor. The Rail Alignment EIS should also include a technical basis on the seismic safety standards DOE intends to implement for the Caliente rail system. In addition, it should include a detailed geologic hazard analysis of the City of Caliente and a historic analysis of catastrophic rail alignment loss.

Response

DOE inventoried and reported geologic hazards in the *Geotechnical Report – Caliente Corridor* (DIRS 183639-Shannon & Wilson 2007, all), which is referenced in Section 3.2.1.2.2 of the Rail Alignment EIS. The geotechnical report addressed geologic hazards such as rockfall, earthquakes, low-load-bearing capacity soils, debris flows, surface erosion, and mined land subsidence. The *Geotechnical Design Criteria Manual* (DIRS 174296-Shannon & Wilson 2005, all) discussed potential mitigations for such hazards. These documents list typical geologic hazards and discuss techniques DOE could implement as the rail design advanced and additional geotechnical information was gathered along the selected rail alignment. Section 2.2.2.1 of the EIS discusses the need for additional geotechnical information as the rail design advanced.

Section 3.2.1.2.2.1 of the Rail Alignment EIS contains regional shaking-hazard maps for the Caliente rail alignment. DOE would use these maps as the design of the rail advanced to ensure that the design met modern seismic design provisions for the construction of buildings, bridges, rail roadbed, and utilities.

The southern Great Basin is a seismically active area with a history of volcanism. The volcanic rocks under the City of Caliente have been dated to approximately 16 million years ago (DIRS 183639-Shannon & Wilson 2007, p. 33). In addition, Section 4.2.1.2.2.1 of the Rail Alignment EIS contains information about heat wells, which are indicative of active heat flow in the area.

Rail industry standard practice is to design detection equipment into a rail system. Such asset protection systems would detect disruptive geologic events that affected the rail line during operations. This would alert operators to inspect for symptoms such as broken rails, washouts, and mechanical failures. The Nevada Railroad Control Center, which would oversee the operation of the proposed railroad, would monitor these systems continually. DOE could implement a monitoring regimen for regional seismic events.

Response to detected seismic activity would be in a manner that met or exceeded American Railway Engineering and Maintenance-of-Way Association standards. Section 4.2.1.2.1.2 in the Rail Alignment EIS states, "At a minimum, DOE would design and operate the proposed railroad to be consistent with American Railway Engineering and Maintenance-of-Way Association seismic guidelines (DIRS 162040-AREMA 2001, Chapter 9) and could decide to implement additional, more stringent standards."

3.7.3 (1081)

<u>Comment</u> - RRR000617 / 0127

Page 3-15, Section 3.2.1.2.2.2: This section of the DEIS says nothing about proven or potential mineral reserves as such may bear upon future mining and demand for commercially available rail service in the area.

The EIS should disclose information regarding proven mineral reserves or potential for mining in the area.

Response

Individual alternative segment discussions in the Rail Alignment EIS provide detail about mineral deposits in Lincoln County. Sections 3.2.1.3.1.2 and 3.2.1.3.2.2 of the EIS describe perlite, quartzite, basalt, limestone, and geothermal resources along the Caliente rail alignment. Sections 4.2.1.2 describes potential impacts to these resources.

3.7.3 (1082)

Comment - RRR000617 / 0128

Page 3-17, Section 3.2.1.2.3: The description of the amount of prime farmland soils within the Caliente rail alignment construction ROW [right-of-way] as a percentage of the total of all such soils in Nye and Lincoln counties is not a useful comparison. More appropriate would be a description of the amount of prime farmland soils within the Caliente rail alignment construction ROW as a percentage of the total of all soils which are located on private land and as such are developable.

The EIS should include a description of the amount of prime farmland soils within the Caliente rail alignment construction ROW as a percentage of the total of all soils which are located on private land and as such are developable.

Response

The Rail Alignment EIS soil discussion explains several ways in which prime farmland soils are measured along the Caliente rail alignment. Table 3-3 of the EIS lists alignment-specific percentages of prime farmland. Tables 4-2 and 4-3 list upper-bound acreages of prime farmland soils along the alternative segments. Section 3.2.1.2.3 of the EIS identifies the amount of prime farmland in Lincoln and Nye Counties to provide a sense of scale of affected prime farmland soils in those counties. Section 4.2.2 addresses impacts to private land.

3.7.3 (1084)

<u>Comment</u> - RRR000617 / 0130

Page 3-20, Section 3.2.1.3.1.2: The description of mineral resources in the DEIS is incomplete. Pozzolan, a mineral that could be used as a concrete hardening agent in the fabrication of concrete ties and in concrete and shotcrete that might be used in construction of the repository, is located in commercial quantities in Lincoln County near the rail alignment.

The EIS should include the description of commercial pozzolan deposits and active mining for same in the Lincoln County portion of the project area.

Response

There are pozzollan placer claims approximately 2 to 4 miles north of Caliente common segment 1 (DIRS 182762-Shannon & Wilson 2005, Plate 1, and Table 1). Although the extent of the material deposits is unknown, the rail alignment would not restrict access to the existing claims. Further geotechnical studies along the rail alignment would provide additional detail regarding the mineral resources the rail alignment would cross.

3.7.3 (1089)

<u>Comment</u> - RRR000617 / 0126

Page 3-7, Section 3.2.1.1: DOE states that the region of influence for the physical setting includes all areas that would be directly or indirectly affected by the construction and operation of the rail. However, the region of influence is described in most cases as the "nominal width of the rail line construction right-of-way".

The ROI [region of influence] for physical setting should be expanded to include areas of potential direct and indirect impact outside of the nominal width of the construction ROW [right-of-way]. The region of influence, and adverse impacts, extends well beyond the physical limits of construction.

Response

The Physical Setting region of influence includes all areas that the impact analysis for each rail alignment segment would assess. The impact analysis for physical settings included the potential for increased soil erosion and topsoil loss, and the removal of prime farmland soils that soil disturbance during construction would affect. Construction of the rail line could directly affect slope stability from cut-and-fill procedures. Slope-stabilizing best management practices would minimize the potential for direct and indirect impacts. Sections 4.2.1.2 and 4.3.1.2 of the Rail Alignment EIS discuss the potential loss of mineral availability from construction and operation of the proposed Caliente and Mina rail alignments, respectively, by analyzing the presence of economic minerals in the area surrounding the nominal width of the construction right-of-way.

3.7.3 (1119)

Comment - RRR000617 / 0160

Page 4-11, Section 4.2.1.2.1.3: DOE should have analyzed how and if the corridor placement would disrupt irrigation of prime farmland not directly within the right-of-way (particularly irrigated parcels bisected by the rail line). If such disruption would occur, this acreage of the entire disrupted parcel should be included in the acreage calculation of directly impacted prime farmland. DOE refers to 200 acres of Prime Farmland along the Caliente Common Segment 1, as "relatively isolated area in Lincoln and Nye Counties and at present is not being used for agricultural purposes." Prime farmland that is not is being used for grazing may still qualify under the Farmland Protection Policy, depending on the NRCS District Conservationist's decision.

The EIS must include the entire acreage of any irrigated parcel of prime farmland crossed by the rail line in the acreage calculation of directly impacted prime farmland.

The EIS should note that Prime farmland that is not is being used for grazing may still qualify under the Farmland Protection Policy, depending on the NRCS District Conservationist's decision.

Response

DOE consulted with the Nevada Natural Resource Conservation Service office to complete the Farmland Conversion Impact Rating process, during which the Department identified soils of statewide importance. This information supplemented the Prime Farmland soil classification data in the Soil Survey database. Section 4.2.1.2.1.3 of the Rail Alignment EIS explains that the Conservation Service office identified two segments that would potentially cross farmland, centered around the junction between the end of the Caliente and Eccles alternative segments and the beginning of Caliente common segment 1. About 1.2 to 1.5 miles of the northern portion of the Eccles alternative segment would cross private land with the potential to be farmed. There are historical traces of irrigation north of the origin of Caliente common segment 1.

The rail alignment would not cross the historical irrigation traces. In addition, an aerial photo review of the prime farmland soils along Caliente common segment 1 found that Dry Lake Valley is not irrigated. Table 4-12 of the Rail Alignment EIS lists the private lands that the proposed rail alignment could affect.

3.7.3 (1120)

<u>Comment</u> - RRR000617 / 0161

Page 4-13, Section 4.2.1.2.2.1: DOE states: "Soil disturbance from construction activities along either alternative segment would result in localized impacts from the loss of topsoil and an increase in the potential for erosion. However, these impacts would be temporary and would be reduced through a combination of erosion control measures." This statement is another example of the DOE understating the impacts of the Caliente Rail Alignment. The impacts associated with the loss of topsoil cannot be referred to as temporary. Even if all topsoil is reserved and re-applied to the disturbed sites, the soil structure, which is important for moisture retention and erosion control, could take several decades to stabilize. The DOE must be prepared to implement careful restoration of disturbed sites and to monitor restoration sites during the life of the project. By writing off these impacts as "short term" the DOE is not taking responsibility for the impacts of the proposed action.

DOE must accurately distinguish between short-term and long-term impacts with respect to soil/vegetation disturbance and reclamation, and recognize that the impacts discussed above are long-term impacts. DOE must disclose these impacts and implement appropriate restoration measures.

Response

DOE has classified short-term impacts as those during the construction phase (4 to 10 years). The Department would build the proposed rail alignment in phases. When construction of each segment of the alignment was complete, grading, reseeding, and topsoil recovery would begin. Table 7-1 of the Rail Alignment EIS lists the best management practices DOE would implement to conserve topsoil and prevent erosion. Although soils left to natural recovery can take many years to regain their structure, soil erosion best management practices would speed the recovery.

3.7.3 (1121)

<u>Comment</u> - RRR000617 / 0162

Page 4-32, Section 4.2.1.5: DOE states, "With the exception of topsoil loss, the overall impacts would be small because of the best management practices or mitigation measures DOE would implement. There would be a potential for increased erosion because relatively undisturbed land would be extensively graded. Impacts related to soil erosion or loss of topsoil would be small, because implementation of best management practices would effectively reduce the potential for increased erosion and sedimentation that could occur during construction activities. In addition, soil disturbance would be distributed throughout several counties, reducing the concentration of increased soil erosion."

In section 4.1.2, page 4-4 DOE defines a "small" impact as follows: "Small: For the issue, environmental effects would not be detectable or would be so minor that they would neither destabilize nor noticeably alter any important attribute of the resource."

Any area disturbed by the railroad will in all probability remain in a disturbed state for the next 50 to 100 years. The effects will be obvious and in no way minor. Loss of topsoil will destabilize the resource by changing infiltration rates. Loss of topsoil also means the loss of a stable plant community, which supports chemical weathering and soil formation, making recovery an even longer process. These impacts are not "small," nor will BMP [best management practice] implementation reduce the impacts enough to consider them "small".

The EIS must present an improved analysis of the temporal consequences of construction of the rail line on soils and vegetation. The DOE must accurately state the impacts of the rail, and must be prepared to implement environmentally responsible restoration and mitigation practices.

Response

Although a small portion of the total disturbed area would contain the rail line and its service road throughout the life of the Proposed Action, DOE would regrade all other disturbed areas with stockpiled topsoil. The best management practices listed in Table 7-1 of the Rail Alignment EIS provide a framework to restore soils once construction of each rail line segment was complete. During rail line construction, DOE would implement the following best management practice:

- Remove and stockpile topsoil for application during reclamation of disturbed areas.
- Stabilize topsoil stockpiles to prevent erosion. If the topsoil would remain in a stockpile for more than 1 year, seed with native plant species.
- Periodically monitor and maintain the stability of the stockpile to minimize erosion.

The reclamation efforts would include grading the reserved topsoil to the disturbed areas, seeding the soil with native plant species, and monitoring the area to ensure appropriate revegetation. Although the disturbed area would be visible during the proposed rail alignment construction phase, the reclamation efforts would help ensure that the disturbed soils could return to a natural state.

3.7.3 (1133)

<u>Comment</u> - RRR000617 / 0133

Page 3-17, Section 3.2.1.2.3: Prime farmland soils are limited in Nevada due to the arid environment and limited irrigation. The DOE is considering these soils only because the Farmland Protection Policy Act protects them. There are other valuable soils, such as highly productive rangeland soils that are not protected under this Act but are important to Nevada. These can be mapped as "highly productive range soils" in the NRCS soil data viewer. Lincoln County believes the extent of "highly productive range soils" likely exceeds the acreages of prime farmland soils in the County.

The EIS should disclose the acreages and locations of "highly productive range soils" within the ROI [region of influence]. DOE should seek to minimize impacts to said soils. Impacts to said soils should be disclosed in Chapter 4 of the EIS.

Response

DOE analyzed soil impacts from the Proposed Action due to an increased potential for erosion and the potential to remove Prime Farmland classified soils. Highly productive rangeland soils are not protected by federal, state or county regulations. Productive rangeland is affected by the presence of vegetation, water, and grazing animals in addition to appropriate soil characteristics. Section 4.2.2.2.3.2 of the Rail Alignment EIS describes construction impacts to grazing in more detail. Table 7-1 of the EIS includes best management practices that would minimize impacts to soils, which would include highly productive rangeland soils.

3.7.3 (1134)

Comment - RRR000617 / 0134

Page 3-24, Section 3.2.1.3.3.3: DOE states that there are no prime farmland soils along Garden Valley Alternative 8 but Figure 3-8, Page 3-25 suggests otherwise.

The presence or absence of prime farmland soils along the Garden Valley Alternative 8 should be verified in the EIS.

DOE revised the text in Section 3.2.1.3.3.3 of the Rail Alignment EIS to match the percentage of prime farmland soils along Garden Valley Alternative Segment 8 to Table 3-3.

3.7.3 (1348)

<u>Comment</u> - RRR000678 / 0008

With respect to the environment, the Rail SEIS does not provide a complete evaluation of the Caliente Corridor's potential impact on the environment. The Department has failed to closely consider soil erosion and harms to water quality near the railroads, which suggests that DOE simply does not have a complete understanding of its rail alignment proposal. Railroad construction will necessarily dislodge rock and soil, induce erosion, and create a risky environment during flooding events for a railway intended to transport tens of thousands of tons of radioactive waste. The Department's SEIS disregards these potentially disastrous scenarios without providing a technical basis for all of its conclusions.

Response

Although a small portion of the total disturbed area would contain the rail alignment and service road throughout the life of the Proposed Action, DOE would regrade all other disturbed areas with the reserved topsoil. The best management practices listed in Table 7-1 of the Rail Alignment EIS provide a framework to restore soils once each rail alignment segment construction was complete. During rail line construction, DOE would employ the following best management practices:

- Remove and stockpile topsoil for application during reclamation of disturbed areas.
- Stabilize topsoil stockpiles to prevent erosion. If the topsoil would remain in a stockpile for more than 1 year, seed with native plant species.
- Periodically monitor and maintain the stability of the stockpile to minimize erosion.

Reclamation efforts would include placing the reserved topsoil on the disturbed areas, grading and recontouring, and seeding the soil with native plant species and monitoring the area to ensure appropriate revegetation. Using best management practices would ensure that erosion was kept to a minimum.

3.7.3 (1470)

<u>Comment</u> - RRR000656 / 0063

Section 4.2.1.4, page p 4-31: The Shared-Use Option would include the construction and operations activities described in Sections 4.2.1.2 and 4.2.1.3, and private companies would use the rail line for shipment of general freight. Under the Shared-Use Option, potential construction and operations impacts would be very similar to those identified in Sections 4.2.1.2 and 4.2.1.3 for the Proposed Action without shared use.

The Shared-Use Option would require the construction of more rail sidings within the rail line construction right-of-way in areas of relatively flat terrain. A commercial-use interchange facility at the beginning of the line and a facility at the termination point of commercial use to support the Shared-Use Option would also be constructed within the construction right-of-way. The analysis should identify the possibility of commercial rail facilities off the right-of-way, such as Crater Flat or to business parks in Lincoln County. These areas may have construction impacts on the physical setting too. Implementation of the Shared Use Option would increase the area of surface disturbance by less than 0.1 percent (see Chapter 2). There would be a potential for topsoil loss and increased erosion in this area. Under the Shared-Use Option, the rail line would likely be in use for more than 50 years, compared to the railroad operations life under the Proposed Action without shared use. Shared use of the proposed rail line would add no impacts to physical setting beyond the permanent alterations already described.

As noted in the comment, the Shared-Use Option would involve the construction of commercial rail sidings and would include the use of the rail line for commercial trains. DOE agrees that the incremental impacts of the Shared-Use Option would be small.

3.7.3 (1717)

Comment - RRR000656 / 0092

Section 4.3.1.4, page 4-397, Impacts under the shared-use option – Mina: Refer to comments made on the Caliente corridor above (3.7.3 [1470]).

Response

As noted in the comment, the Shared-Use Option would involve the construction of commercial rail sidings and would include the use of the rail line for commercial trains. DOE agrees that the incremental impacts of the Shared-Use Option would be small.

3.7.3 (3521)

<u>Comment</u> - RRR000691 / 0059

A Supplemental or Final EIS studies should include potential impacts for the reduced availability of perlite and or limestone and its economic cost to surrounding communities. Future studies should include the total percentage of anticipated limited mining boundaries. A Supplemental or Final EIS should include an analysis of the potential effects of anticipated leaks and spills that may contaminate soils during railroad operations.

Response

Section 4.2.1.2.2.1 of the Rail Alignment EIS describes impacts to perlite. Sections 4.2.1.2.2.2, 4.2.1.2.2.3, 4.2.1.2.2.12, and 4.3.1.2.2.12 describe impacts to limestone. The *Geotechnical Report Caliente Corridor* (DIRS 183639-Shannon & Wilson 2007) describes the underlying bedrock in more detail. The *Mineral and Energy Resource Occurrence Report* (DIRS 183644-Shannon & Wilson 2007, all) and the *Mineral and Energy Resource Occurrence Report – Mina Rail Corridor* (DIRS 183637-Shannon & Wilson 2007, all) present additional information about the mining potential around the proposed rail alignments. Sections 4.2.12 and 4.3.12 of the EIS describes impacts from leaks and spills; Chapter 6 provides information about remediation procedures.

3.7.3 (4150)

<u>Comment</u> - RRR000524 / 0035

The draft rail EIS indicates that the risk of wind-blown soil deposits is relatively small but does not provide a clear basis for this conclusion. Deep bodies of wind-blown soils can accumulate in small canyons to depths of 15 feet (4.6 meters) or more, and the collapse potential can be 40 percent or more.

Response

The Rail Alignment EIS addresses impacts to wind-blown soil deposits as a function of an increased potential for erosion by wind. Tables 3-3, 3-80, 4-2 through 4-8, and 4-146 through 5-150 provide information about the amount of soil with the NRC-defined blowing soils characteristic, and the discussions of each alternative segment in Sections 4.2.1 and 4.3.1 indicate the amount of blowing soils that could be disturbed. Along alternative segments with a high proportion of blowing soils, erosion best management practices (such as wind fencing) would reduce the amount of erosion in blowing soils. In addition, after DOE chose the final rail alignment, the Department would conduct soil foundation studies in conjunction with the final design. DOE would use the results of the studies to determine engineering techniques and features for rail line construction and practices for railroad operations that would reduce the impacts of the project associated with erosive soils and impacts to the rail line from erosive soils.

Application of these measures would help ensure that the environmental impacts due to wind-blown soil would be small.

3.7.3 (4156)

<u>Comment</u> - RRR000524 / 0042

The rail alignment passes less than 2 kilometers (1.2 miles) north of both Dry Lake Playa (Section 3.2.5.3.2 and Figure 3-61) and Mud Lake Playa (Section 3.2.5.3.6 and Figure 3-69). The geotechnical characteristics of the ground beneath the alignment may be the same as the areas designated as playa; however, the draft rail EIS does not appear to discuss special construction considerations or impacts that may be associated with these features.

Response

Section 4.2.1.2.2.8 of the Rail Alignment EIS describes potential impacts related to soft soils in playa deposits, including special considerations for restoration activities. In addition, the individual rail alignment segment discussions in Section 3.2.1.3 of the EIS also indicate where playa soils are present in the vicinity of the proposed rail alignment.

When DOE initially planned the rail alignments, it made adjustments to avoid playa soils and playa lakebeds. As noted in the comment, the current alignments are roughly 1 mile or more away from playa lakes. This would be sufficient separation to avoid soft playa soils.

The rail line would be an engineered structure that would require detailed foundation soil studies as part of the final design. This would ensure the avoidance or mitigation of playa soils.

3.7.3 (4160)

<u>Comment</u> - RRR000524 / 0040

Section 4.2.1.2.1.2 states that rail line construction activities, such as blasting and other cut procedures, would have the potential to induce rock falls and landslides. The draft rail EIS concludes that construction activity impacts would not include inducing earthquakes or reactivating faults. However, no clear technical basis is provided for the conclusion.

Response

Bedrock blasting would be necessary to construct the rail line. DOE would follow all mandated safety procedures and best management practices to ensure that bedrock removal occurred in a safe and controlled manner. The loci of modern earthquakes in the Southern Great Basin occur at depths between 1.2 to 7 miles beneath the Earth's surface. It is extremely unlikely that removing rock at the surface would generate the stress necessary to activate a fault at these depths.

3.7.3 (4166)

<u>**Comment**</u> – 2 comments summarized

Commenters noted that Section 3.2.1.2.3 of the Rail Alignment EIS stated that soil surveys around the Nevada Test Site and the Nevada Test and Training Range are not complete. This section also states that, for areas with no available soil data, DOE did not consider the unavailable data critical to the design and construction of a railroad along the Caliente rail alignment because it expected soils to be similar to those already surveyed. However, there are attributes of the rail line in the last 5 percent of the proposed route that differ from previous descriptions (for example, sand ramps around Busted Butte). The EIS does not appear to discuss the risk of dispersive soil in arid regions. Construction of embankments using dispersive soils could result in rapid erosion during flooding events.

DOE conducted several field surveys along the Caliente rail alignment, as described in Section 3.2.1.2.2 of the Rail Alignment EIS. The Department conducted literature and field reconnaissance investigations to obtain an understanding of the geologic and soil conditions along the alignment. The resulting Geotechnical Report (Volumes I and II; DIRS 182854-Shannon & Wilson 2006; DIRS 183639-Shannon & Wilson 2007, all) described the geologic hazards (for example, debris flow, mine subsidence, bridge scour, soft soils, embankment settlement and erosion, and liquefaction) and identified the locations of difficult soil conditions, including the area along Busted Butte. In addition, DOE consulted the Natural Resources Conservation Service soil database to analyze soil conditions in more detail. Additional geotechnical and engineering surveys along the finalized rail alignment would identify engineering restrictions along the alignment and clarify the procedures to mitigate them.

The rail line would be an engineered structure that would require detailed foundation soil studies as part of the final design. This would ensure that DOE avoided or otherwise mitigated erosive soils.

3.7.4 Surface- and Groundwater Resources

3.7.4.1 Surface-Water Resources

3.7.4.1 (115)

<u>Comment</u> – 2 comments summarized

Commenters expressed concern about direct and indirect impacts to wells, springs, and other water sources for livestock and wildlife watering. They noted a number of water sources in and adjacent to the construction right-of-way.

Response

For the Rail Alignment EIS analysis, DOE screened the area for surface-water resources within 1 mile of the centerline of the rail alignment, including springs (see Sections 3.2.5.3 and 3.3.5.3 for descriptions). As described in Sections 4.2.5.2.1.7 and 4.3.5.2.1.7 of the EIS, DOE designed the rail line to avoid springs whenever practicable. If there would be impacts to springs in the construction right-of-way, the Department would incorporate avoidance and control measures in the final engineering and design of the rail line to minimize impacts. DOE modified this statement to clarify that it would take such measures as necessary for springs outside the right-of-way but within 1 mile of the rail line. Sections 4.2.5.2.2.1 through 4.3.5.2.2.12 of the EIS address impacts to springs outside the construction right-of-way, as applicable, for specific segments. Sections 4.2.2 and 4.3.2 address impacts on access to water (surface or groundwater) for livestock operations.

DOE expanded Sections 4.2.5.2.1.7 and 4.3.5.2.1.7 of the Rail Alignment EIS to clarify impacts to springs in and outside the construction right-of-way, as applicable; and refers readers to the land use and biological resources sections for impacts on access to water for livestock and wildlife.

As indicated in Sections 4.2.6.2.1 and 4.3.6.2.1 of the EIS, railroad construction activities could occur near one or more existing wells. However, based on available data, DOE does not anticipate that construction activities would disturb existing wells. In the unlikely event that DOE identified potentially affected wells before rail roadbed construction, it would take steps to minimize impacts to those wells, such as advising well owners of planned activities and discussing with the owners measures needed to protect the wellhead (the portion of the well above the surface) during construction.

3.7.4.1 (174)

<u>**Comment**</u> – 3 comments summarized

Commenters said the Rail Alignment EIS failed to address flooding impacts to the proposed rail line considering the history of periodic floods that have damaged Union Pacific Railroad rail lines in eastern Nevada.

Response

As described in Sections 3.2.5.2.4, 3.3.5.2.4, F.2.1.1, and F.2.1.2 of the Rail Alignment EIS, DOE used the best available data to identify floodplains. Information sources include Federal Emergency Management Agency maps, the Hydrologic and Drainage Evaluation Report for the Caliente Rail Corridor (DIRS 182755-Parsons Brinckerhoff 2005, all), Hydrologic and Drainage Evaluation Report -Mina Rail Corridor (DIRS 180885-Parsons Brinckerhoff 2007, all), and DIRS 176903-DeLew, Cather and Company (1992, Appendix H). These descriptions provided characteristics of precipitation events in the area, including patterns, intensity and duration, and characteristics of storms that have triggered flooding events along the proposed rail alignments, including peak flow data. The hydrologic report describes other storm events that have occurred in the area that caused flooding. These flooding events were primarily a result of large flooding events that occurred in and around the proposed rail alignments and that DOE has incorporated in the Rail Alignment EIS. Sections 3.2.5.2.1.2 and 3.3.5.2.1.2 of the EIS provides available U.S. Geological Survey historical flow data measured in streams of the hydrographic regions along the proposed rail alignments; however, historical 100-year, floodplain-specific data for all segments along the rail alignment are not available. In addition, Sections 4.2.5.2.1.6, 4.3.5.2.1.6 F.3.1.1, and F.3.1.2 of the EIS describe impacts and engineering design and construction practices DOE would implement to minimize adverse impacts from flooding during construction activities along the proposed rail alignments.

DOE used currently accepted best practices to perform the floodplain analysis. The impact of climate change on flood frequency, if any, is highly speculative and not within the scope of the Rail Alignment EIS. DOE would perform additional flood analysis and hydraulic modeling during the design phase of the railroad.

3.7.4.1 (824)

<u>Comment</u> - RRR000668 / 0002

EPA [U.S. Environmental Protection Agency] is concerned that the preferred alignment, i.e., the Caliente rail alignment, may require the filling of up to 81 acres of waters of the U.S., including wetlands associated with the Meadow Valley Wash and Clover Creek (Table 4-58). These wetlands represent one of the few remaining riparian areas in southern Nevada that supports mature native vegetation. The direct loss of these resources would eliminate habitat for wildlife, including the endangered southwestern willow flycatcher, and could contribute to altered flow regimes and changes to erosion and sedimentation rates in the remaining aquatic resources in the watershed. Despite these potentially significant impacts to waters of the U.S., the draft EIS does not provide an analysis of how these proposed discharges of fill material would meet the requirements of the Clean Water Act Section 404(b)(l) Guidelines ("Guidelines"). We are particularly concerned that the draft EIS does not provide information to demonstrate that the preferred alignment represents the "least environmentally damaging practicable alternative" under the Guidelines and does not provide specific information regarding potential mitigation measures to compensate for any unavoidable impacts.

We note that the majority of impacts to waters of the U.S. are associated with construction of support facilities, rather than the rail line itself. For example, construction of the Indian Cove staging area along the Caliente alternative segment would result in filling of 47 acres of wetlands in Meadow Valley Wash. Construction of the Eccles alternative segment interchange yard would result in the filling of 8.2 acres of Clover Creek. An additional 22 acres of wetlands in Meadow Valley would be filled if quarry CA-8B is

built. According to the draft EIS, there may be alternative locations for these facilities that would be less damaging to aquatic resources.

We are also concerned about the limited analysis regarding the hydrologic effects of the rail line construction to the Meadow Valley Wash area. Given that the proposed Eccles alignment is at the mouth of two unnamed tributaries that contribute to high flows in Clover Creek, we would expect that the rail line construction may constrict the stream channels and potentially lead to higher flow events, causing erosion and sedimentation impacts. We also note that the Eccles alternative segment, both where it crosses Clover Creek and at the proposed interchange site, would impact a riparian restoration site that is currently subject to monitoring and maintenance as part of an EPA enforcement action.

Finally, we are concerned that the presentation of information regarding impacts to wetlands and other waters of the United States makes it difficult to compare alternatives and discern the extent of impacts. For example, the summary of impacts to waters of the United States (presented in Table 4-56 for the Caliente Rail Alignment and Table 4-202 for the Mina Rail Alignment) does not include impacts to jurisdictional wetlands, and appears to be inconsistent with information presented in Tables 2-31, 4-58 and 4-204.

In light of the concerns stated above, we recommend that additional information and analysis regarding compliance with the Guidelines be included in the final EIS, and that the information specifically discuss the steps taken to avoid, minimize and mitigate impacts to wetlands and other waters of the United States. Specifically, we recommend that the final EIS include the following information and analyses:

- 1. A detailed information (e.g., maps, tables) regarding the extent of wetlands and other waters that may be impacted by the proposed alignments, including a Clean Water Act jurisdictional determination by the US Army Corps of Engineers;
- 2. A description of the nature of the potential impacts (i.e., permanent or temporary; direct, indirect or cumulative);
- 3. A differentiation between impacts that would occur from construction of the rail line, staging yards, interchange yards, and quarries;
- 4. A functional assessment of the impacted wetland resources, using a hydrogeomorphic methodology or other US Army Corps of Engineers' approved methodology;
- 5. A n analysis of the practicability of avoiding wetland impacts by not using the Indian Cove staging yard and potential quarry site CA-8B (which would fill 47 and 22 acres of wetlands, respectively) and instead using the Upland staging yard and other quarry sites which would potentially have less impacts to aquatic resources;
- 6. An analysis of the practicability of further alternatives for connecting the Caliente rail alignment to the Union Pacific Railroad Mainline that avoid impacts to Meadow Valley Wash and Clover Creek;
- 7. An analysis of the practicability of avoiding wetland impacts on the Eccles rail alignment, which has 8.2 acres of fill associated with the interchange yard;
- 8. An analysis of the practicability of using a variation to the Mina rail alignment (which would, as currently proposed, impact only 0.005 0.007 acres of wetlands (Table 2-31, p. 2-123)), recognizing that the Walker River Paiute Tribe have expressed their objections to transporting nuclear or radioactive waste through their Reservation; and
- 9. A detailed compensatory mitigation plan for unavoidable impacts, including an identification of how the compensatory mitigation sites would be managed and financial assurances to ensure that the

compensatory mitigation projects will be implemented successfully and protected over the long-term.

Response

In response to the concerns raised by the U.S. Environmental Protection Agency and other commenters about potential impacts to wetlands, DOE has developed design changes and stated a preference for an alignment and associated facilities that would avoid, minimize, and mitigate to the extent practicable, impacts to wetlands and other waters of the United States. As described in Section 4.2.5.2 and Appendix F (Section F.3.2.1.1) of the Rail Alignment EIS, implementing these changes would reduce the amount of wetlands that would need to be filled to construct the Caliente alternative segment, Upland Staging Yard, and associated ballast quarry siding to about 8.7 acres.

DOE substantially expanded the description of wetlands along the alignments; analysis of potential impacts to those wetlands; and explanation of the process followed to avoid, minimize, and mitigate impacts to wetlands to address this comment. The Department expanded Sections 4.2.5 and 4.3.5, Appendix F (Sections F.3.2.1, F.3.3.4, and F.4.1.2), and the description of preferred alternatives in Section 2.4 to better describe how the preferred alternative meets the requirements of Section 404(b)(1) of the Clean Water Act. These sections describe how the preferred alternative avoids and minimizes impacts to wetlands to the extent practicable and explain why the preferred alternative rail alignment and facility locations are the "least environmentally damaging practicable alternative." DOE added text to Sections 4.2.5.2.2 and 4.3.5.2.2 and Appendix F (Sections F.3.2 and F.3.3) to describe, for each rail alignment segment, why further avoidance of wetlands and other waters is not practicable. DOE expanded Appendix F (Section F.4.4.3) to explain how DOE plans to mitigate losses of wetlands.

DOE currently plans to utilize Section 404(r) of the Clean Water Act to obtain an exemption from the Section 404 permit process for the discharge of dredged or fill material in connection with construction of the rail line. DOE estimates that it would seek such authorization following issuance of a Record of Decision selecting a rail alignment and prior to the actual discharge of dredged or fill material in connection with construction of the rail line and prior to an appropriation of funds for such construction. Appendix F of the Rail Alignment EIS includes a description of how DOE would comply with the Section 404(r) requirements.

DOE made the following changes to address the specific U.S. Environmental Protection Agency recommendations:

- 1. Description of Wetlands: DOE revised the description of wetlands in Appendix F (Sections F.3.2.1 and F.3.3.4) to better describe the extent of wetlands along the Caliente and Mina rail alignments and added tables summarizing the extent of wetlands within each alternative segment and facility location to Sections 4.2.5.2.1.4, 4.3.5.2.1.4, and F.4.1.2) and included maps showing the locations of wetlands in Appendix F. As now stated in Section 4.2.5.2.1.5, a request was submitted to the U.S. Army Corps of Engineers in October 2007 for a jurisdictional determination of wetlands and other waters of the United States along the Caliente alignment that might be regulated under Section 404 of the Clean Water Act. The results of that determination were not available for inclusion in the Rail Alignment EIS.
- Description of Potential Impacts: DOE expanded the description of the nature of potential impacts to wetlands in Sections 4.2.5.2.2, 4.3.5.2.2, and Appendix F, and added a description of the wetland functions that could be affected by the Proposed Action. DOE expanded Sections 4.2.5.2.1.1, 4.3.5.2.1.1, and Appendix F (Sections F.3.1.3 and F.3.1.4) to better describe potential changes to natural drainage patters, flow regimes, and erosion and sedimentation rates from constructing in wetlands. The Department added information to Section 4.2.7.2.1.3 (Biological Resources) to better

describe potential losses of habitat for wildlife, including the endangered southwestern willow flycatcher, from constructing within and near wetlands and riparian areas along the Caliente rail alignment.

- Differentiation of Impacts Among Alternatives: DOE clarified the amount of wetlands that would be filled for each alternative segment and associated facilities (see Sections 4.2.5.2.2, 4.3.5.2.2, F.3.21.1.1.2, F.3.2.1.2.2, and F.3.3.4), and added summary tables to better differentiate the potential impacts to wetlands among alternative segments and facilities.
- 4. Functional Assessment: As described in Appendix F (Section F.2.2.1), and summarized in Sections 4.2.5.2.1.5 and 4.3.5.2.1.5, DOE conducted field investigations and literature reviews to develop a functional assessment of wetlands along the Caliente and Mina rail alignments. That assessment was based on a hydrogeomorphic-based wetlands assessment procedure developed for use in the Basin and Range landform. The Department used the results of that assessment to better describe potential impacts to wetlands, and added Tables summarizing potential impacts to wetlands functions to Appendix F (Tables F-6, F-9, and F-12).
- 5. Caliente Alternative Segment Facilities: DOE added a discussion of the practicability of selecting alternative facility locations along the Caliente segment that would avoid or minimize impacts to wetlands to Appendix F (Sections F.3.2.1.1.2 and F.4.1.2). As described in that Appendix, DOE has stated a preference for the Upland Staging Yard to avoid filling of wetlands during construction of that facility. DOE also has identified a variation of the proposed location for the associated quarry siding that would reduce the amount of wetlands filled from 22 to 1.6 acres. DOE added an explanation of why it would not be practicable to further avoid or minimize filling of wetlands along the Caliente alternative segment to Section F.3.2.1.1.2.
- 6. Alternatives for Connecting to the Union Pacific Mainline: DOE added an evaluation of other beginning-of-line options for the Caliente rail alignment to Section 4.2.5.2.2.1 and Appendix F (Section F.4.1.2) to examine whether a practicable alternative exists that would not require filling of wetlands or otherwise impact aquatic resources in Meadow Valley Wash or Clover Creek. Based on that analysis, DOE has concluded that the Caliente alternative segment is the practicable beginning-of-line alternative with the least adverse impacts to aquatic ecosystems.

3.7.4.1 (1140)

<u>Comment</u> - RRR000617 / 0139

Page 3-137, Section 3.2.5.3.1.1: Beginning here and in following sections of Chapters 3 and 4, the text describes various surface waters as "waters of the United States". As only EPA and the Corps of Engineers can make this jurisdictional determination, and given that most, if not all of the surface water features have not been considered yet by either agency, the text should in all appropriate cases be revised to describe these as "potentially or potential jurisdictional waters of the United States".

As appropriate, all references in the DEIS to "waters of the United States" should be revised to "potentially or potential waters of the United States".

Response

Sections 4.2.5.2.1.4 and 4.3.5.2.1.4 state:

"The U.S. Army Corps of Engineers is responsible for determining whether drainages and wetlands along the rail alignment are regulated under Section 404; therefore, all conclusions in this analysis about the classification of washes and wetlands as waters of the United States are tentative. On June 5, 2007, the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers released interim guidance that addresses the jurisdiction over waters of the United States under the Clean Water Act. Based on this guidance, it is likely that many of the drainages along the rail alignment that DOE currently considers to be waters of the United States might not be considered as such. If DOE selected the Caliente rail alignment for construction of the proposed railroad, the Department would request that the U.S. Army Corps of Engineers determine the limits of jurisdiction under Section 404 along the rail alignment before beginning construction."

This statement did not appear specifically in Appendix F in the Draft Rail alignment EIS, but DOE added similar text to Section F.2.2. DOE completed a delineation of wetlands along the Caliente rail alignment and submitted it to the U.S. Army Corps of Engineers in October 2007 with a request for a jurisdictional determination to identify which waters are regulated under Section 404 of the Clean Water Act.

3.7.4.1 (1211)

Comment - RRR000617 / 0179

Page 4-135, Section 4.2.5.2.2.1: The total area of wetlands within 30 meters (100 ft.) of the rail line (the area delineated by DOE) would be 0.28 square kilometers (68 acres). DOE plans to disturb at least 68 acres of wetland along the proposed rail alignment. All of these wetlands occur within the Panaca Valley hydrologic basin. This would result in a loss of 3% of the North American arid west emergent marsh vegetation type within the Panaca Valley basin, as defined by the RE-GAP vegetation data. The fact that no other marsh habitat is mapped along the Caliente Corridor highlights the importance of protecting this habitat where it does exist. These limited wet areas are vital to maintaining biological diversity throughout Nevada. DOE should consider an alternative route that avoids wetland habitat. In doing so, the DOE could also design this alternative to avoid the private land conflicts that plague the Caliente Alternative Segment.

The following sections also deal with this issue:

Page 4-144. Section 4.2.5.2.3.2 -- Indian Cove Wetland Fill. 47 acres of wetland to be filled for the Indian Cove Staging Yard.

Page 4-146. Section 4.2.5.2.4 -- Quarry CA-8B Wetland Fill. 22 acres of wetland filled for the quarry siding.

The EIS should fully analyze alternatives to the Indian Cove Staging Area location which serve to avoid or minimize impacts to wetlands and private property. Alternatives might include a site in Dry Lake Valley or in Caliente on city-owned land near the City's existing wastewater treatment facility.

Response

In response to this and similar questions, DOE conducted additional analyses to evaluate methods for avoiding and minimizing impacts to wetlands along the Caliente alternative segment. The preferred alternative identified in the Final Rail Alignment EIS would require the filling of about 8.5 acres of wetlands. As described in Sections 4.2.5.2.2 and F.3.2.1 of the EIS, DOE reduced impacts to wetlands by selecting the Upland as the preferred location for the Staging Yard, moving the proposed location of a quarry siding just south of Beaver Dam Road to support the Upland Staging Yard, and incorporating design features that would avoid wetlands. DOE modified those sections to better evaluate methods for avoiding and minimizing impacts to wetlands. In addition, DOE examined possible sites for a staging yard south of Caliente near the wastewater treatment facility and found that the slope in the area is too steep for construction of the yard. DOE did not consider a potential location for the Staging Yard in Dry Lake Valley in the Rail Alignment EIS because the site would be too far from both the Caliente alternative segment and the Union Pacific Mainline to be feasible.

3.7.4.1 (1349)

<u>Comment</u> - RRR000678 / 0009

The Rail SEIS also fails to consider the flow into springs and wetlands of poor quality water -- water that has been mixed with chemicals, sediment, and petroleum products spilled from construction equipment.

Response

DOE analyzed impacts to surface-water quality during construction and operation of the proposed railroad and expects such impacts to be small (see Sections 4.2.5.2.1.2 and 4.3.5.2.1.2 of the Rail Alignment EIS). All operations and maintenance activities would have to comply with applicable regulatory requirements for spill-prevention measures and for reporting and remediating spills of oil or hazardous substances. Storm-water pollution control practices require implementation of best management practices; storage of hazardous materials inside facilities, secondary containment, or other protective devices; and spill control and containment equipment close to hazardous material and fuel storage areas. A Spill Prevention, Control, and Countermeasure Plan would be necessary for all rail line operations.

3.7.4.1 (1491)

<u>Comment</u> - RRR000656 / 0068

Construction impacts to surface-water resources under the Shared-Use Option would be similar to those identified for the Proposed Action without shared use. The Shared-Use Option would involve the construction of additional sidings, which would be approximately 300 meters (980 feet) long and would be aligned parallel to the rail line within the construction right-of-way. Construction of these additional sidings would involve the same types of land disturbance as for the Proposed Action without shared use, but with minor additive impacts.

General freight shipped on the rail line could include mineral products, petroleum, agricultural products, or other commodities shipped or received by private companies. Spills of oil or hazardous substances carried on the rail line as general freight could affect surface-water resources.

Response

The construction of commercial sidings under the Shared-Use Option would involve the same types of land disturbance as those for the Proposed Action without shared use. Potential impacts without shared use would be release and spread of contaminants by precipitation or intermittent runoff events or, for portions of the rail line near surface-water bodies, alteration of natural drainage patterns or runoff rates that could affect downgradient resources and the need for dredging or filling of perennial or ephemeral streams. Adverse impacts to surface-water resources from constructing commercial sidings under the Shared-Use Option would add little to these potential impacts because DOE would use the same control measures to minimize impacts, as described in Sections 4.2.5.2 and 4.3.5.2 of the Rail Alignment EIS. Sections 4.2.5.4 and 4.3.5.4 of the EIS discuss impacts to surface-water resources from construction and operation of additional sidings under the Shared-Use Option. Even though there would be different commodities on trains under this option, the conclusions about operations and potential spills would be valid.

All rail line operations under the Shared-Use Option would have to meet the same environmental regulations as the Proposed Action without shared use. All operations and maintenance activities would have to comply with applicable regulatory requirements for spill-prevention measures and for reporting and remediating spills of oil or hazardous substances. Stormwater pollution control practices require implementation of best management practices; storage of hazardous materials inside facilities, secondary containment, or other protective devices; and spill control and containment equipment close to hazardous material and fuel storage areas. A Spill Prevention, Control, and Countermeasure Plan would be necessary for all rail line operations.

3.7.4.1 (1671)

<u>Comment</u> - RRR000710 / 0005

One example is the roadbed having a (purportedly) minor impact to infiltration on a watershed basis; however, the post-storm accumulation of water along the roadbed on all upslope areas will attract cattle, wild horses, and wildlife to the pools to drink, which will significantly increase the likelihood of collision with the trains. Thus a small impact on infiltration may have a significant impact on wildlife, wild horses, and livestock grazing.

Response

Accumulation of surface water on the upgradient sides of the rail line in some areas could result from cutand-fill operations during rail line construction. There would be alteration of some natural drainage patterns. Sections 4.2.5.2.1.1 and 4.3.5.2.1.1 of the Rail Alignment EIS state that during construction, regrading would be performed so that a number of minor drainage channels would collect in a single culvert or pass under a single bridge, resulting in water flowing from a single location to the downstream side rather than across a broader area. This would reduce the potential for surface-water accumulation along the rail roadbed during operations. As a result, there would be some accumulation during and following storm events and localized changes in drainage patterns, but DOE would use standard engineering design and construction practices to minimize it. Sections 4.2.5.2.1.1 and 4.3.5.2.1.1 describe the practices DOE would use to reduce impacts due to changes in surface-water drainage patterns and impede flow. The preliminary design includes structures to accommodate drainage features the rail line would cross. DOE would use culverts, channelization, and other means of runoff control to minimize the potential for water backup.

DOE expanded Sections 4.2.5.3 and 4.3.5.3 of the Rail Alignment EIS to clarify the impacts from surface-water accumulation on the upgradient side of the rail roadbed during operations and specifically to address how engineering design and construction practices would minimize surface-water accumulation. DOE would incorporate these methods and practices into the final design process for the railroad.

From a land-use perspective, DOE has designed the rail line to allow surface-water runoff from storms and snowmelt events that could generate a 50-year flood. The runoff would pass through embankments produced by the placement of culverts so there would be little impedance of surface water returning to normal runoff channels. There could be small ponding near the rail line; DOE added text to Sections 4.2.2 and 4.3.2 of the Rail Alignment EIS to acknowledge the possibility of increased train strikes of wildlife and livestock. DOE would work with the BLM and permittees to implement engineering controls to minimize the loss of livestock and wildlife, which could include additional culverts, grading, or fencing in problem areas.

3.7.4.1 (3162)

<u>Comment</u> - RRR000691 / 0032

The EIS is absent information concerning whether anticipated changes in sedimentation rates and drainage patterns will adversely impact local plants, fish or wild life.

Response

DOE added text to Sections 4.2.5.2.1.1 and 4.3.5.2.1.1 of the Rail Alignment EIS to refer the reader to Sections 4.2.6 and 4.3.7 for a discussion of impacts to local plants, fish, or wildlife resulting from surface disturbance activities.

3.7.4.1 (3164)

Comment - RRR000691 / 0034

The EIS is absent information concerning the amount of wetland fill anticipated and the modifications anticipated to reduce the need for wetland fill. The EIS is also absent information to determine impacts due to raising or decreasing water levels in the wetland areas.

Response

Sections 4.2.5.2.2 and 4.3.5.2.2 of the Rail Alignment EIS contain wetland fill estimates for the Caliente and Mina rail alignments, respectively. DOE revised the EIS to provide summary tables of wetland fill estimates in Sections 4.2.5.2.1.4 and 4.3.5.2.1.4, and to expand the description of avoidance measures and minimization methods. Sections 4.2.5.2.1.1 and 4.3.5.2.1.1 describe standard engineering design and construction practices DOE would implement to prevent surface-water backup or flow impediment. The Department would use these methods to accommodate runoff and stream flow and minimize adverse impacts to water-level changes in wetland areas during rail line construction and operations.

DOE expanded Sections 4.2.5.2.1.5 and 4.3.5.2.1.5 to address how these methods would minimize impacts to water-level changes in wetland areas, and has revised Sections 4.2.5.3 and 4.3.5.3 to address impacts and describe standard engineering design and construction practices it would implement to prevent surface-water backup or flow impediment during operations. The Department would perform additional flood analysis and hydraulic modeling during the final design phase of the railroad to identify and implement ways to minimize flow impediment.

3.7.4.1 (3419)

<u>Comment</u> - RRR001082 / 0003

Effects to the floodplain of Fortymile Wash would occur from improvements to the existing access road where it crosses Fortymile Wash. Construction activities could reduce the area through which floodwaters naturally flow. However, none of these actions would be likely to increase the risk of future flood damage, increase the impact of floods on human health and safety, harm the natural and beneficial values of the floodplains because there are no nearby human activities or facilities upstream or downstream that floods could affect. There are no delineated wetlands at or near Yucca Mountain.

Response

Thank you for your comment.

3.7.4.1 (3664)

<u>Comment</u> - RRR000101 / 0002

The commenter said that DOE did not address flooding impacts to tribal lands in the Death Valley area. He suggested that DOE analyze 100-year and 500-year floods.

Response

Figures 3-70, 3-185, and F-12 of the Rail Alignment EIS show surface-water features and floodplains near tribal lands close to the rail alignment in the Death Valley area (Scottys Junction). Sections 4.2.5.2.1.6 and 4.3.5.2.1.6 address flooding impacts. As stated in those sections, DOE would conduct hydraulic modeling and adhere to design standards that would substantially limit the potential for adverse impacts to populations and resources adjacent to floodplains.

3.7.4.1 (4148)

<u>Comment</u> - RRR000524 / 0047

Section 4.2.5.2.1.7 states that the rail line would be designed to avoid springs whenever practicable. However, impacts are not documented for those discharge areas where avoidance is not possible.

Section 4.2.2.3.1.2 of the Rail Alignment EIS addresses spill and contamination potential. In addition, Section 4.2.5 and Chapter 6 of the EIS mention National Pollutant Discharge Elimination System compliance, which would require DOE to implement certain measures to ensure that degradation of water resources was minimized. Table 7-1 lists best management practices for construction activities.

Section 4.2.5.2.1.7 of the Rail Alignment EIS states, "In the few cases where there would be springs inside the construction right-of-way, the Department would incorporate avoidance and control measures into final engineering and design of the rail line in order to minimize impacts." Section 3.2.5.3 of the EIS identifies the springs in the right-of-way of the proposed rail alignment that are analyzed in Section 4.2.5.2.2 for each rail segment. Sections 4.2.5.2.2.1 through 4.2.5.2.2.12 discuss individual unavoidable impacts for each rail segment in which springs were identified. For example, Section 4.2.5.2.2.7 identifies impacts to springs in the construction right-of-way for the Goldfield alternative segments3 and lists the methods DOE would use to minimize impacts to springs. Section 4.2.5.2.2 of the EIS states that construction would adversely affect these springs, which would be fenced or flagged during construction.

Data from the Nevada Division of Water Resources in support of the hydrologic analysis in the Rail Alignment EIS included springs. The *Alignment Development Report – Caliente Rail Corridor* documents potential conflicts with springs on a segment-by-segment basis (DIRS 180916-Nevada Rail Partners 2007, all). The alignment derivation process would include a 400-meter spring avoidance criteria, which DOE would adhere to in all but one area. Section 4.2.5.2.2 discusses impacts to springs along the rail line, as applicable. DOE expanded the discussion of avoidance of springs in Section 4.2.5.2.1.7.

3.7.4.1 (4149)

<u>Comment</u> - RRR000524 / 0048

Table 4-54 of section 4.2.5.1 states that adverse impacts on wetlands or waters from altered drainage patterns are discussed. However, the draft rail EIS does not include this discussion.

Response

Sections 4.2.5.2.1.4 and 4.2.5.2.1.5 of the Rail Alignment EIS discuss impacts to waters of the United States and wetlands, respectively, from altered drainage patterns. Section 4.2.5.2.2 discusses impacts to waters and wetlands for individual alternative and common segments, and Section 4.2.5.2.3 discusses such impacts for the construction of facilities. In addition, DOE revised Appendix F and the summary of water and wetlands impacts in Section 4.2.5 to evaluate more consistently and thoroughly impacts for each alternative alignment and facility. The analysis is site-specific and considers existing conditions at each site (for example, the presence of existing disturbances such as the old rail roadbed and grazing).

3.7.4.1 (4152)

<u>Comment</u> - RRR000524 / 0037

The draft rail EIS does not clearly describe the ability of the Beatty Wash Bridge to withstand the largest design flood (Table F-4). The discussion in Appendix F of the flooding analysis does not include a technical basis for whether the proposed Beatty Wash Bridge abutments and supports affect the downstream flood potential of the Wash.

Response

DOE added text and a technical reference, which discusses the Beatty Wash Bridge, to Appendix F, Section F.3.2.12 of the Rail Alignment EIS. *Phase 1 Hydrologic and Drainage Evaluation Report Mina Rail Corridor* (DIRS 180885-Parsons Brinkerhoff 2007, pp. 1 to 16) describes the study that investigated the 100-year peak flow for the bridge that would cross Beatty Wash on U.S. Highway 95. This report lists the 500-year storm event as a basis for the design of bridges where scour could be an issue. The Beatty Wash Bridge would have two piers in or near the floodway of the ephemeral stream. During preliminary design, flood models would determine the flow of the 500-year storm. This would be the minimum return event for design of the foundations and protection against scour. The foundations would be founded in rock and armored in accordance with American Railway Engineering and Maintenance-of-Way Association and Nevada Department of Transportation recommendations to prevent scour. A pier in the floodway would create a minor blockage and cause a slight detention of flow above the bridge. The bridge would have no negative impact on flooding downstream.

3.7.4.1 (4159)

<u>Comment</u> - RRR000524 / 0045

Section 4.2.5 of the draft rail EIS does not include average water quality values found below rail lines that are in use and that have a climate and sediments similar to those of the Caliente rail alignment. This information could characterize the effects of rail use on water quality below railroad beds, accounting for factors such as routine use of herbicides and other chemicals, as well as small but continual spills from lubricants and fuel.

Response

Proposed railroad construction and operations would inevitably result in minor releases of lubricants, fuels, herbicides, and other chemicals into isolated areas of the groundwater below the rail line. However, these activities would not result in an impact to overall groundwater quality. Prior to construction, DOE would request a right-of-way grant from the BLM in accordance with 43 CFR Part 2800; Section 2805.12 mandates that DOE comply with all water quality standards in applicable federal and state laws and regulations. In addition, 43 CFR 2805.12 mandates that DOE must do everything to suppress or prevent wildfires. This involves vegetation management activities in the right-of-way. These activities would be enforced in accordance with BLM Handbook 2801.

Chapter 6 of the Rail Alignment EIS discusses stormwater and pollution discharge management plans as required by the Clean Water Act and the Safe Drinking Water Act. In addition, as discussed in Chapter 6, the State of Nevada Division of Environmental Protection requires a temporary permit to work in any waters of the state (including dry washes).

Chapter 7 of the EIS discusses best management practices DOE would implement during the construction and operations phases. These would include preparing and submitting a stormwater pollution prevention plan; applying herbicides during calm weather to avoid runoff into the surrounding environment; and developing a spill prevention plan for petroleum products and other hazardous materials.

3.7.4.2 Groundwater Resources

3.7.4.2 (140)

<u>**Comment**</u> – 4 comments summarized

The Rail Alignment EIS must provide a far more comprehensive evaluation of the cumulative demand for and impacts to water resources from the Proposed Action, past and present actions, and reasonably foreseeable future actions.

Response

Sections 4.2.6.1 and 4.3.6.1 of the Rail Alignment EIS describe the methodology DOE used to evaluate potential impacts to wells, springs, and seeps due to the proposed groundwater withdrawals. Appendix G of the EIS describes this methodology in more detail. Potential impacts to evaluated springs and seeps include potential reductions in flow (discharge) rates and attendant reductions in water quality.

DOE revised Sections 4.2.6.2.1 and 4.3.6.2.1 of the EIS to describe the process by which DOE would submit water rights applications for the proposed wells to the State Engineer for consideration.

Tables 3-36 (for the Caliente rail alignment) and 3-114 (for the Mina rail alignment) list existing NDWRlisted wells having appropriate water rights, existing domestic wells, and existing U.S. Geological Survey-listed wells within either 1 mile of the centerline of each proposed rail alignment segment or within a 1-mile radius of any proposed well. These tables also list information on the use category of each existing NDWR-listed well. Figures 3-75 through 3-82 (for the Caliente rail alignment) and Figures 3-190 through 3-196 (for the Mina rail alignment) show the approximate locations of these existing wells. These tables and figures reflect data on the following wells and well-use types within the 1-mile search distance: (1) existing domestic wells (tables and figures); and (2) existing wells with current water rights (tables and figures). The impacts assessment included such wells, existing springs, seeps, or other surface-water-right locations, and considered proposed wells for which water rights applications had been submitted to the State Engineer and that had been assigned a status of "Ready for Action" or "Ready for Protest" by the State Engineer at the time the water rights data were acquired. As described in Appendix G of the EIS, the impact analyses considered existing wells, existing springs, seeps, or other surfacewater-right locations, and Ready for Action or Ready for Protest wells as far as 1.75 miles from proposed new wells if no existing well or Ready for Action or Ready for Protest well was within a 1 mile-radius of a proposed well. In addition, as discussed in Sections 3.2.6.2.1, 3.3.6.2.1, 4.2.6.2.2, 4.3.6.2.2, and Appendix G, if a proposed well could be in a potential fault zone, the potential for impacts to existing wells, existing springs, seeps, or other surface-water-right locations, Ready for Action, and Ready for Protest wells as far as 6 miles from each such proposed potential fault-zone well was evaluated.

The potential for cumulative impacts to groundwater resources as a result of the combined impacts from pumping in existing wells and from Ready for Action and Ready for Protest wells, if they were to be approved by the State Engineer and put into operation at the same time as the proposed rail alignment-related wells, was specifically assessed in the groundwater resource impact analyses. This analysis considered Ready for Action and Ready for Protest wells in proximity to proposed new wells deemed (based on the water rights application information) to have a reasonable chance of being put into use at the same time as the groundwater withdrawal wells proposed for this project. Sections 4.2.6 and 4.3.6 of the Rail Alignment EIS present the results of these analyses.

In addition, Section 4.2.2.3.2 of the Nevada Rail Corridor SEIS describes the potential for cumulative impacts to groundwater resources from the implementation of other groundwater resource development projects in Nevada at the same time as proposed railroad construction and operations in the Mina rail corridor.

3.7.4.2 (154)

Comment - 5 comments summarized

Some commenters expressed concern that the Rail Alignment EIS did not evaluate alternatives for establishing a means to supply water to support proposed railroad construction and operations along the Caliente rail alignment or Mina rail alignment if DOE did not receive new water rights for proposed groundwater withdrawal wells. Commenters noted that such a situation could occur, for example, if the Nevada State Engineer determined that granting temporary or permanent water rights for these wells, or the transfer of water rights from existing beneficial uses to support the construction and operations phases would not be in the best interests of the state. As justification to support a contention that the State Engineer might deny applications for new water rights to support the rail alignment project, commenters pointed to the State Engineer's denial in 2000 of a 1997 DOE application for water rights to support construction and operation of the Yucca Mountain Repository, which stated that the use of water for the construction and operation of a repository was "detrimental to the public interest." Issues related to this concern include the possibility of having to import water to the rail alignment area by a common carrier

such as rail or truck, which could involve substantial attendant impacts to the existing transportation infrastructure.

Response

As with any major construction project, proposed railroad construction and operations would require an adequate supply of water. This water would be necessary for construction materials such as concrete, for compaction of earthen materials when constructing the rail line, for control of dust, to support operations at facilities during and after rail line construction, and for emergency use such as fire suppression during the construction and operations phases.

DOE would follow all applicable requirements under state water law in Nevada Revised Statute Section 533 in applying for and acquiring water rights for all phases of the proposed railroad. For purposes of analysis, the Department assumed it would obtain all required water from groundwater pumped from new water-supply wells; however, DOE is aware that there could be other approaches for obtaining some of the required water, including purchasing or leasing water from established municipalities or other existing permitted water-rights holders. Obtaining water from new water-supply wells is the only method that would require new construction; therefore, the Rail Alignment EIS analyzes the impacts from obtaining all required water from new wells to illustrate the maximum impact of the suite of potential ways to obtain the required water.

3.7.4.2 (159)

<u>Comment</u> – 2 comments summarized

DOE needs to expand the analysis of springs and seeps in Section 4.2.6 of the Rail Alignment EIS to address in quantitative terms (that is, reduction in flow rates, reduction in water quality, restriction of access) the impacts of proposed groundwater use on springs and groundwater seeps. Chapter 7 of the EIS must identify and evaluate alternative measures to mitigate impacts to springs and groundwater seeps.

Response

The impacts assessment included identifying existing springs, existing seeps, and other surface-waterright locations (along with wells having water rights and domestic wells) within a 1.75-mile radius around each proposed new well location and within a 6-mile radius around each proposed new well location that could be associated with a (water-bearing) fault-zone, based on review of the NDWR online water rights databases and other available databases, including the U.S. Geological Survey National Water Information System and the GNIS-Nevada Springs databases and published geologic and hydrogeologic reports and data. These data sources provide the best available information on the location and characteristics of such existing groundwater resource features. The impact analyses included consideration of these existing resources in the specified search areas described above, as applicable. DOE expanded the description of the methodology it used to identify these features in Appendix G of the EIS.

Chapter 7 of the EIS includes a description of the best management practices DOE would adopt for minimizing impacts to springs, seeps, or other surface-water-right locations. In addition, Chapter 7 identifies mitigation measures for impacts to springs that could not be avoided.

3.7.4.2 (1095)

<u>Comment</u> - RRR000617 / 0081

Only wells outside of the construction right-of-way have been identified. Well locations within the rightof-way should be identified in the EIS in order to determine their impacts on the environment and current users.

The figures in Sections 3.2.6 and 3.3.6 of the Rail Alignment EIS show the locations of existing wells and springs either within 1 mile of the centerline of each proposed rail alignment segment or within a 1-mile radius of a proposed well. These figures also show the locations of proposed groundwater withdrawal wells.

3.7.4.2 (1125)

Comment - RRR000663 / 0046

The Draft EIS' discussion of groundwater impacts is limited to impacts associated with groundwater withdrawals for construction activities and from infiltration of pollutants from potential spills during construction and operation. However, most of the rail corridors cross rugged terrain where there will be significant cuts required. These cuts could intercept groundwater flow. When shallow aquifers are intercepted by a linear cut, such as those associated with a rail line, adverse impacts can occur both down-dip and up-dip from the cut. The cut would allow water to drain from the aquifer, causing dewatering or lowering of the water table up-dip from the cut. The recharge to the aquifer down-dip from the cut would be eliminated or reduced, causing groundwater levels to decline. Lowering of the water table of the aquifer could cause serious impacts to ranching operations if there is significant decline. Many stock watering wells are pumped by windmills. The pumps used on windmills are suction pumps, and have a very limited height that they can pump. Therefore, wells located where the water table is lowered significantly could become unusable. DOE has not provided sufficient information on the actual routes and the location and depth of cuts to assess these potential impacts.

Response

As described in Sections 3.2.6.3 and 3.3.6.3 and summarized in Tables 3-37 through 3-45 and 3-115 through 3-125 of the Rail Alignment EIS, DOE anticipates that groundwater depths beneath the proposed Caliente and Mina rail alignments would typically range between about 10 to 15 feet and 280 feet, and between about 10 and 490 feet below the ground surface, respectively. Based on a comparison of groundwater depth and design information for the rail line (DIRS 182674-Nevada Rail Partners 2007, all; DIRS 180871-Nevada Rail Partners 2007, all), the probability of intercepting groundwater during excavation activities for construction of either rail alignment would be small.

Available information suggests that in two isolated areas along the Caliente alignment groundwater could be less than about 3 to 8 feet below the ground surface. Shallow groundwater conditions could occur beneath a short stretch of the Caliente alternative alignment segment northeast of a proposed facility location (south of well location PanV4) and southeast of a proposed quarry (south of well location PanV23) (see Figure 3-76 of the Rail Alignment EIS; DIRS 182821-Converse Consultants 2005, Plates 4-13a and 4-15). Shallow groundwater could occur beneath a short stretch of the Oasis Valley 1 alternative segment where it crosses near the Upper Oasis Valley Ranch Springs area (see Figures 3-82 and 3-196 of the EIS; DIRS 182821-Converse Consultants 2005, Plate 4-3; DIRS 169384-Reiner et al. 2002, Plate 2 and Figure 3). Water-level data from existing wells (for example, the OVU-Middle ET Well and OVU-Lower ET Well) in the Upper Oasis Valley Ranch Springs area (DIRS 169384-Reiner et al. 2002, Plate 2) show groundwater levels less than 8 to 10 feet below the ground surface.

Excavation work for construction of these stretches of the Caliente alternative alignment segment and the Oasis Valley 1 alternative segment would be limited to about 2 feet or less below the ground surface, and to about 5 feet or less below the ground surface, respectively (DIRS 182674-Nevada Rail Partners 2007, Sheets 1, 56, and 57). Most earthwork in these areas would involve the placement and compaction of fill rather than excavation work. Although the possibility of excavations intercepting shallower groundwater in these two areas does exist, the probability of intercepting large areas of groundwater in either stretch would be small.

Similarly, available information (for example, DIRS 180887-Converse Consultants 2007, Plate 4-10) suggests that, in two selected areas along the Mina rail alignment in Hydrographic Area 110A, groundwater could be about 10 feet or less below the ground surface (Tables 3-115 through 3-117 of the Rail Alignment EIS). Shallow groundwater conditions (DIRS 180887-Converse Consultants 2007, Plate 4-10) could occur beneath a short stretch of the westernmost part of Schurz alternative segment 5/6, beneath a short length of the westernmost part of Schurz alternative segment 1/4, and beneath a short stretch of Schurz alternative segment 1 in the area around well location WLa-3a (see Figure 3-190 of the EIS).

Excavation work for construction of Schurz alternative segments 1 and 4, and 5 and 6 along the Mina rail alignment would be limited to 5 feet or less below the ground surface, and for Schurz alternative segment 1 would be 2 feet or less below the ground surface (DIRS 180871-Nevada Rail Partners 2007, Sheets 1, 5, and 6). Most earthwork in these areas would involve the placement and compaction of fill rather than excavation work. Although the possibility of excavation work intercepting shallower groundwater in these two areas does exist, the probability of intercepting large areas of groundwater in either of these alternative segment stretches would be small.

Available information (for example., DIRS 180887-Converse Consultants 2007, Plate 4-3) also suggests that in one selected area along proposed Montezuma alternative segment 1 in hydrographic area 143, groundwater could be less than about 10 feet below the ground surface (see Table 3-119 of the Rail Alignment EIS). Shallow groundwater conditions (DIRS 180887-Converse Consultants 2007, Plate 4-3) could occur beneath a stretch of this alternative segment east and southeast of Silver Peak (Figure 3-194 of the Rail Alignment EIS). However, construction work for this portion of Montezuma alternative segment 1 would involve very minimal excavation, if any, and primarily involve placement and compaction of fill materials rather than excavation work (DIRS 180871-Nevada Rail Partners 2007, Sheets 23 and 24). The probability of intercepting large areas of groundwater in along this portion of the alternative segment is therefore considered to be very small. If shallow groundwater were to be encountered, standard engineering controls (as described in Section 4.3.5.2.1.1 of the Rail Alignment EIS) would be employed to minimize potential impacts to groundwater potentially disturbed by excavation activities.

Available information (for example, DIRS 180887-Converse Consultants 2007, Plate 4-4, and p. 51) suggests that in one area along Montezuma alternative segment 2 in hydrographic area 137A, groundwater might be less than about 10 feet below the ground surface (see Table 3-120 of the Rail Alignment EIS). Shallow groundwater conditions (DIRS 180887-Converse Consultants 2007, Plate 4-3) could occur beneath a portion of this alternative segment east and southeast of Silver Peak (Figure 3-194 of the Rail Alignment EIS). However, construction work for this portion of Montezuma alternative segment 1 would involve very minimal excavation, if any, and primarily involve placement and compaction of fill materials rather than excavation work (DIRS 180871-Nevada Rail Partners 2007, Sheets 35 through 37). The probability of intercepting large areas of groundwater along this portion of the alternative segment is therefore considered to be very small. If shallow groundwater were to be encountered, standard engineering controls (as described in Section 4.3.5.2.1.1 of the Rail Alignment EIS) would be employed to minimize potential impacts to groundwater potentially disturbed by excavation activities.

For these reasons, the probability of intercepting groundwater during excavation activities associated with rail line construction along the Caliente or Mina rail alignment would be small. If these activities encountered shallow groundwater, DOE would use standard engineering controls (described in Section 4.2.5.2.1.1 of the Rail Alignment EIS) to minimize impacts to groundwater from excavation activities. DOE added text to Sections 4.2.6.2.2.1, 4.2.6.2.2.11, 4.3.6.2.2.2, 4.3.6.2.2.5, 4.3.6.2.2.6, and 4.3.6.2.2.11 of the EIS to reflect this information.

3.7.4.2 (1141) <u>Comment</u> - RRR000617 / 0140

Page 3-169, Section 3.2.6.1: DOE used a screening distance of one mile on either side of the rail alignment to locate wells. Paragraph 4 states: "DOE used the same distance criteria to identify whether there could be damage to, or loss of use of, an existing well that fell within the rail roadbed or was disturbed during construction activities." This is inconsistent with the 1000 ft. ROW [region of influence] used to identify impacted stockwater sources and pipelines in Section 3.2.2.5.1, which addresses stockwaters on BLM land.

If DOE identifies a well within one mile of the alignment as "damaged" or unusable, DOE should also be responsible for mitigation or avoidance.

Response

DOE revised the text of Section 3.2.6.1 of the Rail Alignment EIS and (the corresponding text in Section 3.3.6.1) to stated that the Department used a distance criterion of 150 meters (500 feet) on either side of the proposed rail alignment centerline to identify whether there could be damage to, or loss of use of, an existing well that fell within the rail roadbed or was disturbed during construction activities.

As indicated in Sections 4.2.6.2.1 and 4.3.6.2.1 of the EIS, railroad construction activities could occur near one or more existing wells. However, based on the available data, construction activities would not disturb existing wells. In the unlikely event that, prior to rail roadbed construction, DOE identified additional wells that construction activities could disturb, the Department would take steps to minimize impacts to those wells. These steps would include advising well owners of planned activities and discussing with the owners measures to protect the wellhead (the portion of the well above the surface) during construction.

3.7.4.2 (1143)

<u>Comment</u> - RRR000617 / 0142

Page 3-180, Figures 3-77 and 3-78: The figures showing existing and proposed wells within one mile of the railroad alignment or new proposed wells are incomplete. Two wells are missing from the Timber Mountain Allotment and four are missing from the Sunnyside Allotment. One well is also missing from the Garden Valley Alternatives map.

Complete information regarding stockwater sources and pipelines should be incorporated into the FEIS. This more complete information should be factored into revised impact analyses to be provided in Chapter 4 of the EIS.

Response

Of those wells mentioned in the comment, available information for the proposed Caliente rail alignment (DIRS 173845-Resource Concepts 2005, Figures 5.20.1, 5.21.1, and 5.26.1; DIRS 182821-Converse Consultants 2005, Plates 4-10 and 4-12 and Appendix E; DIRS 183992-Nevada Division of Water Resources [NDWR] 2007, all; and DIRS 184045-NDWR 2007, all) indicates that two wells are within 1 mile of the centerline of the proposed Caliente rail alignment. However, in each case, a review of available information, including Nevada Division of Water Resources well log and water rights databases indicated that the well is not a domestic well and it has no known matched water right (DIRS 182821-Converse Consultants 2005, Plate 4-12 and Appendix E; DIRS 184045-NDWR 2007, all). For these reasons, Figures 3-77 and 3-78 of the Rail Alignment EIS do not show these two wells and DOE performed no analyses to assess potential impacts of groundwater withdrawals from these wells. The other wells mentioned in the comment are more than 1 mile from the centerline of the proposed Caliente rail alignment, and therefore do not appear in Figure 3-77 or 3-78. One of these other wells (which

appears to correspond to Nevada Division of Water Resources Well Log Number 4237) is about 5,734 feet (more than 1 mile) from proposed well location PahV10 in Pahroc Valley. A review of available information, including Nevada Division of Water Resources well log and water rights databases, indicated that this well is not a domestic well and has no known matched water right (DIRS 182821-Converse Consultants 2005, Plate 4-12 and Appendix E; DIRS 184045-NDWR 2007, all). For these reasons, DOE did not perform an analysis to assess potential impacts of groundwater withdrawals on this well.

3.7.4.2 (1168)

<u>Comment</u> - RRR000617 / 0188

Page 4-162, Section 4.2.6.1: The analysis of groundwater consumptive use by DOE does not appear to have accounted for evaporation from temporary water-storage reservoirs. Disclosure of this information is important to any decision by DOE over the choice of temporary water-storage techniques to be employed.

The EIS should disclose the amount of pumped groundwater to be lost to evaporation through the use of temporary water-storage reservoirs. Chapter 7 should describe mitigation measures to avoid or minimize evaporative losses of pumped groundwater.

Response

DOE indirectly factored evaporative losses into the estimated amount of water the rail alignment project would need. Although the water demand estimates did not specifically incorporate quantities of such losses in the water demand estimates, project designers used experience-based factors to determine the amount of water necessary in a desert environment such as Nevada, and used similar methods for applying water during the earthen material compaction process. Earthwork compaction activities associated with construction of the rail line would account for most of the water for the project. The water demand estimates included a contingency factor to help account for such items as evaporative losses of water.

3.7.4.2 (1170)

<u>Comment</u> - RRR000617 / 0190

Page 4-171, Section 4.2.6.2.2.2: DOE proposed wells Pan V9 through 16 are all located in the hills surrounding Bennett Spring. DOE states: "Assuming proposed base case average groundwater withdrawal rates at each proposed new well location, analysis results indicate that with the exception of proposed well location PanV7/PanV8, there would be no impacts to existing wells or springs near Common Segment 1 from pumping at the proposed well locations." The concurrent use of these wells may have a much greater impact than the isolated use of one well at a time. The DOE should be prepared to use alternative well locations if the analysis completed to this point proves to be faulty, and Bennett Spring (which is privately owned) experiences any impacts.

The EIS should clearly indicate whether groundwater modeling considered the combined effects of pumping new wells simultaneously. The results of modeling the drawdown effects of simultaneously pumping wells in the Bennett Spring area and for similar pumping situations along the rail corridor should be presented in the EIS.

Response

DOE analyzed the potential impacts on Bennett Springs due to pumping at nearby new well locations through impacts analysis calculations. The calculations considered two pumping scenarios. In the first scenario, a total (combined) pumping rate of 74 gallons per minute, which would be from locations PanV13 (PanV15) and PanV14 (PanV16), depending on the selected alternative alignment segment, was applied at the PanV13 location, which is the most conservative assumption possible because it involves

the highest possible required groundwater pumping rate for this case and the well location closest to Bennett Springs under this scenario. In addition, DOE analyzed a second scenario that applied a total (combined) pumping rate of 140 gallons per minute, which would be from locations PanV9 (PanV11) and PanV10 (PanV12), depending on the selected segment, at the PanV9 location, which is the most conservative assumption possible because it involves the highest possible required groundwater pumping rate for this case and the well location closest to Bennett Springs under this scenario. This approach results in the greatest potential for impacts at Bennett Springs based on the range of possible well pumping schemes. Analysis results (Section 4.2.6.2.2.2 of the EIS) indicate that: (1) the proposed pumping at well location PanV13 would not affect Bennett Springs for these assumed most conservative conditions; and (2) other proposed well locations along this portion of the Caliente rail alignment (common segment 1) are sufficiently far away from Bennett Springs that pumping at those locations would not affect Bennett Springs.

DOE added this information to Section 4.2.6.2.2.2 of the Rail Alignment EIS. Chapter 7 of the EIS present information on monitoring of spring discharges and well water levels that DOE would perform, as appropriate, to verify the effects of proposed groundwater withdrawals on springs or wells.

3.7.4.2 (1181)

Comment - RRR000663 / 0057

The Draft EIS does not adequately explore the potential impacts to water users in the Amargosa Valley.

Response

As described in Sections 4.2.6.2.1 and 4.3.6.2.1 and summarized in Sections 4.2.6.5 and 4.3.6.5 of the Rail Alignment EIS, groundwater resource impacts analysis results indicate that the effects of groundwater withdrawals from the proposed wells at the range of withdrawal rates that would be necessary for the project would be localized. The impacts caused by the majority of water withdrawals and the wells with the highest production rates (those associated with construction of the rail roadbed) would be short term. The effects in each case in which the analysis assumed projected average withdrawal rates would occur at the well locations would be limited to a maximum horizontal distance of about 0.5 mile or less in a few instances and generally a much smaller distance for the Caliente alignment. Analysis results indicated that the effects for each case in which the analysis assumed that a hypothetical withdrawal rate of 225 gallons per minute might be imposed at each well location, would be limited to a maximum horizontal distance of about 0.75 mile or less for the Caliente alignment and, including one case where the pumping rate could be as high as 350 gallons per minute, to a maximum horizontal distance of about 0.72 mile or less for the Mina alignment.

In addition, as summarized in Sections 4.2.6.5 and 4.3.6.5 of the Rail Alignment EIS, for areas where new water wells would be near a boundary between adjacent hydrographic areas, downgradient hydrographic areas would be unlikely to be affected by the groundwater withdrawals because (1) there are no identified existing groundwater users for the downgradient groundwater basins 1 mile of any of these proposed well-water withdrawal locations, and (2) available hydrogeologic information indicates that significant interbasin groundwater (under)flow does not occur in the areas downgradient of the well locations.

For the reasons described above, impacts to water users in Amargosa Valley would not occur as a result of proposed groundwater withdrawals to support construction or operation of the Caliente or Mina rail alignment and rail line.

3.7.4.2 (1216)

<u>Comment</u> - RRR000617 / 0185

Page 4-155, Section 4.2.6.2.1: The DEIS here implies that impacts from groundwater pumping on existing rights may be avoided or minimized because of uncertainty regarding the degree of over-

commitment and/or pumping of existing rights in certain hydrographic basins. Such an approach to impact analysis disregards Nevada water law which requires the Nevada State Engineer to protect existing water rights.

In order to present a bounded analysis of impacts associated with DOE use of groundwater, the EIS must assume that apparently "overcommitted" basins are in fact overcommitted and that all existing groundwater rights are in fact being put to beneficial use or would be put to beneficial at the same time DOE intended to pump its new wells. The analyses of impacts to existing water rights in the EIS should account for these worst-case assumptions.

Response

The groundwater resources impact analyses considered existing wells and permitted wells. DOE also evaluated proposed future wells for which water rights applications had been submitted to the State of Nevada and to which the State had assigned a status of Ready for Action or Ready for Protest if that well would be within 1.75 miles of proposed new wells. DOE considered wells out to that distance if no existing well, permitted well, Ready for Action well, or Ready for Protest well would be within a 1-mile radius of a proposed well.

For cases in which a proposed new DOE groundwater withdrawal well was inferred to be within a potential fault zone, the Department also evaluated potential impacts to existing wells, permitted wells, Ready for Action wells, and Ready for Protest wells as far away as 6 miles from each proposed potential fault-zone well. For purposes of analysis, DOE conservatively assumed that each nearest existing well or each permitted well, Ready for Action well, or Ready for Protest well within the specified distance criteria (depending on the type of new well; that is, conventional well or potential fault-zone well) and considered to have a reasonable chance of being approved, implemented, and put into operation at the same time as the DOE-proposed new groundwater withdrawal wells, would be in operation at the same time as the proposed new well. This is equivalent to assuming that all committed groundwater resources and all known groundwater pumping wells and known reasonably foreseeable future groundwater withdrawal well in each case.

3.7.4.2 (1217)

Comment - RRR000617 / 0186

Page 4-161, Section 4.2.6.2.1: The text here states, "DOE currently plans that wells not needed for operation of the rail line or for quarries would be abandoned in compliance with State of Nevada regulations, and the well sites and temporary access roads would be reclaimed in accordance with applicable requirements." The DOE should consult with permittees and the BLM prior to well abandonment in order to determine if the wells could be used to offset any of the damage to livestock distribution caused by the rail alignment. If so, any applicable wells should be turned over to the appropriate permittee for use as a stockwater source.

The EIS should include a commitment by DOE to determine if the wells no longer required for rail construction or operation could be deeded to grazing permittees and used to offset any of the damage to livestock distribution caused by the rail alignment. The feasibility of this possible mitigation should be evaluated in the EIS.

Response

DOE revised the text of Sections 4.2.6.2.1 and Section 4.3.6.2.1 to state that prior to the decommissioning groundwater wells, the Department would investigate whether there are other parties (for example, ranchers, the BLM, county government agencies) interested in using the wells to obtain water or monitor groundwater conditions, and DOE would work with those parties to facilitate their possible use of the

wells upon completion of the railroad. Those interested parties would be responsible for following Nevada laws to obtain water rights and, if necessary, would also be responsible for obtaining a right-ofway from the BLM. Because the Department anticipates that the majority of the water rights it will obtain will be for the specific and temporary purpose of constructing the rail line, it will not be possible to transfer those rights to other interested parties upon completion of the railroad.

3.7.4.2 (1218)

<u>Comment</u> - RRR000617 / 0187

Page 4-161, Section 4.2.6.2.1: It is unclear whether the analysis of impacts from pumping new DOE wells was based upon one or two wells being installed on each drilling pad. The apparent effect of a single well on each pad would be to spread the pumping impacts over a larger area, although, depending upon pumping rates, the impact at each well site might be reduced. Alternatively, location of two wells at each drill pad would heighten the impact of pumping in proximity to each drill pad, but might reduce the aerial extent of pumping impacts.

The EIS should clearly specify whether the analysis of groundwater pumping impacts in the DEIS was based upon an assumption of one or two wells located at each drill pad site. If the analysis was based on location of a single well at each site, analysis of the impacts of two wells being located at each drill pad should be provided in the EIS.

Response

DOE based its analysis of impacts from pumping at proposed wells on calculations that assumed one pumping well at each location. For cases in which DOE postulated the installation of as many as two wells on the same drilling pad (a number of proposed sites along the Caliente rail alignment), the calculations assumed one "equivalent" pumping well at the drill pad location. Although the use of only one equivalent well in the calculations represents an analytical simplification, the impact analysis calculations incorporated a number of conservative assumptions including: (1) The targeted waterbearing zone would have the greatest possible saturated zone thickness based on specified ranges of possible total well depths and estimated depths to the potentiometric surface [analysis results indicated that a greater saturated zone thickness would result in a greater impact (a larger radius of the cone of depression)]; (2) For cases in which DOE proposed a suite of different well locations (one to two wells each on multiple well pads) to provide collectively the total water demands at a given construction station, the single equivalent pumping well location selected from the suite of locations for use in the impact analysis calculations would be the one closest to the nearest groundwater resource feature (well, spring, or seep); (3) In each such multiple-well case, the total required groundwater pumping rate necessary to meet the total water demand at that station would occur at the (equivalent) well on the well pad nearest the groundwater resource in question; and (4) Known committed groundwater resources and known and reasonably foreseeable groundwater pumping wells would be in operation at the same time as the proposed (equivalent) well in each case.

Based on these considerations and the conservative assumptions in the impact analysis calculations, the approach DOE used to simulate the effects of groundwater drawdown by using a single equivalent well (at the pumping location closest to the groundwater resource) is a reasonably conservative way to assess potential groundwater resource impacts.

3.7.4.2 (1443)

<u>Comment</u> - RRR000621 / 0042

Table 4-60, Page 4-156, attachment 8, shows the estimated water demand or range of water demand values within hydrographic area, and Figure 4-13, Page 4-160 attachment 9 shows a map of the hydrographic basins. Table 4-60 lumps all estimated water use into a single category. It does not

identify how much water will be needed for construction and how much will be needed for operations. Show the estimated demand in terms of construction and operations.

Response

Table 4-60 of the Rail Alignment EIS lists the estimated range of water demands for construction of the
Caliente rail alignment. Similarly, Table 4-206 lists the estimated range of water demands for
construction of the Mina rail alignment. Water demand estimates for operation of the Caliente or Mina
rail system represent a very small fraction of the construction water demands for each alignment.
Sections 4.2.6.3 and 4.3.6.3 of the EIS describe estimated water demands for rail operations. DOE
revised Tables 4-60 and 4-206 to indicate the estimated water demand or range of water demand values
are for construction in the hydrographic areas that each alignment would cross.

3.7.4.2 (1496)

<u>Comment</u> - RRR000656 / 0070

Section 4.2.6.4, page 4-180, Impacts under the Shared-Use Option: Impacts to ground water under the Shared-Use Option would be similar to those identified for the Proposed Action without shared use. Under the Shared-Use Option, additional commercial rail sidings would be constructed as a third track alongside passing sidings (Figure 2-55). The total length of commercial rail sidings would be relatively small compared to the total length of the rail line. Therefore, under the Shared-Use Option, water needs for construction of the rail line would increase only by approximately 150,000 cubic meters (119 acrefeet).

Response

Thank you for your comment.

3.7.4.2 (1563)

<u>Comment</u> - RRR000555 / 0001

The commenter stated that DOE should not proceed with the project because it is wasteful to use 5,950 to 6,100 acre-feet of water while creating impacts to wildlife, springs, and rural agriculture.

Response

Regarding springs, results of impacts analyses indicate that either no impacts to springs are anticipated at the pumping rates assumed at the proposed new well locations or, at selected specific spring locations, impacts could be avoided if the pumping rates were kept at or below a specified average pumping rate determined through analysis calculations. Sections 4.2.7 and 4.3.7 describe impacts to wildlife; Sections 4.2.5 and 4.3.5 describe impacts to springs; and Sections 4.2.9 and 4.3.9 describe impacts to agriculture.

3.7.4.2 (1869)

<u>Comment</u> - RRR000677 / 0022

DOE plans to withdraw water for rail construction from aquifers below the location of the rail line. SEIS Transp. at 3-3. The Death Valley region, including Yucca Mountain, is in the Basin and Range physiographic province. Moreover, distinct hydrogeologic boundaries for the aquifer at Yucca Mountain cannot be identified and the boundaries are up to 500 kilometers away. Several Utah aquifers, also in the Basin and Range province, are less than 500 kilometers from Yucca Mountain. Accordingly, DOE must assess the impact to regional aquifers and how DOE'S draw down of groundwater may impact aquifers in Utah.

Response

Aquifers in the State of Utah are outside the region of influence for groundwater impacts, as stated in Sections 3.2.6.1 and 3.3.6.1 of the Rail Alignment EIS. There should be no impacts to aquifers in Utah.

3.7.4.2 (2076)

<u>Comment</u> - RRR000710 / 0034

Page 4-174, Section 4.2.6.2.2.6: The DEIS fails to adequately assess impacts to Black Spring, and possible mitigations.

The DEIS states, "... hydrogeologic impact analysis results indicate that if all of the water required for construction was obtained from the HC5, this might impact flow rates to Black Spring. However, analysis indicates that if the groundwater withdrawal rate at HC5 did not exceed 490 liters (129 gallons) per minute, discharge rates at Black Spring would probably not be affected by the groundwater production."

However, "hydrogeologic impact analysis" is not a precise analysis, and it is reasonably foreseeable that pumping at HC 5, even at rates lower than 129 gallons per minute, will impact the discharge rates at Black Spring. "Probably" is not sufficient analysis.

Further, the DEIS provides no proposed mitigation if the pumping at wells HC 5 and/or HC 7 result in lowering/incapacitating of the water supply at this location.

Response

DOE revised the text in Section 4.2.6.2.2.6 of the Rail Alignment EIS to state that obtaining all necessary water from well HC5 for construction of the alignment could affect flow rates to Black Spring. If the groundwater withdrawal rate at well HC5 did not exceed 129 gallons per minute, withdrawals at the well would not affect discharge rates at Black Spring.

DOE could use a well or wells at the HC7 location to meet the total water demand (to the average required pumping rate of 165 gallons per minute) at a specified station. There are no known existing wells or springs within the radius of influence of well location HC7 (see Figure 3-79 of the Rail Alignment EIS). If DOE used well location HC5 and attempted to pump a well or wells at a total rate of 129 gallons per minute or less, it would institute a program to monitor discharge rates at Black Spring before and during pumping to verify impact analysis results and ensure that there would be no impacts to the spring.

3.7.4.2 (2077)

Comment - RRR000710 / 0033

Page 4-174, Section 4.2.6.2.2.5: The DEIS fails to adequately assess impacts to Witch Well, which is the well discussed at pages 4-173 through 4-174, and possible mitigations.

Table 4-64 reports that Witch Well is 0.83 miles from proposed Well RrV8, but no radius of influence is provided in the Table. Instead, the Table states that such radius is "not applicable" and that "no calculation was completed for reasons stated in text." However, the text at this section gives no reason for not performing the calculation.

Further, the DEIS provides no proposed mitigation if the pumping at wells on either side of Witch Well result in lowering/incapacitating of the water supply at this location.

Response

DOE revised the text of Section 4.2.6.2.2.5 of the Rail Alignment EIS above Table 4-64 to state a proposed quarry well (RrV8), which could provide water needed to support operation of potential quarry, could be installed southeast of an existing stockwatering well (see Figure 3-79 of the EIS). The average required groundwater withdrawal rate at the new quarry well location would be approximately 24 gallons per minute (DIRS 182822-Converse Consultants 2007, Appendices A and B). Analysis results

(Table 4-64 of the EIS) indicate that this existing well would not be expected to be impacted by the proposed groundwater withdrawal at the RrV8 location. Because the quarry well would be situated in primarily bedrock-dominated terrain, a groundwater well installed at this location would be unlikely to have the capacity to supply any extra water beyond that required for the quarry operation. Therefore, DOE did not perform sensitivity analyses for this well (or for any other proposed quarry wells) to evaluate whether there would be increased impacts from higher groundwater withdrawal rates.

3.7.4.2 (2098)

<u>Comment</u> - RRR000710 / 0031

Page 154: The DEIS fails to assess a reasonably foreseeable range of alternatives as to groundwater pumping withdrawal rates.

The DEIS states, "The typical groundwater pumping scenario for rail roadbed construction wells assumes a 9-month effective pumping period with 3 months of lost production for each construction well because of adverse weather conditions or other factors such as equipment repairs. This provides for a conservative or upper bound estimate of groundwater withdrawal rates that would result in the largest potential impacts (greatest amounts of drawdown) to groundwater resources and existing groundwater users potentially situated within the region of influence of the proposed water wells."

However, it is reasonable to expect that ground water pumping may have to occur in a shorter-than-9-month period, because the DEIS at page 4-194 states:

"The Migratory Bird Treaty Act (16 U.S.C. 703 through 712) protects migratory birds, their eggs, and occupied nests... As such, all activities that would harm nesting birds or result in nest abandonment would be prohibited during construction and operation of the railroad.... To avoid or minimize adverse impacts to migratory birds during the construction phase, DOE would implement best management practices, including minimizing groundbreaking activities in nesting habitat during the critical nesting period, which the BLM defines as May 1 through July 15 (see Chapter 7)...."

Therefore, it is a reasonably foreseeable possibility that the construction activities would be lost for 3 months due to inclement weather and mechanical breakdowns, and an additional at least 2.5 months when the weather is not inclement, but migratory birds are nesting. In addition, Fallini would request that construction activities not occur on the Reveille Allotment during peak calving season, which starts February 1 and ends about the end of July, a period of 6 months. Consideration should also be given to avoiding wild horse foaling season and wildlife fawning seasons.

For this reason alone the DEIS fails to adequately assess a reasonable range of alternative pumping withdrawal scenarios that would encompass withdrawal over a shorter time period (e.g. 6.5 months). As with many other issues discussed by the DEIS, DOE has arbitrarily and erroneously selected one scenario, characterized it (erroneously) as the most conservative, and assessed only it, claiming that all other reasonably foreseeable scenarios would have "less impact".

Response

DOE anticipates that groundwater well withdrawals to obtain water for constructing the rail alignment would be complete within a period of about 9 months to less than 1 year. The groundwater resource impact analysis assumed a well pumping timeframe of 9 months due to the progress of construction along the rail line. In some instances (for example, if groundwater pumping at a location directly interfered with the location and timing of a sensitive species migration event or disrupted a specific activity such as those mentioned in this comment), DOE could implement mitigation measures to minimize or preclude impacts. These measures could include groundwater withdrawals in a staggered fashion (in separate stages), if necessary, to avoid periods of direct conflict. However, DOE does not anticipate that (1) it

would conduct pumping over more than 1 year at any well, and (2) the pumping rate at any well location would exceed the pumping rate value in the impact analyses.

3.7.4.2 (2114)

Comment - RRR000687 / 0027

Table 4-60, Page 4-156: The table lumps all estimated water use into a single category. It does not identify how much water will be needed for construction and how much will be needed for operations. Show the estimated demand in terms of construction and operations.

Response

Table 4-60 of the Rail Alignment EIS lists the estimated range of water demands for construction of the Caliente rail alignment. Similarly, Table 4-206 lists the estimated range of water demands for construction of the Mina rail alignment. Water demand for operation of the Caliente or Mina rail system would be a very small fraction of construction water demand. Sections 4.2.6.2.1 and 4.3.6.2.1 of the EIS describe estimated water demands for Caliente and Mina rail operations, respectively.

3.7.4.2 (2316)

Comment - RRR000078 / 0001

The commenter asked about the potential impacts to her domestic water well at Sarcobatus Flat.

Response

DOE researched data on domestic wells available through the Nevada Division of Water Resources Well Log and Water Rights Databases. Based on those data, the domestic well closest to the proposed common segment 5 centerline appears to be about 4,770 feet away from the rail alignment centerline. The data indicate that the domestic well closest to any proposed new well location is about 5,680 feet away. Analysis results indicate that no impacts to domestic wells in Sarcobatus Flat would occur at the pumping rates assumed at the new well locations.

3.7.4.2 (4147)

Comment - RRR000524 / 0046

Section G.1.1 states that vertical groundwater flow can occur between aquifers and that part of the flow from pumping an aquifer may be derived from vertical flow. However, potential impacts from the vertical flow of poor-quality water into the affected environment do not appear to be characterized.

Response

DOE used available information from published reports, well logs, and maps to evaluate the potential for groundwater impacts from vertical movement of poor-quality water within an aquifer or between different superadjacent aquifer units as a result of groundwater pumping from the proposed new wells. The Department considers the potential for this type of impact to be small for the Caliente rail alignment. DOE revised Sections 4.2.6.2.1 and 4.3.6.2.1, and Appendix G of the Rail Alignment EIS to reflect this information.

3.7.4.2 (4153)

<u>Comment</u> - RRR000524 / 0038

Section 4.2.6 documents the perennial yield for each hydrographic area, but the impact on each aquifer is not clearly presented. For example, the draft rail EIS does not clearly discuss the affected aquifers and their yields or how the aquifer parameter values used in Section G.1.2.2 were obtained. Also, groundwater basins and subbasins are not presented for the rail alignment areas.

DOE revised Appendix G, Tables G-1, G-2, and G-5 of the Rail Alignment EIS and the tables in Sections 4.2.6 and 4.3.6 that summarize the calculated radii of influence for the proposed wells to indicate the specific type(s) of aquifer that DOE analyzed for each new well location.

DOE added text to Section G.1.2.2 of the EIS to describe how, depending on parameter type, DOE obtained the aquifer parameter values for the groundwater resources impact analyses or determined the values from those analyses and then compared them to published estimates of parameter values.

In Nevada, groundwater basins are defined (administratively) to be the same as hydrographic areas. The Rail Alignment EIS describes the hydrographic areas in Sections 3.2.6, 3.3.6, 4.2.6, 4.3.6, and Appendix G. Sections 3.2.6.2.1 and 3.3.6.2.1 define the relationships between hydrographic areas and groundwater basins. A few hydrographic areas have been subdivided into hydrographic subareas (corresponding administratively to groundwater subbasins). Where this has occurred (for example, hydrographic subareas 173A and 173B for the Caliente rail alignment, and subareas 110A, 110B, and 110C; 121A and 121B; and 137A and 137B for the Mina rail alignment), the relevant figures in these sections show the subareas.

3.7.4.2 (4154)

Comment - RRR000524 / 0039

Section 4.2.6.2.2 states that DOE considered the possibility of intersecting cones of depression from the simultaneous pumping of the nearest existing well and the proposed new well. However, Tables 4-61 though 4-68 do not show the radius of influence of the nearest existing pumping well.

Response

DOE added a column to the relevant tables in Sections 4.2 6 and 4.3.6 of the Rail Alignment EIS that lists the calculated radius of influence for the nearest existing well to each proposed well or the nearby well with the highest average pumping rate, as applicable.

3.7.5 Biological Resources

3.7.5 (148)

<u>**Comment**</u> – 5 comments summarized

Commenters expressed concern about the establishment and spread of noxious weeds and invasive species during construction and operation of the railroad and stated that DOE should commit to a program to monitor and control weeds. They suggested that the program include an inventory of weeds along the alignment before construction; control of weeds more often than annually if necessary; cleaning of vehicles to remove plant seeds; and use of weed-free straw and mulch during reclamation. Commenters requested additional information on how DOE would develop and implement a weed-control program. One commenter stated that DOE failed to provide information on how it would address the conflict between control of weeds and application of water to disturbed sites to control dust.

A commenter said that DOE did not recognize the positive aspects of some non-native plant species.

Response

Sections 4.2.7.2.1.1 and 4.3.7.2.1.1 and Table 7-1 of the Rail Alignment EIS describe the DOE commitment to monitor and control noxious weeds and invasive species. The Department clarified these descriptions to better describe how it would develop and implement weed control during railroad construction and operations. It would develop a weed-management plan that met BLM requirements for monitoring and control of weeds and would consult with directly affected parties during the development of the plan. DOE would implement a program to monitor and control weeds before construction; the

program would include a weed inventory of the alignment before construction, monitoring of disturbed sites, control of weeds throughout the construction and operations phases, and reclamation of disturbed sites no longer necessary for railroad operations. The weed-management plan would include details on how and when DOE would monitor and control weeds. As stated in Table 7-1, DOE would limit the application of water to disturbed sites to that necessary to meet requirements for the control of fugitive dust; it would control weeds that grew as a result of such water application.

Sections 3.2.7.2.1.1 and 3.3.7.2.1.1 of the EIS discuss the positive nutritional and habitat value of nonnative species including Tamarisk and cheatgrass for domestic animals and wildlife species.

DOE has committed to a more specific invasive weed plan and included that in Chapter 7 of the EIS.

3.7.5 (158)

<u>Comment</u> – 2 comments summarized

A commenter expressed concern about the DOE approach in the Rail Alignment EIS to compliance with Nevada Revised Statutes Section 527.050, which requires certain actions to protect cacti, yucca, and Christmas trees.

The Migratory Bird Treaty Act does not protect occupied nests, it protects all nests, occupied or not. See 16 U.S.C. 703. While initially stating that "all activities that would harm nesting birds or result in nest abandonment would be prohibited during construction and operation of the railroad," DOE walks away from this protection, stating that it would only minimize activities; then further walks away by minimizing only groundbreaking activities, and finally goes on to state that, if the groundbreaking activities had to occur, only that "DOE would conduct surveys … before beginning those activities."

However, DOE could construe minimizing to mean anything, and does not provide the required protection under the Migratory Bird Treaty Act; groundbreaking is not the only activity that would disturb nesting migratory birds, and does not provide the required protection under the Act; DOE could construe "had to occur" to mean anything, and does not provide the required protection under the Act; "would conduct surveys before beginning" does not provide the required protection under the Act; and DOE discusses absolutely no protection for the operations phase of the railroad, which would occur year-round for at least the next 50 years.

Response

Based on the comment, DOE made a number of changes in the Rail Alignment EIS to clarify its approach to the salvage of cacti and yucca. In addition, the Department clarified other potential salvage requirements.

DOE modified the following sections to describe the requirements and how the Department would comply:

- Section 2.2.2.10, regarding the salvage of cacti and yucca for replanting pursuant to BLM protocols for land reclamation.
- Sections 3.2.7.3.3.2 and 3.3.7.3.3.2, regarding special status species that are afforded some level of protection or special management under federal or state laws or regulations.
- Sections 4.2.7.2.1.3, describing how DOE would salvage for replanting the small number of cacti and yucca it would need to remove during the construction phase.
- Sections 4.2.7.4 and 4.3.7.4, regarding the loss of conifer habitat and individual conifer trees.

The statement, "The Migratory Bird Treaty Act protects occupied nests" does not imply that DOE would not protect unoccupied nests. This statement is in relation to additional mitigation for protection when species are nesting or before fledging. Because species are more vulnerable and present in the nests at these times, the Migratory Bird Treaty Act requires the application of certain mitigation measures. DOE does not anticipate disturbances to unoccupied nests during proposed railroad construction or operations.

The comment does not reflect the commitment DOE has described about compliance with the Migratory Bird Treaty Act. The mandates for the Act are not negotiable and DOE understands its responsibility. Where appropriate, the Department would prohibit activities that could harm nesting birds or result in nest abandonment. In other areas where distance and timing would lessen the effect on nesting birds, DOE would apply best management practices to minimize activities to ensure no harassment of bird species. DOE clarified this statement in the Rail Alignment EIS.

3.7.5 (1122)

<u>Comment</u> - RRR000663 / 0045

DOE has significantly understated the impact to biological resources. Loss of habitat would not be limited only to the physical loss of habitat due to the construction of the rail line. The rail line passes through or adjacent to many significant biological resource areas, including critical habitat, migration corridors, etc. The construction and operation of the rail line would reduce the value of these areas, resulting in significantly greater loss in resources than just the area physically within the rail line right-ofway. The Caliente rail line would cross and be near to critical habitat for many species of wildlife. Critical habitat is absolutely necessary for wildlife. Human activity, such as the operation of a rail line, in or even near critical habitat can seriously degrade the value of that habitat for wildlife. This is especially true of linear facilities, such as a rail line, that pass through habitat areas. Without undisturbed access to critical habitat, the wildlife using that habitat may abandon large areas of year-round habitat. The Environmental Baseline File for Biological Resources (DIRS 104593) lists the following crucial habitats within the Caliente corridor: Bighorn Sheep Crucial Winter Habitat (Cedar Range), Mule Deer Crucial Winter Range (Cedar Range), Quail Crucial Habitat in Meadow Valley. The Caliente corridor contains many additional biological resources within the corridor or within 5 kilometers of the corridor. Although these resources are identified in the Environmental Baseline File, the DOE makes no attempt to quantify the impacts of the rail line on most of these resources.

DOE does not adequately address the potential impact of construction of rail line on the spread of noxious weeds and invasive species. The discussion of noxious weeks is inadequate in several respects.

In the Draft Rail Corridor SEIS, DOE does acknowledge that noxious weeds may be a problem, stating that "clearing vegetation and disturbing the soil could create habitat for colonization by noxious weeds and invasive species in the Mina corridor. .." (CA p. 3-26). DOE then concludes that reclamation of disturbed areas would reduce the colonization by noxious weeds. Under cumulative impacts for the Mina corridor, DOE further notes that linear disturbances, such as rail lines, may result in the spread of noxious weeds into areas where they had not previously been a problem. DOE then concludes that the "strict adherence to best management practices should reduce the potential for impacts" and that the cumulative impacts, would therefore, be small (CA p. 4-25).

Similarly, in the Rail Alignment DEIS, DOE concedes the potential for establishment of noxious weeds and invasive species along the rail alignment and adjacent areas, but concludes that the application of "best management practices" would minimize or avoid the impacts (RA p. 4-193). Such vague assertions are unacceptable. The use of the term "best management practices," without more information, gives no assurance that the practice will actually be implemented sufficiently to reduce the potential for the establishment of noxious weeds.

DOE also fails to give enough information on how it will address a significant conflict between best management practices for weed control and best management practices for other construction activities. DOE acknowledges that watering of land surfaces during construction could encourage the establishment of noxious weeds, and therefore, proposes to limit watering of land surfaces "to the extent practicable" to mitigate this potential impact (RA p. 4-193). Not only is the phrase "to the extent practicable" unacceptably vague and non-committal, but the best management practice of avoiding watering may well conflict with other project related requirements, such as the need to apply water to soils for proper compaction and the watering of disturbed areas and haul roads for dust control (RA p. 7-11).

DOE does note in the section on best management practices that it will use weedfree straw and mulch for reclamation activities (RA p. 7-15). Since it is critical that straw or mulch used for reclamation not result in the introduction of invasive species, this requirement should be absolute, and not subject to the caveat of "to the extent practicable." To ensure that the mitigation is followed, DOE should commit to requiring the use of certified weed free mulch in all the reclamation contracts for the rail line construction.

Response

Sections 4.2.7.1 and 4.3.7.1 of the Rail alignment EIS discuss the criteria for establishment of the degree of impact and lists loss of habitat, displacement (construction-related), long-term loss of potential habitat (species-specific land-cover types), and risk of collisions as direct impact criteria. Indirect impact criteria include land-use changes that could affect movement patterns and displacement due to those changes. Section 4.2.7.2 of the EIS describes impacts common to all segments for vegetation; Tables 4-70 through 4-73 and 4-214 through 4-27 outline by land-cover types the amount of loss of habitat. Section 4.2.7.2.1.2 and the corresponding section for the Mina rail alignment discuss how the proposal (including sidings, facilities, access, and the like) and loss of habitat could affect differing wildlife in terms of movement, displacement, and migration. DOE included these factors in the determination of threshold criteria listed in Section 4.1.2.

Sections 4.2.7.2.1.1 and 4.3.7.2.1.1 and Table 7-1 of the Rail Alignment EIS describe the DOE commitment to monitor and control noxious weeds and invasive species. DOE clarified those descriptions to better describe how it would develop and implement weed control during construction and operation of the railroad. The Department would develop a weed-management plan that met the requirements of the BLM for monitoring and control of weeds, and would consult with directly affected parties during the development of the plan. It would implement a program to monitor and control weeds before construction; that program would include an inventory of the alignment before construction, monitoring of disturbed sites, control of weeds throughout construction and operation, and reclamation of disturbed sites no longer necessary for operation of the railroad. The weed management plan would include details on how and when DOE would monitor and control weeds. As listed in Table 7-1, DOE would limit the application of water to disturbed sites to that necessary to meet requirements for the control of fugitive dust; weeds that grew as a result of applying water for dust control would be controlled.

3.7.5 (1131)

<u>Comment</u> - RRR000617 / 0132

Page 3-229, Section 3.2.7.2.2: DOE states that field surveys for wildlife were conducted within the construction ROW [right-of-way]. This survey is incredibly limited and provides no real data. The wildlife species of concern for this area are mobile and impacts will be spread much farther than the construction ROW. Wildlife movement across the rail will be especially impacted due to the size and construction of the access roads and rail roadbed. The ROI for biological resources -- wildlife -- should be expanded within the EIS.

Prior to the assessment for wildlife, DOE generated terrestrial and aquatic species lists for habitat and species occurrence along the construction right-of-way (500 feet on either side of the rail alignment) and the study area (a 10-mile-wide search on either side of the centerline) (Sections 3.2.7.1.1, 3.2.8.1.1, 3.2.7.1.2, and 3.8.1.2 of the Rail Alignment EIS). These investigations incorporated literature and database searches and consultation with land and resource agencies and authorities, including the BLM, the U.S. Fish and Wildlife Service, the Nevada Natural Heritage Program, and the Nevada Department of Wildlife. This information included Nevada game species. The commenter is correct that DOE incorporated additional ground surveys only in the construction right-of-way. However, the Department did this to provide a comprehensive understanding of the habitats and species, through data integration, that the project could affect.

In addition, Section 4.2.7.1.2 of the EIS establishes how this project would affect movement corridors as one of the criteria for the impact assessment. DOE considered this criterion in Section 4.2.7.1 of the EIS in the final determination of whether impacts would be small, medium, or large.

The largest direct impact to wildlife would be loss of habitat. Fragmentation of habitat would be a smaller impact in these types of ecosystems that rely more on forage potential and water. Animals that are as adaptable as the species in the Great Basin are generally limited primarily by those factors. Fences, roads, rail lines, buildings, walls, and the like could affect patterns of movement in this large ecosystem but they would not stop migration. Loss of food and water would affect species in the arid ecosystem, but is less important than loss of habitat.

3.7.5 (1144)

<u>Comment</u> - RRR000617 / 0143

Page 3-212, Section 3.2.7.1.1: The geographic extent of impacts to mobile biological resources will be much larger than the construction footprint because migration routes could be impacted as well as movement within and between habitat areas. Secondly, in the Great Basin and Mojave Desert environments the damage that will be done to plant life during the construction phase will not be short term. The ROI [region of influence] for biological resources -- wildlife -- should be expanded within the EIS.

Response

DOE agrees that a larger area is necessary for analysis of wildlife, particularly migratory species, and the Department studied a larger area. DOE considered an area much larger than the construction footprint during the evaluation of impacts to wildlife. Before the assessment, DOE generated terrestrial and aquatic species lists for habitat and species occurrence along the construction right-of-way (500 feet on either side of the rail alignment) and the study area (a 10-mile-wide search on either side of the centerline) (Sections 3.2.7.1.1 and 3.2.7.1.2 of the Rail Alignment EIS). These investigations incorporated literature and database searches and consultation with land and resource agencies and authorities, including the BLM, the U.S. Fish and Wildlife Service, the Nevada Natural Heritage Program, and the Nevada Department of Wildlife. This information included Nevada game species. DOE conducted ground surveys in the construction right-of-way to provide a comprehensive understanding of the habitats and species the project could affect.

In addition, Section 4.2.7.1.2 of the EIS established how this project would affect movement corridors as one of the criterion for the impact assessment. DOE considered this criterion in Section 4.2.7.1 in the final determination of whether impacts would be small, medium, or large.

In desert conditions, impacts to plant communities could extend beyond the short-term construction period due to the unpredictable nature of precipitation necessary to reestablish vegetation cover.

Chapter 7 of the EIS describes mitigation measures and best management practices related to revegetation.

3.7.5 (1145)

Comment - RRR000617 / 0144

Page 3-214, Section 3.2.7.2.1: DOE states that although undisturbed areas of winterfat (*Krascheninnikovia lanata*) are present within the ROW [right-of-way], they are uncommon. The fact that these areas do not dominate the landscape should make it possible to avoid impacting them. BLM allotment permittees have pointed out several important winterfat areas along the proposed rail alignment. The rail alignment passes along benches and valley bottoms, which are typical habitats for winterfat. Inter Mountain Basins Mixed Salt Desert Scrub, which makes up 33.59% of Common Segment 1, 77.37% of Common Segment 2, and 70.19% of GV1 (see tables 3-48 and 3-49 pages 3-232 and 3-233) contains winterfat as a co-dominant species. Inter-mountain Basins Semi Desert Shrub Steppe also contains winterfat as a characteristic species and makes up an additional percentage of the route coverage. Full descriptions of these vegetation types are available in the RE-GAP vegetation mapping legend. Winterfat is highly nutritious and is valued as a winter protein source for both livestock and wildlife use.

Section 3.2.7.2.1 of the EIS should be expanded to denote the significance of winterfat and disclose its likely/actual locations along the rail alignment alternatives.

The EIS should disclose steps DOE will take to avoid impacting areas containing winterfat and should be prepared to implement thorough and diligent revegetation efforts to standards approved by the BLM and the scientific community familiar with this desert environment.

Response

Sections 3.2.7.2.1 and 3.3.7.2.1 of the Rail Alignment EIS describe the significance of winterfat. While they have no official protected status with any federal or state agency, the BLM has identified these vegetation communities as important and stated that DOE should consider their conservation or protection. The BLM is a cooperating agency in the preparation of the Rail Alignment EIS, and consistency with BLM objectives, such as winterfat management, is mandatory.

Sections 4.2.7.1.1 and 4.3.2.1.1 of the EIS describe the effects to RE-GAP vegetation land-cover types. These include areas where winterfat might be more prominent. DOE incorporated impacts to species of concern in the EIS consistent with BLM policy for conservation and protection through habitat avoidance and minimization of direct impacts.

Table 7-1 of the EIS lists the steps DOE would take to minimize impacts to winterfat areas, including implementing a best management practice for winterfat management.

3.7.5 (1147)

<u>Comment</u> - RRR000617 / 0146

Page 3-244, Section 3.2.7.3.3.1: The Ute Ladies'- tresses orchid has the potential to occur in the alignment ROW [right-of-way]. While there is no designated critical habitat for this species within the one-mile study area, the orchid is associated with moist soil conditions such as those found around perennial stream or washes, spring-fed stream channels or wetland. This type of habitat is found in Meadow Valley Wash between Panaca and Caliente, which will be impacted by the proposed rail alignment. Other important species such as the southwestern willow flycatcher (endangered) and the yellow-billed cuckoo (federal candidate species) rely on wetland and riparian habitat as well as do the southwestern toad and the meadow valley speckled dace (state protected). The EIS should specifically acknowledge that wet habitat areas are crucial to maintaining biological diversity and should be protected and avoided.

Section 3.2.7.2.1.2 of the Rail Alignment EIS describes existing conditions for these habitats and their significance to the comparatively high amount of diversity they support, including Ute ladies' tresses. DOE collected information on locations of the species from BLM data and observations during field surveys. DOE would avoid known occurrence (more than 1 mile from the construction right-of-way) and would not affect additional species or habitat. This is true for the other species identified by the commenter. DOE added to the discussion in Section 3.2.7.2.2 of the EIS on the abundance and diversity of terrestrial species associated with wetland and riparian habitats. Section 4.2.7.2.1.3 discusses locations of these species and habitats and describes impacts to them, including Ute ladies' tresses.

DOE has selected a preferred alternative for the Staging Yard along the Caliente rail alignment that would reduce the amount of wetlands and riparian habitat it would disturb to about 8.7 acres by modifying design features. With this reduction in disturbance to wetlands, impacts would be smaller.

3.7.5 (1171)

<u>Comment</u> - RRR000617 / 0191

Page 4-184, Section 4.2.7.1: DOE states: "Although the Department would minimize the use of the area between the edge of the construction footprint and the outside edge of the construction right-of-way, DOE took a conservative approach and analyzed the short-term impacts to biological resources within this area. This approach overstates impacts as DOE would likely not disturb a large portion of this area."

This is a completely ridiculous statement and once again demonstrates how the DOE has consistently underestimated the impacts of the proposed rail alignment. In the harsh desert environment where the disturbance of biological resources would take place, very few if any impacts can be considered "short-term". Because of the low rates of seed germination and seedling survival, disturbance caused by heavy machinery traffic or soil removal will most likely remain beyond the 50-year lifespan of the project. DOE must implement realistic and long-term mitigation measures and implement post-restoration monitoring to ensure that re-vegetation with appropriate species is successful. Without these efforts scarring from railroad construction will become a permanent blemish on the landscape, and could contribute to erosion, invasive weed establishment, and forage and habitat loss.

The EIS must present an improved analysis of the temporal consequences of construction of the rail line on soils and vegetation. The DOE must accurately state the impacts of the rail, and must be prepared to implement environmentally responsible restoration and mitigation practices.

Response

Section 4.2.7.1 of the Rail Alignment EIS describes the rationale for reduction of impacts in the area between the width of the construction footprint for the rail line and the construction right-of-way. The right-of-way width is a nominal 500 feet on either side of the rail alignment centerline, and the actual construction footprint would typically be well within this right-of-way. However, DOE assessed the whole area of the construction right-of-way for direct construction- and operations-related impacts, thereby overestimating the total area of impacts. Mitigation measures and best management practices listed in Chapter 7 support avoidance and minimization of construction- and operations-related impacts. DOE is committed to restoring all disturbed sites not necessary for operation of the rail line. Section 2.2.2.10 of the Rail Alignment EIS explains that during and following construction, DOE would implement a program to monitor restoration activities and remediate revegetated areas as required.

3.7.5 (1194)

<u>Comment</u> - RRR000617 / 0193

Page 4-186, Section 4.2.7.1.3: The DEIS inappropriately limits the analysis of impacts to T&E [threatened and endangered] species to one of a qualitative nature. DOE is required to quantify an estimate of take (acres of lost habitat and/or numbers of animals killed) for inclusion in any Biological Assessment provided to the U.S. Fish and Wildlife Service to comply with Endangered Species Act Section 7 consultation requirements. The Service and the BLM typically prefer that Section 7 consultation and preparation of the related Biological Assessment occur concurrent with NEPA compliance. These quantitative estimates of take prepared for the Biological Assessment should have also been presented in the DEIS.

The EIS should include quantitative estimates of take of Threatened and Endangered species resulting from implementation of the Proposed Action and action alternatives.

Response

DOE has prepared a Biological Assessment for the desert tortoise, southwestern willow flycatcher, and Ute ladies' tresses and has entered formal consultation with the U.S. Fish and Wildlife Service (see Section 6.3.7.1 of the Rail Alignment EIS) since the publication of the Draft EIS. The assessment evaluates take and adverse modification or destruction of critical habitat. Sections 4.2.7 and 4.3.7 of the EIS quantify and qualify this information for each segment. Section 4.2.7.2.2.17 qualitatively discloses the acres of habitat for desert tortoise lost and the potential for harm to tortoises. As stated in Sections 4.2.7.2.1.3 and 4.2.7.2.2.1, DOE does not anticipate any quantifiable take of southwestern willow flycatcher or Ute ladies' tresses or destruction of their habitat. As required by the Endangered Species Act, the Fish and Wildlife Service would quantify take during development of a Biological Opinion.

3.7.5 (1197)

<u>Comment</u> - RRR000617 / 0196

Page 4-193, Section 4.2.7.2.1.2: Disruption of wildlife movement patterns and access to forage will be greater than necessary due to the width and uneven topography of the rail alignment cross-section. The DOE has failed to minimize the rail footprint and has also failed to include plans for wildlife underpasses in the BMPs [best management practices] and mitigations outlined in this document. The DOE should identify and evaluate the feasibility and environmental impact/benefit of alternatives for minimization of the rail footprint and options for allowing wildlife movement across the rail alignment (i.e. underpasses).

Response

Sections 4.2.7.1 and 4.3.7.1 of the Rail Alignment EIS describe the DOE commitment to wildlife avoidance and minimization of the rail line and facility footprints. These sections discuss the approach DOE took in the evaluation of impacts through a conservative approach (1,000-foot construction right-of-way) in considering the width of the rail line when the project would not disturb much of the area due to avoidance and minimization measures. DOE discusses culverts and other vertical construction mechanisms that would enable passage of wildlife. In addition, DOE has committed to reducing the total length of access roads by 300 miles, which has been incorporated in the impacts analysis for all resources affected by the change (DIRS 185099-Gehner 2008, all).

3.7.5 (1198)

<u>Comment</u> - RRR000617 / 0197

Page 4-194, Section 4.2.7.2.1.3: The conclusion that there is no suitable breeding habitat for the southwestern willow flycatcher within the construction right-of-way is incorrect. A baseline ecological assessment of the Meadow Valley Wash prepared as a component of the Draft Southeastern Lincoln County Habitat Conservation Plan identified existing suitable southwest flycatcher habitat within 150 feet east of the abandoned rail roadbed and within the construction right-of-way north of the City of Caliente

(beginning approximately 1,400 feet north of the Caliente Hot Springs Motel). Existing suitable southwest flycatcher habitat was also mapped within 200 feet of the abandoned rail roadbed and within the construction right-of-way near the entrance to the Caliente Youth Training Center.

The DOE should consider the results of the Meadow Valley Wash Baseline Ecological Assessment (Bio-West, 2004 and Bio-West, 2005) regarding any conclusions about the existence of existing suitable habitat for southwestern willow flycatcher within the construction right-of-way. Chapter 7 should describe measures to mitigate potential impacts to southwestern willow flycatcher.

Response

Section 4.2.7.2.1.3 of the Rail Alignment EIS discusses the impact of the Caliente Alternative on habitat for the southwestern willow flycatcher in the construction right-of-way. The conclusion of the analysis is that the habitat is marginally suitable migratory or nonnesting habitat and not critical. Breeding habitat and suitable habitat are not the same; suitable (marginal) habitat exists but is not breeding habitat. However, the analysis does not exclude the potential for small impacts to birds using the habitat. DOE is committed to avoidance and minimization of impacts to these habitats, as described in Appendix F of the EIS. The Department has completed a Biological Assessment for the southwest flycatcher that examines these relationships.

3.7.5 (1370)

Comment - RRR000617 / 0253

Radiological exposure risk associated with incident-free and rail accident conditions are not discussed as related to flora and fauna. DOE/EIS-0369D. 4.2.7, and 4.3.7 assesses impacts to Caliente and Mina corridors biological resources.

Response

Projects that involve the transportation of radioactive materials do not normally evaluate impacts to threatened and endangered species from radiological exposure. DOE did not find it necessary to conduct studies that could develop a link between radiation exposure and adverse effects in threatened and endangered species.

3.7.5 (1498)

<u>Comment</u> - RRR000656 / 0071

Section 4.2.7.3, page 4-232: The Shared-Use Option would require construction of commercial sidings. All such construction would be immediately adjacent to the DOE rail alignment and would have impacts similar to those under the Proposed Action without shared use. The Shared-Use Option would mean an increase in train traffic. Therefore, DOE would expect special status species, State of Nevada game species, and wild horse and burro interactions with train traffic (collisions, change in movement patterns, altered behavior, and nest abandonment) to be slightly higher than those interactions with rail traffic under the Proposed Action without shared use.

Response

Thank you for your comment.

3.7.5 (1549)

<u>Comment</u> - RRR000693 / 0011

Section 3.3.7.3.3.1, Threatened and Endangered Species: The Duckwater Shoshone Tribe has previously addressed our concern on the Railroad Valley springfish in 3.2.7.3.2.4.

As stated in Sections 4.2.7.2.2.9 and 4.2.7.2.3.3 of the Rail Alignment EIS, DOE has concluded that there would be no impacts to the Railroad Valley springfish because habitat for this species is far from the construction and operations rights-of-way and would not be disturbed.

3.7.5 (1564)

<u>Comment</u> - RRR000555 / 0003

The commenter said that DOE did not adequately evaluate impacts to several species of wildlife, including Lahontan cutthroat trout. He also said that there was no evaluation of impacts to the Amargosa Toad.

Response

This comment provides few details as a basis for the assertion that the impacts analysis for the Lahontan cutthroat trout is inadequate and that an analysis for the Amargosa toad is absent.

Lahontan cutthroat trout could occur in the Mina rail line alternative in Segments 1 and 6 of the Schurz option near Walker Lake and its associated tributaries (Section 3.3.7.3.3, Table 1000, and Section 3.3.7.3.3.1 of the Rail Alignment EIS). Section 4.3.7.2.2.3 of the EIS provides the rationale for the determination of a "small" impact on Lahontan trout from construction.

DOE assessed impacts to the Amargosa toad along the Caliente rail alignment in Section 3.2.7.3.3 and along the Mina rail alignment in Section 3.3.7.3.3 and the corresponding tables that disclose the toad's presence in common segments 5 and 6, the Oasis Valley alternative segments 1 and 4. Sections 4.2.7 and 4.3.7 the EIS provide the rationale for the determination of no impact.

Sections 4.2.7.1 and 4.3.7.1 of the Rail alignment EIS contain more information on impact assessment criteria; Section 4.1.2 presents the metrics for measurement. Based on the analysis and the habitat requirements for Amargosa toad (near water, springs, or seeps) and because no open water, springs, seeps, or ponds would be in the construction right-of-way, DOE determined that there would be no impact to Amargosa Toad populations.

3.7.5 (1643)

Comment - RRR000710 / 0016

Page 3-242, Section 3.2.7.3.2.2: The DEIS inadequately and inaccurately reports the affected environment as to bird species.

The DEIS states, "Two upland game bird species are expected to occur within the Caliente rail alignment construction right-of-way: chukar (Alectoris chukar) and Gambel's quail (Callipepla gambelii). Two species of upland game birds, chukar and mourning dove, were observed during surveys conducted along the rail alignment. Chukars were recorded in cliff and talus habitat in the Beatty Wash area. Mourning doves are common and were observed at multiple locations along the rail alignment. The greater sage-grouse is an upland game bird that has historically occurred in low abundance near portions of the rail alignment and it could occupy suitable habitat along the northern sections of the rail alignment."

As a matter of simple arithmetic, chukar + Gambel's quail + mourning dove + sage grouse = four upland game bird species, not two.

Additionally, the document fails to discuss any habitat or population surveys relating to Gambel's quail. The document for this reason alone does not assess accurately and adequately the affected environment relative to upland game bird species.

The DEIS states, "Populations of raptors are typically low in numbers, and their occurrence in the rail line construction right-of-way would be very low due to the lack of roosting, nesting, and foraging potential along the alignment. Raptors observed during field surveys included prairie falcon (Falco mexicanus), red-tailed hawk (Buteoj jamaicensis), rough-legged hawk (Buteo lagopus), northern harrier (Circus cyaneus), burrowing owl (Athene cunicularia), great-horned owl (Bubo virginianus), turkey vulture (Cathartes aura), and golden eagle (Aquila chrysaetos). In addition, ferruginous hawks (Buteo regalis) have been reported to occupy, and in some cases nest in, areas with trees close to the construction right-of-way.

The obvious observation is that, if the cited raptor species were not roosting, nesting, or foraging, what were they doing there? The corollary is that if the species were there, they were either roosting, nesting, or foraging, and, thus, there must be roosting, nesting, and foraging habitat available.

We conclude that DOE has inadequately sampled for the roosting, nesting, and foraging habitat available for the cited species, and for this reason alone the document does not assess accurately the affected environment relative to raptors.

The DEIS states, "Populations of bird species that rely on sagebrush habitat in Nevada are declining because cattle grazing and the proliferation of nonnative weeds have degraded the native sagebrush habitat.

However, it is not the State of Nevada that is the focus of this proposed rail alignment, and the document provides no foundation for applying a broad, sweeping, and mostly inaccurate statement to this area. Further, it is wildfires, not cattle grazing, that has destroyed millions of acres of sagebrush habitat within the State of Nevada in the past several years. The DEIS is completely silent as to the contribution of operation of railroads in starting such fires, and for this reason alone the document does not accurately assess the affected environment relative to sagebrush-obligate or sagebrush-dependent species.

Finally on this note, within at least the Reveille Allotment, the available data do not show a decline in the ecological condition or forage conditions of the sagebrush habitat, due to any reason at all, let alone due to cattle grazing. At least as to the 658,000+ acres within the Reveille Allotment, the document erroneously reports the affected environment relative to sagebrush-obligate species.

Response

DOE modified the text in Section 3.2.7.3.2.2 of the Rail Alignment EIS by adding the "two additional" species of upland game birds.

The commenter is correct that DOE did not complete population surveys for Gambel's quail; such surveys were not necessary to establish the species existence in the area of influence. The EIS discusses quail in Sections 3.2.7.2.4 and 3.2.7.3.2.2 for the Caliente rail alignment and Sections 3.3.7.2.4 and 3.3.7.3.2.2 for the Mina alignment. In addition, Appendix H, Section H.3.2 mentions quail.

To address the comment about raptor roosting, nesting, or foraging, DOE clarified Section 3.2.7.3.2.2 of the EIS to distinguish the potential for nesting habitat for ferruginous hawks and not for the other species listed.

Sections 4.2.7.2.1.1 and 4.3.7.2.1.1 of the EIS discuss impacts of wildfires on biological resources and grazing habitat. DOE expanded these sections to better describe the potential impacts to resources of wildfires caused by the Proposed Action.

DOE added fire-avoidance best management practices to Table 7-1; these include control of brush and weeds along the rail roadbed, monitoring to identify overheated wheel bearings, and development of water sources at sidings to be used to fight fires.

Sagebrush habitats have been declining throughout the west, including the Reveille Allotment, for many years due to fire, disturbance, grazing, and non-native competition. Section 3.2.7.3.1 of the EIS describes existing conditions for sagebrush communities and other vegetation land cover types, which DOE derived from the best available data and data sources. The text includes additional information on fires and other disturbance regimes to better identify elements that affect not only the habitat but also the species.

3.7.5 (1644)

Comment - RRR000710 / 0015

Page 3-224, Section 3.2.7.2.2: The DEIS inadequately and inaccurately describes the affected environment for wildlife as being; only that area within the construction right of way.

The DEIS states, "As with the vegetation communities and wetland habitats, DOE gathered data on wildlife communities to identify existing information regarding the occurrence and distribution of wildlife, including mammals, birds, reptiles, and aquatic species, within the construction right-of-way."

However, as with livestock habituated to the open range and as with wild horses habituated to the open range, the wildlife population's habitat and habitat uses are not confined to or defined within the area of the construction right-of-way. The effects of construction and operation of the railroad, especially but not limited to noise, will be disruptive to wildlife populations well away from the construction right-of-way, which the DEIS fails to adequately assess. In addition, wildlife corridors may also be affected, including bighorn sheep that are commonly found using the area near Warm Springs. Bighorn populations are known to have suffered die-offs from airborne dust, smoke, and ash from wildfires and construction activities. We [Twin Springs Ranch] did not see anywhere within the DEIS that described this reasonably foreseeable possibility. In addition, the post-storm accumulation of water on the upslope areas of the railbed will have the reasonably foreseeable impact of attracting wildlife, which will result in an increased likelihood of collision by trains.

Further, the document fails to discuss at all train-caused wildfires, which are a commonly reported and reasonably foreseeable possibility. The web is full of reports of such incidents across the United States and in the arid West.

The document for this reason alone does not assess accurately the affected environment and the potential of trains to cause wildfires, noise, and other forms of wildlife disruption that will reach far beyond the construction right-of-way.

Response

Before assessing impacts to wildlife, DOE generated lists for terrestrial and aquatic habitat and species occurrence along the construction right-of-way (500 feet on either side of the alignment) and the study area (a 10-mile-wide search on either side of the alignment centerline) (see Rail Alignment EIS Sections 3.2.7.1.1 and 3.2.7.1.2, respectively). Investigations included literature and database searches and consultation with land and resource agencies and authorities, including the BLM, the U.S. Fish and Wildlife Service, the Nevada Natural Heritage Program, and the Nevada Department of Wildlife. This included Nevada game species. The Department added ground surveys in the construction right-of-way to provide a comprehensive understanding of habitats and species the Proposed Action could affect.

Section 4.2.7.2.2 of the EIS discusses how the Proposed Action would affect movement corridors, which is a criterion for impact assessment. The final determination of small, medium, or large impacts would consider this criterion.

DOE expanded Sections 4.2.7.2.1.1 and 4.3.7.2.1.1 of the EIS to provide a better description of potential impacts of wildfires due to the Proposed Action. In addition, DOE added fire-avoidance best management practices to Table 7-1 of the EIS. These would include control of brush and weeds along the rail roadbed, monitoring to identify overheated wheel bearings, and development of water sources at sidings for fighting fires.

3.7.5 (1645)

<u>Comment</u> - RRR000710 / 0014

Page 3-214, Section 3.2.7.2.1: The DEIS fails to accurately assess and report the present situation (existing environment) as to vegetation through which the Caliente Rail Line would be placed.

The DEIS states, "Undisturbed areas of winterfat, or whitesage (Krascheninnikovia lanata), are present, but uncommon, within the construction right-of-way. While they have no official protected status with any federal or state agency, the BLM has identified these vegetation communities as important and their conservation or protection should be considered during development of any projects." However, this statement is erroneous for at least three reasons: 1) the DEIS does not define what is meant by the word "undisturbed"; 2) the DEIS does not identify why "undisturbed" areas of winterfat should deserve consideration during development, but areas of "slightly", "lightly", "moderately", or "heavily" disturbed areas (however the classes are defined) should not be considered; 3) the DEIS fails to accurately report the presence of winterfat in most of the length of Caliente Common Segment 2 and 3, at least within the Reveille Allotment. It is a key component of the vegetation, and is a key management species, at BLM vegetation types through which the proposed rail line would pass. See BLM monitoring files. See also DEIS Appendix H, Table H-1.

The document for this reason alone does not assess accurately or adequately the affected environment.

Response

Sections 3.2.7.2.1 and 3.3.7.2.1 of the Rail Alignment EIS discuss the significance and abundance of winterfat. DOE would consider protection of winterfat communities during the implementation of best management practices and mitigation measures discussed in Chapter 7 of the EIS.

3.7.5 (1999)

<u>Comment</u> - RRR000710 / 0040

Page 4-215, Table 4-82: The DEIS fails to adequately assess long-term impacts to Tonopah fishhook cactus.

The DEIS states that there would be a "small impact to potential habitat". However, DOE undertook only two survey transects, and those were undertaken perpendicular to the proposed rail alignment, rather than multiple transects conducted parallel to the rail alignment inside and outside the construction right-of-way. Further, two linear transects run perpendicular to the rail alignment cannot be deemed to be a sufficient sample size and sample design so as to adequately sample the "potential habitat" of the Tonopah fishhook cactus.

On the basis of the failure to adequately sample both the right-of-way corridor and the potential habitat of the species, DOE lacks sufficient information to authoritatively conclude that impacts to the potential habitat of the Tonopah fishhook cactus will be "small". The fact is that the lack of adequate sampling

means that the railbed construction has the potential to wipe out the entire population and entire habitat of the species, at least within the Reveille Allotment.

Response

The Tonopah fishhook cactus is a BLM-designated sensitive species and a State of Nevada protected species. Table 3-53 of the Rail Alignment EIS lists areas where the cactus might occur. Before the assessment for plant species, DOE generated lists of habitat and species occurrence along the construction right-of-way (500 feet on either side of the rail alignment centerline) and the study area (a 10-mile-wide area on either side of the alignment centerline (see Rail Alignment EIS Sections 3.2.7.1.1 and 3.2.7.1.2). These investigations incorporated literature and database searches and consultation with land and resource agencies and authorities, including the BLM, the U.S. Fish and Wildlife Service, the Nevada Natural Heritage Program, and the Nevada Department of Wildlife. This information included Nevada game species. The Department incorporated additional ground surveys in the construction right-of-way to provide a comprehensive understanding of the habitats and species the Proposed Action could affect.

Section 4.2.7.2.2.9 of the Rail Alignment EIS describes a small impact to the habitat of Tonopah fishhook cactus along Caliente common segment 3 in the Stone Cabin area. The impact would be short term, as noted in Table 4-92.

3.7.5 (2000)

Comment - RRR000710 / 0038

Page 4-196, Section 4.2.7.2.1.4: The DEIS fails to adequately assess impacts to Nevada same species.

We have, quite frankly, seen more and better quality analysis given to smaller groups of wildlife species in local-area projects than this EIS gives to species that will be disrupted over a 340-mile length of railroad, for the next 60 years.

The DEIS states, "After sections of the rail line were completed, it is possible that trains moving along the completed portion of track could collide with and injure or kill individual game animals. However, the likelihood of such collisions would be low, because most game animals would likely avoid oncoming trains whenever possible. During rail line construction there would be a potential for short-term impacts from the temporary disruption of movement patterns of game species within an area or along migratory corridors. This could disturb individuals or groups of animals and cause animals to avoid the construction areas.... These changes in movement or habitat-use patterns would affect relatively low numbers of individuals at any one time; therefore, changes in utilization of the water or forage resources in the region would be small. There could be direct impacts to game populations if animals avoid water sources close to construction activities. Water sources are found only along certain portions of the Caliente rail alignment and there could be a small short-term impact to individuals if they are unable to reach those water sources. However, there would be no impact on the overall populations of State of Nevada game species."

However:

- 1. The "overall populations of the State of Nevada" is not the relevant baseline. The relevant baseline is those populations within the impact area. What DOE is saying here is that, if all wildlife along the route are killed, it won't have any impact on the overall populations of the state. This is not adequate analysis.
- 2. It is not a short-term impact to a game animal to deprive it of water, especially in dry summer months. It is a permanent impact, because the animal dies.
- 3. Killing "relatively low numbers of individuals at any one time" still kills them all.

4. No analysis whatsoever is provided for the fact that wildlife will likely congregate at storm runoff accumulations on the upslope side of the road, which will increase the likelihood of collision by trains. The notion that most animals avoid collision with trains "whenever possible" is irrelevant to the fact that the history of railroads is [full] of reports of collisions with wildlife.

For example, in one scientifically-undertaken Canadian study, "railway-killed ungulates included bighorn sheep, caribou, deer (species unknown), elk, moose, mule deer, and white-tailed deer (N=164). Elk, moose, and mule deer comprised 83% of all ungulates killed. Railway-killed carnivores included black bear, cougar, coyote, grizzly bear, timber wolf, and wolverine (N=56). Black bears comprised 49% of all carnivores recorded. Rodents (beaver and porcupine) comprised 4% (N=9) of the reported mammal railway-kills. Bird railway-kills (N=12) included 5 Bald Eagles, 5 owls (Great Horned Owl and Northern Saw-whet Owl), 1 Killdeer, and 1 Ruffed Grouse." (See http://www.dot.state.fl.us/emo/sched/wells.pdf).

Response

Section 4.2.7.2.1.4 of the Rail Alignment EIS provides a general overview of potential impacts and establishes the criteria used to assess those impacts on Nevada game species. Overall, estimated direct impacts on game species would be small, as described in Section 4.2.7.2.1.4. Section 4.2.7.2.2 provides a segment-specific and species-specific understanding of direct impacts to Nevada game species related to the overall populations in Nevada. This discussion is provided as a comparison rather than a baseline discussion.

Section 4.2.7.2.1.4 of the EIS describes the potential effects of the rail line on mobility and selection of water sources rather than deprivation of water. Species adapt to movement, particularly in these ecosystems, and are drawn to water sources. The short-term impact is related to species changing and adapting their movements to find alternative water sources during construction-related activities and not depriving them of water altogether.

The statement in Section 4.2.7.2.1.4 is "would affect relatively low numbers of individuals"; the text does not use the word "kill" and the effects for each segment in Sections 4.2.7.2.2 through 4.2.7.3 do not allude to killing. Animals would be affected by adapting to changes in movement corridors and water sources. Those effects could cause mortality in some cases but, in general, the species in the areas are highly adaptable and loss of individuals should be small.

DOE has designed the rail line to handle surface-water runoff from storms and snowmelt events that could generate a 50-year flood. Placement of appropriately sized culverts would allow runoff to safely pass through embankments and allow surface water to return to normal runoff channels. As a consequence, impacts to forage production from runoff diversion would be small to none (Section 4.2.6 of the EIS).

The Canadian study to which the commenter refers is a collection of data from the Mountain Subdivision of the Canadian Pacific Railway that crosses the Rocky and Columbia Mountains in eastern British Columbia. Species respond differently to conditions in different ecosystems due to cover, forage, seasonal migrations, and many other factors dictated by the environment. The areas in British Columbia are very different ecosystems and, therefore, this study is not objectively transferable to the Great Basin and the proposed railroad, and DOE could not consider it for an impact discussion. DOE conducted a search for similar studies in the arid western United States, but found none.

3.7.5 (2066)

<u>Comment</u> - RRR000710 / 0039

Page 4-197, Section 4.2.7.2.1.5: The DEIS fails to adequately assess long-term impacts to the free-roaming nature of wild horses caused by operation of the Caliente line.

The DEIS discusses only short term impacts to forage, water, and patterns of movement during the construction phase, and long term impacts only relative to forage loss. However, the DEIS is entirely silent as to the long-term impacts to the free-roaming ability of wild horses along the rail line, due to operations over the next 50 years. See also Tables 4-79 through 4-82, and pages 4-211 through 4-216, all of which fail to adequately address impacts to the Herd Management Area usability due to operations of the rail line.

Response

The construction and operation of the rail line should not have long-term impacts to wild horses and burros and their ability to "free-roam." These animals are highly adaptable and subject to planning cycles of changing grazing allotments in the Herd Management Areas. The herds have had to experience population control due to overpopulation and problems with interactions with cattle and sheep. Reduction of habitat should be a short-term impact in the Herd Management Areas.

3.7.5 (2100)

<u>Comment</u> - RRR000710 / 0029

Page 4-124 and continuing, Section 4.2.5.2.1: The DEIS fails to adequately assess stormwater drainage and the impacts of damming (i.e. filling with the roadbed) several hundreds, if not thousands, of small-order drainages.

While the DEIS admits that localized flow patterns will be altered, the document fails to discuss all of the reasonably foreseeable results of such numerous "mini-dams" that will stretch for 340 miles. These dams will result in surface pool accumulation after storm events. The DEIS is silent to this fact. While this may have minor overall watershed affects, it has indirect impacts to livestock grazing and wildlife use of the areas. These pools of water are a known attractant to livestock and wildlife, which will increase the likelihood of congregation around the rail line, which will increase the likelihood of train collision after storm events. See also Section 4.2.7.2.1.2, where the DEIS fails to assess this reasonably foreseeable likelihood.

Response

From a land-use perspective, DOE designed the rail line to handle surface-water runoff from storms and snowmelt events that could generate a 50-year flood. The runoff would safely pass through embankments by the emplacement of appropriately sized culverts such that little surface water would be impeded from returning to normal runoff channels. There could be some small ponding near the rail line, and DOE added text to land use Section 4.2.2.3.2 of the Rail Alignment EIS to acknowledge the possibility of increased train strikes of wildlife and livestock near the rail line. DOE would work with the BLM and permittees to implement engineering controls to minimize loss of livestock and wildlife.

Section 4.2.7.2.1.2 of the EIS discusses impacts to wildlife from loss of habitat, disturbance to habitat, displacement, access to important habitat, change in movement patterns, and how these would affect the risk for collisions. This section includes these effects and the criteria on which DOE based the impact assessment for each segment.

3.7.5 (2136)

<u>Comment</u> - RRR000710 / 0021

Page 3-261, Section 3.2.7.3.5.1: The DEIS fails to recognize the proximity, if not the crossing, of bighorn habitat at Warm Springs Summit.

Bighorn are regularly [sighted] on private and public lands at Warm Springs, and we believe they may move between Warm Springs and the Black Springs waters.

Figure 3-101 of the Rail Alignment EIS shows a year-long desert bighorn sheep habitat area near Warm Springs and Caliente common segment 3.

3.7.5 (2137)

<u>Comment</u> - RRR000710 / 0020

Page 3-257: The DEIS fails to assess the affected environment relative to burrowing owl.

The DEIS states, "DOE identified one burrowing owl burrow, which appeared to be active, within the Caliente rail alignment study area in the vicinity of Yucca Mountain." However, this is an incredible, and in-credible, statement. The study area purportedly involves a strip 10 miles wide x 340 miles long, but DOE would have the public believe that in the entire 3400-square mile corridor (2,176,000 acres), only a single active burrowing owl burrow was located! This indicates that the sampling conducted by DOE was inadequate, either as to timing or as to intensity, or as to design, or as to a combination of the three.

For this reason alone, the DEIS fails to adequately monitor the habitat of, and report and assess the affected environment relative to, the burrowing owl.

Response

Tables 3-53 and 3-133 of the Rail Alignment EIS and the corresponding text discuss the potential for the Western burrowing owl to occur in all rail line segments and alternatives. Sections 4.2.7.2.1.3 and 4.3.7.2.1.3 of the EIS discuss possible impacts to the Western burrowing owl.

3.7.5 (2156)

<u>Comment</u> - RRR000710 / 0019

Page 3-256: The DEIS fails to adequately assess the affected environment and pertinent controlling government requirements relative to cacti, yucca and Christmas trees.

The DEIS states, "As defined in Section 3.2.7.3.3, special status species are species that are afforded some level of protection or special management under federal or state laws or regulations. As such, all cacti and yucca are considered special status because they are protected by the State of Nevada and the BLM. All cacti, yucca, and Christmas trees have special consideration under Nevada Revised Statutes Section 527.050 and are protected from unauthorized removal.... DOE would salvage minimal amounts of cacti and yucca within the construction right-of-way in accordance with this law and the requirements of applicable land management agencies during the construction phase. Stipulations for salvage are outlined in BLM Manual 6840, Special Status Species Management."

However, while accurately stating that cactus, yucca, and Christmas trees have protected State -- and therefore Federal -- status, the DEIS erroneously assumes that DOE may "salvage" "minimal amounts" of the species.

As to "minimal amounts", although we [Twin Springs Ranch] are not lawyers, it would appear from our reading of NRS 527 that BLM may have the authority to remove the protected species from land they administer. However, it may also be BLM's decision that DOE must replant or replace off-corridor a like number of (or more, or fewer) individuals of each species that will be destroyed as a result of the construction activities. In any event, it is not DOE'S prerogative, because DOE has no authority, to decide that it will only protect "minimal amounts" of the species.

As to "salvage", such activity as outlined in BLM Manual 6840 is an exception to the prohibition on "take" of a species, and is permitted as follows:

Section 10 (Exceptions to the ESA). Section 10 of the ESA provides for exceptions to the requirements and prohibited acts of other sections of the ESA.

Take and incidental take. Section 10 of the ESA provides exceptions for activities otherwise prohibited by Section 9. The BLM shall obtain permits from the FWS [U.S. Fish and Wildlife Service] and/or NMFS [National Marine Fisheries Service] if...reduction to possession of listed plants is anticipated and is not otherwise authorized. Authorization for take can occur in several ways – Any BLM employee may, when acting in the course of his or her official duties, remove and reduce to possession a federally endangered plant without a permit if such action is necessary to (i) care for a damaged or diseased specimen; (ii) dispose of a dead specimen; or (iii) salvage a dead specimen which may be useful for scientific study.

Therefore, assuming BLM would apply the provisions of Manual 6840 to include not only endangered species, but also "special status" species, it would appear that neither DOE nor BLM has any authority to "salvage" any live individuals of these plant species, but instead only individuals that are already dead.

Further, assuming Manual 6840 was erroneously cited by the DEIS, and that this Manual would not apply, then the DEIS nevertheless fails to identify the mechanism by which these State-protected (and therefore federally-protected) plant species would be preserved, and/or the mechanism by which appropriate Mitigations would occur. We know of no federal protective mechanism that would apply (other than Manual 6840), and contend that the protective measures for these plant species is inadequately provided for by federal Manual 6840 guidance, and should therefore be properly determined by the State of Nevada.

Response

In response to this comment, DOE made changes to the Rail Alignment EIS throughout the document to clarify the role of the Department and the salvage requirements for cacti and yucca. DOE also clarified other potential salvage requirements. See Sections 2.2.2.10, 3.2.7.3.3.2, 4.2.7.2.1.3, 4.2.7.4, 4.3.7.2.3.3, and 4.3.7.4.

3.7.5 (2157)

<u>Comment</u> - RRR000710 / 0018

Page 3-256: The DEIS fails to adequately assess the affected environment relative to Tonopah fishhook cactus.

The DEIS states, "The Tonopah fishhook cactus has been recorded near the Caliente rail alignment in Reveille Valley. Only general locations of this species are included in the Nevada Natural Heritage Program database (DIRS 182061-Hopkins 2005) because of the risk of illegal collection. Field surveys consisting of two 1.6-kilometer (1-mile) transects perpendicular to the rail alignment in Reveille Valley did not locate any Tonopah fishhook cacti within the construction right-of-way."

However, transects run perpendicular to the rail alignment, cannot be deemed to be adequate sampling, either in number, or in design. Such sampling would properly be conducted along several transects run parallel to the rail alignment, both within and outside the construction corridor. In fact, the two transects could have only sampled a maximum of (nominal width of 1000 feet x 2 transects = 2000 feet =) 0.38 mile, out of the two miles (10,560 feet) of transects conducted.

For this reason alone, DOE has inadequately sampled, and therefore inadequately reported and assessed, the affected environment relative to Tonopah fishhook cactus.

The Tonopah fishhook cactus is a BLM-sensitive and state-protected species. Table 3-53 in of the Rail Alignment EIS lists the area where the cactus occurs. Before the assessment for plant species, DOE generated lists of habitat and species occurrence along the construction right-of-way (500 feet on either side of the rail alignment) and the study area (a 10-mile-wide-search on either side of the centerline) (Sections 3.2.7.1.1 and 3.2.7.1.2). These investigations incorporated literature and database searches and consultation with land and resource agencies and authorities, including the BLM, the U.S. Fish and Wildlife Service, the Nevada Natural Heritage Program, and the Nevada Department of Wildlife. This information included Nevada game species. DOE conducted additional ground surveys for fishhook cactus and other species in the construction right-of-way to provide a comprehensive understanding of the habitats and species that the project could affect.

3.7.5 (2158)

<u>Comment</u> - RRR000710 / 0017

Page 3-248, Table 3-53: The DEIS fails to report the presence of bighorn sheep at Warm Springs and the Warm Springs Summit, along Caliente Common Segment 3.

Response

Figure 3-101 of the Rail Alignment EIS shows a year-long desert bighorn sheep habitat area near Warm Springs and Caliente common segment 3.

3.7.5 (3103)

<u>Comment</u> - RRR000671 / 0034

Page 3-230, Table 3-47, Nevada Game Species Present or Potentially Present: The text omits two species that are absent and known to exist in the proposed area. Indian people have observed kit fox and bobcats that have been inadvertently omitted. Other sources should be reviewed to determine a complete listing to alleviate other exclusions. The text should be revised to include the two species identified.

Response

Section 3.2.7.2.4 of the Rail Alignment EIS discusses the list of game species identified in Nevada Administrative Code Sections 503.020, 503.045, and 503.060 that could occur in the study area. Section 3.2.7.3.2.1 of the EIS discusses kit fox and bobcats; DOE updated Table H-3 in Appendix H to include these species as potentially existing in the project area. Sections 4.2.7 and 4.3.7 assess impacts to these species.

3.7.5 (3167)

Comment - RRR000691 / 0037

The EIS is absent information with reasonable certainty, quantifying the number of desert tortoises that may be impacted by rail construction. Likewise, the EIS is absent any information concerning identification and relocation and/or mitigation of tortoise loss.

Response

DOE is preparing a Biological Assessment for the desert tortoise, southwestern willow flycatcher, bald eagle (status updated), Ute ladies' tresses, and yellow billed cuckoo. This assessment will include estimated take and adverse modification or destruction of critical habitat, if appropriate. Sections 4.2.7 and 4.3.7 of the Rail Alignment EIS quantify and qualify this information for each Segment. Section 4.2.7.2.2.17 of the EIS describes the loss of habitat for desert tortoise and the potential for loss of species without a determination of take. The Biological Assessment will explore a determination of take for species with documented concurrence from the U.S. Fish and Wildlife Service and disclosed in the EIS and Record of Decision.

3.7.5 (3168)

<u>Comment</u> - RRR000691 / 0038

The EIS is absent information concerning the proposed rail lines impact on the spawning activities of the Lahontan cutthroat trout or depredation of game species such as Bighorn Sheep, Prong Horn Sheep, deer, mountain lions and herd management areas for wild horses and burros.

Response

Section 4.2.7.2 and 4.3.7.2 of the Rail Alignment EIS discuss impacts to the species listed in this comment and describe the loss of habitat from construction and operation of the rail line. Section 4.3.7.2.2.3 of the EIS describes the effects determination for Lahontan cutthroat trout in the Walker River and discusses existing conditions, including spawning for this species.

3.7.5 (3169)

<u>Comment</u> - RRR000691 / 0039

The EIS is absent information quantifying the impact of rail line soil erosion on plant, fish or mammal life.

Response

Section 4.2.7.2.1.1 of the Rail Alignment EIS discusses the potential for removal of vegetation to increase soil erosion. Chapter 6 of the EIS discusses mitigation measures and best management practices for minimizing soil erosion and removal and restoration of vegetation.

3.7.5 (3415)

<u>Comment</u> - RRR001082 / 0001

We [Bureau of Land Management] were unable to verify whether there are potential fish passage issues with the proposed crossings. All streams that are perennial and/or have fisheries issues should have a bridge or natural bottom crossing.

Response

There are no fish passage issues associated with the Caliente rail alignment because the rail alignment would not cross viable fisheries. Section 4.3.7.2.2.3 of the Rail Alignment EIS discusses the possible use of a fish ladder in the Walker River area along the Mina rail alignment.

3.7.5 (3946)

<u>Comment</u> - RRR000943 / 0003

The commenter stated that the analysis of impacts to grazing allotments is inadequate because it fails to address impacts from surface-water obstructions and diversions to the quality of forage.

Response

DOE designed the rail line to handle surface-water runoff from storms and snowmelt events that could generate a 50-year flood. The runoff would safely pass through embankments by the emplacement of appropriately sized culverts such that little surface water would be impeded from returning to normal runoff channels. Therefore, impacts to forage production from runoff diversion would be small to none.

3.7.6 Cultural Resources

3.7.6 (445)

<u>Comment</u> - RRR000101 / 0005

The commenter noted that the Rail Alignment EIS omitted a Nevada Revised Statute regarding Indian burial remains.

The commenter is correct. DOE modified Chapter 6 of the Rail Alignment EIS to include the appropriate Nevada Revised Statute on Indian burial remains.

3.7.6 (446)

<u>Comment</u> - RRR000101 / 0007

The commenter requested that a discussion be included about historic Southern Paiute settlements along some parts of the Caliente corridor.

Response

Section 3.2.13.3.2 of the Rail Alignment EIS describes historic Southern Paiute settlements along the Caliente rail alignment, including those in the Pahranagat Valley, Pahroc, and Panaca areas. DOE added locations of additional settlements to the EIS.

3.7.6 (1182)

<u>Comment</u> - RRR000663 / 0058

The Draft EIS separates cultural resources (S-60) from American Indian Interests (S-62) much as the Draft Repository SEIS does. The identification of properties of religious and cultural significance should be considered an activity separate from seeking viewpoints. Because properties of religious and cultural significance have not yet been identified it is premature to predict that effects would be small to moderate.

Response

DOE is engaged in ongoing consultation with the Consolidated Group of Tribes and Organizations, a group of Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shoshone tribal governments with indigenous ties to Yucca Mountain and surrounding regions. The Group meets regularly to review, comment on, and recommend actions concerning all aspects of the project. It also reviews and comments on all studies of cultural, historic, burial, and religious sites and of potential impacts to traditional resources and resource use. In October 2004, DOE conducted a 3-day field trip with the American Indian Writers Subgroup (designated by the Consolidated Group of Tribes and Organizations) that covered the areas of the Caliente rail corridor that were accessible by 4-wheel drive vehicles. Maps were used to analyze the route and areas that were not accessed. DOE held three additional meetings (December 2004, January 2005, and April 2006) with the American Indian Writers Subgroup to continue to review maps, have discussions, and prepare a reference document on the proposed Caliente rail corridor. This process helps to ensure that DOE considers Western Shoshone and Southern Paiute concerns in the ongoing government-to-government relationship between the Department and the tribes. DOE is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts prior to rail construction.

Tribal consultation is addressed in detail in the Programmatic Agreement (see Appendix M of the Rail Alignment EIS), which specifies the use of written communication, telephone communication, personal meetings, procedures for resolving identified issues, participation of tribal monitors during field studies, and 2-day notification of tribes in the event of discovery situations. Treatment of impacts would be guided by an appropriate treatment or data recovery plan and would be designed to lessen or mitigate project-related effects to historic properties through avoidance, data recovery, or other measures (including Historic American Indian Buildings Survey/Historic American Engineering recordation, oral history, historic markers or exhibits, or interpretive publications).

Based on current information, DOE has concluded that constructing and operating the proposed railroad along the Caliente rail alignment or the Mina rail alignment would not result in any high and adverse impacts. If, during the development of the inventory described in Sections 4.2.13.4 and 4.3.13.4 of the Rail Alignment EIS, additional cultural resources were discovered that could not be avoided and for

which cultural resources impacts might be considered significant, then the magnitude of the environmental impacts might also be larger.

3.7.6 (1183)

Comment - RRR000663 / 0059

The Draft EIS minimizes the effect the selection and building of the Goldfield alternative four would have on the Goldfield National Register District. Construction through a National Register District would likely be more than a "small to moderate" impact -- it could be sufficiently significant to result in a delisting of the Goldfield Historic District.

Response

To the extent possible, construction of a rail alignment through Goldfield would follow an existing historic railroad alignment. As a consequence, the rail line would not be incompatible with the character of the historic district and, therefore, would be unlikely to result in a delisting of the Goldfield Historic District.

3.7.6 (1497)

<u>Comment</u> - RRR000693 / 0009

Section 3.2.13, Cultural Resources: Class II inventory, a 20% survey is insufficient. The Tribes have THPO's [Tribal Historic Preservation Officers] or Cultural Resource officers. The appointed people by the Tribes need to visit the entire rail corridor to insure that TCPs [traditional cultural properties], sacred sites, doctoring places, plant gathering areas, paint sources are not impacted. Without proper survey, these places may be adversely impacted. The DOE needs to have ethnographic research completed for the entire rail corridor.

Section 3.3.13.4, Site-Specific Cultural Resources: There are certain areas along the rail corridor such as massacre sites, and areas of conflict with, Euro-Americans along the rail corridor. Again a ethnographic research needs to be conducted to prevent potential adverse effects to these places.

Response

DOE conducted a sample archaeological inventory of all alternative segments and common segments to assist in the analysis and selection of preferred routes. The Department would conduct an intensive 100-percent inventory for selected segments before construction, and would avoid significant cultural resources where feasible; it would mitigate impacts to disturbed or damaged sites in consultation with the State Historic Preservation Office, BLM, and other appropriate agencies. The archaeological survey process and subsequent mitigation actions would include tribal representatives to ensure documentation of cultural sensitivities and American Indian perspectives. DOE is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before construction.

3.7.6 (1551)

<u>Comment</u> - RRR000693 / 0013

Section 3.3.13, Cultural Resources, Section 3.3.13.3.4, Cultural Landscapes: A more thorough in-depth ethnographic study needs to be conducted. Areas of spiritual [significance] can be impacted.

Section 3.3.13.4, Site-specific Cultural Resources: Not noted is this segment is paint (mineral) sources, medicinal and food plants areas that are still utilized and can be impacted.

Response

DOE added a reference to the presence of mineral, medicinal, and food plant areas along the Mina rail corridor to Section 3.4 of the Rail Alignment EIS. The Department would conduct additional studies to

better understand the locations and importance of areas and resources significant to the tribes. DOE is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before construction.

3.7.6 (1567)

<u>Comment</u> - RRR000555 / 0008

The commenter said that DOE should end the Yucca Mountain Project because Yucca Mountain is sacred to the Shoshone.

Response

DOE does not have the statutory authority to end the Yucca Mountain Project; that authority lies with the U.S. Congress. DOE has worked with the Consolidated Group of Tribes and Organizations since 1991 in an effort to collect and consider concerns of American Indians and has committed to resume its annual Tribal Update Meetings with the Group. DOE will continue to work through such meetings to discuss topics of concern to the Shoshone people. DOE is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before construction.

3.7.6 (2479)

<u>Comment</u> - RRR000675 / 0020

The proposed Caliente Rail Alignment will travel through areas disrupting many cultural resources. The documents state that the DOE will try to avoid disturbances to cultural sites; however, the transport of nuclear waste will disturb more than just sites on the land. It will disturb all things. The documents state that the construction of a railroad will have unavoidable impact to the interests of American Indian interests. The [Big Pine Paiute Tribe of the Owens Valley] would like to emphasize that the construction of a railroad will cause unavoidable impacts to its traditional lands.

Prior to any ground disturbing activities of the Caliente Rail Alignment, the Tribe recommends that systematic ethnographic studies be completed to determine the cultural and ethnographic importance of the area followed by a traditional blessing ceremony and support of on-site Indian Monitors during all phases of evaluation and construction activities. The following areas are places that the Tribe has specific concerns Crater Flat, Tarantula Wash, Beatty Wash, Coffer's Ranch, Goldfield, Mud Lake, Warm Springs, Caliente, Quinn Canyon, Pete Ranch, Willow Witch Well, White River Narrows and Black Top.

Response

DOE is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before rail construction. The Department would include tribal representatives in the archaeological survey process and subsequent mitigation actions at the rail corridor level to ensure the documentation of cultural sensitivities and American Indian perspectives. DOE is aware that the places mentioned in the comment have traditional meaning for the Big Pine Paiute Tribe of the Owens Valley; it did not list them on maps to protect them from unwanted intrusion.

3.7.6 (3146)

<u>Comment</u> - RRR000671 / 0037

Page 3-320 3.2.13.3.1 Prehistoric Period: The information provided in this section is inconsistent with previous literature and text written provided by DOE/YMP [Yucca Mountain Project] archaeologists. Moreover, the text clearly delineates the Prehistoric Period from the American Indian Historic Period which is inconsistent with information and text previously provided in YMP documents. The text should be revised to maintain consistency within DOE documents.

Prehistoric chronological developments are often open to interpretation and commonly vary from region to region. As a result, archaeologists often develop different sequences to account for changes observed in the archaeological record. For the Rail Alignment EIS, a simple, commonly accepted sequence has been adopted that addresses prehistoric developments across the regions crossed by the proposed rail alignments. Utilization of this sequence does not affect any conclusions reached in the analyses. The Department acknowledges that long-standing practices of American Indian peoples originating in prehistoric periods carried on unchanged into the historic and present-day periods.

3.7.6 (3147)

<u>Comment</u> - RRR000671 / 0038

Page 3-326, Section 3.2.13.4.3, Known American Indian Resources: The text fails to list and/or identify Prow Pass and Cot Cave that are known to exist within the Yucca Mountain Site boundary.

Response

DOE added Prow Pass and Cot Cave to the discussion of known American Indian resources in Section 3.2.13.4.3 of the Rail Alignment EIS.

3.7.6 (3156)

<u>Comment</u> - RRR000671 / 0043

Page 4-350, Section 4.2.13.1, Impact Assessment Methodology, identifies a Class III Inventory would recommend tribal involvement and the American Indian Writers Subgroup. This recommendation is good however there is no guarantee that this will occur based on previous commitments made by the DOE but not upheld. The text should be revised to address this concern.

Response

The Programmatic Agreement for cultural resources management requires tribal involvement in the monitoring effort. Therefore, DOE would include American Indian tribal representatives to monitor archaeological inventory efforts to identify cultural sites in the affected areas. The Department is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before rail construction.

Chapter 7 of the Rail Alignment EIS includes the description of the process DOE would use to include American Indian monitoring of the proposed project and negotiation of mitigation measures if such measures became necessary.

3.7.6 (3158)

<u>Comment</u> - RRR000671 / 0044

Page 4-352, Section 4.2.13.1, Impact Assessment Methodology: The text references the American Indian Writers Subgroup Resource Document but must recognize that this document was not intended to be all inclusive due to the limited time permitted by the DOE for only those sites that they pre-selected. During Class III Archaeological Evaluation a provision should be clearly stated that the American Indian Writers Subgroup will be afforded the opportunity to systematically evaluate the entire rail line in addition to on-site American Indian monitors during all phases of construction.

Response

In October 2004, DOE conducted a 3-day field trip with the American Indian Writers Subgroup (designated by the Consolidated Group of Tribes and Organizations) covering the areas of the Caliente rail corridor that were accessible by 4-wheel drive vehicles. Maps were also utilized to further analyze the route and areas that were not accessed. The DOE held three additional meetings (December 2004, January 2005, and April 2006) with the American Indian Writers Subgroup to continue to review maps,

have discussions, and prepare a reference document relating to the proposed Caliente Corridor. DOE understands that additional tribal involvement in documenting and recording cultural information and perspectives is necessary. DOE is committed to continuing its Native American Interaction Program through directly involving tribes in cultural resource and ethnographic study efforts prior to rail construction.

3.7.6 (3186)

Comment - RRR000524 / 0020

The draft rail EIS does not describe clearly how DOE relates adverse effects determined under the Section 106 consultation process to the EIS discussion of small, moderate, or large impacts. This appears to have resulted in inconsistencies or gaps in some of the discussions of impacts (e.g., discussions of visual intrusion). The final rail EIS should clearly explain how potential impacts were assessed to be consistent with 36 CFR 800.5. Also, the final EIS should present its conclusions about impacts consistently.

As defined in 36 CFR 800.5(1), "...an adverse effect is found when an undertaking may alter, directly, or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association... Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative."

The draft rail EIS either appears to omit impacts or does not clearly discuss impacts that could be considered adverse affects under 36 CFR Part 800. For example, Section 4.2.13.2 states that nearly all potential direct impacts on cultural resources, including those that would physically damage, alter, or disturb a historic property, would occur during the construction phase. However, visual intrusion effects from construction in remote areas are not discussed. Table 4-144 indicates that during operations, no additional direct or indirect impacts on cultural resources would occur, but Section 4.2.13.2.2 states that trains using tracks may be a potential visual intrusion on the character of cultural landscapes.

Section 5.2.2.13 states that, with ground disturbance associated with construction of the rail alignment, cultural resources could be destroyed, damaged, or discovered for recovery or mitigation. However, DOE concludes in the same section that impacts on cultural resources would be small, because DOE would conduct field surveys and implement mitigation measures.

Response

DOE would not conduct complete Class III cultural resource inventories until it had selected a final alignment. As a consequence, the Department cannot determine the specific effects of the project; however, the Rail Alignment EIS text acknowledges the possibility of damage to, or destruction of, historic properties. In the Programmatic Agreement developed for the project, DOE has committed to a process to satisfy its Section 106 responsibilities that will identify and address adverse impacts to historic properties. If adverse impacts are identified, DOE, in consultation with the BLM, State Historic Preservation Office, and other consulting parties as appropriate, would develop and evaluate ways to avoid, minimize, or mitigate such impacts. Because of the expectation that this process would resolve adverse impacts, DOE characterized residual effects as small. DOE added text to the Rail Alignment EIS that explains the relationship between adverse impacts identified through application of the process in the Programmatic Agreement and the EIS discussion of impacts characterized as small, medium or large.

As specified in 36 CFR 800.5.a.1, DOE would determine if visual effects (as well as other effects) would adversely affect the characteristics of each historic property that qualifies it for inclusion on the *National Register of Historic Places*. DOE reviewed the EIS discussion of potential adverse visual effects for consistency and clarity.

3.7.6 (3187)

<u>Comment</u> - RRR000524 / 0021

The draft rail EIS does not provide a clear discussion of the methodology used to assess archaeological resources in the context of National Register eligibility. The final rail EIS should clarify the criteria for the listing of archaeological resources on the National Register.

Section 3.2.13 of the draft rail EIS states that "...archaeological resources are prehistoric or historic remains of human lifeways or activities that are at least 100 years old" However, no basis is provided for this statement and it may not be consistent with the evaluation criteria in 36 CFR 60.4.

Response

Sections 3.2.13 and 3.3.13 of the Rail Alignment EIS identify the criteria for evaluating eligibility for listing on the *National Register of Historic Places*, as defined in 36 CFR 60.4. DOE reviewed the EIS to ensure that it clearly states how the Department would apply these criteria to identify historic properties among the sites identified during the performance of the Class III inventories described in Sections 3.2.13.2 and 3.3.13.2.

3.7.6 (3188)

<u>Comment</u> - RRR000524 / 0022

The draft rail EIS does not clearly discuss cultural resource preservation in the context of the BLM visual resource classification rating system, especially with regard to Class III and Class IV landscapes. The final rail EIS should clarify how cultural landscapes that fall within BLM jurisdiction would be preserved, protected, and managed and clarify the applicability of the "State Protocol Agreement Between the Bureau of Land Management and the Nevada State Historic Preservation Office" and Section 110 of the National Historic Preservation Act.

Section 3.2.13.3.4 states that several areas along the Caliente rail alignment have been assessed to contain potential cultural landscapes based on the criteria of historic and prehistoric activities. Many of these areas fall under Class III and IV of the BLM visual resource management system (BLM, 1986). Along the project areas, identified potential cultural landscapes that may be eligible for listing on the National Register include ethnographic, rural historic, and historic mining districts. As stated in the draft rail EIS, railroad construction and operation could lead to unavoidable changes in cultural landscapes.

References:

Bureau of Land Management, Visual Resource Inventory, Manual H-8410-1 Washington, D.C. 1986. State Protocol Agreement Between the Bureau of Land Management and the Nevada State Historic Preservation Office (DN2001868743-ALA20050513.0262).

Response

In Nevada, the BLM visual resource classification system and cultural resources management program generally have been managed separately. The BLM visual resource classification system compares visual impacts using a scale of contrast for key observation points not specific to cultural resources. The system is intended to evaluate and determine impacts to viewsheds on BLM-administered public lands. This system is not generally integrated into the evaluation of impacts or effect on cultural resources.

Cultural resources are evaluated through the Section 106 process of the National Historic Preservation Act. In the case of the proposed railroad, a Programmatic Agreement (see Appendix M of the Rail Alignment EIS) has been approved by the BLM, the State Historic Preservation Office, the STB, and DOE. The agreement helps to identify and resolve adverse effects by using processes for each step in the evaluation. This includes adverse effects to visual characteristics that contribute to the qualities that make historic properties (sites or landscapes) eligible for listing on the *National Register of Historic Places*.

DOE clarified this approach in Sections 4.2.13.1 and 4.3.13.1 of the Rail Alignment EIS. DOE complies with Section 110 of the National Historic Preservation Act through the processes described in the Programmatic Agreement.

3.7.6 (3192)

<u>Comment</u> - RRR000671 / 0045

Page 4-353, Section 4.2.13.2.1.1, Alternative Segments at the Interface with Union Pacific Mainline: The text describes ... a previously recorded rockshelter and an unevaluated rockart panel and various lithic scatters. These areas have not been visited nor evaluated by the American Indian Writers Subgroup and provisions need to be stated in the text that provisions will be made and supported by the YMP [Yucca Mountain Project] for tribal representatives the opportunity to systematically evaluate these important areas prior to [implementation] of the construction phase.

Response

In October 2004, DOE conducted a 3-day field trip with the American Indian Writers Subgroup (designated by the Consolidated Group of Tribes and Organizations) covering the areas of the Caliente rail corridor that were accessible by 4-wheel drive vehicles. The survey used maps to analyze the route and areas that the trip could not access. DOE held three meetings (December 2004, January 2005, and April 2006) with the American Indian Writers Subgroup to continue to review maps, have discussions, and prepare a reference document on the Caliente rail corridor. As additional field studies progress, DOE will provide the Consolidated Group of Tribes and Organizations the opportunity to evaluate areas of concern to American Indians. DOE understands that additional tribal involvement in documenting and recording cultural information and perspectives is necessary. DOE is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before rail construction.

3.7.6 (3198)

<u>Comment</u> - RRR000671 / 0049

Page 5-44, Section 5.2.2.13, Cultural Resources: The text identifies other federal agencies that employ cultural resource specialists and involve tribal representatives as appropriate but fails to identify similar initiatives by the YMP [Yucca Mountain Project]. The text should be expanded to include similar efforts by the YMP. In addition, the absence of this text specifically related to the YMP further confirms the absence of consultation with tribes to maintain a government-to-government relations and include tribal interactions as stated throughout the Rail EIS.

Response

DOE employs cultural resource experts in conducting cultural resource management efforts as part of the environmental compliance program. As part of the consultation process, the Department has worked with the Consolidated Group of Tribes and Organizations since 1991 to collect and consider concerns of American Indians and has committed to resume its annual Tribal Update Meetings with the Group. It will continue to work through such meetings to discuss topics of concern to American Indians. DOE understands that tribal involvement in documenting and recording cultural information and perspectives is necessary. The Department is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before construction of the proposed railroad began.

3.7.6 (3640)

<u>Comment</u> - RRR000666 / 0008

The EIS fails to fully recognize the destructive impacts associated with GF3 to Willow Springs and related artifacts of cultural significance to Native Americans. Furthermore, the EIS mistakenly characterizes the potential impacts from GF4 to the Goldfield Historic District. Specifically, the EIS

states in bullet 3 above "Goldfield 4 would enter the Goldfield Historic District" which is absolutely wrong.

What this table does not recognize is the likelihood of Cultural Resource impact to Willow Springs and historic Native American Sites that Goldfield 3 would cause. Esmeralda County asserts that the GF4 alternative allows more flexibility in the final route alignment to avoid negative cultural impacts.

The EIS recognizes the existence of a known site within the GF3 alignment (DOE, 2007. Vol. II, page 3-326). Specifically, the "probable site of a Western Shoshone village named Matsum" is identified near Willow Springs. Section 3.2.13.4.3 of the EIS recognizes the value of feelings associated traditional sites and landmarks, but there is no accepted methodology to place value on those feelings. It seems reasonable to assume the cut and fill activities required for the tortured rail alignment through the adjacent hills would alter the area beyond recognition, in addition to what might be unearthed.

Numerous springs are identified in the area, and artifacts in the vicinity of these springs in an historic arid environment are almost guaranteed. Any modification to the alignment in this location would not be cheap or easy within topological constraints.

The switchbacks evident in the route alignment of GF3 (see Figure 1) suggest engineering considerations in the vicinity of Willow Springs already require a less than optimal path, and alternatives for route modification in the area will be few. The alignment adjacent to Goldfield is in a corridor formerly utilized by a railroad, and includes recent utility construction under the oversight and approval of SHPO [State Historic Preservation Office]. Local cooperation with County officials and private interests should provide some flexibility of final alignment without expensive mitigation.

The Alternative Route (GF4) skirts the edge of the Goldfield Historic District (GHD), but doesn't actually penetrate or traverse the protected location (see Figure 2). NOTE: The streets bounding the Historic District are depicted in red; private lands are white and BLM lands in yellow (see Appendix A for the National Registry of Historic Places for the description of the Goldfield Historic District).

The recent experience of the Esmeralda County sewer renovation and SHPO approval demonstrates the feasibility of GF4. Recent construction in areas adjacent to GHD were conducted under the supervision of a recognized CR [cultural resources] specialist, used accepted protocols, and yielded no mitigating circumstances from sewer, water, and power projects (See Appendix B).

The Nevada State Historic Archives contain few maps associated with Goldfield, but holds numerous documents and several newspaper microfilm archives of what was once the most bustling city in the state. Specific locations, such as rail terminals and surrounding activities, are available in such documents as the historic rail infrastructure map shown in Figure 3 (Myrick, 1962). Other local sources such as the highway department and Esmeralda County Public Works can provide additional information for avoidance of impacts rather than mitigation.

Any construction activities on either route would be subject to appropriate protocols and oversight by the State Historic Preservation Office (SHPO). However, the Esmeralda County position is that the rough terrain in the vicinity of Willow Springs and the potential archeological sites would provide little opportunity for route realignment or mitigation on the GF3 route.

Response

DOE has not yet conducted intensive archaeological surveys along alternative segments. As a consequence, the Department has not identified the locations of all historic and archaeological resources and has not evaluated the potential impacts to them. DOE is aware of the high concentration of historic

resources in the Goldfield area, including those that comprise the designated Historic District and those in the vicinity, as well as the presence of significant prehistoric resources in the area. The Department would conduct comprehensive archaeological studies along selected alternative segments and would avoid identified historic and prehistoric resources to the extent feasible. It would mitigate impacts to significant resources that it cannot avoid in an appropriate manner in consultation with the State Historic Preservation Office, BLM, and other appropriate agencies.

3.7.6 (3666)

Comment - RRR000101 / 0009

With respect to the archaeological surveys that will be going on, there is mention of class three studies ... conducted along the rail corridor, and with that there needs to be Indian involvement in those studies making sure that there's Indian monitors and tribal representatives included in those efforts.

Response

DOE agrees with this comment and will include American Indian tribal representatives to monitor inventory activities to identify cultural sites in the affected areas. In addition, the Programmatic Agreement for cultural resources management requires tribal involvement in the monitoring effort. DOE understands that additional tribal involvement in documenting and recording cultural information and perspectives is necessary. DOE is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts prior to rail construction.

3.7.6 (3803)

<u>Comment</u> - RRR000191 / 0003

Summary, page S-60, Section S.3.4.13, Cultural Resources: This section makes no mention of the "City" project by world-renowned land sculptor Michael Heizer. It should.

Response

The *City* sculpture is a work in progress and has not been identified as a cultural resource as defined in the National Historic Preservation Act. Although resources younger than 50 years have occasionally been determined significant under special circumstances, the *City* sculpture has not been so evaluated for listing on the *National Register of Historic Places*. However, Section 3.7.10 of the Rail Alignment EIS addresses impacts to the *City* sculpture from an aesthetics perspective.

3.7.6 (4026)

<u>Comment</u> - RRR000671 / 0015

The CGTO [Consolidated Group of Tribes and Organizations] knows that S.3.4.14 Cultural Resources section does not mention or consider Southern Paiutes sites along the Caliente Rail Alignment, Mountain Meadow Massacre Site or Quinn Canyon Massacre Site.

Response

Section S.3.4.14 of the Rail Alignment EIS is a summary of information and not meant to include numerous details of the analyses such as specific sections of Chapters 3 and 4. Section 3.2.13.3.2 includes a general reference to Southern Paiute use and occupation of lands along the Caliente rail alignment. The Mountain Meadow massacre site in southwestern Utah, approximately 45 miles east of Caliente, is well outside the region of influence for this analysis. The Quinn Canyon area is just north of Caliente common segment 2; DOE added a reference to historical events in the area important to American Indians to Section 3.2.13.5.4 of the EIS. Section 4.2.13.2.1.4 already contained a reference to the same historical events in the Quinn Canyon area.

3.7.6 (4028)

<u>Comment</u> - RRR000671 / 0016

The CGTO [Consolidated Group of Tribes and Organizations] knows that there is distinct reference to Western Shoshone villages and surrounding use areas in the Oasis Valley, Goldfield area and Stone Cabin and Reveille Valleys. However, no Southern Paiute settlements are mentioned or identified along the Caliente Corridor.

Response

DOE modified the text in Section 3.2.13 to include Southern Paiute settlements along the Caliente rail alignment in the same way the section discusses Western Shoshone villages.

3.7.6 (4037)

Comment - RRR000671 / 0056

Page 8-10, Section 8.1.1.13, Cultural Resources: The text identifies Western Shoshone Villages however does not mention Southern Paiute Settlements along certain portions of the Caliente Rail Corridor. The text should be revised accordingly.

Response

DOE added a discussion of Southern Paiute settlements along portions of the Caliente rail alignment to Section 3.2.13 of the Rail Alignment EIS.

3.7.6 (4146)

<u>**Comment**</u> – 3 comments summarized

Members of the Timbisha Shoshone Tribe expressed concern that DOE should preserve cultural resources and areas of interest to American Indians and minimize intrusions. The Tribe expressed appreciation for DOE efforts to protect cultural resources, but stated that the Tribe could not support the Preferred Alternative or the No-Action Alternative.

Response

DOE appreciates the expression of support for its commitment to conserve and protect cultural resources. The Department complies with all requirements for the protection of cultural resources in its realm of responsibility. DOE has engaged the BLM and units of local government as cooperating agencies on the Yucca Mountain Repository and transportation programs. In addition, the Department has entered a programmatic agreement with the BLM, the Surface Transportation Board, and the Nevada State Historic Preservation Office on cultural resources. Each government agency or tribal group has differing objectives and responsibilities for these resources. As part of the ongoing Native American Interaction Program, DOE will continue to seek input from tribal representatives on the best way to address cultural resource protection measures through direct involvement of tribes in cultural resource and ethnographic study efforts before construction of the proposed railroad.

3.7.6.1 Paleontological Resources

DOE did not receive comments on this topic.

3.7.7 Socioeconomics

3.7.7 (48)

Comment - 7 comments summarized

DOE received comments that it had not addressed impacts to economic plans of the Timbisha Shoshone Tribe, such as solar energy or other projects, including development plans for the Timbisha Shoshone Trust Lands near Scottys Junction. The Department also received comments that it needs to provide housing statistics for tribal housing authorities, as provided by the Bureau of the Census, and that the Rail Alignment EIS should discuss the services of Indian Health Service clinics, tribal police forces, and related organizations.

Response

DOE identified the socioeconomic region of influence as the counties through which the rail line would pass. That region includes two American Indian Homelands – the Walker River Paiute Reservation and the Timbisha Shoshone Trust Lands near Scottys Junction. DOE used Census information to describe the baseline for the Walker River Paiute Reservation. DOE has examined Census tables from the American Indian and Alaska Native data set, which provided information that was almost the same as that in the Draft EIS; therefore, no change is necessary. At present, there are no residents on the Timbisha Shoshone Trust Lands, so there is no population information to present. Further, given the region of influence, other than services on the Walker River Paiute Reservation, tribal organizations provide no other services in the area.

DOE understands that there is no current economic development on the Timbisha Shoshone Trust Lands near Scottys Junction. However, the Department anticipates that the Tribe will develop and implement economic plans for these lands. The *Final Legislative Environmental Impact Statement for the Timbisha Shoshone Homeland* (DIRS 154121-DOI 2000, all) stated that expected development for the Trust Lands would include a service station/convenience store, a gift/souvenir shop, and single-family detached housing units. DOE modified Section 3.2.9.1 of the Rail Alignment EIS to reflect the possibility of these plans. Based on the possibilities described in the Final Legislative EIS, there does not appear to be an impact from the proposed railroad on the economic plans for the Trust Lands.

3.7.7 (63)

<u>Comment</u> - 7 comments summarized

DOE received comments on the need to expand its analysis of county and local government services to support construction work camps. The Department also received comments on the need to address emergency medical services, fire suppression to control potential wildland fires, and impacts on law enforcement caused in part by "transient construction workers with higher incidences of crime." One commenter stated that DOE should address impacts on Lincoln County medical services and impacts on the Lincoln County school system, taking into account planned developments in southern Lincoln County. Commenters requested additional information on impacts to emergency response services during the shipping campaign.

Response

DOE does not anticipate large impacts to government services during the construction phase. The construction camp medical facilities, which would be staffed by four medical personnel working rotating shifts, would treat injuries and illnesses. Each construction camp would have the same facilities and number of medical personnel. For serious accidents or illnesses, each camp would be able to receive helicopters that would airlift patients to Las Vegas or Utah hospitals. In the Draft EIS, DOE assumed that medical cases would go to Nye County facilities. The Department does not anticipate a large number of cases going to either Nye County or Lincoln County facilities; nevertheless, DOE agrees with the Lincoln County comment that some patients could go to Lincoln County facilities. Just as Nye County is an underserved area, so is Lincoln County; additional cases could affect the capacity of Lincoln County to address the health needs of its local users. DOE revised the discussion in Section 4.2.9.2.3 to reflect that potential situation.

Each construction camp would have three fire personnel with a pumper truck and a water tank trailer to respond to fire emergencies. Safety and health plans at the camps would address response to fire

emergencies and notification and coordination of actions with responsible agencies, including the BLM and local officials.

Sections 4.2.7.2.1.1 and 4.3.7.2.1.1 of the EIS discuss impacts of wildfires on biological resources and grazing habitat. DOE expanded these sections to provide better descriptions of the potential impacts of wildfires caused by the proposed railroad during construction and operations.

DOE added fire prevention and control to the discussion of best management practices to Table 7-1 of the EIS. These practices would include control of brush and weeds along the rail roadbed, monitoring to identify overheated wheel bearings, and development of water sources at sidings for fighting fires.

DOE would provide security at its construction camps to minimize impacts on local law enforcement; however, the Department cannot assume that its workforce could cause an increase in crime. DOE could establish protocols with local law enforcement agencies on how to address such issues. In addition, DOE would fulfill its obligations for emergency response under NWPA Section 180(c). The Department would establish a monitoring program to evaluate future impacts caused by the proposed railroad and develop potential mitigation measures.

Lincoln County assessed its student load and the capacity of the school system in 2000. That report showed the school system operating at less than 50-percent capacity. Therefore, there is more than sufficient room in the system to accommodate additional students from families working on the proposed railroad. DOE added the results of the Lincoln County assessment to the discussion of impacts in Section 4.2.9.3.3 of the EIS. There are plans for new development in southern Lincoln County, particularly the Coyote Springs Planned Community. Section 5.2.1.3.4 describes the Coyote Springs Community and Section 5.2.2.9 describes its potential impacts.

3.7.7 (64)

<u>Comment</u> – 3 comments summarized

DOE received comments that it had not provided a detailed assessment of how much revenue it would pay to county and local governments, specifically Payments Equal to Taxes (PETT), but also in relation to other taxes. A commenter requested a definition of the term "state and local government spending."

Response

DOE would comply with the requirements of the NWPA, Section 116(c)(3), and make PETT payments and other assessed taxes to appropriate taxing agencies.

"State and local government spending" is an output measure of the Regional Economic Models, Inc., *Policy Insight* computer model of the amount of government spending on all employees, goods, and services. Because the model predicts increases in population caused by changing economic inputs, it also predicts government spending rising to accompany the growth in income. Therefore, it is a proxy for revenue increases to state and local governments.

3.7.7 (66)

<u>**Comment**</u> – 2 comments summarized

DOE received comments on the need to analyze the current level of preparedness for emergency response during the shipping campaign, to identify needs of local responders, and to identify emergency response times along the entire route, including the Union Pacific Railroad mainline.

The Department also received comments on the potential for spills of hazardous materials and rangeland wildfires during proposed railroad construction and operations.

Response

As described in Appendix M, Section M.5 of the Yucca Mountain FEIS, state and tribal governments have the primary responsibility to respond to and protect the public health and safety in their jurisdictions for accidents that involve radioactive materials. This includes providing, managing, and maintaining responsibility for emergency response capabilities. Although DOE would originally provide the funding, each state and tribe would determine how it would administer that funding. Section 180(c) of the NWPA requires DOE to provide technical assistance and funds to states for training public safety officials of appropriate units of local government and tribes through whose jurisdictions it would transport spent nuclear fuel and high-level radioactive waste. The training would cover procedures for safe routine transportation of these materials and procedures for addressing emergency response situations. DOE would provide the assistance based on the training needs of the states and tribes and on availability of funds in annual Program budgets specified by Congress.

If there was a decision to proceed with the development of a repository at Yucca Mountain, DOE would identify shipping routes at least 4 years before shipments began and would make Section 180(c) assistance available approximately 4 years prior to shipments through a jurisdiction. This would be enough time for emergency responders to receive the training to prepare them to respond to an accident that involved DOE shipments. Appendix M, Section M.6 of the Yucca Mountain FEIS discusses the DOE Section 180(c) policy and procedures.

DOE would institute best management practices to minimize environmental impacts on lands, including maintenance of equipment and instituting procedures to handle hazardous materials safely, minimize the possibilities of spills, and respond to spills if necessary. Table 7-1 of the Rail Alignment EIS describes these best management practices.

3.7.7 (79)

<u>Comment</u> – 5 comments summarized

Commenters expressed concern that the Rail Alignment EIS did not fully identify impacts to ranch lands, mining lands, private property, and recreational lands, and impacts to quality of life. In particular, commenters were concerned that grazing allotments would be affected to a greater extent than identified in the EIS because DOE did not identify and analyze site-specific impacts or identify mitigation for the unique circumstances of each allotment area. DOE received comments on the need to identify existing social conditions, including crime rates, substance abuse, and characteristics of communities such as cohesion and sense of security, and to identify impacts and mitigation of any impacts to these social conditions. DOE also received comments on the need to assess the impacts of railroad construction and operation on the quality of life on those who live in or near the alignment, many of whom have lived their entire lives on these properties, including those from families who have lived there for generations. One commenter stated that DOE should make every effort to obtain BLM land and not private property.

Response

DOE would institute mitigation on a site-specific basis in coordination with landowners, grazing permittees, the BLM, and other directly affected parties, as appropriate. This would include local governments for impacts on recreational lands. Section 7.1 of the Rail Alignment EIS describes the mitigation process. DOE expanded the discussion in that section to better describe and clarify the process. In its development of rail corridors and alignments, DOE has striven to minimize conflicts with private land, avoidance of which has been one of the primary requirements in the Department's alignment decisions. While there will inevitably be some instances, due to considerations such as environmental concerns, engineering restrictions, or the need to obtain private property, DOE would make every effort to avoid private property.

NEPA requires DOE to analyze physical impacts to the environment and impacts to health when changes in the physical environment directly affect health. It does not require that DOE analyze perceived potential impacts to the listed social structure or to quality of life in the manner suggested by commenters. DOE has analyzed socioeconomic conditions in accordance with NEPA and CEQ guidelines. In its mitigation efforts, DOE would work with directly affected parties to minimize impacts. DOE expanded Table 7-2 of the EIS to better describe what would occur and who would be involved.

3.7.7 (80)

<u>**Comment**</u> – 8 comments summarized

DOE received comments that, under the impacts of the Nye County Rail Transportation Economic Impact Evaluation and Planning Study (Nye County, November 2007), there could be larger sales, employment, and income benefits to affected counties and, as a consequence, increased population with a need for new housing and impacts on other services. Further, increased economic activity can lead to increased traffic by new employees and trucks. One commenter suggested that unless infrastructure systems, including water rights, could expand in the face of rapidly growing populations, housing demands might not be achievable. DOE also received a comment that construction and operation of the repository would lead to increased truck traffic throughout southern Nevada and that DOE should examine the need to upgrade local highways and establish bypasses around populated areas.

Response

DOE revised Sections 4.2.9.4.2 and 4.3.9.4.2 of the Rail Alignment EIS to include this Nye County perspective of the increased economic activities due to shared use. Section 6.4.2 of the Repository SEIS discusses traffic impacts of the repository. DOE would establish a monitoring program to evaluate future impacts and potential mitigation related to the proposed railroad, including those from shared use and transportation issues arising from the repository.

3.7.7 (81)

<u>Comment</u> – 3 comments summarized

Commenters stated that DOE was incorrect in assuming that the workforce for construction of the proposed rail line would come from Clark County and, for the Mina rail alignment, from Washoe County. Commenters also stated that for the Mina route, the construction industry in Churchill County would benefit and DOE should perform a full socioeconomic analysis of Churchill County, and that workers would not come from Carson City but more likely from Churchill County due to the shorter distance. Commenters stated that the impact assessment incorrectly assigned benefits to large urban areas and did not properly assess impacts on the smaller counties through which the rail line would pass. Further, due to competition for workers in the large urban areas, construction workers from those areas would not sign on to build the rail line, but would stay home; DOE might use out-of state workers who might bring their families and establish temporary residences in rural communities. A commenter stated that workers would not stay in the work camps but would live in the local economy and use local services.

Response

DOE analyzed a scenario for the Rail Alignment EIS – that the rail line constructor would choose construction camp locations along the alignment that would minimize daily travel time to the job site. The Department recognizes that it is not possible to compel workers to stay in the camps; however, it would prepare contracts that provided incentives to the rail line constructor and employees to do so.

DOE assumes that workers would come from the two large urban areas in Nevada because those are the only locations with sufficient workforces to staff the construction. These two counties employ approximately 92 percent of workers in Nevada's construction industry, according to the June 2007 Covered Employment report from the Nevada Department of Employment, Training and Rehabilitation (DIRS 185246-DETR 2007, all); Clark County employs approximately 76 percent and Washoe County

employs approximately 16 percent. While a contractor from Churchill or another county could become the rail line constructor, the size of the construction workforce in Churchill County, approximately 700 (DIRS 185246-DETR 2007, all), would not be sufficient. The rail line constructor could employ workers from Churchill or other counties, but an attempt to identify how many from each county would be guesswork. On the possibility of construction workers coming from Carson City, DOE assumed the workers would come from Washoe County, as discussed above. The combining of Carson City with Washoe County in the model is a factor of the model construction. If there were workers from other states, impacts on population and on services in the urban areas of Clark and Washoe Counties would be smaller.

Regarding impacts on local economies, the analysis did not assume that all monies would flow back to the urban areas. Rather, it assumed that it would cost \$300,000 for each month of operation of each camp. It also assumed that workers would spend these monies in the local counties, which would increase the economic and demographic measures DOE discussed in the Rail Alignment EIS. The analysis included expenditures for the construction of batch plants, drilling of wells, development of quarries, building of access roads, and construction of rail line facilities. It assumed that employees who lived in local counties would operate the wells, batch plants, quarries, and construction trains. DOE used these assumptions in the development of the impacts analysis.

3.7.7 (1150)

<u>Comment</u> - RRR000617 / 0147

Pages 3-279 through 3-298, Section 3.2.9, Socioeconomics: In Lincoln County's November 8, 2002 letter to DOE containing comments to the Yucca Mountain FEIS, the County points out that the Yucca Mountain FEIS continues to fail to reflect the best available information on local socioeconomic conditions in Lincoln County communities (Lincoln County also raised this issues in extensive written comments to the scope of the Yucca Mountain EIS and in written comments to the Yucca Mountain DEIS). Section 3.2.9.2 of the Rail Alignment DEIS "used the Yucca Mountain FEIS as a basic source of data, and supplemented that data where possible with current community-level data for Lincoln, Nye and Esmeralda Counties". Despite the claim that "current community-level data" has been utilized, Lincoln County finds that DOE has again, as it did in preparing the Yucca Mountain FEIS, failed to utilize the best available information to describe existing socioeconomic conditions in Lincoln County. As a consequence, analyses of socioeconomic impact in Chapter 4 of the Rail Alignment DEIS do not adequately disclose potential impacts.

For example, Section 3.2.9.3.1 of the DEIS states "Lincoln County's employment has been declining after growth during the 1980's". In fact, data compiled by the University of Nevada Center for Economic Development indicates that total employment in Lincoln County has been increasing during the past [five] years and in 2005 reached levels comparable to the 1980s. Similar trend data is available from the State of Nevada, Department of Employment, Training and Rehabilitation...

With regard to projected values for population, employment and economic variables as depicted in Table 3-60, the DEIS fails to reflect the fact that the Coyote Springs project alone in southwestern Lincoln County will add in excess of 250,000 persons to Lincoln County population during the next 40 years. Table 3-60 also fails to reflect the fact that the BLM has in the past four years (and since completion by DOE of the Yucca Mountain FEIS) sold to private developers in excess of 13,500 acres in southeastern Lincoln County for mixed-use development which over the next 40 years is estimated to add another 100,000 persons to the Lincoln County population. Table 3-60 of the DEIS also fails to capture development by the City of Caliente of the Meadow Valley Industrial Park and by Lincoln County of the Alamo Industrial Park, both of which will encourage growth in projected employment levels in the County. Despite DOE claim that it has utilized community-specific information, in fact, key socioeconomic variables have been estimated using an input-output model (REMI-based Policy Insight)

which is wholly incapable of accurately depicting existing and anticipated conditions in rural but rapidlychanging Lincoln County.

Section 3.2.9.3.4.2 does not even mention the Pahranagat Valley school facilities, including a high school and elementary school. This section provides no insight as to current capacities of existing school facilities or existing fiscal conditions and trends for the Lincoln County School District, as said facilities and fiscal capacity may be impacted by Caliente rail alignment construction and operations. In fact, a recent environmental assessment prepared by BLM's Ely Field Office regarding the sale of public land in the Alamo area for industrial and residential development concludes that school facilities in the Alamo area are nearing capacity and with Lincoln County planned development in the area will require expansion. Accordingly, Chapter 4 of the Rail Alignment DEIS should reflect that any construction and operations related school enrollment in the Alamo area would exacerbate current planned demands on school facilities and fiscal resources.

Section 3.2.9.3.4.3 does not describe the extent to which all-volunteer fire departments in Lincoln County have personnel which are currently trained to respond to incidents/accidents involving SNF [spent nuclear fue]/HLW [high-level radioactive waste] and the extent to which said departments have equipment required to safely respond to said incidents/accidents. This section also does not describe any plans (or lack thereof) to secure training and equipment required to respond to incidents/accidents involving SNF/HLW. These issues were not discussed in personnel communications included as the source for information in this section of the DEIS (DIRS 174971 and DIRS 174973). It does not appear that DOE even contacted any of the current fire chiefs for the volunteer fire departments. Various reports prepared by Lincoln County as a component of its Yucca Mountain repository oversight program describe the extent to which volunteer fire departments and other emergency first responders including emergency medical services in Lincoln County are not adequately trained or equipped to respond to the myriad of hazardous materials being transported by rail and truck through the County currently, let alone possible shipments of SNF/HLW....

Section 3.2.9 fails to address the characteristics of tourism as a significant component of the Lincoln County economy. Consequently, Chapter 4 of the DEIS misses entirely any disclosure of potential impacts to tourism in Lincoln County. Reports prepared by Lincoln County as a component of its Yucca Mountain repository oversight program describe the extent to which tourism is important to the County and how development and operation of the Yucca Mountain repository system may impact tourism. Although DOE was advised of the availability of said reports and the documents has been available electronically on the Lincoln County repository oversight program and LSN websites for a few years, none of the information in said documents was considered by DOE in preparation of the DEIS. Lincoln County is characterized by an abundance of outdoor recreational opportunities such as camping, fishing, hunting, water skiing, off-highway vehicle use, hiking, rock hounding, camping and backpacking. There are five state parks in Lincoln County -- Spring Valley State Park, Echo Canyon State Recreation Area, Cathedral Gorge State Park, Kershaw-Ryan State Park, and Beaver Dam State Park. There are also two federally designated wildlife areas -- the Desert National Wildlife Range and the Pahranagat National Wildlife Refuge. Nearly 300,000 persons annually visit the state parks and other outdoor recreation venues in Lincoln County. In 1988, a Nevada Division of State Parks survey of state park visitors ascertained that each visitor to the five state parks in Lincoln County spent an average of \$7.60 per day in Lincoln County. Adjusted for inflation this amount would be approximately \$16.00 in 2007. A decline in visitation may harm sales to local businesses, particularly gasoline and retail sales....

To enable the NEPA required "hard look" at potential impacts of the Caliente Rail Alignment to Lincoln County, DOE must more accurately and comprehensively describe existing and projected socioeconomic conditions for Lincoln County. DOE should review and where appropriate, utilize the best available

information regarding socioeconomic characteristics in Lincoln County, including the many reports prepared by the County through its DOE-funded Repository Oversight Program.

Response

DOE has examined the documents posted on the Lincoln County Nuclear Oversight Program Internet sites and is using information from more recent documents in the Final Rail Alignment EIS as it relates to current socioeconomic conditions in the County and as they apply to the EIS (see Section 4.2.9.3.1). As requested, DOE modified its statement on Lincoln County employment trends to reflect Nevada Department of Employment, Training and Rehabilitation data showing that Lincoln County has posted modest employment gains in recent years.

DOE uses the REMI Policy Insight model to analyze impacts in Nevada. The model is in wide national use in urban and rural economic units, and by the University of Nevada Las Vegas Center for Business and Economic Research and the Nevada State Demographer. Population projections for Lincoln County in the model are keyed to population projections of the State Demographer, which are updates of projections in Lincoln County documents prepared in the early 2000s and posted on the Lincoln County Nuclear Oversight Program Internet site. Section 5.2 of the Rail Alignment EIS discusses projections based on potential development at Coyote Springs or similar projects. If the 250,000-person Coyote Springs development occurred, impacts from the proposed railroad would be a very small part of the long-term cumulative impacts.

Construction and operation of the proposed railroad should not affect tourism. DOE addresses stigmarelated impacts in Section 4.4 of the Rail Alignment EIS. There would be small increases in student enrollment as a result of the operation of the rail line. DOE cannot speculate about the particular schools these students might attend, but a Lincoln County Assessment of Facility Capacity and Student Loads in 2000 showed sufficient capacity. DOE would establish, in conjunction with affected counties, monitoring programs to evaluate future impacts and potential mitigation measures.

As described in Appendix M, Section M.5 of the Yucca Mountain FEIS, state and tribal governments have the primary responsibility to respond to and protect the public health and safety in their jurisdictions in accidents that involve radioactive materials. This includes providing, managing, and maintaining responsibility for emergency response capabilities. Although DOE would originally provide the funding, each state and tribe would determine how it would administer that funding. Section 180(c) of the NWPA requires DOE to provide technical assistance and funds to states for training public safety officials of appropriate units of local government and tribes through whose jurisdictions the Department would transport spent nuclear fuel and high-level radioactive waste. The training would cover procedures for safe routine transportation of these materials, as well as for addressing emergency response situations. DOE would provide the assistance based on the training needs of the states and tribes and on availability of funds in annual program budgets specified by Congress.

If there was a decision to proceed with the development of a repository at Yucca Mountain, DOE would identify shipping routes at least 4 years before shipments began and would make Section 180(c) assistance available approximately 4 years prior to shipments through a jurisdiction. Based on interactions with stakeholders, this would be sufficient time for emergency responders to receive training to prepare them to respond to an accident that involved DOE shipments. Appendix M, Section M.6 of the Yucca Mountain FEIS discusses the DOE Section 180(c) policy and procedures.

3.7.7 (1159)

<u>Comment</u> - RRR000617 / 0154

The DEIS fails to consider any environmental or socioeconomic impacts associated with possible decommissioning of the Caliente rail alignment (construction and transportation related with removal of

rail, demolition of support facilities and reclamation of roadbed) and related support facilities (all of which are included as a component of the Proposed Action). The DEIS also fails to consider any impacts that construction, operation and decommissioning of the Caliente rail alignment would have on the social fabric of Lincoln County such as crime rates, substance abuse, community cohesion, resident sense of security and political divisiveness, among other characteristics.

The EIS must include an analysis of the environmental or socioeconomic impacts associated with possible decommissioning of the Caliente rail alignment. The EIS must also consider any impacts that construction, operation and decommissioning of the Caliente rail alignment would have on the social fabric of Lincoln County such as crime rates, substance abuse, community cohesion, resident sense of security and political divisiveness, among other characteristics.

Response

DOE analyzed socioeconomic conditions in accordance with NEPA and CEQ guidelines, which require the Department to assess physical impacts to the environment and impacts to health when changes to the physical environment directly impact health. The guidelines do not require DOE to analyze perceived potential impacts in the manner suggested by the commenter.

Section 2.2.5 of the Rail Alignment EIS discusses decommissioning, under which DOE might abandon the rail line after the end of the shipping campaign. The Department states that any abandonment of the railroad would be conducted in accordance with all applicable laws and in consultation with local governments, the BLM and, other land-management entities, as appropriate, at the time of abandonment. The Department also states that analysis of railroad abandonment would be performed near the completion of the shipping campaign, when an accurate assessment could be made regarding the usefulness of maintaining portions of the rail line or individual facilities.

Further, Section 2.2.6.4 explains that under the Shared-Use Option, the current assumption is that DOE would not abandon the proposed railroad upon completion of the DOE shipping campaign. Local communities or the private sector could maintain the rail line, and possibly some facilities not within the Yucca Mountain Site boundary, for other uses. DOE would decommission and dismantle facilities that would not be useful to local communities or the private sector.

To discuss details of potential decommissioning at this time would be premature, especially when it might not occur. However, in the absence of shared use, the impacts of decommissioning the railroad could be expected to be similar to those of constructing the railroad, except it would take place within a larger economy. Therefore, the impacts would be relatively less. Inasmuch as the impacts of constructing the railroad would be small to moderate, the impacts of decommissioning would be expected to be small to moderate.

3.7.7 (1191)

<u>Comment</u> - RRR000617 / 0202

Page 4-265, Section 4.2.9.2.1: The DEIS fails to consider the indirect impact to existing employers in the vicinity of the Caliente Rail Alignment who may find it difficult to retain existing employees leaving to seek employment on the Proposed Action.

The EIS should disclose the potential for existing employers in the vicinity of the Caliente Rail Alignment to retain existing employees who leave to seek employment on the Proposed Action. Said analysis should frame this potential indirect impact in terms of the possible wage differential between existing wages paid in Lincoln County to those wages likely to be offered to workers employed in construction and operation of the DOE rail line. Chapter 7 of the EIS should identify measures to mitigate the indirect impact to existing employers who find it difficult to retain existing employees.

Response

Any project that brings growth and an increase in demand for labor has the potential to raise wages in the affected region, and DOE regards this as a positive impact. NEPA does not require DOE to analyze shifts within the job market. DOE projects an increase in the number of jobs in Lincoln County, including increases for existing employers.

3.7.7 (1193)

Comment - RRR000617 / 0204

Page 4-267, Table 4-101: Table 4-101 highlights the inequitable distribution of benefits and costs associated with construction and operation of the Caliente rail alignment between Lincoln and Clark counties. In 2010, Clark County will accrue five times the level of Gross Regional Product as Lincoln County while only have to incur State and local spending at a rate three times greater than Lincoln County. During operations (Page 4-277, Table 4-107) the situation is even worse with Clark County Gross Regional Product being 8.7 times State and local spending. DOE's original intent in seeking rural routes to transport SNF [spent nuclear fuel]/HLW [high-level radioactive waste] was to minimize shipments of said materials through and related public health risk within the Las Vegas Valley. This transfer of risk from urban to rural areas coupled with the disparity in distribution of economic benefit results in the inequitable allocation of economic benefits and public health risks. Clark County gets the greatest share of economic benefit and largely (if not entirely) avoids the environmental and public health consequences of the rail line. The DEIS says nothing to disclose these important dimensions of socioeconomic impact. Further, Chapter 7 provides no measures by which the inequitable distribution of economic benefits, environmental costs and public health risk between Clark and Lincoln County might be mitigated.

The EIS must disclose the nature and magnitude of the inequitable distribution of Caliente Rail Alignment construction and operations related economic and fiscal benefits, environmental costs and public health risk. Chapter 7 of the FEIS must identify and evaluate measures to mitigate the inequitable distribution of Caliente Rail Alignment construction and operations related economic and fiscal benefits, environmental costs and public health risk. One example might be setting aside procurements for vendors located within U.S. Small Business Administration designated HubZone Areas, which Lincoln County is.

Response

The results of the analysis show that there might be an uneven distribution of benefits between counties. For example, during the construction phase, the analysis estimates that employment would rise more than 5 percent in Lincoln County and only 0.1 percent in Clark County. Similarly, real disposable income in Lincoln County would rise more than 4 percent, while rising less than 0.2 percent in Clark County. DOE is not required to equalize benefits between jurisdictions. As discussed in Chapter 7 of the Rail Alignment EIS, DOE would establish a monitoring program to evaluate future impacts caused by construction and operation of the proposed railroad, and would develop mitigation actions.

3.7.7 (1386)

<u>Comment</u> - RRR000678 / 0010

Additionally, the economic impact on the affected communities must be thoroughly considered before the Department decides to break ground on the Caliente Corridor. DOE'S preferred route would severely impact rural communities; disrupt livestock operations and grazing lands; utilize scarce water resources; and cross private residential, industrial, and commercial land with the railway. In addition, we are also concerned that the Caliente Corridor would interfere with mining and renewable energy development in Nevada. Although DOE acknowledges that there are potential wind, solar, and geothermal energy resources along the Caliente Corridor, the Department fails to consider the opportunity costs of constructing a rail line over this land. The Rail SEIS erroneously states that the locations of energy resources are unknown, despite the fact that publicly available maps (http://www.unr.edu/geothermal

//renewables.htm) show that there are significant potential solar energy resources in the northeast corner and western boundary of the Nevada Test and Training Range.

Response

In its development of rail corridors and alignments, DOE has striven to minimize conflicts with private land, avoidance of which has been one of the primary requirements in the Department's alignment development process. While there would inevitably be some conflicts, due for example to other considerations such as environmental concerns or engineering restrictions, DOE would continue to pursue every effort to avoid private property.

DOE would institute mitigation on a site-specific basis in coordination with land owners, grazing permittees, the BLM, and other directly affected parties, as appropriate. Section 7.1 of the Rail Alignment EIS discusses the process DOE would use. DOE expanded that section to better describe and clarify the process. In addition, the Department would institute best management practices to minimize environmental impacts on lands, including maintenance of equipment and procedures to handle hazardous materials safely, minimize the possibilities of spills, and respond to spills if necessary.

Section 3.2.6.2 of the Rail Alignment EIS describes the process through which DOE characterized groundwater, and Section 4.3.6 describes the groundwater impacts from proposed railroad construction and operations, which would be small. Impact analysis could determine a requirement to preclude impacts on an existing well or spring, limit pumping rates or eliminate pumping at a proposed groundwater withdrawal well, obtain (purchase) additional water from existing water-rights holder(s), relocate a proposed well to an alternative location, or implement best management practices as necessary. As an alternative, DOE would negotiate with the existing water-rights holder or domestic water-well owner to access and monitor water levels in an existing well or monitor discharge rates to a spring, where appropriate, to verify the effects of proposed groundwater withdrawals on those wells or springs. On completion of construction, the State Engineer would determine if and how the well would be closed or if the well could be transferred to another agency or landowner.

DOE developed the rail corridors and alignments to minimize and avoid existing mining claims. The development of new mining claims would be subject to valid existing rights, including the rail right-of-way. DOE, in constructing and operating a railroad, would be subject to valid existing rights, including previously established mining claims. Table 7-2 of the EIS lists the methods that would enable the coexistence of mining operations and the safe operation of the rail line.

DOE examined the maps provided in the comment and notes that the rail line would cut a narrow strip across areas of potential solar power generation, particularly outside the northwest corner of the Nevada Test and Training Range. The amount of impacted area in comparison with the amount of land with solar potential in Nevada is very small. Further, because the rail line in this area would be close to the Training Range border, potential conflicts are further reduced. With regard to opportunity cost, if there were one or a limited number of properties where a solar station could be located, there might be competition for the land and opportunity cost, the next best alternative, might come into play. However, there are apparently, according to the commenter's map, many opportunities for establishing solar power stations, which means that the proposed railroad would not preclude such stations. There would be no need for a choice between the two projects. Further, there is no reason why the railroad and a solar generating plant could not be near one another, much as the Solar One facility owned by Acciona Solar Power is near U.S. Highway 95 south of Boulder City; or other projects in the Las Vegas area, such as at Nellis Air Force Base, are in urban areas.

3.7.7 (1387)

<u>Comment</u> - RRR000678 / 0011

Although the Rail SEIS does provide limited consideration of mining, it does not adequately assess the impacts that the proposed corridor would have on mine shafts and tunnels, mining safety, and the integrity and stability of the railroad itself. The Department must make a more comprehensive effort to assess the opportunity costs of lost mining potential caused by the Caliente Corridor, as well as the possible impact on existing mining activity.

Response

As listed in Table 7-1 of the Rail Alignment EIS, before construction DOE would field-verify the locations of underground mine shafts and tunnels. If a borehole or obvious surface subsidence indicated the presence of a possible void, DOE would conduct further investigations, such as additional boreholes, ground-penetrating radar, and seismic analysis, to determine the extent of the feature. If the investigation identified a void, the Department would develop engineered solutions to prevent damage to underground mines and the railroad.

As listed in Table 7-2 of the EIS, before construction DOE would notify nearby mining lessees and claimants and consult with owners of active mines and mining claims to ensure minimal impacts to mine-related operations during construction activities. Where feasible, the Department would reduce the construction right-of-way in mining areas to minimize impacts to claims. Such actions would be site-specific and dependent on the locations of claims and mines. DOE would work with the BLM and mining lessees, claimants, and owners to identify these locations.

As discussed in Sections 4.2.2.2.6 and 4.2.2.3 of the EIS, the BLM could approve new mining claims and energy leases on lands near the rail line during the construction and operations phases. In such a case, "the applicant would be required to work closely with the BLM and DOE to ensure they would not interfere with the safe operation of the railroad. Engineering solutions for the safe extraction of mineral and energy resources near or beneath the rail line could include directional (lateral) drilling of wells or ensuring all mine shafts or tunnels were sufficiently deep and reinforced to prevent subsidence."

These actions would mitigate potential mining losses if new claims were filed.

3.7.7 (1506)

Comment - RRR000656 / 0057

Vol. II, Chap. 3, Section 3.2.9.1, page 3-279: Construction and operations workers are assumed to reside 80 percent in Clark County. Historical residency patterns are not applicable and are incorrectly used in this presentation. It is illogical to expect DOE employees and contractors to travel 100 miles or more one-way to work each day. Most workers would find this arrangement unacceptable. Nye County recommends that DOE work with Nye County to plan and develop ways to incentivize business and employees to locate in Nye County.

Response

For the Draft Rail Alignment EIS, DOE assumed that the historical residential patterns of Yucca Mountain Project and Nevada Test Site workers (80 percent residing in Clark County and 20 percent residing in Nye County) would be the same for the construction and operation of the railroad facilities located in Nye County near the Yucca Mountain Site.

Construction of the Maintenance-of-Way Trackside Facility in Nye County along the Caliente rail alignment would be part of the overall construction effort, for which DOE assumed construction workers would come from Clark County and reside in construction camps along the alignment. In the Draft Rail Alignment EIS, operation of the Maintenance-of-Way Trackside Facility in Nye County assumed all workers would reside in Nye County. The Final Rail Alignment EIS analysis assumes that if DOE selected the Goldfield 4 alternative segment all employees of the Maintenance-of-Way Facilities, both the Trackside Facility and the Headquarters Facility, would be in Esmeralda County.

For the Final Rail Alignment EIS, DOE provides a sensitivity analysis of the impacts of a different residential pattern of construction and operations workers for the railroad facilities located in Nye County near the Yucca Mountain Site. T hat different residential pattern would be 80 percent residing in Nye County and 20 percent in Clark County; the results are in Appendix J, Section J.1.8 of the Rail Alignment EIS.

3.7.7 (1532)

<u>Comment</u> - RRR000682 / 0066

Section 4.3.9.2.4.2: Impacts to rail crossing should also be considered in the cumulative impact section. Also, there is no at grade rail crossing at U.S. Highway 50 at Hazen.

Response

Although the Proposed Action would result in additional traffic delays at rail crossings, the existing levelof-service for the roads would not change, and DOE expects no cumulative impacts. See Sections 4.2.9 and 4.3.9 of the Rail Alignment EIS for more detail.

DOE revised Chapters 3 and 4 of the Rail alignment EIS to remove references to an at-grade crossing at U.S. Highway 50A.

3.7.7 (2057)

<u>Comment</u> - RRR000525 / 0032

Between 7,600 and 8,100 construction workers with up to 10 or 12 construction camps cited in Table S-5 gives an indication of the magnitude of the railroad construction required in either the Mina or Caliente route. The economic impact along the corridor routes and throughout the State from the railroad construction is considerable.

Response

Thank you for your comment.

3.7.7 (2613)

<u>Comment</u> - RRR000523 / 0045 There is no at-grade rail crossing at U.S. Highway 50 at Hazen.

Response

DOE revised Section 3.3.9.3.5.1, Section 4.3.9.2.4.2, and Table 4-252 to remove references to an at-grade crossing at U.S. Highway 50A

3.7.7 (2793)

<u>Comment</u> - RRR000073 / 0003

The commenter asked for more details on rail crossings for existing or proposed access roads in Esmeralda County. He wanted to know who would maintain the crossings and pay for the maintenance.

Response

DOE would be responsible for maintaining and paying for rail crossings.

3.7.7 (3684)

<u>Comment</u> - RRR000666 / 0011

The commenter stated that Esmeralda County is in favor of the Goldfield 4 alternative segment and the Shared-Use Option. The basis for these preferences is the potential to enhance transportation linkages to the county. The commenters believe transportation development could provide opportunities for new ventures and enhance the viability of existing mining enterprises. The commenter thought reestablishment of rail service through the shared use concept could stimulate broader economic development. The commenter also stated appreciation for the addition of the Maintenance-of-Way Facility in Esmeralda County, and noted that an industrial siding adjacent to land with industrial potential would be attractive. The rail line could have other possible benefits, including a nuclear reprocessing facility; geothermal, wind, and solar energy; collocation of transmission lines; rejuvenation of the historic community and expanded tourism; and, along with the abundant groundwater, provide market transport for products for aquaculture and hydroponics operations.

Response

Thank you for your comments.

3.7.7 (3740)

<u>Comment</u> - RRR000317 / 0013

The study fails to consider the adverse effects of the proposed project on tourism, culture, quality of life, and history, including that resulting from risk, damage or destruction of the Caliente Hot Springs, Caliente Hot Springs Motel and Spa, Las Vegas Strip and downtown properties, Palm Springs resorts, and the like. The report fails to address the fact that Lincoln County is growing rapidly with an additional 200,000 people expected as a result of ongoing development at Coyote Springs and Mesquite, most all of which is based or founded in tourism and golf.

Response

DOE discussed perceived risks in Section 2.4 of the Yucca Mountain FEIS. Additional information is provided in Appendix N of the Yucca Mountain FEIS. Chapter 5 of the Rail Alignment EIS discusses the Coyote Springs project and other planned growth in Lincoln County.

3.7.7 (4138)

<u>Comment</u> - RRR000710 / 0042

Pages 4-270 through 4-271, Section 4.2.9.2.1: The DEIS fails to adequately assess the impacts of the operations phase of the railroad, and fails to provide for mitigation for livestock losses during operations due to collisions.

The DEIS states that, "During the construction phase, there could be an additional impact from construction trains colliding with cattle. DOE would compensate ranchers for any such losses of cattle in accordance with Nevada Revised Statutes 705.150 to 705.200."

However, the DEIS is entirely silent as to collisions and compensation during the 50-year proposed operations phase. This is not acceptable, and is inadequate analysis of the long-term impacts.

Response

DOE would compensate for livestock losses due to collisions during proposed railroad construction and operations in accordance with Nevada Revised Statutes 705.150 to 705.200. The Department revised Sections 4.2.9.2.1, 4.2.9.3.1, 4.3.9.2.1, and 4.3.9.3.1 accordingly.

3.7.8 Occupational and Public Health and Safety

3.7.8 (210)

<u>Comment</u> - RRR000042 / 0004

The commenter noted the DOE estimates of fatalities during the operations phase along the Caliente rail alignment and stated that there are no hospitals in the remote area of the alignment and "no way of taking care of people."

Response

The radiological impact assessment for the Rail alignment EIS indicates that the estimated number of fatalities (expressed as latent cancer fatality units) associated with proposed railroad operations would be less than 1. This estimate includes occupational and public radiological exposure from routine operation of the railroad and radiological exposure from potential accidents. Therefore, DOE does not anticipate adverse radiological exposure effects to workers or the public from railroad operations that would necessitate hospital or other health care resources. DOE has summarized radiological impacts of the Proposed Action in Table 4-133 of the EIS for the Caliente alignment and in Table 4-282 for the Mina alignment.

3.7.8 (364)

<u>Comment</u> - RRR000102 / 0001

Emergency routes need to be identified. We know that Fort Hall is notified of any waste going through their reservation.

Response

Appendix L of the Rail Alignment EIS describes roles and responsibilities for emergency response in the event of a transportation accident. Section L.2.5 describes advance notification of shipments. DOE would provide advance notification of shipments in accordance with Section 180 of the NWPA.

DOE has intentionally not identified specific evacuation routes in the Rail Alignment EIS. The sitespecific Emergency Response Plan for the rail line that DOE would develop in accordance with the National Response Plan (DIRS 175729-DHS 2004, all) and National Incident Management System would identify specific evacuation routes. The Department of Homeland Security developed the National Response Plan to align federal coordination structures, capabilities, and resources in a unified approach to domestic incident management. The Plan is built on the template of the National Incident Management System.

Shipments of radioactive materials could not occur in the next 10 years. Site-specific conditions, including locations of roads, structures, and population centers, could change over that period. If DOE identified specific evacuation routes in the EIS, those routes could become irrelevant over time. DOE would identify specific evacuation routes in the site-specific Emergency Response Plan it would develop before the beginning of the shipping campaign.

3.7.8 (830)

<u>Comment</u> - RRR000452 / 0001

The public health impacts estimated by the Rail Alignment EIS are minimal and based on conservative assumptions. The methods used to calculate these results are widely accepted by advisory groups and federal agencies.

Response

Thank you for your comment.

3.7.8 (831)

<u>Comment</u> - RRR000641 / 0013

The delineation on Page 3-300 of the Rail Alignment DEIS of a "Radiological Region of Influence" is confusing and requires further clarification in the FEIS. As presented in the DEIS, the designation may lead one to conclude a land-use designation for which it is not intended. Rather, the FEIS must clearly describe that the delineation of a Radiological Region of Influence is for risk assessment purposes and is not a formal designation by any government entity. Indeed, some area property owners who have reviewed the DEIS have concluded that the designation by DOE of a "Radiological Region of Influence" in the DEIS may require sellers of real estate in the area to disclose said designation.

Further, the FEIS must place in perspective the use of and the meaning of the term Radiological Region of Influence. A study prepared by the University of Nevada Las Vegas Transportation Research Center for Lincoln County found that more than 25,000 rail carloads of every imaginable hazardous material move through the City of Caliente annually... It is important to note that existing volunteer fire and emergency medical personnel in the City are under-prepared and equipped to effectively respond to a major release of many of the hazardous materials being transported through Caliente presently. This compares to the approximate 200 carloads of spent nuclear fuel and other high-level radioactive waste which DOE proposes to ship through the Caliente area each year. Caliente has not been designated a "Hazardous Material Region of Influence" nor are owners of private property in the area required to disclose the number and nature of hazardous rail shipments moving through the community when offering their private property for sale. The UNLV study further concluded that incremental risk associated with the additional shipments of Yucca Mountain bound radioactive waste would be small compared to the projected risk associated with continued transport of hazardous materials through the City.

Response

DOE applied the "radiological region of influence" solely to conduct the Rail Alignment EIS radiological impact analysis and identify the population potentially affected by exposure to radiation from routine railroad operations and in the event of an accident. The 0.5-mile distance for estimating the potentially affected population for incident-free transportation of spent nuclear fuel casks (see Appendix K, Section K.2.1.1) and the 50-mile distance for estimating the potentially affected population for accident analyses (see Section K.2.4) are standard distances DOE and other agencies have applied in previous transportation analyses (DIRS 185281-AEC 1972, all).

These distances are conservative. For example, the maximum radiation dose rate allowed by U.S. Department of Transportation regulations is 10 millirem per hour at 6.6 feet from a spent nuclear fuel or high-level radioactive waste cask. At 0.5 mile, the radiation dose rate would be about 3×10^{-6} millirem per hour.

DOE does not intend for the radiological region of influence to have an effect as a land-use designation, or have a legal meaning or relevance in relation to property law. DOE is not aware of any instance in which a region of influence applied in an EIS for radiological impact analysis was legally deemed to affect property rights or land-use designations.

3.7.8 (1110)

<u>Comment</u> - RRR000663 / 0034

Portions of both the Schurz-Mina and Caliente rail corridors lie in the path of many of the radioactive fallout clouds that left the NTS [Nevada Test Site] during atmospheric weapons and cratering nuclear explosion tests. These particles, which remain hazardous for hundreds of years or longer, lie in the soil and will pose a hazard during any period of land disruption (i.e., rail [construction]). The railroad work will involve the movement of massive quantities of desert soils that will likely result in the radioactive particles being lofted into the atmosphere, creating hazards for railroad workers and the public, including

communities and people downwind from such activities. The final EIS must assess the risks and impacts associated with soils disruptions and re-suspension of any residual radioactive fallout particles.

Preparatory to developing the Draft EISs, DOE should have conducted extensive baseline surveys of the area within the proposed rail corridors and any other areas that would be disturbed by construction or other activities to develop baseline data on the extent of contamination against which impacts of rail construction and operational activities could be assessed.

Response

In April 1996, a Federal Facility Agreement and Consent Order was entered into by and among the State of Nevada, acting by and through the Department of Conservation and Natural Resources, Division of Environmental Protection, DOE, and the U.S. Department of Defense. The purpose of the Consent Order was to identify sites of potential historic contamination due to Nevada Test Site operations and implement proposed corrective actions based on public health and environmental considerations. The Consent Order identifies Corrective Action Units, which are groupings of Corrective Action Sites that delineate and define areas of concern for contamination. Offsite Corrective Action Sites include the Central Nevada Test Area and Project Shoal.

DOE submitted Closure Reports to the Nevada Division of Environmental Protection indicating that the site remediation process with respect to surface contamination was complete on February 13, 1998, for Corrective Action Unit 416 and on June 27, 2002, for Corrective Action Unit 417. Based on the work conducted under the Consent Order, the potential for workers or the public to be exposed to contamination due to fallout during railroad construction and operations in either rail corridor would be unlikely. DOE has not identified any information identifying similar contamination from the Nevada Test Site in the vicinity of the proposed rail corridors.

3.7.8 (1222)

<u>Comment</u> - RRR000617 / 0228

Page K-11, Section K.2.3: Incidents such as broken rail, washouts, floods or derailments happen, DOE says, "the train would not stop en route to the repository". This statement needs to be explained.

A plan needs to be provided by DOE in the EIS that would ensure the environmental safety and health of the populace and all topography associated to the railroad and the nuclear waste being transported. In the event one of these scenarios would occur there needs to be a staging area for the trains.

Response

The statement, "the train would not stop en route to the repository," refers only to railroad operations under routine operating conditions. Under routine operating conditions, trains transporting spent nuclear fuel and high-level radioactive waste would not stop on the tracks or on sidings en route to the repository. In the event that an in-bound cask train encountered another train moving in the opposite direction (for example, a train transporting empty casks from the repository), the other train, not the train transporting nuclear materials, would move to a siding to allow the in-bound train to pass. In the event of an accident affecting the integrity of the track, trains might not be able to pass that point on the rail line and would either remain at the Staging Yard or at the repository pending repair of the track.

3.7.8 (1301)

<u>Comment</u> - RRR000617 / 0213

Page 4-302, Third Bullet: The DEIS fails to consider the radiological health impacts of construction related re-suspension and inhalation of radionuclides deposited along the Caliente rail alignment during above-ground nuclear weapons testing.

The DOE must consider the radiological health impacts of construction related re-suspension and inhalation of radionuclides deposited along the Caliente rail alignment during above-ground nuclear weapons testing.

Response

In April 1996, a Federal Facility Agreement and Consent Order was entered into by and among the State of Nevada, acting by and through the Department of Conservation and Natural Resources, Division of Environmental Protection, DOE, and the U.S. Department of Defense. The purpose of the Consent Order was to identify sites of potential historic contamination due to Nevada Test Site operations and implement proposed corrective actions based on public health and environmental considerations. The Consent Order identifies Corrective Action Units, which are groupings of Corrective Action Sites that delineate and define areas of concern for contamination. Offsite Corrective Action Sites include the Central Nevada Test Area and Project Shoal.

DOE submitted Closure Reports to the Nevada Division of Environmental Protection indicating that the site remediation process with respect to surface contamination was complete on February 13, 1998, for Corrective Action Unit 416 and on June 27, 2002, for Corrective Action Unit 417. Based on the work conducted under the Consent Order, the potential for workers or the public to be exposed to contamination due to fallout during railroad construction and operations in either rail corridor would be unlikely. DOE is not aware of any information identifying similar contamination off the Nevada Test Site in the vicinity of the rail corridors.

3.7.8 (1304)

<u>Comment</u> - RRR000617 / 0214

Page 4-308, Section 4.2.10.2.2.2: Lincoln County believes the estimates of the proximity of the closest residents to the Staging Yard locations at Indian Cove and Upland may be underestimated. In addition, the DEIS fails to analyze the operations radiological impacts to the public from the Interchange Yard in downtown Caliente. UPRR [Union Pacific Railroad] dedicated trains carrying SNF [spent nuclear fuel]/HLW [high-level radioactive waste] will arrive at the Interchange Yard, decouple from the SNF/HLW cask, buffer and security cars which will then be met by the DOE locomotive which will couple to the SNF/HLW cask, buffer and security cars and move same to the Staging Yard.

The DOE should provide verified estimates of the proximity of the closest residents to the Staging Yard locations at Indian Cove and Upland. In addition, the DOE must analyze the operations radiological impacts to the public from operation of the Interchange Yard in downtown Caliente.

Response

DOE used geographic information systems (GIS) data and imagery to evaluate the potential options for the location of the Staging Yard in Lincoln County at Indian Cove and Upland. The imagery is 5-foot orthorectified photography obtained in 2005. Engineered track data were overlain on the imagery and evaluated; distances from the center of the Staging Yard to the closest residence were measured using the GIS software.

The operations mentioned by the commenter as taking place at the Interchange Yard in Caliente would actually take place at the Staging Yard at Indian Cove or Upland. DOE included impacts to the public from these operations in the radiological impacts discussion in the Rail Alignment EIS.

3.7.8 (1327) Comment - RRR000656 / 0007

Even though the calculated risks to workers and the public are extremely low in most cases, the methods the EIS employs to calculate the risk inherently overestimate the radiological consequences. The overestimates are typically caused by severely conservative input assumptions. For instance:

The EIS assumes radiation emitted from transportation casks is at the regulatory limit instead of using historical measures of average radiation. Even with this assumption, the EIS presents numerical dose estimates that are so low that they could not be measured compared to everyday background radiation. Such very low estimates should be stated as being "negligible" or "near zero" instead of such a tiny number.

The EIS assumes one worker receives the maximum allowed radiation dose of 500 milirem per year for 50 years causing a total exposure of 25 rem. This is totally unrealistic.

For severe transportation accidents the EIS assumes that none of the nearby population leaves the area promptly and that everyone is exposed to contamination deposited on the ground for an entire year with no interdiction or cleanup. Such a circumstance for any significant contamination is not possible. Other assumptions such as near worst case weather add to significant overestimate of consequences.

The EIS presents a compelling argument that security measures will be in place that would likely prevent any successful sabotage event. It then goes on to produce consequence estimates for an assumed optimally successful sabotage event with nobody promptly leaving the scene of the event.

In addition to the overestimates of consequences, the EIS inappropriately presents results of severe accidents and sabotage as a statistical projection of increases in lifetime cancer fatalities. In the event of a severe accident or successful sabotage, a more meaningful projection would be of immediate health effects. The EIS should very clearly report that for incident free transportation, almost all credible accident scenarios, and reasonably likely sabotage scenarios attempt that the most likely result is no immediate health effects -- with only a small statistical increase in possible lifetime health effects.

Nye County supports the position documented by the Health Physics Society recommending, "... against quantitative estimation of health risks below an individual dose of 5 rem in one year or a lifetime dose of 10 rem in addition to background radiation. Risk estimation in this dose range should be strictly qualitative accentuating a range of hypothetical health outcomes with an emphasis on the likely possibility of zero adverse health effects."

Overestimates of risk and the reporting of negligible risk as meaningful, serve to misinform the citizens near the repository and transportation routes. While the writers of the EIS may see the need to bound or [envelop]its environmental impact analysis to ensure that the analysis does not have to be frequently redone, realistic estimates would be more informative to those who receive the impacts.

Response

Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions where information is incomplete or unavailable, or where uncertainties exist, the Rail Alignment EIS adequately analyzes the environmental impacts that could result from the Proposed Action. The use of widely accepted analytical tools, latest reasonably available information, and cautious but reasonable assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts.

Although the EIS analyses are based on the latest reasonably available information and state-of-the-art analytical tools, not all aspects of incident-free transportation or accident conditions can be known with absolute certainty. In such instances, DOE has relied on conservative assumptions that tend to overestimate impacts. However, in response to this comment, DOE revised the text in Sections 4.2.10, 4.3.10, K.2.3, and K.2.5 of the EIS to highlight aspects of the transportation analyses that would tend to overestimate impacts and are, therefore, conservative.

3.7.8 (1331)

Comment - RRR000617 / 0263

A comparative analysis of all analyzed routes with regard to the presence near the rail corridor of difficult to evacuate facilities such as schools, correctional institutions, hospitals, assisted living centers and homebound persons. This topic is not addressed in the October 2007 NEPA documents.

Response

Appendix L of the Rail Alignment EIS discusses roles and responsibilities for emergency response in the event of a transportation accident. DOE would provide advance notification of shipments in accordance with Section 180 of the NWPA. DOE would identify specific evacuation routes in site-specific Emergency Response Plans it would develop consistent with the National Response Plan (DIRS 175729-DHS 2004, all) and National Incident Management System. The National Response Plan would align federal coordination structures, capabilities, and resources in a unified approach to incident management. It would use the National Incident Management System as a template.

At this time, it is more than 10 years before shipments of radioactive materials could occur. Site-specific conditions, including locations of roads, structures, and population centers, could change during that period; if DOE identified specific evacuation routes in the Rail Alignment EIS, such routes could become irrelevant later. The Department would identify specific routes in the site-specific Emergency Response Plans it would develop before the start of spent nuclear fuel transportation.

3.7.8 (1369)

Comment - RRR000617 / 0252

The cumulative exposure risk and related acute and latent fatalities associated with incident-free and rail accident conditions for existing and future expected numbers of shipments of non-radiological hazardous constituents and planned shipments of spent nuclear fuel and other high-level radioactive waste along the entire study route (including ... companion Union Pacific mainline segments) for the Caliente and Mina alternatives.

The cumulative exposure risk and related acute and latent fatalities associated with incident-free and rail accident conditions for existing and future expected numbers of shipments of non-radiological hazardous constituents and planned shipments of spent nuclear fuel and other high-level radioactive waste are not addressed in the DOE NEPA documents.

Response

The only nonradiological hazardous material that DOE would routinely ship on the rail line would be fuel oil. During the operations phase, DOE would expect one train carrying fuel oil every 2 weeks, each with about six rail cars (a total of 163 cars in 26 trains every year). The only exception is year 1, with half as many fuel oil trains and cars. During as many as 50 years of operations, 8,109 cars in 1,287 trains would transport fuel oil (DIRS 182826-Nevada Rail Partners 2007, Section 4, Table 1). The nonradiological transportation analysis considered potential accidents and fatalities associated with these fuel oil trains, even though DOE did not analyze these trains separately from the trains that would not carry casks.

Table 2-31 of the Rail Alignment EIS lists the radiological and nonradiological impacts from shipments of spent nuclear fuel, high-level radioactive waste, and other nonradiological materials.

3.7.8 (1507)

<u>Comment</u> - RRR000656 / 0058

Section 3.2.10.1.2, page 3-300: Region of influence is projected to be 0.5 miles from the rail alignment and for accidents or sabotage, within 50 miles. This seems like an extremely conservative (large) area to use in the evaluation. Is there technical justification for these distances?

Response

These distances are conservative. For example, the maximum radiation dose rate allowed by U.S. Department of Transportation regulations is 10 millirem per hour at 6.6 feet from a spent nuclear fuel or high-level radioactive waste cask. At 0.5 mile, the radiation dose rate would be about 3×10^{-6} millirem per hour. However, the 0.5-mile distance applied for estimating the potentially affected population for incident-free transportation of spent nuclear fuel casks (see Appendix K, Section K.2.1.1 of the Rail Alignment EIS) and the 50-mile distance applied for estimating the potentially affected population for accident analyses (see Section K.2.4) are standard distances that DOE and other agencies have applied in previous transportation analyses (DIRS 185281-AEC 1972, all).

3.7.8 (1537)

<u>Comment</u> - RRR000656 / 0086

Section 4.2.10.2.2.1, page 4-305 estimates the maximally exposed worker would receive 25 rem because the same person would receive the administratively controlled maximum dose for 50 consecutive years.

This is ridiculous. No number should be cited for the maximally exposed worker for the lifetime of the project. It is enough to say doses will be limited administratively to no more than 500 millirem per year. Assumptions such as this serve only to provide misinformation to the public by overestimating impacts. This comment also applies to all instances where DOE assumed one person receives the maximum dose every year for the project duration such as Section 4.3.10.2.2.1, pages 4-672 and 673.

Response

Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions where information is incomplete or unavailable, or where uncertainties exist, the Rail Alignment EIS adequately analyzes the environmental impacts that could result from the Proposed Action. The use of widely accepted analytical tools, latest reasonably available information, and cautious but reasonable assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts.

Although the EIS analyses are based on the latest reasonably available information and state-of-the-art analytical tools, not all aspects of incident-free transportation or accident conditions can be known with absolute certainty. In such instances, DOE has relied on conservative assumptions that tend to overestimate impacts. However, in response to this comment, DOE modified the text of the EIS to highlight aspects of the transportation analyses that would tend to overestimate impacts and are, therefore, conservative (see text boxes in Sections 4.2.10 and 4.3.10 of the EIS).

3.7.8 (1620)

<u>Comment</u> - RRR000656 / 0085

Section 4.2.10.2.2.1, page 4-305: Radiation dose to workers is based on a 50 year exposure. It is inconceivable that a worker would occupy the same job and receive the same exposure for a 50 year period. It is recommended that a more realistic scenario be used in this type of calculation. As noted in

Section K.2.3, page K-7, this analysis assumes the regulatory maximum radiation dose of 10 millirem per hour is emitted from every transportation cask. This is highly conservative and should be noted along with a more realistic estimate using statistics from radiation rates from historical shipments of used nuclear fuel and high-level radioactive waste. Assumptions such as used in this calculation serve only to misinform the public by overestimating impacts. This comment applies to all estimates that use the regulatory maximum radiation rate as input.

Response

Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions where information is incomplete or unavailable, or where uncertainties exist, the Rail Alignment EIS adequately analyzes the environmental impacts that could result from the Proposed Action. The use of widely accepted analytical tools, latest reasonably available information, and cautious but reasonable assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts.

Although the EIS analyses are based on the latest reasonably available information and state-of-the-art analytical tools, not all aspects of incident-free transportation or accident conditions can be known with absolute certainty. In such instances, DOE has relied on conservative assumptions that tend to overestimate impacts. However, in response to this comment, DOE revised the text Sections 4.2.10, 4.3.10, K.2.3, and K.2.5 of the Rail Alignment EIS to highlight aspects of the transportation analyses that would tend to overestimate impacts and are, therefore, conservative.

3.7.8 (1698)

<u>Comment</u> - RRR000656 / 0088

Section 4.2.10.2.2.2, page 4-310: The exposed population surrounding a cask maintenance facility is within an area 52 miles away from the facility and the population in this area is assumed to be exposed at the same level as the maximally exposed individual. This assumption is inconceivable. It is recommended that a more realistic scenario be used in this type of calculation.

Response

DOE uses widely accepted analytical tools, the latest reasonably available information, and cautious but reasonable assumptions that offer the most appropriate means to arrive at conservative estimates of transportation-related impacts. DOE assumed that the total population would be exposed at the same level as the maximally exposed member of the public to develop a collective radiation dose. However, DOE also points out in Section 4.2.10.2.2.2 of the Rail Alignment EIS that "the radiation dose and latent cancer fatality risk for members of the public from emissions from the Cask Maintenance Facility would be much smaller because the public is located much farther from the facility."

3.7.8 (1702)

<u>Comment</u> - RRR000656 / 0089

Section 4.2.10.2.2.2, pages 4-311 to 315 discuss consequences from severe accidents and sabotage involving transportation casks. Based on the information in the Draft Appendix K and references, the consequences make very conservative assumptions regarding response to the sabotage or accident events. This should be noted in the text along with analytical results of more reasonable scenarios. For instance, estimates assuming evacuation within a few hours one half mile from the severe event would be more reasonable and should be included as a point of reference. Also, all releases should not be assumed to be respirable sized particles. Bounding analysis may be useful to DOE impact analysts, but is nothing more than misinformation to the public. This comment also applies to Section 4.3.10.2.2.2, pages 4-675 to 681. In addition, the exposure in this scenario would be an "acute" exposure.

Response

Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions where information is incomplete or unavailable, or where uncertainties exist, the Rail Alignment EIS adequately analyzes the environmental impacts that could result from the Proposed Action. The use of widely accepted analytical tools, latest reasonably available information, and cautious but reasonable assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts.

Although the EIS analyses are based on the latest reasonably available information and state-of-the-art analytical tools, not all aspects of incident-free transportation or accident conditions can be known with absolute certainty. In such instances, DOE has relied on conservative assumptions that tend to overestimate impacts. However, in response to this comment, DOE revised the text in Sections 4.2.10, 4.3.10, K.2.3, and K.2.5 of the EIS to highlight aspects of the transportation analyses that would tend to overestimate impacts and are, therefore, conservative.

3.7.8 (1761)

<u>Comment</u> - RRR000525 / 0034

Much has been said by opponents of either the Yucca Mountain repository or of transportation of spent nuclear fuel to suggest that it is unsafe to ship spent fuel or other forms of high-level radioactive waste. Especially following the terrorist attacks on non-nuclear fixed targets on September 11, 2001, there are also concerns expressed by some over the risks of sabotage attacks on nuclear waste shipments en route to the repository and along these rail alignments. The summary in S.3.4.10.2 reminds the public that all shipments will be in NRC-certified shipping casks that are protected by robust metal structure. We [National Association of Regulatory Utility Commissioners] concur with DOE's conclusion that the probability of a sabotage event that would result in a major radiological release would be low.

Response

Thank you for your comment.

3.7.8 (1775)

<u>Comment</u> - RRR000656 / 0090

Section 4.2.10.3.3.2, page 4-322, Nonradiological roadway accidents: Under Shared-Use Option operations, any increase beyond what is described under the Proposed Action for roadway accidents and fatalities would be minimal.

The High Scenario train operation, cited in the Nye County economic impact study, may increase this number. FRA [Federal Railway Administration]/PUC [Public Utility Commission] safety measures should be included as mitigation. Impacts are considered to be the same as those identified for the Proposed Action.

Response

Roadway accidents are accidents involving trucks and other vehicles carrying personnel, equipment, and material related to this project, as described in Section 4.2.10.2.3 and 4.3.10.2.3 of the Rail Alignment EIS. Grade crossing accidents are rail accidents (see Section 4.2.10.2.3.2 for the Caliente alignment and Section 4.3.10.2.3 for the Mina alignment) and not roadway accidents. The analyzed incidence of roadway accidents should not change under the Shared-Use Option in comparison with the Proposed Action. Because the DOE analysis was conservative, the Department did not account for the possibility that under the Shared-Use Option there could be fewer trucks on the road (because there could be some mode shift from trucking to rail) and, therefore, fewer roadway accidents.

The commenter might be referring to roadway accidents that could occur at highway-rail grade crossings, which are discussed in the subsection entitled "Nonradiological Rail Accidents" under "Grade Crossings" in Section 4.2.10.2.3.2 for the Caliente rail alignment and Section 4.3.10.2.3.2 for the Mina rail alignment. Section 4.2.3.3.3.2 and 4.3.3.3.2 note that the Shared-Use Option would slightly increase the potential for accidents. However, the rail traffic volumes under the "High Scenario" cited by the commenter are based on the most optimistic business expectations and are, therefore, assumed in the Nye County Economic Analysis Report to be unrealistically high.

3.7.8 (1803)

<u>Comment</u> - RRR000656 / 0091

Section 4.2.10.3.3.2, page 4-322, Nonradiological rail line accidents: This section says that the impacts of commercial rail traffic at crossings would be small. A higher number of grade crossing accidents can be expected on the eastern end of the line due to the higher volume of traffic forecast there in the Nye County study.

Response

The rail accident rate data DOE used in the Rail Alignment EIS included accidents at grade crossings, as discussed in Section 4.2.10.2.3.2 for the Caliente alignment and Section 4.3.10.2.3.2 for the Mina alignment. Because these accident-rate data are conservative, the EIS analysis accounts for the additional number of grade-crossing accidents that could occur in areas with higher traffic volumes. DOE estimated an annual tonnage of about 1.2 million that would be diverted from truck to rail under the Shared-use Option (see Section 4.2.3.3.2). The Nye County study to which the commenter refers had a midrange of 1 million tons that would be diverted annually from truck to rail.

3.7.8 (1996)

<u>Comment</u> - RRR000656 / 0106

Section K.2.5, page K-47 says input assumptions for transportation accidents include that all material released would be aerosolized and respirable and that there would be no interdiction or cleanup for 1 year. These assumptions are unreasonable for any significant release and should be replaced with more reasonable assumptions for severe accidents and sabotage estimates. This comment also applies to Section K.2.6, page K-51.

Response

Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions where information is incomplete or unavailable, or where uncertainties exist, the Rail Alignment EIS adequately analyzes the environmental impacts that could result from the Proposed Action. The use of widely accepted analytical tools, latest reasonably available information, and cautious but reasonable assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts.

Although the EIS analyses are based on the latest reasonably available information and state-of-the-art analytical tools, not all aspects of incident-free transportation or accident conditions can be known with absolute certainty. In such instances, DOE has relied on conservative assumptions that tend to overestimate impacts. However, in response to this comment, DOE revised the text in Sections 4.2.10, 4.3.10, K.2.3, and K.2.5 of the EIS to highlight aspects of the transportation analyses that would tend to overestimate impacts and are, therefore, conservative.

3.7.8 (2313)

<u>Comment</u> - RRR000619 / 0004

Even though the Draft Environmental Impact Statements find the impacts of the proposed action to be small, it has significantly overestimated these impacts in several respects.

In conducting the analyses presented in the Draft Rail Corridor SEIS and Draft Rail Alignment EIS, DOE has built in a number of conservative assumptions intended to establish a certain margin of confidence in the results. While the use of conservative analyses does provide additional confidence in safety, it does not necessarily provide the public with a realistic representation of the expected radiological health and safety and environmental consequences. We [Nuclear Energy Institute] understand the use of bounding analysis in the context of an EIS that must comply with both the National Environmental Policy Act (NEPA) and DOE's internal NEPA requirements. However, in our review of these documents, we found the following examples of areas where DOE's use of conservatism should be reduced or, at least, better explained.

Sections 4.2.10.2.2 and 4.3.10.2.2 of the Draft Rail Alignment EIS, states the maximally exposed individual worker would receive 25 rem based on an assumption that he or she would receive an annual administrative limit of 500 millirem per year for a 50 year working life escorting shipments. Instead of making the unreasonable assumption that the same person would receive the maximum allowed dose for 50 consecutive years, only the maximum annual results should be presented.

Furthermore, even if an individual were to work the same job for 50 consecutive years, which would be unprecedented, use of the maximum annual results based on the administrative dose limit of 500 millirem would still be overly conservative. It should be noted that industry experience indicates that the average worker dose is less than 200 millirem per year. ... We, therefore, do not agree with DOE's decision to assume that workers would receive the administrative dose limit of 500 millirem per year, no matter how short or long his or her career might be.

Section K-2.3 of the Draft Rail Alignment EIS, discusses methods for estimating transportation impacts. One of the assumptions is that the radiation levels emitted from transportation casks will be at the regulatory limit of 10 millirem per hour at a distance of 2 meters for every transportation cask. This should be recognized as conservative since not all casks will be loaded with fuel that has the characteristics that would result in the cask external dose rate being at the regulatory limit. In Electric Power Research Institute (EPRI) report, Assessment of Incident Free Transport Risk for Transport of Spent Nuclear Fuel to Yucca Mountain Using RADTRAN 5.5 ..., EPRI noted that since more than 40% of the fuel shipped is likely to have been cooled for times greater than 20 years, cask external dose rates will be lower than the regulatory limit for the majority of packages shipped. Incident free dose is directly proportional to the cask external dose rate. Thus, if one assumes that the external dose rate is 30% lower than the regulatory limit, the calculated incident free dose will be 30% lower. It is suggested that DOE either replace this assumption with a more realistic assumption based on projected waste streams or on an estimate using statistical average radiation limits from previous shipments or include a more realistic estimate as a point of reference. As identified in EPRI 2005, there are also other conservative assumptions contained in the calculation of the radiological risk associated with incident free transportation that result in an overstatement of risk. These conservatisms should be recognized and identified to assist decision makers and the public in evaluating the results presented in the EIS.

Sections 4.2.10.2.2.2 and 4.3.10.2.2.2 of the Draft Rail Alignment EIS, discuss impacts of severe accidents and present a text box saying the State of Nevada has an opposing viewpoint that the consequences of severe accidents could be much greater than estimated by DOE. Many of the assumptions made by DOE in the calculation of accident risk are conservative, resulting in an overestimate of accident risk, and should be noted as such. For example, all material is assumed to be aerosolized and respirable and there is no interdiction or cleanup. In a reassessment of transportation accident risk performed by EPRI in 2006, EPRI found that overall accident risk could be reduced by 35% to 40% with the use of less conservative, more realistic assumptions. ... If the accident analysis assumes evacuation, interdiction and cleanup, accident dose risk can be reduced by 70%. In addition, neither the

accident analysis nor the sabotage analysis takes credit for the fact that DOE assumes that at least 75% of the used nuclear fuel will be shipped in Transportation, Aging, and Disposal (TAD) canisters -- an additional barrier that is not accounted for in the release fractions. Where inputs are unrealistically conservative, recognition of this should be highlighted. This recognition should be applied in responding to the State of Nevada viewpoint to show how DOE has applied the very conservative input assumptions to derive gross overestimates, as opposed to underestimates, of accident consequences.

In Sections 4.2.10.2.2.2 and 4.3.10.2.2.2 of the Draft Rail Alignment EIS, the assessment of the maximum reasonably foreseeable accident considered accidents with a probability of more than 1×10^{-7} (1 chance in 10 million) -- this is an order of magnitude lower than NRC guidance regarding "credible" accident, defined as accidents with a probability of 1 chance in 1 million. ... The Draft Rail Alignment EIS evaluated the maximum "reasonably foreseeable" transportation accident as having a frequency of 6×10^{-7} per year and would involve a long-duration, high-temperature fire that would engulf a cask. This maximum reasonably foreseeable accident does not take into account recent action by the U.S. Nuclear Regulatory Commission (NRC) staff and the American Association of Railroads (AAR) to reduce the probability of rail accidents that could result in a long-duration high-temperature fire. Specifically, in response to recommendations by a National Academy of Science committee that studied the transport of radioactive waste, the U.S. Nuclear Regulatory Commission considered transportation operational controls that could be implemented to prevent or mitigate the consequences of a long-duration fire associated with rail shipments. ... NRC staff requested that the AAR consider revising the AAR Circular on railroad operating practices for transport of hazardous materials, OT-55, to prohibit a train carrying flammable gases or liquids from being in a tunnel at the same time as a train carrying used nuclear fuel. AAR has revised OT-55 to include such a prohibition. NRC staff has concluded that this action to revise the AAR recommended operating practices combined with DOE's stated policy to use dedicated trains for transporting used nuclear fuel have effectively addressed operational controls that would decrease the probability of rail accidents that could result in long duration fires. DOE should recognize this action on the part of the NRC and AAR in the Draft Rail Alignment EIS and remove from the list of "reasonably foreseeable" accidents those accidents that consider long-duration high-temperature fires -- since the probabilities of this type of accident occurring would now be much lower due to the actions of AAR.

In the "Accidents at the Cask Maintenance Facility" portion of Sections 4.2.10.2.2.2 and 4.3.10.2.2.2 of the Draft Rail Alignment EIS, DOE notes that the public would be located about 11 km from the facility. Yet, in calculating the population dose for a fire at the facility, DOE assumes that the entire population would be exposed at the same level as a member of the public located 300 meters from the facility. This results in an unrealistic collective dose of 1.3 person rem given the extremely conservative assumptions regarding the location of the population.

Sections 4.2.10.2.2.2 and 4.3.10.2.2.2 of the Draft Rail Alignment EIS summarize the "collective dose" to the public from transportation operations. As an example, Table 4-119 lists the population receiving a calculated radiation dose of 87 person-millirem to 210 person-millirem, with a latent cancer fatality probability of 0.000052 to 0.00013 -- which is essentially zero. Based on these results, the dose to an individual will be negligible and the latent cancer fatality probability essentially zero. The National Council on Radiation Protection and Measurement (NCRP) cautions on the use of collective dose, noting that there are questions regarding the "applicability of the collective dose concept to large populations with very small individual doses and to populations that will exist several generations hence." If DOE plans to continue to utilize collective dose in this document, DOE should include a discussion that puts the collective dose into perspective. Results from more reasonable scenarios and assumptions should also be presented in order to provide the public with more realistic consequences.

Response

Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions where information is incomplete or unavailable, or where uncertainties exist, the Rail Alignment EIS adequately analyzes the environmental impacts that could result from the Proposed Action. The use of widely accepted analytical tools, latest reasonably available information, and cautious but reasonable assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts.

Although the EIS analyses are based on the latest reasonably available information and state-of-the-art analytical tools, not all aspects of incident-free transportation or accident conditions can be known with absolute certainty. In such instances, DOE has relied on conservative assumptions that tend to overestimate impacts. However, in response to this comment, DOE revised the text in Sections 4.2.10, 4.3.10, K.2.3, and K.2.5 of the EIS to highlight aspects of the transportation analyses that would tend to overestimate impacts and are, therefore, conservative.

3.7.8 (2314)

<u>Comment</u> - RRR000619 / 0005

The sabotage analysis in the Draft Supplemental Environmental Impact Statement is extremely conservative and highly speculative

Used nuclear fuel transportation and storage containers are extremely robust and highly resistant to sabotage. The same defense-in-depth design philosophy that protects these systems against severe accidents, drops, puncture, fires and submersion in water also makes them highly resistant to terrorist attack. Additionally, NRC regulations require that a strict security plan be in place for all shipments which will carefully track and monitor the shipments as well as establish specific procedures to protect against sabotage and theft.

Industry believes that DOE has not taken these security precautions properly into account and, as a result, the Draft Rail Alignment EIS significantly overestimates both the likelihood and potential consequences of a sabotage event. The extreme over-conservatism in the Department's approach diminishes the value of this document as a public communication tool, as it can potentially raise concerns that are not justified. Several examples of this problem, as well as recommendations for better communicating the context of the scenarios evaluated, are provided below.

Sections 4.2.10.2.2.2 and 4.3.10.2.2.2 of the Draft Rail Alignment EIS, discuss severe accident and sabotage scenarios and the resulting estimated consequences. Based on the information in the document Appendices and references, the analysis includes very conservative input assumptions regarding response to the sabotage or accident events. This should be noted in the text along with analytical results of more reasonable scenarios. For instance, estimates assuming evacuation within a few hours one half mile from the severe event would be more reasonable and should be included as a point of reference. Bounding analysis is useful to DOE impact analysts, but, absent qualification, it tends to misinform the public.

In Section K.2.6 of the Draft Rail Alignment EIS it is recognized that DOE plans to operate the repository using primarily TAD canisters which would hold 21 PWR assemblies. However, DOE chose to estimate the consequences of a rail sabotage event based on the radionuclide inventory in 26 PWR assemblies, "which overestimated consequences by about 24 percent in comparison to the inventory in 21 pressurized-water reactor spent nuclear fuel assemblies." (Section K.2.6, page K-52).

As a core legal matter, NEI [Nuclear Energy Institute] notes that evaluating the environmental impacts of potential terrorist attacks against nuclear facilities and activities not only severely distorts the National

Environmental Policy Act (NEPA), it is not a general legal requirement. U.S. Supreme Court decisions in Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766 (1983), and Department of Transportation v. Public Citizen, 541 U.S. 752 (2004), make clear that NEPA should not be construed to force agencies to consider environmental impacts for which they cannot reasonably be held responsible. In Metropolitan Edison, the Court held that NEPA did not require the Nuclear Regulatory Commission (NRC) to consider the "severe psychological distress" that local residents might suffer if a nuclear plant resumed operation, even though relicensing the plant would be a "but-for" cause of any such distress. Metropolitan Edison, 460 U.S. at 774. The Court explained that "[t]ime and resources are simply too limited" for Congress to have intended to extend NEPA to cover every conceivable impact of any agency's decision. Id. at 776. Instead, the Court recognized that NEPA's underlying policies and Congress's intent limit the Act's scope in a manner similar to "the familiar doctrine of proximate cause from tort law." Id.774. Applying that limitation, the Court found the causal relationship between the federal action at issue, an ensuing change in the physical environment, and the feared distress of residents "too attenuated" to make the NRC potentially "responsible for [the feared] effect" in a way that required NEPA analysis. Id at n.7. The residents' claim "lengthen[ed] the causal chain beyond the reach of NEPA." Id. at 775.

In Public Citizen, the Court again recognized common sense limitations on the scope of NEPA. The President had made clear that he would lift a ban on cross-border operations by Mexican motor carriers, subject to the promulgation of safety regulations by the Federal Motor Carrier Safety Administration (FMCSA). The FMCSA's NEPA assessment considered the increased emissions and noise that would result directly from the inspection regime to be established by the regulations, but not the environmental consequences that might be caused by the increased cross-border traffic itself. The agency reasoned that those consequences resulted from the President's decision to permit the traffic, not from the agency's safety regulations. Public Citizen, 541 US, at 760-61.

The Supreme Court agreed. Although the regulations were a condition precedent to the cross-border traffic, and would inevitably trigger the environmental effects, that was "insufficient to make [the FMCSA] responsible for [those] effect[s] under NEPA." Id. at 767. Moreover, while NEPA aims to ensure that agencies consider information about potential environmental effects before deciding whether and how to take a particular action, and to facilitate public participation in that consideration, those purposes also limit the statute's reach:

[I]nherent in NEPA and its implementing regulations is a "rule of reason," which ensures that agencies determine whether and to what extent to prepare an [Environmental Impact Statement (EIS)]...based on the usefulness of any new potential information to the decision making process. Where the preparation of an EIS would serve "no purpose" in light of NEPA's regulatory scheme as a whole, no rule of reason worthy of that title would require an agency to prepare an EIS. Id. at 767 (citations omitted).

The foregoing notwithstanding, NEI recognizes that the controlling law in the Ninth Circuit is to the contrary. See San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016 (2006), cert denied, -- US.--, 127 S. Ct 1124 (2007). Accordingly, since Yucca Mountain is within the geographic boundaries of the Ninth Circuit's jurisdiction, DOE's analyses are compelled under the circumstances. Nevertheless, in conducting such analysis DOE should either take care to avoid excessive speculation and conservatism or, at least, explain the speculative and conservative nature of its analysis.

Response

Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions where information is incomplete or unavailable, or where uncertainties exist, the Rail Alignment EIS adequately analyzes the environmental impacts that could result from the Proposed Action. The use of widely

accepted analytical tools, latest reasonably available information, and cautious but reasonable assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts.

Although the EIS analyses are based on the latest reasonably available information and state-of-the-art analytical tools, not all aspects of incident-free transportation or accident conditions can be known with absolute certainty. In such instances, DOE has relied on conservative assumptions that tend to overestimate impacts. However, in response to this comment, DOE revised the text in Sections 4.2.10, 4.3.10, K.2.3, and K.2.5 of the EIS to highlight aspects of the transportation analyses that would tend to overestimate impacts and are, therefore, conservative.

3.7.8 (2337)

Comment - RRR000681 / 0023

Section 4.2.10.1.3, Transportation Impact Assessment Methodology: The evaluation of probable frequency of accidents during transportation of hazardous materials along rail line and station yards is based upon statistical data of small size rail vehicles. However, these statistics are not reflective of accident probability for the large size casks that are proposed for this project, thus putting in question the validity of the risk assessment and requiring a different safety evaluation methodology. There are places in the rail SEIS where risk is not fully addressed; rather, by claiming similarity to other analyses, DOE copied those results into the new sections. It would have been more convincing, if the copying had been replaced by a careful description of similarities and possible differences and uncertainties.

Response

DOE based the derivation of rail accident rates on the best available data. DOE generated rail accident rates based on Class I rail data, including accidents involving freight trains on mainline tracks, but excluding accidents to passenger trains, work trains, on-track maintenance and inspection equipment, light locomotives and cuts of cars, and on accidents on yard sidings and industry tracks. The Department broke rail accidents down by cause code and identified each cause group as car-mile or train-mile related, depending on whether accident likelihood was considered to be a function of the total car-miles or train-miles operated. DOE also calculated total exposure to accidents in terms of train- and car-miles. This approach enabled the derivation of accident rates that accounted for the fact that cask trains are much shorter than the average freight train. Because the transportation of casks would follow much stricter safety and procedural rules than an average train with the same number of rail cars, the rail accident rates DOE utilized in the Rail Alignment EIS are conservative.

3.7.8 (2369)

Comment - RRR000681 / 0026

The primary problems identified in the occupational and public health and safety sections of the Draft Rail Alignment EIS documents have to do with inadequate documentation, inconsistencies in the documentation, inadequate consideration of uncertainties, inadequate justification of assumptions, and claims of future actions that have not yet been accomplished. The identified errors do not enhance confidence in the analysis or the technical review of the calculations, especially since they occurred in some of the few demonstration calculations presented in the reports.

Response

Based on the level of information and analysis, the analytical methods and approaches used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions where information is incomplete or unavailable, or where uncertainties exist, the Rail Alignment EIS adequately analyzes the environmental impacts that could result from the Proposed Action. The use of widely accepted analytical tools, latest reasonably available information, and cautious but reasonable

assumptions offer the most appropriate means to arrive at conservative estimates of transportation-related impacts.

Although the EIS analyses are based on the latest reasonably available information and state-of-the-art analytical tools, not all aspects of incident-free transportation or accident conditions can be known with absolute certainty. For such instances, DOE has relied on conservative assumptions that tend to overestimate impacts. However, in response to this comment, DOE revised the text in Sections 4.2.10, 4.3.10, K.2.3, and K.2.5 of the EIS to highlight aspects of the transportation analyses that would tend to overestimate impacts and are, therefore, conservative.

3.7.8 (2398)

Comment - RRR000681 / 0029

Section 4.2.10.2.2.2 mentions the guidelines that would be employed as preventative measures against terrorist attack (such as "use of armed escorts to accompany all shipments, safeguarding of the detailed shipping schedule information, monitoring of shipments through satellite tracking and a communication center with 24-hour staffing, and coordination of logistics with state and local law enforcement agencies" (page 4-313). However, no analysis is offered regarding response time and preparedness of emergency management agencies in case of a catastrophe. The issue of emergency response management is of critical importance considering the harsh terrain and rural nature of the region that does not guarantee immediate availability of resources and their timely dispatch. Further, there is no analysis to show the number and location of the emergency response facilities around the proposed rail line, or their financial commitments over the next 50 years of operations.

Response

At this time, at least 10 years before the start of operations at the repository, information such as the response time and preparedness of emergency management agencies, the number and location of the emergency response facilities around the rail line, or their financial commitments has not been determined. The analysis of sabotage events in the Rail Alignment EIS does not assume that emergency response assets will be available to mitigate the consequences of these events.

In addition, Section 180(c) of the NWPA requires DOE to provide technical assistance and funds to states for training of public safety officials of appropriate units of local government and American Indian tribes through whose jurisdictions the Department would transport spent nuclear fuel and high-level radioactive waste. The training would cover procedures required for safe routine transportation of these materials, as well as procedures for addressing emergency response situations. DOE would provide the assistance based on the training needs of the states and tribes, as determined using a planning grant and based on availability of funds in annual Program budgets specified by Congress. DOE could activate additional federal response capabilities, such as expert services from the Radiological Assistance Program Team, as requested by states and tribes.

DOE developed a draft Section 180(c) policy that it issued in a *Federal Register* notice on July 23, 2007 (72 *FR* 40139), to request additional comments from stakeholders and the public. Under the proposed policy, DOE would make two grants available to eligible state and tribal governments. An initial assessment-and-planning grant would be available about 4 years before shipments through a jurisdiction began. Once the state or tribe completed the assessment and planning grant activities, it would be eligible for the training grant every year shipments traveled through its jurisdiction. DOE plans to conduct a pilot test of the program and then issue the final Section 180(c) policy.

3.7.8 (2399)

Comment - RRR000681 / 0030

The Draft Rail EIS also fails to address potential impacts of military training accidents to rail operations and the repository site.

Response

Appendix K, Section K.2.4.10 of the Rail Alignment EIS discusses aircraft crashes and accidental releases of ordnance or practice weapons. The analysis concluded that an aircraft crash would not breach a transportation cask. The EIS does not evaluate radiological consequences of an impact of accidentally dropped ordnance on a shipping cask because the probability of such an event (about 1 in 10 billion per year) is so low that it is not reasonably foreseeable. Section 4.1.8 of the Repository SEIS discusses aircraft crashes into a repository facility.

3.7.8 (2415)

<u>Comment</u> - RRR000075 / 0005

I've come from a ranch where we've been bombarded with so much radiation, those nuclear shots, it was unreal. Now you're going to turn around and make it possible that we'll get another dose.

Response

Table 4-133 of the Rail Alignment EIS summarizes radiological impacts of the Proposed Action for the Caliente rail alignment and Table 4-282 summarizes impacts for the Mina rail alignment. The analysis in the EIS factored in the characteristics of spent nuclear fuel and high-level radioactive waste, the integrity of shipping casks that DOE would use for transportation, and the regulatory and programmatic controls on shipping operations (see Appendix L of the Rail Alignment EIS). The analytical results are supported by many technical and scientific studies over decades of research and development by DOE and other federal agencies, including the NRC and the U.S. Department of Transportation, and by the international community, including the International Atomic Energy Agency.

3.7.8 (2416)

Comment - RRR000103 / 0001

I'm a representative from the Timbisha tribe. We have serious concerns about the storage of 70,000 metric tons of commercial and spent waste, nuclear waste. We have many concerns about the transportation by rail, by truck, that all the emergency routes need to be more identified, the effects to the environment need to be more understood.

Response

Appendix L of the Rail Alignment EIS describes roles and responsibilities for emergency response in the event of a transportation accident. Section 180(c) of the NWPA requires DOE to provide technical assistance and funds to states and American Indian tribes for training public safety officials of appropriate units of local governments through whose jurisdictions the Department would transport spent nuclear fuel or high-level radioactive waste (see Section L.7 of the EIS). Section 180(c) mandates that training must cover procedures for safe routing and emergency response situations. It encompasses all modes of transportation, and funding would come from the Nuclear Waste Fund. Once implemented, this program would provide funding and technical assistance to train firefighters, law enforcement officers, and other public safety officials in preparation for repository shipments through their jurisdictions.

3.7.8 (2417)

<u>Comment</u> - RRR000555 / 0005

Three years ago, DOE came to our property in an attempt to answer our questions about this route that will be less than three miles from our house. When we asked about the potential threat of terrorists trying to take radioactive materials from the railroad, DOE employee Robin Sweeny simply said, "Why would

they want to do that?" They also said, "Who would want to blow up this rural place?" This is the attitude we got from the professional staff of DOE and Bechtel. I see that DOE put a little more info in the EIS.

Response

In the EIS, DOE has evaluated sabotage events in which a military jet or commercial airliner would crash into a spent nuclear fuel cask or a modern weapon (a high-energy-density device) would penetrate a spent nuclear fuel cask. Sections S.3.4.10.2, 4.2.10, 4.3.10, K.2.6, K.2.7.4, and K.2.8.4 of the Rail Alignment EIS discuss the potential impacts of these sabotage events. Tables K-43 and K-51 summarize consequences of a sabotage event in suburban and rural areas for the Caliente and Mina rail alignments, respectively.

3.7.8 (2418)

<u>Comment</u> - RRR000555 / 0006

We also asked Robin how DOE would inform us and evacuate the area in case of an accident. Her answer was, "there won't be an accident." This EIS does not say what DOE would do in case of an accident. This needs to be added to the EIS! The EIS does admit that so many will die from radiation exposure, by giving actual numbers. It seems rather obvious that none of you really care about our safety.

Response

The radiological impact assessment for the EIS indicates that the number of potential fatalities (expressed as latent cancer fatality units) associated with operation of the rail line would be less than one. This estimate includes occupational and public radiological exposure from routine operation of the rail line and from potential accidents. Therefore, DOE does not anticipate even a single fatality as a result of radiological exposure from operation of the rail line. Tables 4-133 and 4-282 of the Rail Alignment EIS summarize the radiological impacts of the Proposed Action for the Caliente and Mina alignments, respectively.

Appendix L of the EIS discusses roles and responsibilities of federal, state, and tribal agencies for incident notification and emergency response in the event of a transportation accident. Section L.6.2 discusses federal coordination. The Department of Homeland Security coordinates the overall Federal Government response to radiological Incidents of National Significance in accordance with Homeland Security Presidential Directive 5 (DIRS 182271-DHS 2003, all) and the National Response Plan (DIRS 175729-DHS 2004, all). Based on Directive 5 criteria, an Incident of National Significance is an actual or potential high-impact event that requires a coordinated and effective response by, and appropriate combination of, federal, state, local, tribal, nongovernmental, or private-sector entities to save lives and minimize damage, and to provide the basis for long-term community recovery and mitigation activities.

In Directive 5 (DIRS 182271-DHS 2003, all), the President directed the development of the new National Response Plan (DIRS 175729-DHS 2004, all) to align federal coordination structures, capabilities, and resources into a unified approach to domestic incident management. The Plan is built on the template of the National Incident Management System. It provides a comprehensive, all-hazards approach to domestic incident managements and agencies, including DOE, must adopt the National Incident Management System and use it in their individual domestic incident management and emergency prevention, preparedness, response, recovery, and mitigation activities, as well as in support of all actions taken to assist state or local entities.

The Department of Homeland Security is the lead agency for response to any Incident of National Significance. DOE supports the Department of Homeland Security as the coordinating agency for incidents that involve the transportation of radioactive materials by or for DOE. DOE is otherwise responsible for the radioactive material, facility, or activity in the incident. DOE is part of the Unified Command, which is an application of the Incident Command System when more than one agency has

incident jurisdiction or when incidents cross political jurisdictions. DOE coordinates federal radiological response activities as appropriate. Agencies work together through the designated members of the Unified Command, often the senior person from agencies or disciplines that participate in the Unified Command, to establish a common set of objectives and strategies. DOE, as the transporter of radiological material, would notify state and tribal authorities and the Homeland Security Operations Center.

3.7.8 (3089)

<u>Comment</u> - RRR000664 / 0027

DOE did not address Eureka County's scoping comment concerning the resuspension of radioactive particles present in the soil during the construction of the rail line. As Eureka County pointed out, "DOE must assess whether the soils within the corridor contain radioactive particles that could be released into the air with project related ground disturbance." Eureka County Comments on Notice of Intent for Alignment of Rail at 10 (2004). Resuspension of radioactive particles could occur in significant quantities during construction. Sources would include earthwork for construction of the road bed and fugitive dust emissions from access roads and haul roads from quarries and borrow areas. The potential for fugitive dust emissions containing radioactive particles should require DOE to implement aggressive fugitive dust control measures for all potential sources of fugitive dust.

As a county downwind of the area where above and underground nuclear weapons tests were conducted, we are especially aware of the vulnerability of our population to airborne radioactive particles. This is illustrated by information and graphics on the Department of Energy's website regarding radiological exposure pathways. http://www.doe.gov/emprograms/dose/pathways.htm...

Longtime Eureka County residents are currently eligible for a compensation program authorized by the Radiation Exposure Compensation Act of 1990, conducted by the University of Nevada School of Medicine (http://www.medicine.nevada.edu/community/resep) related to cancer resulting from their exposure to fallout. See "You May Have Been At Risk for Nuclear Fallout Exposure" advertisement from Eureka Sentinel (Nov. 8, 2007).

Response

In April 1996, a Federal Facility Agreement and Consent Order was entered into by and among the State of Nevada, acting by and through the Department of Conservation and Natural Resources, Division of Environmental Protection, DOE, and the U.S. Department of Defense. The purpose of the Consent Order was to identify sites of potential historic contamination due to Nevada Test Site operations and implement proposed corrective actions based on public health and environmental considerations. The Consent Order identifies Corrective Action Units, which are groupings of Corrective Action Sites, that delineate and define areas of concern for contamination. Offsite Corrective Action Sites include the Central Nevada Test Area and Project Shoal.

DOE submitted Closure Reports to the Nevada Division of Environmental Protection indicating that the site remediation process with respect to surface contamination was complete on February 13, 1998, for Corrective Action Unit 416 and on June 27, 2002, for Corrective Action Unit 417. Based on the work under the Consent Order, the potential for workers or the public to be exposed to contamination due to fallout during proposed railroad construction and operations along the Caliente or Mina rail alignment would be unlikely.

3.7.8 (3108)

<u>Comment</u> - RRR000691 / 0012

The EIS is absent information concerning the potential, in creating new ballast quarries, of releasing harmful natural carcinogens or reintroducing existing nuclear fallout from previous nuclear tests into the atmosphere

As described in Section 4.2.2.4.4 of the Nevada Rail Corridor SEIS, information on contamination at the Nevada Test Site is incorporated by reference from several recent NEPA analyses (DIRS 101811-DOE 1996, all; DIRS 162638-DOE 2002, all). The section states that contamination of soil resources has occurred at the Nevada Test Site primarily due to radioactive waste management sites and past nuclear testing activities.

In April 1996, a Federal Facility Agreement and Consent Order was entered into by and among the State of Nevada, acting by and through the Department of Conservation and Natural Resources, Division of Environmental Protection, DOE, and the U.S. Department of Defense. The purpose of the Consent Order was to identify sites of potential historic contamination due to Nevada Test Site operations and implement proposed corrective actions based on public health and environmental considerations. The Consent Order identifies Corrective Action Units, which are groupings of Corrective Action Sites that delineate and define areas of concern for contamination. Offsite Corrective Action Sites include the Central Nevada Test Area and Project Shoal.

DOE submitted Closure Reports to the Nevada Division of Environmental Protection indicating that the site remediation process with respect to surface contamination was complete on February 13, 1998, for Corrective Action Unit 416 and on June 27, 2002, for Corrective Action Unit 417. Based on the work under the Consent Order, the potential for workers or the public to be exposed to contamination due to fallout during railroad construction and operations in any of the rail corridors would be unlikely. DOE is unaware of information identifying similar contamination off the Nevada Test Site in the vicinity of the proposed rail corridors.

3.7.8 (3487)

<u>Comment</u> - RRR000035 / 0004

The commenter said that if a train derailment happened in Caliente, the whole middle of town would be taken out, including her home.

Response

Train derailments are events of very low probability, and the rail analysis indicated that the risk of a derailment in Caliente would be extremely low. In this case, the probability that a train would be involved in an accident in a 1-kilometer segment is 8.95×10^{-7} (see Table 4-127 of the Rail Alignment EIS for the Caliente alignment), which is less than a one-in-a-million chance. As a result, the analysis indicated that there would be less than one accident during the entire 50 years of operation in the City of Caliente (see Table 4-128). Transportation safeguards and security are among the highest DOE priorities as it plans for shipments of spent nuclear fuel and high-level radioactive waste to Yucca Mountain. DOE would build the security program for the shipments on the successful security program it developed and has successfully used in past decades for shipments of spent nuclear fuel to DOE facilities from foreign and domestic reactors.

3.7.8 (3497)

<u>Comment</u> - RRR000024 / 0002

The commenter said that considering the number of train accidents in the past 2 years, DOE should assume that an accident will happen.

Response

Rail accidents have a very low probability of occurrence, and any analysis based on statistical principles will refer to the likelihood of an accident. For the Caliente and Mina rail alignment analyses, the probability that a train would be involved in an accident within a 1-kilometer segment is 8.95×10^{-7} (see

Chapter 4, Table 4-127, for the Caliente rail alignment), which is less than a one-in-a-million chance. Although there have been rail accidents in the past 2 years in Nevada, that does not mean that an accident would occur on this project. The calculation of rail accidents considers not only the number of historical accidents in the project area, but also the amount of rail activity, measured as train-miles and railcar-miles. DOE based the derivation of rail accident rates on Class I rail data. The Department broke rail accidents down by cause code and defined each cause group as car-mile or train-mile related, depending on whether accident likelihood was a function of the total car-miles or train-miles operated. In addition, DOE calculated total exposure to accidents in terms of train- and car-miles. This approach enabled the derivation of accident rates that accounted for the fact that cask trains would be shorter than the average freight train. By multiplying this rail accident rate by the amount of train-miles and railcar-miles generated by this project, DOE estimated the number of rail accidents that would be likely to occur due to this project. The analysis for the Caliente rail alignment indicated that there would be fewer than 13 accidents during the entire 50 years of operation along the entire alignment (see Table 4-128 of the EIS).

3.7.8 (3584)

<u>Comment</u> - RRR000231 / 0005

The commenter stated that an accident would probably occur and leakage of radioactive waste would spill across much of the lands due to the length and rough terrain the rail line would cross.

Response

According to the NRC report *Reexamination of Spent Fuel Shipment Risk Estimates* (DIRS 152476-Sprung et al. 2000, pp. 7-76), in more than 99.99 percent of accidents, radioactive material would not be released from the cask. Sections 4.2.10 and 4.3.10 of the Rail Alignment EIS present the impacts of the 0.01 percent of accidents that could result in a release. Tables 4-133 and 4-282 of the EIS summarize the radiological impacts of the Proposed Action for the Caliente and Mina rail alignments, respectively.

3.7.8 (3649)

<u>Comment</u> - RRR000373 / 0006

The commenter said that a disclosure and warning should be made to workers and those nearby of potential health risks of transporting radioactive materials by train.

Response

Section 6.4 of the Rail Alignment EIS identifies DOE Orders applicable to transportation of radioactive materials. In accordance with DOE Order 440.1A, *Worker Protection Management for DOE, Federal and Contractor Employees, and Fire Protection*, DOE would inform workers of the potential health risks of transporting radioactive materials. DOE Order 440.1A establishes a comprehensive worker protection program that ensures that DOE and contractor employees have an effective program to reduce or prevent injuries, illnesses, and accidental losses by providing a safe and healthful workplace. The radiological impact analysis in this EIS, as summarized in Tables 4-115 through 4-119 for the Caliente rail alignment and Tables 4-266 through Table 4-270 for the Mina alignment, indicates that, under assumed conditions, the maximally exposed worker (a security escort) would receive a radiation dose no greater than 0.5 rem per year, equivalent to a latent cancer fatality of 0.00030.

Through this EIS and other methods of communication, DOE has informed the public of the potential health risks from transporting radioactive materials. The radiological impact analysis in this EIS, as summarized in Table 4-121, indicates that the maximally exposed public individual (a person residing in the vicinity of the Staging Yard at Caliente-Upland) would receive a radiation dose no greater than 0.0027 rem, equivalent to a latent cancer fatality of 1.6×10^{-6} over the 50-year railroad operations period along the Caliente rail alignment. In the event of an accident, the Interagency Modeling and Atmospheric Assessment Center would be responsible for disseminating information about potential consequences. Appendix L of the EIS discusses incident response; Section L.6.2 describes the roles and responsibilities

of federal agencies. As described in Section L.6.2, the Interagency Modeling and Atmospheric Assessment Center is responsible for production, coordination, and dissemination of consequence predictions for an airborne hazardous material release. The Center generates the single federal prediction of atmospheric dispersions and their consequences using the best available resources.

3.7.8 (4224)

Comment - 2 comments summarized

Referring to Section 3.2.10.3, Radiological Health and Safety Environment, the commenter stated that there has been research done by the Native American Community Action Council on radiation exposure and pathway studies and the impact of radiation on Native American communities. The commenter stated that this document should be added to the list of resource and research presented to the Center of Disease Control by Clark University and the affected Native American Tribes.

Response

DOE reviewed the radiation exposure and pathway analysis studies published by Clark University and the U.S. Centers for Disease Control for their potential applicability to the Rail Alignment EIS. These studies address the issue of retrospective radiation exposures of American Indian populations from iodine-131 from nuclear weapons testing through hunting and eating of game animals, such as rabbits, and address the feasibility of conducting radiation dose reconstructions for small populations. As such, these studies do not directly apply to the incident-free transportation of radioactive material that is the subject of the Rail Alignment EIS. The incident-free transportation of spent nuclear fuel would not involve releases of radioactive material from the shipping casks. In addition, iodine-131 has a half-life of about 8 days. By the time the spent nuclear fuel and high-level radioactive waste would have already decayed, limiting the usefulness of the iodine-131 game model described in the referenced studies for estimating radiation doses from transportation accidents.

3.7.9 Noise and Vibration

3.7.9 (834)

<u>Comment</u> - RRR000641 / 0016

Page 4-245, Section 4.2.8.2.1 of the Rail Alignment DEIS indicates that the Interchange Yard at the interface with the Union Pacific Railroad would be located 3,900 feet to the north of receptors in Caliente. This is not true. The Interchange Yard would be located in downtown Caliente less than 100 feet from the City of Caliente administrative complex and within a few hundred feet of dozens of existing homes and businesses. The related conclusion that there would be no adverse noise impacts from construction of the Interchange Yard in Caliente is unfounded. The FEIS must accurately disclose the proximity of existing receptors in the City of Caliente to the proposed location of construction of the Interchange Yard in Caliente to the nature of adverse noise impacts to existing receptors in Caliente from construction (and operation) of the Interchange Yard in Caliente. Chapter 7 of the FEIS must identify and evaluate measures to mitigate Interchange Yard related construction and operation noise within in the City of Caliente.

Response

Section 4.2.8.2.1 of the Rail Alignment EIS refers to both the Staging Yard and the Interchange Yard. The DOE analysis cited by the commenter concerned the Staging Yard to the north of Caliente, not the Interchange Yard. DOE clarified the text in Section 4.2.8.2.1.

3.7.9 (835)

<u>Comment</u> - RRR000641 / 0017

The Rail Alignment DEIS on Page 4-246 in Section 4.2.8.2.3 fails to consider the significant contribution to construction train noise that coupling/decoupling of cars will pose to receptors in the City of Caliente. The FEIS must disclose the frequency and level of noise associated with construction train car coupling/ decoupling over the 4 to10 year construction timeframe for the rail line and the 50-year repository operating horizon. Chapter 7 must include measures to mitigate impacts associated with train coupling/decoupling noise.

Response

Railcar coupling and decoupling operations in the Interchange Yard would occur during the construction and operations phases. The noise that the Union Pacific Railroad locomotive warning horn produces would dwarf railcar coupling and decoupling noise, which has occurred in this area in the past (see Figure 4-14 of the Rail Alignment EIS).

3.7.9 (836)

Comment - RRR000641 / 0018

Because general commerce trains bringing construction materials into the Caliente area would likely perform car coupling/decoupling operations in the Interchange Yard (located in front of the Caliente City Hall along the existing UPRR [Union Pacific Railroad] mainline), Figure 4-14 on Page 4-248 of the Rail alignment DEIS and related analyses of construction train noise is not complete. The noise contour shown in Figure 4-14 should extend south in front of the Caliente City Hall to capture the location of the Interchange Yard. The analysis of noise should reflect that train horns would be blown by DOE trains entering and leaving to the east of the Interchange Yard (UPRR mainline crossing in downtown Caliente) and again as they cross the access road to the Caliente Youth Training Center on the way to the Staging Yard. The FEIS should estimate the number of times per day DOE locomotives would enter each of the two crossings on their way to and from the Interchange Yard. Related horn noise impacts, provided as an incremental increase over the frequency of existing train horn blows in Caliente to be 10 (2.4 train crossings per day at each crossing, two horn blasts per crossing). Table 4-100 should be revised to better reflect likely noise related impacts in Caliente.

Response

The Final Rail Alignment EIS includes an analysis of horn sounding at the Caliente Youth Center access road. The analysis estimates that the Proposed Action would adversely impact three receptors at 65 daynight average noise level (DNL) + 3 A-weighted decibels (dBA). Only a small area near this access road would be affected because existing Union Pacific Railroad locomotive warning horn noise dominates a much larger area. In addition, this analysis represents the worst case, because the Federal Railroad Administration does not require locomotive warning horn sounding for private roads. The Federal Railroad Administration might consider the Caliente Youth Center access driveway as a private road, and if so, horn sounding would not be required there. Regarding car coupling/decoupling operations in the Interchange Yard, these activities have occurred in this area in the past and are dwarfed by the existing Union Pacific Railroad locomotive warning horn noise (as shown in Figure 4-14 of the Rail Alignment EIS). DOE modified Sections 4.2.8.2.3, 4.2.8.3.3, 4.2.8.4, and 4.2.8.6 of the Rail Alignment EIS to state these results.

3.7.9 (2135)

<u>Comment</u> - RRR000710 / 0022

Page 3-269 and continuing, Section 3.2.8: The DEIS fails to assess the impacts of noise and vibration on wildlife, wild horses, wilderness characteristics, livestock traditional home ranges, and sensitive underground structures, focusing erroneously on a limited set of "receptor" areas, i.e. towns/cities.

Many more sensitive "receptor" areas exist outside these towns, which are relatively noisy as compared to the quietude of the majority of the proposed rail line, including, but not limited to the wild horse management area, bighorn habitat, livestock habitat, and wilderness characteristics of the South Reveille WSA [Wilderness Study Area] and the Kawich WSA.

Response

DOE sampled ambient noise where people live near the proposed alignment. The overall region of influence is relatively unpopulated and the selected noise and vibration measurements sites reflect that. DOE followed Surface Transportation Board and Federal Transit Administration noise guidelines in this study, which do not address the impact of noise on wildlife. Several areas studied within the region of influence are already exposed to substantial noise, for example due to military aircraft training in Garden Valley. In such cases, the introduction of new train noise would be minor compared with existing noise.

3.7.9 (2532)

<u>Comment</u> - RRR000681 / 0041

According to Table 2-3, Potential Impacts from National and Nevada Transportation, under the Caliente Implementing Alternative: "Noise from construction activities would exceed Federal Transit Administration guidelines in two locations." The EIS should indicate specific locations and the expected maximum noise level.

Response

As indicated in Section 4.2.8.2.1 of the Rail Alignment EIS, the closest residential building would be about 260 feet from pile-driving activity. Assuming continuous pile driving for 8 hours per day and continuous use for 30 days, the estimated 8-hour equivalent sound level and 30-day Day-Night Average Sound Level would be 87 dBA, which is 12 dBA above the 30-day noise guidelines in Table 4-93 of the EIS. The closest residence to construction activities (non-pile driving) would be about 197 feet, and the estimated 8-hour equivalent sound level would be 91 dBA, which is 11 dBA above the noise guidelines listed in Table 4-93.

3.7.9 (3045)

Comment - RRR000710 / 0041

Page 4-242 and continuing, Section 4.2.8: The DEIS fails to adequately assess the impacts of noise to livestock grazing, wildlife habitat use, wild horses, and wilderness values.

DOE sampled ambient noise, and assessed increased noise of operations only at three communities, and did not assess long term impacts to the biological resources and to the decreased opportunities for solitude within Wilderness and Wilderness Study Area.

Response

DOE sampled ambient noise near residential areas the proposed alignment would pass. The region of influence is relatively unpopulated and the noise and vibration measurement sites reflect that. DOE followed Surface Transportation Board and Federal Transit Administration noise guidelines, which do not address the impact of noise on wildlife. Several areas in the region of influence are exposed to substantial noise, for example military aircraft training in Garden Valley. In such cases, the introduction of train noise would be minor in comparison with existing noise. Wildlife and people live in areas currently exposed to high levels of noise.

3.7.10 Aesthetic Resources

3.7.10 (1093)

<u>Comment</u> - RRR000663 / 0033

The Garden Valley portion of the proposed Caliente rail corridor passes near a unique aesthetic and cultural resource that was not adequately assessed in the Draft Rail Alignment EIS. A characteristic of the Draft Rail Alignment EIS is that it is retrospective and therefore fails to adequately address areas that are deliberately being developed as cultural resources. Since the 1970s Michael Heizer, the artist, and the Dia Foundation have spent decades and tens of millions of dollars developing a unique cultural resource in Garden Valley -- the "City" installation. While the Draft Rail Alignment EIS does acknowledge the presence of the City installation, the assessment is wholly inadequate for a number of reasons.

First, DOE has performed ambient noise assessments in the area and concluded that there will not be significant impacts due to rail noise. The appraisal of the train noise was performed from areas that are not specifically intended as viewing platforms for the City Installation. Therefore the noise assessments that are the basis for concluding that there is no impact were performed at places that do not address the intended use of the area.

Second, DOE has assessed noise impacts assuming relatively small numbers of trains. The Draft Rail Alignment EIS section on auditory impacts specifies small numbers of trains traversing the rail line for construction and waste shipment purposes and overlooks the likely substantially larger numbers of trains that will traverse the rail line because of shared uses. An implication of the shared use line is that increased access could lead to the development of new facilities (e.g., coalfired electric generating plants) that will lead to an increased number of rail trips. This phenomenon, well-documented in the transportation field, is referred to as "induced traffic." It means that improved access leads to an increase demand for transportation services. For example, construction of one 1000 MW coal-fired power plant to be served by the new rail line could result in an additional 2-6 train trips per day of loaded and empty coal cars, with 110 cars or more per train. The Draft Rail Alignment EIS does not acknowledge or assess the likely impacts of induced traffic resulting from the rail line's construction.

The photo-simulations contained in the Draft Rail Alignment EIS also fail to adequately address the impact of the proposed action in several ways. First, the photo-simulations were made from locations that do not correspond to the specific viewpoints selected for use by the artist. Therefore, the photo-simulations do not accurately reflect the intended viewpoints for the City installation. Second, the Draft Rail Alignment EIS does not assess the complete range of visual impacts on the site, including the construction camps and proposed wells. Third, the Draft Rail Alignment EIS asserts that the proposed action is consistent with BLM objectives for the management of Class II areas, but it does not indicate why that is so or provide any basis for this conclusion. The proposed action is a new substantial metal-topped linear feature built above the flat valley floor that extends from east to west across the entire length of the valley. The proposed action is unique for that valley because there are no other rail lines in the vicinity. Although there are several dirt roads, there are no other rail lines. It is difficult to credit the DOE's finding that the finished rail line will not "attract the attention of the casual observer," nor is that finding adequately supported in the Draft Rail Alignment EIS.

The Draft Rail Alignment EIS argues that the small numbers of rail shipments will not be visually disruptive. This assertion ignores the likelihood of increased rail shipments due to induced traffic caused by the shared use of the rail line. As access to this area is improved, other facilities could find it desirable to locate there (e.g. coal plants). As a result, more shipments, possibly many more shipments will use to rail line. The likelihood and significance of these additional shipments is not assessed in the Draft Rail Alignment EIS.

The Draft EIS Rail Alignment does not address two aspects the CEQ has specified for understanding impacts of the type found in the proposed action. First, the context of the impact should be considered. The place of the City installation in Garden Valley is deliberately intended to create a unique physical setting for a cultural artifact. The City installation has already been decades in preparation and was sited in a specific way to achieve a very specific artistic effect. Particular view-sheds were selected and purchased to deliberately enhance the ability to access, observe, and experience the City installation. BLM recognized this particular context when it reclassified the area from Class III to Class II in 2005. When the current plan for the city installation is complete, it will be the heart of a cultural area that will attract visitors from around the world to visit a remote part of the Nevada desert. The Draft Rail Alignment EIS does not address the prospective cultural significance of the City Installation, nor does it address the context of the proposed action with respect to the cultural context of the City Installation.

Another way in which the Draft Rail Alignment EIS does not address the impacts appropriately is the intensity of the impacts. The Draft Rail Alignment EIS completely understates the degree to which the proposed rail line will be used and, therefore, it understates the intensity of the impacts. The Draft Rail Alignment EIS does not examine the degree or likelihood of induced traffic that will result if the proposed action is adopted.

Response

DOE did not measure noise or estimate train noise levels at potential viewing platforms because NEPA requires noise analysis where people sleep (see Surface Transportation Board and Federal Transit Administration noise regulations used in this study). The Shared-Use Option portion of the noise study based train traffic volumes on future activity that is reasonably foreseeable.

The rail line would not cross the purchased view sheds to which the commenter refers. DOE selected key observation points from both within and outside the sculpture area. The artist would not allow any views of the sculpture from points within his property. DOE selected key observation points on top of elements of the sculpture both because they provide views that do not include sculpture elements and because they represent points from which a rail line in the valley would be most visible. DOE selected key observation points outside the sculpture along county roads at varying distances from the sculpture. They clearly show that viewers on the county roads would not be able to see discrete features of the sculpture. Thus, the presence of the rail line would not affect views of the sculpture from public roads outside the sculpture area.

Section 4.2.3.2.2.3 of the Rail Alignment EIS notes that the construction camp would not be discernible from the key observation points at high points on the sculpture. Appendix D, Figure D-42 shows a distant view from *City* toward the west end of the valley where Garden Valley alternative segments 1 and 3 would not be visible at distances of 10 and 13.6 miles, respectively; the caption indicates that the construction camp would be even farther away. Section 4.2.3.1 of the EIS notes that wells would cause short-term weak-to-moderate contrast that would not be compatible with Class II lands in Garden Valley. As noted in Table 7-1 of the EIS, disturbed areas in the rail line right-of-way, including well pads, would be reclaimed after construction. The impact of a reclaimed and revegetated well would be compatible with Class II lands.

The photo simulations support the conclusion that the finished rail line would not attract the attention of the casual observer when the line was more than 1 mile from the county roads. Section 4.2.3.3.2.2 of the Rail Alignment EIS states that DOE has committed to the construction of low, rolling earthwork berms with soils and vegetation that match the surroundings to mask the rail line in places where it would otherwise create a linear feature that would begin to attract attention of viewers (that is, a moderate degree of contrast) in Garden Valley.

The *City* sculpture is a work in progress and has not been identified as a cultural resource. Although resources younger than 50 years have occasionally been determined significant under special circumstances, the *City* sculpture has not been so evaluated.

3.7.10 (1162)

<u>Comment</u> - RRR000617 / 0156

Page 4-4, Section 4.1.2: The text here states that for the analysis of aesthetic resources it was not possible to quantify impacts and DOE provides a qualitative assessment of potential impacts. This is not true. DOE should have completed a Seen Area Analysis of the Proposed Action which would have enabled quantification of the gross area and percentage of area within each basin in Lincoln County from which the rail line and related facilities would have been visible. That information would have provided a quantitative basis for reaching conclusions about the significance of the rail system as a new feature on the landscape within Lincoln County.

The DOE must include a Seen Area Analysis in Chapter 4, which would provide a basis for estimating and disclosing the percentage of area within each basin in Lincoln County from which the rail line and related facilities will be visible. Seen Area Analyses are standard practice in these types of environmental assessments and should have been undertaken for such an important project. Most recently, the BLM ELY Field Office has included a Seen Area Analysis in its April 2007 Draft Environmental Impact Statement for the White Pine Energy Station.

Response

DOE used the BLM method for visual resources management. This method considers visual effects qualitatively, according to the level of contrast (none, weak, moderate, or strong) created by a project, as indicated in Table 4-31 of the Rail Alignment EIS. Different levels of contrast are acceptable for lands with different visual resource management objectives. The Seen Area Analysis to which the commenter refers does not measure impact. The BLM uses it for projects with characteristics that allow for visibility over great distances (such as the tall stacks of the proposed White Pine Energy Station) to indicate where project features could be seen. Impacts from key observation points within these "seen areas" are then characterized according to contrast levels, using the same BLM method DOE used in the EIS aesthetics analysis. The rail line does not include characteristics that allow for visibility over great distances; hence, the BLM would not use a Seen Area Analysis for this project. At 75 to 100 feet tall, the communications towers would the tallest features, as shown in Appendix D, Figures D-30, D-33, and D-59. Those towers would not cause a notable contrast except at very close range.

3.7.10 (1176)

<u>Comment</u> - RRR000663 / 0052

The rail line's impacts on visual resources should be addressed in the Draft EIS, especially in close proximity to Beaver Dam State Park, existing highway corridors, wilderness study areas, communities and any other areas identified during the public comment process.

Response

Sections 3.2.3.3.2 and 3.3.3.2 of the Rail Alignment EIS describe the proximity of the rail line and alternative segments to communities, Wilderness Areas and Wilderness Study Areas, parks, and other areas such as the *City* sculpture identified during the public scoping process. Most of the key observation points provide views from highway corridors or communities across the rail line; DOE assessed project impacts based on views from these key observation points. Beaver Dam State Park is more than 30 miles from the rail line, outside the region of influence for aesthetics.

3.7.10 (1204)

<u>Comment</u> - RRR000617 / 0172

Page 4-69, Section 4.2.3.2.1: The text here indicates that the "short-term level of impact to the visual setting from this contrast would be small to large, and would decrease with the re-establishment of vegetation". This is not an accurate conclusion. In fact, the visual contrast will remain long after construction has been completed, in spite of best efforts to revegetate. In this arid valley bottoms of the region across which the rail line will cross, post-revegetation plant densities and species composition will be significantly different from pre-construction conditions and will be permanently distinguishable from undisturbed areas.

The conclusion in the DEIS regarding visual impacts to the land surface in revegetated areas which states "short-term level of impact to the visual setting from this contrast would be small to large, and would decrease with the re-establishment of vegetation" needs to be reconsidered and restated in the EIS to disclose that said effects will be long-lasting and distinguishable from great distances, especially when viewed from higher elevations.

Response

DOE added a sentence to Section 4.2.3.2.1 of the Rail Alignment to clarify that differences in density and type of vegetation would be visible for many years, resulting in long-term small to large impacts to the visual setting.

3.7.10 (1205)

<u>Comment</u> - RRR000617 / 0173

Page 4-81, Figure 4-3: The photo-simulation here understates the visual impacts because it was shot on a cloud-covered day and is not at all representative of the typical view at this location. With over 300 days of sunshine, the photo-simulation should have been produced using a cloud-free day in which the track and construction camp would have been depicted as a far more dominant feature in the landscape.

The photo-simulation in Figure 4-3 should be replaced in the EIS by a simulation using a photograph of existing conditions shot on a sunny, cloud-free day. The conclusions regarding Figure 4-3 should be revised in the EIS to reflect the significance of the rail line and construction camp as a dominant feature on the landscape based upon said revised photo-simulation.

Response

As the photographs in Appendix D of the Rail Alignment EIS indicate, conditions varied on the days when photographs were made. The reader is referred to simulations that show other buildings and facilities that were made on photographs taken in sunnier conditions (Figures D-5, D-11, D-37, and new figure D-83b in the Rail Alignment EIS. The reader is also referred to the many simulations of track in the Rail Alignment EIS on photos taken in sunnier conditions, including Figures D-17, D-25, D-30, D-33, D-34, D-36, D-39, D-46, D-50, D-54, and D-59.

3.7.10 (1206)

Comment - RRR000617 / 0174

Page 4-87, Section 4.2.3.3.1: DOE states that grade-separated crossings are structures familiar to motorists and would not draw attention away from the surrounding landscape. However, these are not common structures in rural Nevada (in fact there are none in Lincoln County), which increases their visibility to motorists.

The EIS should reconsider the conclusion that grade-separated crossings are structures familiar to motorists and would not draw attention away from the surrounding landscape.

DOE modified the Rail Alignment EIS to delete references to "transportation structures familiar to motorists." DOE changed the contrast rating for key observation point 10 (overlooking the rail-over-road crossing of State Route 318) to "moderate" to reflect the commenter's concern that the attention of rural drivers could be drawn to this structure (although there are similar structures over State Route 317 near Caliente and on U.S. Highways 95 and 50 outside Lincoln County); and has deleted the reference to "typical highway crossing structure" from key observation point 10 in Table 4-33. The contrast rating for key observation point 31 (overlooking the rail-over-road crossing of U.S. Highway 95) remains "weak" (see the simulation in Appendix D, Figure D-72 of the EIS). The contrast rating for key observation point 6 (overlooking the road-over-rail crossing of U.S. Highway 93) also remains "weak" (see the simulation in Figure 4-7 of the EIS) and supports the conclusion that the road-over-rail crossing of State Route 375 would also cause weak contrast. Moderate contrast, where "the element contrast begins to attract attention and begins to dominate the characteristic landscape" (see Table 4-31 in the EIS) is consistent with the Class III and Class IV lands around the crossing of State Route 318 (see Table 4-32 in the EIS, which indicates for Class III lands, "management activities may attract attention but may not dominate the view of the casual observer").

3.7.10 (1663)

<u>Comment</u> - RRR000710 / 0013

Pages 3-107 and continuing. Section 3.2.3.3: The DEIS fails to identify visual resources and impact to wilderness values. and fails to report such effects from key observation points within Wilderness and/or Wilderness Study Areas, which will be [affected] by the construction and operation of the Caliente Rail Line.

Specifically, Sections 3.2.3.3.2.4 through 3.2.3.2.6 fail to report accurately the proximity of the rail line to the South Reveille Wilderness Study Area. See page 3-93 (Section 3.2.2.5.3.2), which states:

"The South Reveille Wilderness Study Area would be 30 meters (100 feet) from the centerline of Caliente common segment 2."

Yet there are no key observation points within either the South Reveille or Kawich WSAs.

The document for this reason alone does not assess accurately and adequately the affected environment.

Response

DOE corrected the discrepancies in reported distance from the Wilderness Study Area. Section 3.2.2.5.3.2 of the Draft Rail Alignment EIS correctly reported the distance to the rail centerline, but it did not note that DOE would reduce the width of the construction and operations rights-of-way in the vicinity of the Wilderness Study Area to avoid crossing the Area. The BLM method for assessing project impacts does not use key observation points in a Wilderness Study Area if a project would not cross the Area.

3.7.10 (2478)

<u>Comment</u> - RRR000555 / 0009

The commenter said that the aesthetic impacts of the proposed rail line were inadequately evaluated and failed to consider the impacts on tourism in the town of Beatty.

Response

Following the BLM visual resource management methodology, the Rail Alignment EIS impact assessment considers the level of contrast in existing views that the rail line would cause. Section 3.2.3.3.2.12 of the Rail Alignment EIS indicates that the rail line would not be visible from key observation point 36 on U.S. Highway 95 north of Beatty, overlooking the route of an access road for

Beatty Wash. Appendix D of the EIS provides a photo from key observation point 36 (Figure D-81). Table 4-33 indicates for key observation point 36 that "Rail line would not be visible from key observation point; increased traffic along access road would be visible but would not attract attention."

3.7.10 (3116)

<u>Comment</u> - RRR000691 / 0020

The EIS fails to address what measures is DOE doing to resolve the apparent inconsistency between BLM visual resource management objectives during the rail construction and operations phases.

Response

In Sections 4.2.3.1 and 4.2.3.2.1 of the Rail Alignment EIS, DOE states that "BLM methodology recognizes that few projects meet the VRM [visual resource management] objectives during construction." As indicated in Chapter 7 of EIS, DOE would use best management practices to minimize construction impacts.

3.7.11 Utilities, Energy, and Materials

3.7.11 (232)

<u>Comment</u> - RRR000074 / 0001

The commenter suggested that construction aggregate from abandoned rail lines can be reutilized to save costs. He offered to provide other construction materials and water.

Response

Thank you for your comment. DOE would make public its plans to solicit bids as part of the selection process for construction of the rail line.

3.7.11 (1998)

Comment - RRR000710 / 0044

Page 438 and continuing, Section 4.2.11: The DEIS fails to adequately assess not only impacts to suppliers (whom DOE has not yet identified), but also to consumers of fossil fuels.

The DEIS admits at Section 4.2.11.2.1.3 that it has not identified regional suppliers of fossil fuels, but "assumes" they would have the ability to respond to an increase in demand. However, DOE is not permitted such "assumption", and the information is or should be readily available to determine whether regional carriers can or cannot absorb the increase in demand. For this reason alone the DEIS fails to adequately assess the impacts to regional carriers and the ability of such carriers to supply the increased demand.

The DEIS fails at this location, and in the Socioeconomics section, to assess the impacts to the region and the State of the increased demand in fossil fuel, which the DEIS admits will amount to 6.5% of the total annual consumption of the entire state. It is a reasonably foreseeable impact that if demand increases by 6.5%, then the cost of the product may reasonably be assumed to increase by 6.5% statewide. This means that the cost of diesel fuel statewide, if currently \$3.30, would increase to \$3.51. Assuming statewide consumption remains at 480 million gallons annually, this will cost the people of Nevada an additional \$100,800.00 annually. The DEIS does not contain this relevant discussion.

It is also a reasonably foreseeable impact that the state-wide average impacts discussed in (2) above will be magnified within the region of the State that is impacted by the demand.

These facts are not discussed by the DEIS, anywhere that we could find, including under Socioeconomic impacts to the area (Section 4.3.9). See also Chapter 8, page 8-8, where the DEIS also fails to assess

unavoidable impacts due to the use of fossil fuels. Again, these impacts are not just upon the distributors, but also the consumers within the State of Nevada.

Response

The deliveries for fossil fuels have a great deal of flexibility. When DOE solicited bids for delivery of fuels, distributors would bid on the contract. The contract would be of sufficient size and duration that it would provide incentives to distributors to make additional investments, if necessary. Further, while the distributor would probably be in Nevada, DOE would not preclude the distributor from obtaining diesel fuel from out of state.

3.7.11 (2617)

Comment - RRR000523 / 0041

DOE needs to explain how they would acquire permits for construction camp water and wastewater systems. The water system would need to provide water capable of meeting drinking water standards. Also, details for meeting fireflow requirements and water storage should be noted. Wastewater treatment requires the disposal and use of treated effluent. How will DOE dispose of their treated effluent during the winter months when land application is not possible?

Response

Table 6-1 of the Rail Alignment EIS identifies requirements for permits. DOE would apply for water permits in accordance with applicable Nevada Revised Statutes (533.324 through 533.435) and Nevada Administrative Code 534.

In its identification of numbers and locations of wells, DOE considered whether the need was for potable or nonpotable water. Water for fire suppression would be drawn from wells. Each camp would have three fire response personnel with a pumper truck and a water tank trailer to respond to fire emergencies in each camp.

As described in Sections 4.2.5.2.1.2 and 4.3.5.2.1.2 of the EIS, DOE would treat sanitary sewage generated at construction camps on site or collect and truck it to a wastewater treatment plant. The Department could install a portable wastewater treatment facility at each construction camp. As a water conservation measure, it could use treated wastewater effluent (gray water) from the camps for dust suppression and soil compaction. These conservation measures would help reduce demands on groundwater wells. The portable wastewater treatment plants would operate such that effluent would not adversely affect the quality of surface water with which it came in contact; therefore, impacts to surface-water quality from wastewater treatment operations during the construction phase would be small. There would be no onsite discharges of industrial wastewater during the construction phase.

As described in Sections 4.2.5.2.1 and 4.3.5.2.1.2, the wastewater treatment process at construction camps would result in the production of biosolids (sludge). DOE would store biosolids on the sites and allow them to dry to the conditions specified in federal regulations (40 CFR Part 503) and state regulations. The Department would dispose of biosolids at a licensed facility in accordance with applicable state and federal laws.

3.7.11 (2758)

<u>Comment</u> - RRR000688 / 0053

The commenter wants to know how DOE knows that the additional new wells will supply enough water.

As described in Section 4.2.3.2.2 of the Rail Alignment EIS, DOE made a comprehensive review of existing geographic and hydrogeologic information to determine where and how much groundwater might be available. Data sources cited in Sections 3.2.6.2.1 and 4.2.3.2.2 include:

The Nevada Division of Water Resources (NDWR) water-rights database and water-well log database, and other data sets (DIRS 177292-MO0607NDWRWELD.000, all; DIRS 183992-Luellen 2007, all; DIRS 182898-NDWR 2007), and

Data from the U.S. Geological Survey National Water Information System database (DIRS 176325-USGS 2006, all and DIRS 177294-MO0607USGSWNVD.000)

DOE indentified preferred locations for wells in the construction right-of-way. If the available information for determining water availability indicated that pumping from a particular area in the right-of-way would not be feasible, DOE relocated the proposed sites as near as reasonably possible to the right-of-way.

3.7.12 Hazardous Materials and Waste

3.7.12 (1499)

<u>Comment</u> - RRR000656 / 0050

Figure 2-53, page 2-106: Is it possible that effluent from the Rail Equipment Maintenance Yard will contain radioactive materials? If so, is a septic tank an acceptable method for disposal?

Response

Effluent from the Rail Equipment Maintenance Yard would not contain radioactive materials. The Yard would provide a staging area for delivery of loaded cask cars to the repository, construction materials, and fuel. It would include office space and train crew and escort quarters, all of which would generate about 6,000 gallons of sanitary wastewater per day that DOE would dispose of through onsite septic systems or wastewater treatment facilities.

The Cask Maintenance Facility would be collocated with the Rail Equipment Maintenance Yard. DOE would meet its sanitary sewage needs by tapping into infrastructure at Yucca Mountain to support the repository.

3.7.12 (1508)

<u>Comment</u> - RRR000656 / 0059

Section 3.2.12.4, page 3-316: "low-level radioactive waste would be disposed "... in a DOE low-level waste disposal site, a site in an Agreement State, or in an NRC-licensed site."

This should be clarified by changing to "either a DOE low-level waste disposal site or in a site licensed under NRC regulations." Sites in Agreement States still have to meet NRC regulations. Similar wording should also be revised in Section 3.2.12.1 on page 3-315; Section 3.3.12.4, page 3-673; Section 4.2.12.3.3, page 4-348; and Section 4.3.12.3.3, page 4-715.

Response

Agreement State-licensed facilities must comply with the Agreement State's requirements, not NRC requirements. However, the Agreement State's regulations must be compatible with those of the NRC. States generally incorporate many of the NRC regulations by reference, but the applicable regulation is the state regulation. Site-generated low-level radioactive waste would be controlled and disposed of in a DOE low-level radioactive waste disposal site, in an Agreement State site, or in an NRC-licensed site

subject to the completion of the appropriate review pursuant to NEPA. Disposal in an Agreement State site or in an NRC-licensed site would be in accordance with applicable portions of 10 CFR Part 20.

3.7.13 Environmental Justice

3.7.13 (168)

<u>Comment</u> – 3 comments summarized

Commenters expressed concern that the Rail Alignment EIS did not properly identify the region of influence for environmental justice. Commenters stated that DOE analyzed demographics for the Walker River Paiute Reservation, but should also have analyzed demographics for other tribal communities. The comments specifically named the Moapa Paiute, Las Vegas Paiute, Duckwater Shoshone, Yomba Shoshone, and Timbisha Shoshone Tribes.

In addition, DOE received comments that it needs to address environmental justice by adopting the views of American Indians expressed by the American Indian Writers Subgroup and the Consolidated Group of Tribes and Organizations. These comments suggested that DOE adopt the language used in Nevada Test Site EISs; for example, "These impacts would be perceived only by American Indian groups and would, therefore, be a disproportionately high impact on the groups" (DIRS 101811-DOE 1996, p. 5-51).

Response

DOE identified the socioeconomic region of influence to be the counties through which the rail line would pass. That region includes two American Indian Homelands, the Walker River Paiute Reservation and the Timbisha Shoshone Trust Lands near Scottys Junction. DOE used Bureau of the Census information to describe the demographic baseline for the Walker River Paiute Reservation. At present, there are no residents on the Timbisha Shoshone Trust Lands, so there is no population information. There are no other tribal communities in the region of influence. This identification is consistent with CEQ and NRC guidelines for identification of low-income populations and minority communities, including American Indian communities.

The DOE analysis of environmental justice is consistent with CEQ guidance (DIRS 177702-CEQ 1997, all). The Department acknowledges a difference of opinion on this issue with American Indian tribes and organizations. DOE initiated the Native American Interaction Program in 1987; as a result of that program, the American Indian Writers Subgroup prepared a resource document, "American Indian Perspectives on the Proposed Rail Alignment Environmental Impact Statement for the U.S. Department of Energy's Yucca Mountain Project" (DIRS 174205-Kane et al. 2005, all). That document provides the basis for much of Section 3.4 of the Rail Alignment EIS, which presents the interests and concerns of tribes and organizations living in or near the rail alignment regions of influence. Section 3.4.2.4 presents American Indian concerns on environmental justice.

Based on current information, DOE has concluded that proposed railroad construction and operations would not result in disproportionately high and adverse impacts to minority or low-income populations.

DOE prepared separate sections of the Rail Alignment EIS that address compliance with environmental justice requirements (see Sections 3.2.15, 3.3.15, 4.2.15, and 4.3.15) and views of American Indians (see Section 3.4). The conclusions in the sections differ because the parties approach the subject of environmental justice differently. The Department understands that American Indian people have differing and unique perspectives regarding environmental justice impacts associated with the Proposed Action, and that they believe there will be impacts to their way of life and the resources related to their culture.

3.7.13 (3143)

<u>Comment</u> - RRR000524 / 0019

The draft corridor SEIS and draft rail EIS reference outdated NRC guidance for environmental justice and do not accurately reflect NRC and CEQ guidance. DOE should correct its discussions regarding a low-income population. DOE should accurately reference or quote the NRC Policy Statement on environmental justice and CEQ guidance.

Section 5.1.1.12 of the draft corridor SEIS and the draft rail EIS state that a low-income community exists when the low-income population percentage in the area of interest is meaningfully greater than the low-income population in the general population. CEQ guidance (Council on Environmental Quality, 1997) only uses the expression "meaningfully greater" in reference to evaluating disproportionate impacts on minority populations.

The draft corridor SEIS and draft rail EIS refer to NRC guidance to support its use of a 10 percent threshold for minority populations. Current NRC guidance (NRC, 2004) on environmental justice does not refer to a 10 percent threshold. Additionally, the documents state that the 20 percent threshold was "established by the Nuclear Regulatory Commission and the Council on Environmental Quality...". CEQ did not establish this threshold.

References:

CEQ, "Environmental Justice Guidance Under the National Environmental Policy Act." Council on Environmental Quality. Washington, DC. December 1997.

NRC, "Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions." 69 *FR* 52040-52048, August 24, 2004.

Response

The discussion of the 10-percent threshold is primarily historical, related to how DOE performed the Yucca Mountain FEIS analysis (see Sections 5.1.1.12, 5.2.12, and 5.3.12 of the Nevada Rail Corridor SEIS). DOE used the threshold incorrectly, as noted in the comment, in Sections 5.2.12 and 5.3.12 in the SEIS.

DOE revised the language that addresses the 10-percent threshold in the CEQ and NRC guidance by referring to the method DOE used in the analyses in the Rail Corridor SEIS and the Rail Alignment EIS.

Under current NRC guidance, an agency identifies a minority or low-income community by comparing the percentage of the minority or low-income population in the affected area to the percentage of the minority or low-income population in the county and the state. If the percentage in the affected area significantly exceeds the state or the county percentage for the minority or low-income population, the agency will consider environmental justice in greater detail. NRC staff guidance defines "significantly" as 20 percentage points. As an alternative, if the minority or low-income population percentage in the affected area exceeds 50 percent, the agency considers environmental justice matters in greater detail (69 *FR* 52040, August 24, 2004).

In Nevada, the percentage of persons below the poverty threshold, as characterized by the U.S. Bureau of the Census (DIRS 174625-Census Bureau 2005, all), was about 11 percent at the last Decennial Census (DIRS 176856-Census Bureau 2003, Table 15). Applying the NRC guidance, DOE identified low-income communities as those affected areas (by Census block groups) in which the percentage of persons characterized as below the poverty threshold exceeded 31 percent.

Because the percentage of minorities in Nevada is approximately 34 (DIRS 173533, Census Bureau 2005, all), adding 20 percentage points would provide a threshold of 54 percent to identify minority

communities. Rather, DOE identified minority communities as those affected areas (by Census blocks) where the minority population exceeded 50 percent.

DOE made this change to Sections 3.2.12.1, 5.1.1.12, 5.2.12, 5.3.12, and 5.4.12 of the Nevada Rail Corridor SEIS, and Sections 3.2.15.2, 3.3.15.2, 4.2.15.1, and 4.3.15.1 of the Rail Alignment EIS.

DOE also added the current NRC guidance to the reference list (DIRS 103426-NRC 2005, all.)

3.7.13 (3154)

<u>Comment</u> - RRR000671 / 0042

Equally important is the intentional siting of the proposed rail line next to the tribal lands thereby causing a disproportionate impact to this tribal community.

Response

The original proposed siting of the rail line at Scottys Junction occurred before the Timbisha Shoshone Tribe acquired the trust lands at that location. The conflict with the Timbisha Shoshone Trust Lands was identified in Sections 6.3.2.2.1.1 and 6.3.2.2.1.4 of the Yucca Mountain FEIS. As discussed in Sections 3.2.2.3 and C.4.1.7 of the Rail Alignment EIS, during the first public scoping period for this EIS, the Timbisha Shoshone Tribe requested that DOE alter the Caliente rail alignment to avoid their land (DIRS 174558-Sweeney 2004, all). DOE adjusted the proposed rail route based on this request, and common segment 5 would be more than 2 miles east of the Timbisha Shoshone Trust Land near Scottys Junction.

Further, the impact is not a disproportionate impact because the rail line comes much closer to communities that are not categorized as either low-income or minority communities.

3.7.13 (3982)

<u>Comment</u> - RRR000671 / 0052

Page 5-83 5.3.2.15.1 Environmental Justice, Potential Effects to Low-Income and Minority Populations: The text is expanded to include a provision for no identified effects to special pathways (such as subsistence hunting and gathering) in the Mina rail alignment region of influence only. The text does not give equal consideration in its explanation to the rest of the rail alignment. Further, the text should be revised to include this information along with the same acknowledgement issued by the Department of Energy - Nevada Test Site that indicates that "disproportionately high and adverse impacts from DOE/NTS activities continue to affect American Indians noted by the CGTO [Consolidated Group of Tribes and Organizations] and need to be addressed." All text in the YMP [Yucca Mountain Project] and Rail EIS' relating to Environmental Justice should adopt this DOE/NTS language to maintain consistency with other DOE documents since the CGTO has made the same recommendations to the YMP that is located near the Nevada Test Site.

Response

The DOE analysis of environmental justice is consistent with CEQ guidance (DIRS 177702-CEQ 1997, all). The Department acknowledges a difference of opinion on this issue with American Indian Tribes and organizations. DOE initiated the Native American Interaction Program in 1987; as a result of that program, the American Indian Writers Subgroup prepared a resource document, "American Indian Perspectives on the Proposed Rail Alignment Environmental Impact Statement for the U.S. Department of Energy's Yucca Mountain Project" (DIRS 174205-Kane et al. 2005, all). This document provides the basis for much of Section 3.4 of the Rail Alignment EIS, which presents the interests and concerns of tribes and organizations living in or near the rail alignment regions of influence. Section 3.4.2.4 presents American Indian concerns on environmental justice.

Based on current information, DOE has concluded that construction and operation of the rail line would not result in disproportionately high and adverse impacts to minority or low-income populations. The

Department understands that the American Indian perspective is that the Proposed Action would produce such impacts.

3.7.14 American Indian Perspectives

3.7.14.1 American Indian Perspectives on Environmental Impacts

3.7.14.1 (387)

Comment - RRR000066 / 0001

The commenter explained the importance of considering impacts to American Indian people and tourists who travel through the area. She expressed opposition to the Yucca Mountain Project due to the intrusion on the Timbisha Shoshone way of life, which encompasses protecting the land and water of the area.

Response

The Rail Alignment EIS presents detailed analyses of potential impacts to the environment, which includes all people in the region of influence and their way of life. Indian people, their history, and associated cultural and natural resources are specifically addressed in applicable sections of the EIS. The ongoing Native American Interaction Program will help ensure tribal issues are discussed, and that Indian people are directly involved in applicable studies.

3.7.14.1 (951)

<u>Comment</u> - RRR000663 / 0019

The treatment of Native American issues and impacts is entirely inadequate. While potentially affected Indian Tribes are identified, there is no comprehensive assessment of potential impacts, particularly regarding potential impacts to Native communities from the transportation of spent fuel and HLW [high-level radioactive waste], both in Nevada and nationally. For Native American interests in Nevada, it presents a sanitized section on "Native American Views of the Affected Environment," but fails to reflect the strong and ubiquitous opposition to the Yucca Mountain project on the part of Native peoples in Nevada and California, and the impact of moving forward with the project and the rail line in the face of such strong opposition.

The Draft EISs also fail to reveal in discussion of the affected environment that Native American tribes in the immediate vicinity of the Yucca Mountain project area and along potential transportation routes are, for the most part, economically disadvantaged. Reservations and communities in Nye, Lincoln, and Inyo counties are rural and isolated, and either lack a land base or have land bases too small to support their populations by ranching or other locally common means. A large number of people are unemployed, underemployed, and/or living below the poverty level. Any negative statewide economic impacts associated with or caused by the repository or repository-related nuclear waste transportation will have a disproportionate impact on such communities because of these depressed baseline conditions.

The 1986 Environmental Assessment for Yucca Mountain stipulated that, "[i]f the Yucca Mountain site is approved for site characterization, [Native American impacts] will receive appropriately detailed treatment in research to be performed during the Environmental Impact Statement process." The EA also made special note of the "potential for impacts on Native American cultures from [SNF (spent nuclear fuel) and HLW] transportation activities" and stated that "[t]his aspect will receive appropriately detailed treatment ... if Yucca Mountain is approved for site characterization." These Draft EISs contain inadequate "detailed treatment" of Native American impacts.

The State of Nevada's research has shown that Native American tribes in the area around Yucca Mountain and along transportation routes have unique governments. As independent federally

recognized entities, tribal governments have a role equivalent to states in most federal undertakings. They also have a special status according to various environmental and cultural protection acts and in the Nuclear Waste Policy Act of 1982. The repository project has also spilled over into the campaign by the Western Shoshone National Council, a political entity made up of representatives from many Western Shoshone tribes, to reclaim lands under the Treaty of Ruby Valley of 1863. This has brought the Western Shoshone and other tribal governmental entities into conflict with DOE, as well as other federal and state agencies. There has even been conflict among various Native communities/groups over how to approach the land claim issue "conflict that has been exacerbated by the ongoing Yucca Mountain project. Because of the unique governmental position of tribes, their interests are not likely to be well protected or even properly represented in deliberations over the repository. They may also come into conflict with neighboring local governmental interaction. None of these issues are addressed in the Draft EISs.

Response

DOE addresses impacts to American Indian populations in a number of sections of the Rail Alignment EIS. Specifically, Sections 4.2.13 and 4.3.13 address impacts to archaeological resources; Section 3.4 addresses American Indian issues; and Sections 4.2.15 and 4.3.15 address issues of environmental justice. Additional information on American Indian perspectives is in the documents prepared by the American Indian Writers Subgroup, which document tribal opposition to all aspects of the repository and transportation programs.

The DOE environmental justice analysis identified the socioeconomic region of influence as the counties through which the either the Caliente or Mina rail alignments would pass. That region includes two American Indian Homelands, the Walker River Paiute Reservation and the Timbisha Shoshone Trust Lands near Scottys Junction. DOE used Bureau of the Census information to describe the demographic baseline for the Walker River Paiute Reservation. At present, there are no residents on the Timbisha Shoshone Trust Lands, so there is no population information. There are no other tribal communities in the region of influence for the construction and operation of the rail line. This identification is consistent with CEQ guidelines for identification of low-income populations and minority communities, including American Indian communities. Based on current information, DOE has concluded that construction and operation of the rail line would not result in disproportionately high and adverse impacts to minority or low-income populations, including tribal communities.

The special status of tribal governments has been the hallmark of the ongoing Native American Interaction Program since the late 1980s. DOE conducts this effort in association with 17 tribal entities from Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shoshone ethnic groups in Nevada, California, Arizona, and Utah. The interactions contribute to the unique government-togovernment consultation process required in the regulations.

In addition, while there is disagreement among the Western Shoshone tribes about land ownership and control related to the Ruby Valley Treaty of 1863, the U.S. Supreme Court has ruled that Western Shoshone title to the land in question has been extinguished and that fair compensation has been made; DOE must abide by that ruling. This issue is addressed in Section 3.4.3 of the Rail Alignment EIS.

3.7.14.1 (1490)

<u>Comment</u> - RRR000693 / 0005

Section 3.2.2.5.2.1, Mineral Resources: The EIS needs to address impacts to mineral (paint) sources along the corridor that will be impacted.

Section 3.4.2 of the Rail Alignment EIS discusses traditional and natural resources of concern to American Indians. DOE modified the discussion to include mineral resources. Identification of specific resources of concern is an ongoing process in which DOE will involve tribal representatives as part of ethnographic evaluations before rail construction.

3.7.14.1 (1492)

Comment - RRR000693 / 0006

Section 3.2.7.2.1, Vegetation: Traditional plant gathering areas along the Yucca Mountain, Nye County rail corridor needs to be addressed.

Section 3.2.7.3.2.1, Mammals: Big horn lambing areas that may be impacted by the rail corridor needs to be assessed. Native American traditional/cultural knowledgeable about bighorn sheep areas along the YMP [Yucca Mountain Project] rail corridor.

Section 3.2.7.3.2.3, Reptiles: The chuckwalla lizard habitat northern most areas need to be addressed and concerns addressed about this reptile used for food, ceremony, and other purposes by the Western Shoshone people.

Section 3.2.7.3.2.4, Aquatic Species: The Railroad Valley springfish may be impacted by the rail corridor. Again this species of fish is culturally significant to the Western Shoshone people. More recently the Duckwater Shoshone Tribe and the US Fish and Wildlife have entered into a safe harbor agreement to insure the springfish is protected and habitat restoration is on-going.

Response

Section 3.4.2 of the Rail Alignment EIS discusses traditional and natural resources of concern to American Indians. DOE understands that extensive, additional Native American information and perspectives can be gathered that would address a large variety of natural resources along the corridor. The American Indian Writers Subgroup document prepared as an important reference to the EIS provides additional information important to Native Americans. To better understand the locations and importance of areas and resources, DOE plans additional studies. DOE is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before rail construction.

3.7.14.1 (1892)

<u>Comment</u> - RRR000672 / 0001

Thank you for incorporating some of our previous comments into the EIS documents for the aforementioned projects. However, we could find no discussion of Indian Trust Assets (ITAs). We would like to re-emphasize the importance of including an analysis of ITAs during the NEPA process. As you know, ITAs are legal interests in assets held in trust by the United States for Native American tribes or individual Native Americans. Assets are anything owned that have monetary value. The asset need not be owned outright but could be some other type of property interest, such as a lease or right of use. Assets can be real property, physical assets, or intangible property rights. The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Native American tribes or individuals by treaties, statutes, and Executive Orders, which rights are further interpreted through court decisions and regulations. The trust responsibility requires that all federal agencies take all actions reasonably necessary to protect trust assets. Trust assets include but are not limited to land resources, water rights, minerals, and hunting and fishing rights.

DOE reviewed documents to determine Indian Trust Assets relevant to the Rail Alignment EIS. The documents included valid treaties, declarations by the U.S. Congress for Indian Trust lands, and Reservations.

The review found that the Walker River Paiute Reservation and Timbisha Trust Lands are the only Indian Trust Assets that the Proposed Action and its alternatives could affect. Figures 2-10 and 2-13 of the Rail Alignment EIS show these lands on base maps for the Caliente and Mina rail alignments, respectively. DOE added Section 3.4.2.5 to the EIS to describe Indian Trust Assets related to the proposed railroad. Another potential Indian Trust Asset is water rights of the Walker River Paiute Tribe. Those rights are the subject of ongoing litigation and are as yet unresolved.

3.7.14.1 (2567)

<u>Comment</u> - RRR000101 / 0011

The commenter stated that DOE had not included some notable information on American Indian historic and prehistoric sites in the cultural resources sections. He stated that these sections focus on archaeological resources and give little attention to American Indian perspectives on other related cultural aspects.

Response

DOE has restricted information on specific historic and archaeological sites to protect the confidentiality of these resources. Section 3.7.14 of the Rail Alignment EIS summarizes American Indian perspectives on issues other than archaeological and historic sites. The American Indian Writers Subgroup document that DOE used as a reference in preparing the EIS presents these perspectives in more detail. Before rail line construction, ongoing involvement of tribal representatives in cultural resource surveys and ethnographic studies will document additional applicable information.

3.7.14.1 (3104)

<u>Comment</u> - RRR000671 / 0035

Page 3-240, Section 3.2.7.3.2, Wildlife: The text identifies water sources that are limited to wildlife guzzlers. There is no mention to "pohs" natural water basins that are known to be in the same areas were maintained by Indian people. These features have been identified by the CGTO [Consolidated Group of Tribes and Organizations] during previous ethnographic studies and reports. The text should be expanded to identify all water sources that are equivalent to man-made guzzlers.

Response

Section 3.4.2.2 of the Rail Alignment EIS discusses pohs as types of water sources that are present in some regions the rail alignment would cross. The more common poh is a depression in a large rock that collects rainwater and sometimes has a flat rock lid to keep the water clean. Section 3.4.2.2 identifies American Indian use of pohs for everyday or ceremonial purposes. DOE revised the text to indicate the potential for wildlife to use pohs.

3.7.14.1 (4036)

<u>Comment</u> - RRR000671 / 0020

Page 3-18 indicates Oasis Valley Option 1 and 3 that includes Thirsty Canyon Wash. The Thirsty Canyon is known to have significant cultural resources relating to water resources and the home of "water babies" a supernatural being that is known by the CGTO [Consolidated Group of Tribes and Organizations] and has been the subject of intense study through the Nellis Air Force Base American Indian Program. The Rail EIS does not consider these important attributes in its analysis.

The American Indian Writers Subgroup document, which was an important reference on perspectives and sensitivities for the Rail Alignment EIS, discusses water resource issues from a tribal perspective. DOE recognizes the American Indian belief in supernatural beings referred to as "water babies" at hydrological locales. Thirsty Canyon Wash would not be directly impacted by the project because it is separated from the proposed Caliente rail alignment by several miles.

3.7.14.1 (4120)

<u>Comment</u> - RRR000671 / 0029

Page 2-24 Figure 2-10 Common Segments, Alternatives Segments, and Related Sites within Caliente Map Area: The text indicates that five segments and related sites within Caliente Map Area 6. Although there is an indication of the Timbisha Shoshone Trust Land there is no consideration to aboriginal homelands of Western Shoshone, Southern Paiute and Owens Valley Paiutes and Shoshones.

Response

Figure 2-10 of the Rail Alignment EIS shows the Trust Lands of the Timbisha Shoshone. Figure 3-116 of the EIS shows traditional homelands of the Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shoshone Tribes. The traditional homelands do not have the same legal status as the defined Trust Lands.

3.7.14.1 (4151)

<u>Comment</u> - RRR000524 / 0036

The draft corridor SEIS concludes that "No special pathways were identified," but does not provide a basis for the conclusion. However, Section 3.4.2.4 of the draft rail alignment EIS refers to a Native American statement that "Loss of access to traditional foodstuffs and medicine has greatly contributed to undermining the cultural well being of Indian people."

Response

In its analysis of transportation impacts in the Yucca Mountain FEIS, DOE analyzed the possibilities of impacts on special pathways, including subsistence diets:

"Unique practices and activities could create opportunities for increased impacts from transportation of spent nuclear fuel and high-level radioactive waste associated with the Proposed Action. One such practice could be the use of subsistence diets (that is, consumption of homegrown or naturally available plant and animal food). Because no radioactive materials would be released to the environment during incident-free transportation, the implementation of new or existing transportation routes in Nevada would not affect food sources likely to be involved in subsistence diets. If an accident resulted in the release of radioactive materials, food sources, both agricultural and subsistence, could be affected and mitigative actions would have to be taken to prevent contamination or consumption of contaminated food" (DIRS 155970-DOE 2002, Section 6.3.4).

In preparing the Nevada Rail Corridor SEIS and the Rail Alignment EIS, DOE found no additional information that would indicate potential significant impacts to American Indians through special pathways. DOE recognizes that American Indians have different views, expressed as a Responsible Opposing Viewpoint in Section 3.4.2.4 of the Rail Alignment EIS. The proposed railroad would limit access to public lands to obtain traditional foodstuffs and medicine very little, except during construction, when access to construction areas would be restricted. DOE still has to decide how much of the rail line it might fence to protect livestock; however, access at roads would still be available. Small areas around railroad construction and operations support facilities would be fenced; however, reduced access would not be extensive.

3.7.14.2 American Indian Perspectives on Intergovernmental Interactions

3.7.14.2 (1583)

<u>Comment</u> - RRR000690 / 0034

DOE needs to address potential impacts to lands held in trust for the Timbisha Shoshone Tribe near the proposed rail line.

Response

DOE is not aware of current economic development on the Timbisha Shoshone Trust Lands near Scottys Junction. However, the Department anticipates that the Timbisha Shoshone Tribe will develop and implement economic plans for these lands. The *Final Legislative Environmental Impact Statement for the Timbisha Shoshone Homeland* (DIRS 154121-DOI 2000, all) stated that expected development for the Trust Lands would include a service station/convenience store, a gift/souvenir shop, and single-family detached housing units. DOE modified Section 3.2.9.1 of the Rail Alignment EIS to reflect the possibility of these future plans. Based on the possibilities described in the Final Legislative EIS, there does not appear to be an impact from the rail line on the economic plans for the Trust Lands, although there is not sufficient available information to provide a more detailed analysis. DOE will work with the Timbisha Shoshone Tribe to assess any impacts on tribal lands and has requested the tribe to submit any additional plans for development of such lands.

3.7.14.2 (2489)

<u>Comment</u> - RRR000675 / 0022

On Page 3-331 (Section 3.2.13.5.3, Garden Valley Alternative Segments) of the Draft Nevada Rail Corridor SEIS there is mention or reference to the American Indian Resource Document and in some instances it is acknowledged that some areas or limited information was provided. The text should be further qualified by stating that the American Indian Writers Subgroup was only afforded 3 days to view pre-selected sites by the DOE and did not have an equal opportunity to examine and evaluate other portions of the rail corridor.

Response

In October 2004, DOE conducted a 3-day field trip with the American Indian Writers Subgroup (designated by the Consolidated Group of Tribes and Organizations) that covered the areas of the Caliente rail corridor that were accessible by 4-wheel drive vehicles. In addition, DOE and the Subgroup used maps to further analyze the route and inaccessible areas. DOE held three additional meetings (December 2004, January 2005, and April 2006) with the American Indian Writers Subgroup to continue to review maps, have discussions, and prepare a reference document on the proposed Caliente rail corridor. DOE understands that additional tribal involvement in documenting and recording cultural information and perspectives is necessary. The Department is committed to continuing its Native American Interaction Program through direct involvement of tribes in cultural resource and ethnographic study efforts before rail construction.

3.7.14.2 (2492)

Comment - RRR000675 / 0024

On page 1-17 (Section 1.6.3, Tribal Update Meetings) of the Draft Rail Alignment it states that the "DOE is committed to continuing the consultation process throughout the development of this Rail Alignment EIS and plans to continue consultation with American Indians to ensure that tribal concerns and perspectives are considered." The CGTO [Consolidated Group of Tribes and Organizations] questions the sincerity of this stated commitment since the DOE/YMP [Yucca Mountain Project] has failed to fulfill its previous commitments for Tribal Update Meetings including a recent statement by a DOE representative that indicated that tribal involvement would occur on an "activity driven" basis. Most recently, on December 6, 2007, the CGTO requested an additional special meeting with the DOE on

January 8, 2008 at the Timbisha Shoshone Tribe for the purposes of providing additional comments relating to the Yucca Mountain Project Supplement and Rail EIS. The DOE belatedly responded to the meeting request on January 4, 2007, via an e-mail of one of DOE's consultants. Budget cuts to the DOE should not interfere with regularly scheduled government-to-government consultation meetings with affiliated tribes.

Response

DOE held a meeting in Pahrump, Nevada, on November 27, 2007, and invited the Consolidated Group of Tribes and Organizations to discuss and comment on the Nevada Rail Corridor SEIS and Rail Alignment EIS. Budget cuts did not interfere with DOE's ability to host this meeting but did prevent a second meeting to cover the same subject matter. DOE began to notify the tribes in late December of the inability to support a second meeting. The Department commits to continue to support the Native American Interaction Program and has agreed to resume annual Tribal Update Meetings in June 2008 so that the future meetings will not be "activity driven" but scheduled on an annual basis.

3.7.14.2 (2568)

<u>Comment</u> - RRR000101 / 0012

The commenter stated that the EIS addressed Northern Paiute activity in the Mina rail corridor, but did not discuss the Northern Paiute Tribes for the Caliente rail corridor.

Response

DOE addressed Northern Paiute activity in its assessment of the Mina rail alignment due to the proximity of Northern Paiute Tribes to the alignment. The location of the Caliente rail alignment focused the DOE decision to work with the Southern Paiute, Western Shoshone, and Owens Valley Paiute and Shoshone Tribes.

3.7.14.2 (2569)

<u>Comment</u> - RRR000101 / 0013

The commenter requested on behalf of the Consolidated Group of Tribes and Organizations that DOE continue annual meetings with the Group and include opportunities to visit cultural and archaeological sites to observe current conditions. The Group also requested a list of Yucca Mountain-related studies so they can determine if they should request copies for review.

Response

DOE has committed to resume its annual Tribal Update Meetings with the Consolidated Group of Tribes and Organizations and will include visits to cultural and archaeological sites. DOE understands that additional tribal involvement in documenting and recording cultural information and perspectives is necessary. The Department is committed to continuing its Native American Interaction Program through directly involvement of tribes in cultural resource and ethnographic study efforts before rail line construction. DOE will work with the Consolidated Group of Tribes and Organizations to determine the studies Group members would like to review.

3.7.14.2 (2571)

<u>Comment</u> - RRR000101 / 0015

The commenter, representing the Consolidated Group of Tribal Organizations, sees the need to develop a more timely, proactive relationship with DOE in the context of government-to-government interaction. At times, interaction with the Group has been too late in project planning for meaningful input. Specifically, the Group would like to gain a better understanding of possible new waste types DOE could receive at the repository, including Greater Than Class C and the impacts of the Global Nuclear Energy Partnership.

DOE has committed to resume its annual Tribal Update Meetings with the Consolidated Group of Tribes and Organizations beginning in June 2008 and will work through such meetings to discuss topics of interest to tribal representatives, including the GNEP and GTCC waste types. DOE understands that additional tribal involvement in documenting and recording pertinent information and perspectives is necessary. The Department is committed to continuing its Native American Interaction Program through directly involvement of tribes in Tribal Update Meetings and cultural resource and ethnographic study efforts before rail line construction.

3.7.14.2 (2640)

Comment - RRR000101 / 0001

The commenter requested that the Consolidated Group of Tribes and Organizations meet with DOE on an annual basis and that the activity-driven meetings be abandoned because they tend to be less frequent. The commenter also requested that DOE schedule a meeting with the Timbisha Shoshone Tribe as an Affected Unit of Local Government.

Response

DOE has committed to resume its annual Tribal Update Meetings with the Consolidated Group of Tribes and Organizations in June 2008. DOE has met with the Timbisha Shoshone Tribe and has and will continue to include the Timbisha Shoshone Tribe in all meetings with other affected units of local government.

3.7.14.2 (2670)

<u>Comment</u> - RRR000066 / 0002

A representative of the Timbisha Shoshone expressed concern that until recently the Tribe was excluded from full participation in the Yucca Mountain Project as afforded by the Nuclear Waste Policy Act.

Response

The Yucca Mountain Project has an ongoing Native American Interaction Program that involves 17 American Indian tribes and organizations. The Timbisha Shoshone Tribe has been actively involved in the program since its inception. The U.S. Department of the Interior granted the Timbisha Shoshone affected status on June 29, 2007. However, at that time there was no fiscal year 2007 funding available and the fiscal year 2008 budget had been submitted to Congress. In appropriating money for the Yucca Mountain Project for fiscal year 2008, Congress provided no funds for the Timbisha Shoshone Tribe, even though the appropriate committees were aware of the situation. For fiscal year 2009, the Administration requested \$500,000 for the Timbisha Shoshone.

3.7.14.2 (3520)

<u>Comment</u> - RRR000691 / 0058

The DOE should consider more frequent and interactive meetings with Tribal representatives from the Consolidated Group of Tribes and Organizations, in addition to separate meetings with tribes awarded affected status.

Response

DOE commits to continue to support the efforts of the Native American Interaction Program and has agreed to resume annual Tribal Update Meetings in June 2008 so that the future meetings will not be "activity driven" but scheduled on an annual basis. The Department will also continue to meet with the Timbisha Shoshone Tribe as an Affected Unit of Local Government.

3.7.14.2 (3957)

<u>Comment</u> - RRR000671 / 0001

The CGTO [Consolidated Group of Tribes and Organizations] recommends that the DOE resume YMP [Yucca Mountain Project]/NAIP [Native American Interaction Program] ... Annual meetings and abandon "Activity Driven Meetings" as has been occurring for the past several years.

The CGTO is requesting another meeting be scheduled on January 8, 2008, at Timbisha Shoshone Tribe as an Affected Unit of Local Government. The CGTO will develop the agenda and invite guests/presenters as appropriate.

The CGTO recommends invitations be sent to Edward F. Sproat, III, Director, Office of Civilian and Radioactive Waste Management; Steve Freishman, from the State of Nevada; Matt Gaffney from Inyo, County and others to be decided.

The CGTO should help create agendas and decide guest presenters to share information related to YMP.

Response

DOE has committed to resume its annual Tribal Update Meetings with the Consolidated Group of Tribes and Organizations. The Department held a meeting on the Rail Alignment EIS and the other EISs with the Group in Pahrump, Nevada, on November 27, 2007, to receive comments on the draft documents. DOE notified the Group and the Timbisha Shoshone Tribe that an additional tribal meeting on January 8, 2008, was not possible due to budget and time constraints; encouraged any member tribe that was not able to attend the meeting in Pahrump to participate in scheduled public hearings; and informed Group members they could submit written comments directly to DOE. DOE will work with the Consolidated Group of Tribes and Organizations to create agendas for future Tribal Update Meetings.

3.7.14.2 (4032)

<u>Comment</u> - RRR000671 / 0017

The CGTO [Consolidated Group of Tribes and Organizations] knows that the EIS specifically concerns ... Northern Paiutes with respect to the Mina Corridor but does not give equal consideration to the tribes that are members of the CGTO.

Response

DOE evaluated Northern Paiute activity in its assessment of the Mina rail corridor based on the corridor's proximity to Northern Paiute tribes. Specifically, DOE addressed Walker River Paiute Tribe (Northern Paiute) issues as part of the Mina rail corridor studies because the corridor crosses their reservation. The Caliente rail corridor crosses lands with traditional ties to several American Indian groups and influenced DOE's decision to work closely with the Southern Paiute, Western Shoshone, and Owens Valley Paiute and Shoshone Tribes, which comprise the Consolidated Group of Tribes and Organizations.

3.7.14.2 (4081)

Comment - RRR000671 / 0026

Page 1-6, Section 1.3, Selection of the Caliente Rail Corridor for Further NEPA Evaluation: The text identifies American Indian tribal consultations in the analysis of the Nevada rail option however, it is misleading to state that tribal involvement would be included since only selected portions identified by DOE and not the tribes and for a minimal period of three days.

Page 1-17, Section 1.6.3, Tribal Update Meetings: The description of the frequency of Tribal Update Meetings is inaccurate ... as the DOE/YMP [Yucca Mountain Project] has previously confirmed that meetings would occur twice per year. These meetings are clearly different than the Special Scoping Meetings that have occurred on June 2-3, 2004 and November 29, 2006. According to CGTO

[Consolidated Group of Tribes and Organizations] records, the last Tribal Update Meeting occurred over 5 years that included site visit to archaeological sites within the Yucca Mountain Study area. The text should be modified to accurately reflect the difference between regularly scheduled Tribal Update Meetings and special scoping meetings.

Page 1-17, Section 1.6.3, Tribal Update Meetings, states that the "DOE is committed to continuing the consultation process throughout the development of this Rail Alignment EIS and plans to continue consultation with American Indians to ensure that tribal concerns and perspectives are considered." The CGTO questions the sincerity of this stated commitment since the DOE/YMP has failed to fulfill its previous commitments for Tribal Update Meetings including a recent statement by a DOE representative that indicated that tribal involvement would occur on an "activity driven" basis. Most recently, on December 6, 2007, the CGTO requested an additional special meeting with the DOE on January 8, 2008 at the Timbisha Shoshone Tribe for the purposes of providing additional comments relating to the YMP Supplement and Rail EIS. As of January 2, 2008 the DOE has again failed to respond or acknowledge this request. Accordingly, the text should be revised to accurately reflect DOE's agreement for limited tribal involvement.

Response

DOE participated in a 3-day field trip with the American Indian Writers Subgroup (designated by the Consolidated Group of Tribes and Organizations) that covered the areas of the Caliente rail corridor that were accessible by four-wheel drive vehicles. In addition, DOE and the Subgroup used maps to analyze further the route and inaccessible areas.

DOE held special scoping meetings to give the Consolidated Group of Tribes and Organizations an opportunity to comment on various subjects, and used the same meetings to cover additional subjects and updates that would occur as part of the Tribal Update Meetings. The Department held a Tribal Update Meeting in July 2005 that included a trip to the Yucca Mountain site and afforded tribal representatives the opportunity to travel into the underground tunnel. Due to the summer temperatures, DOE did not plan trips to archaeological sites for that meeting. It will include trips to archaeological sites as part of future annual Tribal Update Meetings.

DOE commits to continue to support the efforts of the Native American Interaction Program and has agreed to resume annual Tribal Update Meetings that will not be "activity driven."

3.7.14.2 (4123)

<u>Comment</u> - RRR000671 / 0030

Page 2-108, Section 2.2.5, Railroad Abandonment, indicates provisions for the abandonment that could occur following the completion of shipments to the repository. The text states that the DOE would relinquish its regulatory right-of-way to BLM and consult with the same agency and other land-management entities, as appropriate. Currently there is no provision to consult with the CGTO [Consolidated Group of Tribes and Organizations] or other Indian Tribes that may be inadvertently impacted by railroad abandonment.

Response

Any decision on abandonment of the railroad is premature. However, at the completion of the shipping campaign, DOE would institute a process to decide the future of the railroad. At the appropriate time, DOE would consult with all entities, including American Indian tribes, that railroad abandonment could affect.

3.8 Unavoidable Impacts

3.8 (1353)

<u>Comment</u> - RRR000617 / 0239

Pages 8-3 to 8-4, Section 8.1.1.2: DOE here discusses unavoidable adverse impacts to land use and ownership as well as unavoidable long-term changes in land use. Specific statements that warrant comment are listed below:

Land would be managed as a right-of-way grant. "This would not pose a land-use conflict because the rights-of-way would not be in right-of-way avoidance areas."

This statement warrants clarification. Just because a right-of-way grant is awarded, it doesn't void the conflicts and impacts it creates for existing land users.

Response

Section 8.1.1.2 of the Rail Alignment EIS focuses on a discussion of potentially unavoidable adverse impacts to land use and ownership. As stated in Section 8.1.1.2, the rights-of-way would not be in right-of-way avoidance areas; therefore, DOE viewed that there would not be a conflict with BLM right-of-way policies, although DOE also acknowledges that there would be impacts to private land uses, and grazing allotments and mining claims on public land the rail line would cross. Since DOE completed the Draft Rail Alignment EIS, the BLM published the Proposed Ely Resource Management Plan/Final EIS, which establishes two Areas of Critical Environmental Concern along the proposed routes for the Eccles alternative alignment and Caliente common segment 1. These areas are designated right-of-way avoidance areas in the Resource Management Plan. DOE would work with the BLM to determine methods to minimize or avoid impacts to protected resources in these areas. If the BLM judges that these methods would be sufficiently protective of these resources, a right-of-way for the railroad could proceed along these routes. DOE added discussions of these Areas of Critical Environmental Concern in Section 4.2.2.2.3.1 of the Rail Alignment EIS.

3.8 (1354)

<u>Comment</u> - RRR000617 / 0240

Page 8-6, Section 8.1.1.7 discusses unavoidable adverse impacts to biological resources. This section states that overall impacts are small. There could be some predator/prey pattern alterations, and impacts to special status species.

This section does not address the impacts to movement or migration corridors. This is a critical oversight. The rail cross-section as designed will hamper terrestrial wildlife movement. Movements for some species such as bighorn sheep could be completely lost with relatively few mortalities as younger animals learn travel and migration patterns from older animals. The federally listed desert tortoise will be impacted, likely by takes and also by extensive restriction of movement, particularly in crossing rails.

Special status species should include sage grouse, which have been petitioned for listing as an endangered species. The proposed alignment cuts through sage grouse habitat in White River Valley, and sage grouse would be directly affected by the alteration in predator/prey balance via raptor predation and nest predation by crows and ravens.

Desert bighorn sheep, mule deer, and sage grouse are all listed in the State Wildlife Action Plan, and the proposed alignment cuts through habitat of all three species.

DOE should reconsider the extent to which the above-described unavoidable adverse impacts are indeed unavoidable. Lincoln County believes many of the impacts described in the section as unavoidable can in fact be mitigated.

Response

Section 4.2.7 and Chapter 5 of the Rail Alignment EIS discuss impacts to species such as the desert tortoise, sage grouse, and bighorn sheep, and to migration patterns, and generally identify such impacts as small. The purpose of Section 8.1.1.7 is not to focus on analyses of all impacts (which is the purpose of Section 4.2.7) but to discuss potentially unavoidable adverse impacts. To help frame this discussion, DOE conducted an overview of impacts (including fragmentation of habitats) and concluded there would be a small loss of habitats and potential loss of wildlife and that, although such impacts would be unavoidable, long-term impacts would be small.

3.8 (1355)

<u>Comment</u> - RRR000617 / 0241

Page 8-7, Section 8.1.1.9 discusses unavoidable impacts to socioeconomics. The section discusses how unavoidable impacts would be greatest with respect to economic concerns, but would be positive for the most part. Small impacts would be realized by mining, ranching and agriculture. Recall that DOE defines "small" as meaning effects that would be so minor that they would be undetectable or would not serve to destabilize or noticeably alter the affected resource (or in this case land use). The impacts to ranching would be anything but small. Nearly all of the operators who hold permits to allotments along the proposed corridor have indicated that there will be significant negative impacts from the rail line, and some have indicated that they would go out of business altogether. There is also a loss of lifestyle associated with the communities that are largely based on farming and ranching, and the rural way of life. That was not addressed in this Section or this chapter.

DOE should reconsider the extent to which the above-described unavoidable adverse impacts are indeed unavoidable. Lincoln County believes many of the impacts described in the section as unavoidable can in fact be mitigated.

Response

The Department revised and expanded best management practices and mitigation measures (see Chapter 7 of the Rail Alignment EIS). However, as stated in Section 8.1.1.9 of the Rail Alignment EIS, DOE views that construction and operation of the proposed railroad along the Caliente rail alignment would have small, but nevertheless unavoidable, impacts on current mining, ranching, and agricultural activities. Chapter 7 of the EIS discusses mitigation measures. DOE acknowledges that some impact is unavoidable. The EIS discusses the direct and indirect socioeconomic impacts sufficiently for the decisionmakers and the public to understand the potential effects of the project (see section 4.2.9).

3.8 (1356)

<u>Comment</u> - RRR000617 / 0238

Pages 8-2 and 8-3, Section 8.1.1.1 discusses unavoidable adverse impacts to physical setting, specifically with regard to cuts, fills and quarries altering topography and drainage patterns resulting in a loss of topsoil and potential for erosion. There would be some impacts to prime farmland due to isolation of farmed areas, and DOE has contacted NRCS [Natural Resources Conservation Service] to minimize these impacts due to the Farmland Protection Act. The Section also notes that compaction within the construction right-of-way could result in impacted revegetation rate and types. Changes in drainage patterns will also change vegetation distribution and characteristics. Impacts due to isolation of areas would also occur on grazing allotments and grazing complexes, yet no one has been contacted by DOE to help minimize that impact.

Compacted soil can be mitigated by a) minimizing the construction footprint, and b) ripping and raking or dragging areas after construction as part of the restoration. Bigger concerns reside with loss of native species that have proven to be difficult to re-establish such as winterfat. Another major concern is the potential loss of suitable growth medium.

The section contains no discussion with regard to loss of solitude, or lifestyle by ranchers living on the range, or the rural lifestyle of the citizens of Lincoln County.

The Section classifies impacts on physical setting as small. This does not seem to match the DOE definition of a "small" impact -- environmental effects would not be detectable or would be so minor that they would neither destabilize nor noticeably alter any important attribute of the resource. How is the physical setting not noticeably altered? Cuts and fills will alter aesthetic resources permanently, vegetation disturbance will be altered in the short term for sure, and likely over the long-term if restoration efforts aren't successful. Vegetation is likely to change regardless due to the alterations in drainage patters. If invasive species or noxious weeds become present, the physical setting would be destabilized, and at a minimum the physical setting will be noticeably altered.

Measures to mitigate the aforementioned adverse unavoidable impacts exist and DOE should identify and address same in the EIS.

Response

The purpose of Section 8.1.1.1 of the Rail Alignment EIS is to focus on potentially unavoidable adverse impacts, not on mitigation measures. Chapter 7 of the EIS discusses mitigation measures. DOE analyzed impacts on physical setting in Section 4.2.1 and summarized these impacts in Tables 4-2 to 4-9.

To help identify unavoidable adverse impacts that could occur, Section 8.1.1.1 discusses "impacts" (adverse or not) that DOE analyzed in Section 4.2.1, including those mentioned by the commenter. DOE described some impacts on physical setting as unavoidable, but not as having negative (or adverse) effects. DOE acknowledges that some impact is unavoidable. The EIS discusses the direct and indirect impacts to physical setting sufficiently for the decisionmakers and the public to understand the potential effects of the project (see Section 4.2.1).

DOE would institute mitigation on a site-specific basis in coordination with landowners, grazing permittees, BLM, and other directly affected parties, as appropriate. Section 7.3 of the EIS discusses the process the Department would use. DOE expanded this section to describe and clarify the process. In addition, DOE would institute best management practices to minimize environmental impacts on lands, including maintenance of equipment and institution of procedures to handle hazardous materials safely, minimize the possibilities of spills, and respond to spills if necessary. In its development of rail corridors and alignments, the Department has striven to minimize conflicts with private land, avoidance of which has been one of the primary requirements in its alignment development. While there would inevitably be instances due to considerations such as environmental concerns or engineering restrictions, DOE would continue to pursue every effort to avoid private property.

NEPA requires DOE to analyze physical impacts to the environment and to health if changes in the physical environment could directly affect health. It does not require that DOE analyze perceived potential impacts to the listed social structure or to quality of life in the manner suggested by the comment. DOE has analyzed socioeconomic conditions in accordance with NEPA and CEQ guidelines. Nevertheless, in its mitigation efforts DOE would work with directly affected parties to minimize impacts. The Department expanded the mitigation process in Section 7.3 to better describe what would occur and who would be involved.

3.8 (1357)

<u>Comment</u> - RRR000617 / 0242

Page 8-13, Section 8.1.3.7 discusses irreversible and irretrievable commitment of biological resources. Discusses the loss of vegetation during operations and following abandonment if the rail bed was not reclaimed, or if former vegetation cover did not recover. It is likely that former vegetation cover will not recover due to construction operations regardless of reclamation. The same holds true for any vegetation cover that is potentially lost due to wildfire caused by construction or operation of the rail.

The EIS should disclose that, regardless of reclamation, former vegetation cover will likely not recover due to construction operations.

Response

DOE recognizes the possibility that vegetation might not recover under certain circumstances. Section 8.1.3.7 of the Rail Alignment EIS states that the permanent conversion of vegetation resources and wildlife habitat along the rail line and at construction and operations support facilities could represent an irreversible commitment of biological resources for the life of the proposed railroad and beyond if, following abandonment, DOE did not restore these resources, or if former vegetation cover and composition did not recover. Losses of wildlife during railroad construction and operations would represent an irretrievable commitment of biological resources.

3.8 (1359)

<u>Comment</u> - RRR000617 / 0243

Page 8-13, Section 8.1.3.9 discusses irreversible and irretrievable commitment of socioeconomic resources. The section states, "DOE did not identify any associated irreversible and irretrievable commitments of resources along the Caliente rail alignment." This is a gross oversight. There will be a loss of AUMs [animal unit months] and associated monetary potential associated with lost grazing opportunity due to rail construction and operation. That is an irretrievable economic loss to ranchers and Lincoln County, as well as overhead costs associated with conditioning livestock to the new rail.

The discussion of irreversible and irretrievable commitments to socioeconomic resources of socioeconomic resources in the EIS should be expanded to discuss loss of AUMs and associated monetary potential associated with lost grazing opportunity due to rail construction and operation.

Response

DOE would implement mitigation measures for economic impacts on a site-specific basis in coordination with landowners, grazing permittees, the BLM, and other directly affected parties, as appropriate. Section 7.3 of the Rail Alignment EIS discusses the mitigation process. Mitigation measures might not be completely effective in eliminating loss of animal unit months and other possible economic losses to some segments of the economy. The socioeconomic impact analysis (Section 4.2.9 of the EIS) indicates positive increases in such areas as employment, disposable income, Gross Regional Product, and state and local government spending during the construction and operation of a railroad along the Caliente rail alignment. DOE did not identify irreversible or irretrievable commitments of socioeconomic resources along that alignment.

3.8 (1651)

<u>Comment</u> - RRR000687 / 0041

Section 8.1.1.2, Page 8-3: Does the phrase "...could limit certain other land uses..." specifically address the physical limitations discussed later in the section, or does this include potential limitations regarding security or operations of the rail? What does DOE anticipate as "...future land uses that pose a conflict"? Does this include the possible conflicts that grazing may pose to rail construction or operations? To omit potential land-use conflicts and the impacts associated with limiting current land-uses is misleading.

All anticipated conflicts and restrictions to land uses must be disclosed. The effects and impacts of any and all restrictions must be analyzed.

Response

Section 4.2.2 of the Rail Alignment EIS discusses land-use impacts for the Caliente rail alignment; specifically, 4.2.2.3.2 discusses impacts to grazing by alternative. Section 8.1.1.2 of the EIS expands on the discussion of land-use impacts and discusses which of the impacts reported in Chapter 4 would be an irreversible and irretrievable commitment of resources. Specific future land uses are unknown at this time, but DOE recognizes that they could at some time exist, and then pose a potential conflict. DOE, throughout the advancement of the rail design, would avoid, minimize, or otherwise reduce impacts to directly affected parties.

3.8 (3986)

Comment - RRR000671 / 0055

Page 8-3 8.1.1.2, Land Use and Ownership: The text indicates that DOE would need to gain access to some private lands. As such, in the event of inadvertent discovery of Indian burials, NRS 383.160 Protection of Indian Burials would come into play and should be identified accordingly in the text.

Response

DOE added a reference to Nevada Revised Statutes 383.150 to 383.190 (Protection of Indian Burial Sites) to Chapter 6 of the Rail Alignment EIS (see Table 6-3). Section 4.2.13.2.1.1 of the EIS discusses cultural resources along the rail line alternative segments at the Interface with the Union Pacific Railroad Mainline. As discussed in 4.2.13 of the EIS, DOE is committed to deal appropriately with any Indian burials in accordance with the Native American Graves Protection and Repatriation Act.

3.8 (4226)

<u>Comment</u> - RRR000617 / 0272

"The BLM could establish land management requirements that provide for multiple use, but land used for the proposed railroad and railroad construction and operations support facilities could limit certain other land uses."

If the rail construction and/or operations corridors are restricted beyond what is stated in this DEIS, there would be major impacts to nearly all land uses. These impacts would be much greater than those discussed in Chapter 4 of this DEIS. All limitations on the construction and operational rights-of-way must be stated within the DEIS. Any restrictions on these lands will significantly alter the impacts and required mitigation actions described within the DEIS. Future changes in the degree of restriction would invalidate many of the impacts contained within Chapter 4, particularly with regard to land-use impacts.

"The multiple use mandate set forth in the Federal Land Policy and Management Act would continue to apply to the public lands within the right-of-way, but railroad construction and operations could limit certain future land uses that pose a conflict."

What are the land uses that pose a conflict, and why can't they be identified now? If future restrictions are placed, then the impacts discussed in Chapter 4 become invalid. The land uses that may conflict with rail operations need to be disclosed within the EIS. Limiting future land uses invalidates the impacts presented in Chapter 4, as well as the mitigations identified in Chapter 7.

Response

The purpose of Section 8.1.1.2 of the Rail Alignment EIS is to discuss potentially unavoidable adverse impacts, not to discuss impacts as provided in Chapter 4. Specific future land uses are unknown at this

time, but DOE recognizes that they could at some time exist, and then pose a potential conflict. DOE recognizes that land occupied by the rail line and support facilities could not also be used for purposes such as building some other structure, mining, or grazing, and that uncertainty about whether there will be limits on other land uses is because of the uncertainty about which land uses might be proposed, and not uncertainty about the types of restrictions inherent in the Proposed Action.

3.8 (4227)

<u>Comment</u> - RRR000617 / 0273

"Construction and operation of the proposed railroad...would directly impact grazing allotments by transecting parcels and potentially hindering access to forage and water resources. Other potential impacts include allotments being reduced in size and a reduced ability of livestock, wild horses and burros to range freely across grazing areas."

How will tortoise cross the rail and associated access road(s)? Construction and operations of the proposed railroad will hinder access to forage and water, will hinder the movement of livestock, wild horses, and wildlife, in addition to impacting private property rights associated with State Water Rights, and the Taylor Grazing Act. However, many of the impacts can be at least partially mitigated. It is the responsibility of the DOE to make reasonable efforts to mitigate the impacts caused by the construction and operation of the Caliente rail corridor. If simple and reasonable mitigation efforts such as trough relocation and the construction of cattle crossings are not provided for under the current DOE Caliente rail corridor budget, then DOE must obtain the appropriate funding and make plans to implement these mitigations. The problem cannot be addressed by simply dismissing the impacts to current land uses as unavoidable or immitigable. The impacts can and must be mitigated and the appropriate planning to accomplish this.

"Even with mitigation, some adverse impacts to the use of grazing land would be unavoidable."

This is a true statement. However, that does not mean that mitigation measures should be wholly disregarded as they are by their absence in Chapter 7.

"Construction and operation of the proposed railroad along the Caliente rail alignment would not displace existing or planned uses over a large area or conflict with land-use plans or goals. Therefore, any impacts to land use and ownership, although unavoidable, would be small."

This statement is blatantly false. The proposed alignment would impact over 20 grazing allotments, not counting those affected by associated construction activities away from the alignment. Grazing is a long time existing use that would experience large impacts. Each allotment has an existing grazing management system that would be highly affected by rail construction and operation, along with the existing Allotment Management Plans, which described the grazing management goals and objectives that are associated with the allotments. Impacts within each allotment would not be confined to the construction and operational right-of-way. The entire allotment will be affected due to changes in grazing patterns, feed and water accessibility, and the ability of the manager to move and disperse livestock throughout the allotment. The impacted allotments encompass more than 4 million acres or approximately 6,600 square miles. DOE's statement demonstrates the Department's inadequate understanding of public land uses and management in the desert environment, as well as the long-term established land uses (such as grazing) and the very real impacts that this proposed action will have on the public land users and the environment. It also demonstrates that the DOE does not fully understand the impacts of the Proposed Action, let alone appropriate alternatives and mitigation measures.

DOE should reconsider the extent to which the above-described unavoidable adverse impacts are indeed unavoidable. Lincoln County believes many of the impacts described in the section as unavoidable can in fact be mitigated.

Response

The purpose of Section 8.1.1.2 of the Rail Alignment EIS is to focus on a discussion of potentially unavoidable adverse impacts, and not on a discussion of impacts per se provided in Chapter 4. DOE's objective is to avoid all such impacts, and recognizes that identified mitigation measures can substantially reduce impacts, but are unlikely to completely eliminate them, as discussed in Chapter 7. DOE would institute mitigation for any such potential economic impacts on a site-specific basis in coordination with land owners, grazing permittees, the BLM, and other directly affected parties, as appropriate. DOE added details of possible appropriate mitigation actions for impacts to grazing allotments to Chapter 7 of the EIS.

3.9 Section Not Used

3.10 No-Action Alternative Impacts

DOE did not receive any comments related to this subject.

3.11 Cumulative Impacts

3.11 (1042)

Comment - RRR000663 / 0024

The Draft EISs fail to thoroughly assess cumulative impacts from other DOE activities (i.e., low-level radioactive waste, mixed LLW and hazardous waste, and transuranic waste activities at NTS [Nevada Test Site]; other ongoing or planned DOE programs at the NTS; past weapons testing activities at NTS; commercial/ private industry activities at/near the NTS), ranching; mining; any planned highway or other infrastructure activities ongoing or planned for the area surrounding the proposed rail line; and any and all other existing or reasonably foreseeable activities that might affect or be affected by the proposed action.

Response

Section 5.2.1.2.2 describes the activities at the Nevada Test Site that were considered in the cumulative impacts analysis. The section and Table 5-1 summarize the potential environmental impacts and provide references for each environmental assessment describing Nevada Test Site operations. DOE added clarifying language about other Nevada Test Site activities throughout Chapter 5, as necessary. No significant potential cumulative impacts were identified for any of the actions. Sections 5.2 and 5.3 of the Rail Alignment EIS discuss all the reasonably foreseeable projects considered in the cumulative impacts analysis, including commercial, private industry, ranching, mining, transportation, and other reasonably foreseeable activities. DOE made revisions and additions to these sections, as needed to address impacts, including impacts on grazing activities. Additionally, Nye County's viewpoint is included in the Final EIS in Section 5.5.

3.11 (1307)

<u>Comment</u> - RRR000617 / 0215

Page 5-19, Section 5.2.2.1.1, Disturbance of Physical Resources: These impacts are grossly understated by presenting them in relative, incremental terms. For example, DOE states, "the proposed railroad

would disturb only a small percentage of land in the Caliente rail alignment cumulative impacts region of influence." This is an absurd and meaningless way to characterize or assess impacts. The fact that the acres disturbed are a small percentage of the region of influence is irrelevant. What matters is the absolute disturbance to the absolute number of acres. If one were to assess impacts based on the percentage the railroad project's acreage uses out of the entire Great Basin and Mojave Deserts, one would conclude that the project is so insignificant that an EIS is not even necessary.

The same logic is applied in the last sentence of this section. DOE states, "Given the large amount of land potentially available for development of existing and reasonably foreseeable projects, and the small percentage of potentially available land required for the proposed railroad, overall cumulative impacts to physical setting in the Caliente rail alignment region of influence would be small." What does the large amount of land available and the small percentage of available land required have to do with an impact analysis? The relevant inquiry is the amount of land disturbed and the consequences of that disturbance to existing land uses.

The DOE must consider impacts in the context of the amount of land disturbed and the consequences of that disturbance to existing land uses.

Response

As described in Section 5.1.2 of the Rail Alignment EIS, DOE assessed potential cumulative impacts qualitatively and quantitatively to the extent available information allowed. The Department assessed available information sources to determine what was appropriate for the analysis, including information sources that became available after the publication of the Draft EIS. Not all quantitative information is additive because of different methodologies or inconsistent regions of influence. DOE reviewed activities for relevance to the cumulative impacts analysis based on potential geographical and temporal relationships with construction and operation of the proposed railroad along either the Caliente or Mina rail alignment. Section 5.1.1 of the EIS describes DOE's approach to defining the regions of influence for analysis, which provides a perspective on the proposed project in a given region. Sections 4.2.1 and 4.3.1 contain tables that list details of the amount of disturbed area, and the physical setting and land-use sections describe potential consequences of that disturbance.

3.11 (1310)

<u>Comment</u> - RRR000617 / 0217

Page 5-21, Section 5.2.2.2, Existing or Potential Land-Use Conflicts: The last sentence in the Section states that the cumulative impacts related to grazing conflicts would be small. This is false. See the public land grazing analysis in Resource Concepts, Inc. et al., 2007. An entire series of impacts to grazing allotments is contained within a Resource Concepts, Inc. 2005 report that the DOE cites within this DEIS. In addition, Chapter 1 states that over 200 comments were received during scoping regarding impacts to grazing and mining operations. Did the DOE consider the impacts discussed in the 2005 report? Did the DOE conduct any sort of integrated impact analysis in response to the 200+ comments received? If so, who conducted the analysis and what is their technical expertise in the area of grazing management on public lands? None of this information is presented.

The DOE must address each of the issues and questions raised in the paragraph above.

The DOE should disclose whether this map atlas was available to permittees at the time BLM ... solicited comments from permittees.

The DOE should disclose what changes, if any, resulted from meetings with permittees and since development of this atlas.

The DOE should include an appendix which describes in detail the solicitation of and nature of comments received by BLM and DOE from grazing permittees.

Response

DOE evaluated the information in the 2005 Resource Concepts report. Unfortunately, the report did not provide verifiable references for some critical information on range improvements and other key features. Therefore, DOE relied on information obtained directly from the BLM for information on range improvements. In addition, the Resource Concepts report provided ranchers' views on potential mitigation measures. Because revised Allotment Management Plans or interim grazing plans would probably be developed between BLM and permittees if the Bureau granted the right-of-way, DOE cannot determine allotment-specific impacts and mitigation measures at this stage of the project. The Department did consider the scoping comments it received on grazing and mining operations. DOE's technical experts worked directly with the BLM to obtain grazing information and to develop the approach to determining potential impacts. Based on comments it received on the Draft Rail Alignment EIS, DOE revised Sections 4.2.2 and 4.3.2 to acknowledge impacts that could result from isolation of forage, and other concerns about impacts to range improvements, disruption of livestock grazing patterns, and livestock production. In addition, DOE revised Chapter 7 of the EIS to provide more information about potential mitigation measures to address grazing permittees' concerns.

3.11 (1311)

<u>Comment</u> - RRR000617 / 0218

Page 5-26, Section 5.2.2.3, Aesthetic Resources: The statement is made that cumulative impacts to aesthetic resources would primarily result from modifications to natural viewsheds. Impacts would also result from modification to two basic qualities of the local culture -- love of isolation and tranquility. The isolation and tranquility along the rail alignment immediately after Meadow Valley Wash would be forever and unavoidably altered. These intrinsic values are important to the local community and those who visit the area to enjoy the outdoor environment it provides. The impacts on these values must be analyzed and addressed under NEPA. The DOE should address the impacts to changes in isolation and tranquility that will result along the rail alignment.

Response

As explained in Section 3.2.3 of the Rail Alignment EIS, DOE used BLM methodology to assess visual (aesthetic) impacts because most of the lands along the alignment are BLM-administered lands. The BLM does not include explicit consideration of "isolation" or "tranquility" in any of its methodologies for assessing project impacts on aesthetics, noise levels, or any other resource area. The BLM classifies visual resources based on three factors: scenic quality, visual sensitivity, and distance from travel or observation points; not isolation or tranquility. "Visual sensitivity," as indicated in Section 3.2.3.2 of the EIS, reflects the level of public concern for scenic quality, which relates to the "intrinsic values important to the local community" mentioned by the commenter. The BLM sets management objectives for the amount of acceptable visual contrast that a project might cause, based on the visual resource classification. Following the BLM methodology, as explained in Section 4.2.3.1.1 of the EIS, DOE considered the visual contrast the project would cause and evaluated if the contrast would be consistent with management objectives. DOE acknowledges that the commenter values isolation and tranquility in the "area immediately after Meadow Valley Wash." DOE calls the commenter's attention to the boundary of the Chief Mountain Special Recreation Management Area, which falls within approximately 1 mile of U.S. Highway 93 at Meadow Valley Wash, where the alignment would trend northwest toward Bennett Pass. According to the Ely Proposed Resource Management Plan/Final EIS, the Chief Mountain Special Recreation Management Area is intended for high levels of motorized recreational vehicle use. Such use would likely affect the qualities of isolation and tranquility of the area through which the alignment would pass.

Changes in isolation and tranquility would be noted primarily at passage of trains. Both the aesthetics and noise impact analyses in the Rail Alignment EIS consider alteration of visual and aural conditions and acknowledge that there would be short-term noticeable contrasts to views and sound levels when trains passed, and in some locations, long-term contrasts to views where the track introduced a new linear feature into the landscape.

3.11 (1312)

<u>Comment</u> - RRR000617 / 0219

Page 5-28, Section 5.2.2.5, Surface-Water Resources: Springs are a surface-water resource. They are impacted by the railroad and should be addressed in this Section and they are not. See related comments on Chapter 4, Environmental Impacts. The DOE must include an assessment of the cumulative impact to springs.

Response

DOE considered impacts to springs from a water quality perspective in Sections 4.2.5 and 4.3.5 of the Rail Alignment EIS. Sections 4.2.7 and 4.3.7 of the EIS address impacts to wildlife in relation to access to springs, and Sections 4.2.2 and 4.3.2 address impacts to livestock in relation to spring access. Sections 4.2.6 and 4.3.6 discuss impacts to source water for springs. Sections 5.2.2.5 and 5.3.2.5 address cumulative impacts to water quality. Chapter 7 discusses mitigation measures for these impacts.

3.11 (1314)

<u>Comment</u> - RRR000617 / 0220

Page 5-28, Section 5.2.2.5.1, Changes in Drainage, Infiltration Rates, and Flood Control: The risk of combining washes and drainages is understated. The EIS must include an assessment of the cumulative impacts to drainage, infiltration rates, and flood control.

Response

DOE consulted with the BLM, which did not identify pending or potential projects that would have drainage, infiltration-rate, or flood-control issues. The BLM regulates and limits projects to be consistent with BLM resource management plans, which includes protecting surface-water resources and ensuring resolution of flood-control and infiltration-rate issues.

Altered natural drainage patterns and accumulation of surface water on the upgradient sides of the rail line in some areas could result from cut and fill operations during railroad construction and operations. Sections 4.2.5.2.1.1 and 4.3.5.2.1.1 of the Rail Alignment EIS state that "during construction, regrading would be performed so that a number of minor drainage channels would collect in a single culvert or pass under a single bridge, resulting in water flowing from a single location to the downstream side rather than across a broader area." This would reduce the potential for surface-water accumulation (flooding) along the rail roadbed during operations. As a result, there would be some accumulation during and following storm events and localized changes in drainage patterns, but this would be minimized.

In addition, Sections 4.2.5.2.1.1 and 4.3.5.2.1.1 discuss standard engineering design and construction practices that DOE would use to reduce impacts to changes in drainage patterns and flow impediment. The preliminary design includes various structures to accommodate drainage features the rail line would cross. DOE would use culverts, channelization, and other means of runoff control to minimize the potential for water to back up. Construction activities that disturbed the land surface, such as grading, excavation, or stockpiling, could alter the rate at which water infiltrated the disturbed areas. Depending on the type of disturbance, the infiltration rate could increase or decrease. Most of the land disturbance during the construction phase would result in surfaces with lower infiltration rates; that is, the surfaces would be less permeable than natural soil conditions and would cause an increase in runoff. The change

in the amount of runoff that would actually reach the drainage channels would be small, because construction would affect a small amount of the overall natural drainage area.

DOE expanded Sections 4.2.5.3 and 4.3.5.3 of the Rail Alignment EIS to clarify the impacts from surface-water accumulation on the upgradient side of the rail roadbed during operations, and to describe how engineering design and construction practices would minimize surface-water accumulation. Further, DOE would incorporate these methods and practices in the final design process of the railroad. Chapter 7 of the EIS discusses specific mitigation measures and best management practices.

3.11 (1315)

<u>Comment</u> - RRR000617 / 0221

Page 5-29, Section 5.2.2.6, Groundwater Resources: Given the existing situation of limited and sometimes insufficient perennial yields in the 19 hydrographic areas in question, DOE should put more emphasis on purchasing the necessary water from existing water rights owned by other parties, and less emphasis on drilling new wells. To the extent they could avoid drilling new wells, the long-term use of groundwater in these arid areas would be reduced. The DOE must provide an expanded assessment of the cumulative impacts of pumping groundwater from the 19 affected hydrographic basins.

Response

In Sections 5.2.2.6 and 5.3.2.6 of the Rail Alignment EIS, DOE provides a description and analysis of the 19 hydrographic basins and the cumulative impacts to groundwater resources.

As with all major construction projects, the building and operation of a rail line would require an adequate supply of water. This water would be necessary for compaction of earthen materials when constructing the rail line, protection of the health and safety of workers through control of dust, support of operations at facilities during and after rail line construction, and emergency use such as fire suppression during construction and operations.

As described in Sections 4.2.6.2 and 4.3.6.2 of the Rail Alignment EIS, the groundwater impacts assessment included identifying existing springs, existing seeps, and other surface-water rights, wells with water rights, and domestic wells within a 1.75-mile radius around each proposed well location and a 6-mile radius around each potential well location that could be associated with a (water-bearing) fault zone, based on review of the Nevada Division of Water Resources online water rights and well log databases and other available databases, including the U.S. Geological Survey National Water Information System and the GNIS-Nevada Springs databases and published reports. The impact analyses included consideration of these existing resources in the specified search areas around each proposed well. DOE expanded the description of the methodology it used to identify these features.

To assess potential impacts due to well water withdrawals, DOE (conservatively) assumed that it would acquire all water for railroad construction and operations from new wells. If, through analysis the Department would perform at the time of final railroad design, DOE determined it would be necessary to preclude impacts on an existing well, spring, or other surface-water right, DOE would reduce pumping rates or eliminate pumping at a new groundwater withdrawal well, purchase additional water from existing water-rights holder(s), relocate the well to preclude impacts to an existing water-rights holder or other groundwater resource feature, or implement one or more other best management practices as necessary. As an alternative, DOE could implement the proposed pumping at the required pumping rate and negotiate with the existing water-rights holder or domestic water-well owner to access and monitor water levels in the well or monitor discharge rates to the spring, where appropriate, to verify effects of groundwater withdrawal. Chapter 7 of the EIS lists mitigation measures for impacts to springs.

DOE would follow all applicable requirements under state water law in Nevada Revised Statute Section 533 in applying for and acquiring water rights for all phases of the Proposed Action. DOE is not considering other alternatives for acquiring necessary water.

3.11 (1316)

<u>Comment</u> - RRR000617 / 0222

Page 5-32, Section 5.2.2.7.1, Habitat Loss and Fragmentation: The last sentence states, "Cumulative impacts due to habitat loss and fragmentation would be small to moderate through the construction and operations phases throughout the Caliente rail alignment region of influence." The preceding discussion provides generalities and basic ecological theory. No information is provided to establish that the cumulative impacts would be small to moderate for the railroad. The discussion of cumulative impacts to habitat loss and fragmentation must be expanded to consider trends in habitat loss and fragmentation and must quantify the acreage losses in habitat from past, present and reasonably foreseeable future actions from a direct and fragmentation perspective. Acres of disturbance for most of the past, present and reasonably foreseeable future actions is readily available in ROW [right-of-way] applications and other NEPA documents.

Response

As described in Section 5.1.2 of the Rail Alignment EIS, DOE assessed potential cumulative impacts qualitatively and quantitatively to the extent available information allowed. Not all quantitative information is additive because of different methodologies or conflicting regions of influence. DOE determined that implementing a quantitative analysis for habitat loss and fragmentation would not yield accurate or meaningful results; therefore, the EIS discusses cumulative impacts to habitat loss and fragmentation qualitatively.

DOE considered habitat loss and fragmentation in its impact criteria. Before preparing the assessment for wildlife, the Department generated lists of terrestrial and aquatic species for habitat and species occurrence along the construction right-of-way (500 feet on either side of the rail alignment) and the study area (a 10-mile-wide search on either side of the centerline) (Sections 3.2.7.1.1 and 3.2.7.1.2). These investigations incorporated literature and database searches and consultation with land and resource agencies and authorities, including BLM, the U.S. Fish and Wildlife Service, the Nevada Natural Heritage Program, and the Nevada Department of Wildlife. This information included Nevada game species. DOE conducted additional ground surveys in the construction right-of-way to provide a comprehensive understanding of habitats and species the project could affect. In addition, as discussed in Section 4.2.7.2.1.2, one of the criteria for the impact assessment was the project's effect on movement corridors. DOE considered this criterion in the final determination of whether cumulative impacts would occur. As discussed in Section 5.2.2.7.1, mitigation measures would include minimizing land disturbance, using existing roads, interim reclamation, combined roads/utility rights-of-way for pipelines and cables, noise reduction, centralization of facilities, and employee training and education.

3.11 (1318)

<u>Comment</u> - RRR000617 / 0223

Page 5-33, Section 5.2.2.7.2, Invasive Species and Noxious Weeds: Nothing is presented to establish the assertion that cumulative impacts would be small. Railroads are notorious for serving as sources to introduce and spread invasive species and noxious weeds. The EIS must include information to substantiate the conclusion that cumulative impacts would be small for invasive species and noxious weeds.

DOE added clarifying language to Sections 5.2.2.7.2 and 5.3.2.7.2 of the Rail Alignment EIS to explain that potential cumulative impacts would be small due to mitigation and best management practices that would address potential cumulative impacts of invasive species and noxious weeds.

Section 5.2.2.7.2 and Table 7-1 of the EIS address the DOE commitment to monitor and control noxious weeds and invasive species. The Department clarified the descriptions to better describe how it would develop and implement weed control during construction and operation of the railroad. DOE would develop a weed-management plan that met BLM requirements for monitoring and control of weeds, and would consult with other directly affected parties during the development of the plan. DOE would implement a program to monitor and control weeds prior to construction. That program would include an inventory of the alignment before construction, monitoring of disturbed sites, control of weeds during construction and operation, and reclamation of disturbed sites no longer necessary for operation of the railroad. The weed management plan would include details about how and when DOE would monitor and control weeds. As listed in Table 7-1, application of water to disturbed sites would be limited to that necessary to meet requirements for the control of fugitive dust; DOE would control weeds that grew as a result of water application for dust control.

3.11 (1321)

<u>Comment</u> - RRR000617 / 0225

Page 5-35, Section 5.2.2.8.1, Railroad Noise: DOE states that noise associated with rail activities is part of the existing environment in the City of Caliente, and that wayside noise and horn sounding is common. This is true, however the cumulative impacts of the Union Pacific rail operation, Yucca Mountain train traffic, and potential commercial shipments along the Caliente Rail Corridor are not addressed. This small, quiet town would experience a dramatic increase in the level of noise and vibration caused by rail traffic. The EIS should include analysis of the cumulative impacts of existing and anticipated Union Pacific mainline rail operation, Yucca Mountain train traffic, and potential commercial shipments in the vicinity of the City of Caliente and along the Caliente Rail Corridor as appropriate.

Response

There is a relatively large amount of Union Pacific rail traffic in Caliente (25 trains per day) compared to the small increase in rail traffic due to the Proposed Action (2.9 trains per day) and potential shared-use traffic (less than one train per day). DOE revised the noise analysis in Caliente to account for sounding the locomotive warning horn at the Caliente Youth Center driveway (see Section 4.2.8). Cumulative impacts of noise in Caliente would be moderate to large because noise-sensitive receptors would experience adverse impacts. In addition, train vibration impact evaluations are based on maximum level, which would not increase in areas where both Union Pacific and DOE rail traffic occurred. As a consequence, there would be no cumulative impact due to vibration from trains. DOE added text to Section 5.2.2.8 of the Rail Alignment EIS to describe the revised analysis.

3.11 (1323)

<u>Comment</u> - RRR000617 / 0226

Page 5-36, Section 5.2.2.9: DOE states that the economy in the cumulative impacts region of influence is changing from the traditional base of mineral development and livestock grazing to service, retirement, and tourism. This does not provide grounds to discount the importance of traditional land uses in Lincoln County. While livestock grazing may no longer support the majority of the economy of Lincoln County, its value remains substantial. Ranching is part of the heritage of the western states, and contributes to the economy by drawing tourists and retirees to the open spaces and rugged lifestyle associated with it. The Caliente Rail Corridor and the development associated with it could have strong adverse impacts on the ranching economy of Lincoln County.... The loss of agricultural land in and around the more developed areas (such as the City of Caliente) only emphasizes the importance of protecting the more rural

agricultural lands throughout the County. Traditional agricultural land use is important to the culture, values, and economy of Lincoln County. The DOE gives these considerations unduly short shrift. It must recognize these important considerations and make every effort to avoid or minimize the adverse impacts to this sector. The analysis of cumulative impacts in the EIS must consider the important role that conversion of land from open space/agricultural uses (including range livestock enterprises) will have on the culture, values and economy of Lincoln County. The analysis should consider trends in private and public land conversion and changing uses.

Response

Section 5.2.2.2.1 of the Rail Alignment EIS discusses cumulative impacts of land-use changes in Lincoln County. The BLM administers more than 97 percent of the land the Caliente rail alignment and associated facilities would disturb. Although BLM uses most of the land for grazing, land-use changes from the Proposed Action would not have significant cumulative impacts. DOE revised Section 5.2.2.2.2 to include more information about impacts to grazing. The Department would work with affected grazing permittees and the BLM to mitigate adverse impacts to land, both inside and outside the construction right-of-way. As described in Chapter 7, DOE would work with the grazing permittees and the BLM to develop Interim Grazing Management Plans and Allotment Management Plans, and provide compensation or range improvements for the direct loss of crops, pastures, rangelands, or reductions in animal unit months. Section 5.2.2.9 of the EIS discusses cumulative impacts to the socioeconomics of Lincoln County, which should be small.

3.11 (1334)

Comment - RRR000656 / 0011

The Yucca Mountain repository program is central to the nation's overall energy policy, including the disposition of Greater Than Class C waste, the Global Nuclear Energy Partnership, on site and interim storage, advanced fuel recycling as well as spent nuclear fuel and defense high level waste. The cumulative impacts of these programs as well as other federal activities within the county need to be recognized. The Nye County perspective is documented in the Draft Repository SEIS, Section 8.6.2, and is included here by reference.

Response

DOE added (to Sections 5.2.1.2.1, 5.2.1.2.2, 5.3.1.2.1, and 5.3.1.2.2 of the Rail Alignment EIs) consideration of additional waste shipments that could occur due to GNEP and GTCC waste activities, the extension of existing nuclear power plant operating licenses, and facility decommissioning and remediation activities. Chapter 7 of the Rail Alignment EIS discusses the DOE mitigation and monitoring program. This process would be iterative in that DOE would consult with directly affected parties, including Nye County, as the rail line engineering advanced, and during construction and operation of the railroad.

3.11 (1523)

<u>Comment</u> - RRR000682 / 0074

Page 5-75, paragraph 8: Consistent with the methodology established in the Yucca Mountain FEIS (DIRS 155970-DOE 2002, p. 4-43), most of the construction workers for the proposed Mina rail alignment are assumed to be residents of Clark County. This statement is not necessarily true particularly for the northern portions of the route. Major large scale construction projects occur in northwestern Nevada. Few if any workers or construction firms originate in Clark County. What is the basis for this conclusion? Is there another project in northern Nevada that is primarily supported by Clark County firms and employees?

DOE assumes that workers would come from the two large urban areas in Nevada because those are the only locations with sufficient workforces to staff the construction. These two counties employ approximately 92 percent of workers in the construction industry, according to the June 2007 Covered Employment report from the Nevada Department of Employment, Training and Rehabilitation (DIRS 185246-DETR 2007, all); Clark County has approximately 76 percent of these workers and Washoe County has approximately 16 percent.

3.11 (1525)

<u>Comment</u> - RRR000682 / 0072

Page 5-65: With or without the proposed railroad, urbanization and economic development activities, while increasing, would not generally change the overall undeveloped character of the Mina rail alignment region of influence. This statement is not necessarily true; rail development will stimulate other rail served industrial requirements in Nye, Esmeralda, Lyon, Churchill and Mineral Counties. The growth in industrial development will result in more jobs, housing and development throughout the corridor.

Response

DOE recognizes that shared use could result in additional jobs and growth in the Mina rail corridor. DOE would establish a monitoring program to evaluate future impacts from the proposed railroad and potential mitigation of impacts, including those from shared use. Section 4.3.2.4 of the Draft Rail Alignment EIS discussed the potential growth in industrial development along the rail line. DOE revised this section to identify the counties potentially affected. Section 5.3.2.9 of the EIS discusses cumulative impacts that could result in more jobs, housing, and development along the Mina rail corridor, including Mineral County. As described in Section 5.1.1 of the Rail Alignment EIS, Clark County, Churchill County, and Washoe County are generally excluded from the cumulative impacts region of influence, except in some cases to maintain consistency with individual resource analyses. As explained in Section 3.7.7 of this Comment-Response Document, socioeconomic impacts to Churchill County are not considered in detail.

3.11 (1526)

<u>Comment</u> - RRR000682 / 0071

The rail line through Churchill County has a number of private crossings used by off road vehicles and other recreation land users. Increasing use of the rail line will increase conflicts with recreation users in the area.

Response

Section 4.3.2.2.7.1 of the Rail Alignment EIS describes potential impacts to recreational land users along the rail line segments in Churchill County. DOE added similar language to Section 5.3.2.2.5 of the EIS to discuss potential cumulative impacts to recreational land users.

3.11 (1528)

Comment - RRR000682 / 0070

Page 5-63, Section, Recreational Land Use: This section should include Lahontan Reservoir and State Park. More than 450,000 visitors a year use the reservoir and the Mina rail line runs adjacent to and within 1/4 mile or closer to the reservoir and park facilities. It is difficult to understand how DOE can talk about recreation sites in the cumulative analysis that are further remote from the rail line and not include Lahontan Reservoir. The BLM day use facilities at Walker Lake are further from the rail line than Lahontan Reservoir and recreation activities in Pahrump have little or no relationship to the rail line.

The Lahontan Reservoir and State Park does not fall within the region of influence for the Mina rail alignment; therefore, DOE did not analyze cumulative impacts to this area. The Mina rail alignment was defined in the Amended Notice of Intent (71 *FR* 60484, October 13, 2006) as beginning at Wabuska on the north end and proceeding southeast. Although the existing branchline from Hazen to Wabuska is near the Lahontan Reservoir and State Park, the existing rail line could be used without substantial improvements and DOE is not proposing new construction in this area.

3.11 (1531)

<u>Comment</u> - RRR000682 / 0067

Page 5-1: Cumulative impacts are not necessarily limited to the region of influence. Future radioactive waste shipments are an example. This is probably only true for construction and not operations.

Response

Section 5.1.1 of the Rail Alignment EIS describes DOE's approach to defining the regions of influence, which provides bounds on the analysis. By definition, cumulative impacts are limited to properly defined regions of influence. DOE has reviewed the regions of influence in light of this comment and determined that they were properly defined.

3.11 (1837)

Comment - RRR000656 / 0094

Section 5.1.4, page 5-3: "to the extent the Proposed Action would contribute cumulatively to impacts to regional resources, or to other activities . . . DOE could take additional actions to reduce any identified impacts associated with its Proposed Action, as practicable (see Chapter 7)."

Nye County has a different view on cumulative impacts associated with a long history of Federal activities in our county. That view and our perspective on mitigation that DOE should undertake are incorporated in the Yucca Mountain Repository Draft SEIS and should be incorporated in this Rail Alignment EIS, as well. This comment also applies to Section 5.2.2.9, page5-38; and Section 5.3.2.9, page 5-75.

Response

DOE added a discussion of Nye County's perspective on cumulative impacts to the Rail Alignment EIS; see Section 5.5.

3.11 (1942)

Comment - RRR000656 / 0101

Section 5.2.2.9, page 5-36: The final paragraph of this section needs to be refuted. The project, on the high side, would indeed create a large impact on economic development and growth. The document says that the socioeconomic impact would be small.

Response

Based on the analysis described in Sections 5.2.2.9 and 5.3.2.9 of the Rail Alignment EIS, DOE determined that potential cumulative impacts to socioeconomics would be small. If DOE implemented the Proposed Action, the Department would establish a monitoring program to evaluate future socioeconomic impacts and potential mitigation, including those from shared use. DOE worked with Nye, Lincoln, and Esmeralda Counties and the City of Caliente to include their perspective on impacts, including socioeconomics, in the Final EIS (see Sections 5.5 and 7.4).

3.11 (1955)

<u>Comment</u> - RRR000710 / 0046

Page 5-35 and continuing, Section 5.2.2.7.4: The DEIS fails to adequately assess the cumulative impacts of the proposed rail construction and operation relative to wildfire.

The DEIS states, "Both the proposed railroad project and other reasonably foreseeable future actions would likely implement appropriate fire-avoidance strategies in consultation with the BLM. Potential cumulative impacts from wildfires would be small."

However: (1) "would likely" is not good enough. It is incumbent of DOE to spell out what fireavoidance and fire-suppression strategies would be employed in the construction and operation of the railroad; (2) Chapters 2, 3, and 4 of the DEIS do not even contain the phrase "fire-avoidance"; (3) the reasonably foreseeable possibility of train-started wildfires is very real, and is never discussed in Chapters 2, 3, and 4 (Proposed Action, Affected Environment, Impacts).

The DEIS, having failed to adequately assess train-caused wildfire in Chapters 2, 3, and 4, cannot be deemed at Chapter 5 to have adequately assessed the cumulative impacts of the proposed project.

Response

DOE discusses potential impacts of wildfires on biological resources and grazing habitat in Sections 4.2.7.2.1.1, 4.3.7.2.1.1, and 5.2.2.7.4 of the Rail Alignment EIS. DOE expanded these sections to describe wildfire impacts from the Proposed Action on resources. Table 7-1 now lists fire-avoidance best management practices, which would include control of brush and weeds along the roadbed, monitoring to identify overheated wheel bearings, and development of water sources at sidings for use in fighting fires.

3.11 (1956)

<u>Comment</u> - RRR000710 / 0045

Page 5-3, Section 5.1.4: The DEIS unreasonably fails to consider mitigations requested by entities who are not proponents of the rail project.

The DEIS states, "DOE continues to coordinate with public-and private-sector project proponents to foster adequate consideration of cumulative environmental issues."

This apparent disregard for those who are adversely impacted by the project and therefore oppose the project, is unreasonable, and demonstrates that the DEIS fails to adequately propose, implement, and assess mitigations. This is evident by at least three facts: (1) the DEIS fails to assess the site-specific impacts to grazing allotments; (2) the DEIS fails to assess possible mitigations on a site-specific allotment basis, and; (3) the DEIS is entirely silent to the mitigations proposed by at least Fallini on at least the Reveille Allotment.

Response

DOE considered the concerns of entities that the project could affect adversely, including the supplemental comments referenced by the commenter. The Department received many comments on impacts to grazing operations and will address these concerns through coordination with BLM and affected permittees, as described in Chapter 7. DOE is committed to work with affected allotment permittees and BLM to address and mitigate adverse impacts to grazing operations and infrastructure from the rail line. The Department revised the land-use sections of the EIS to include site-specific impacts to grazing allotments, and revised Chapter 7 to address mitigation measures for the grazing allotments. In addition, DOE added clarifying language to Section 5.1.4 to reflect that the Department would coordinate with the BLM and grazing permittees to mitigate adverse impacts to grazing operations.

3.11 (1979)

<u>Comment</u> - RRR000656 / 0102

Section 5.2.2.10.2, page 5-41 discusses cumulative impacts and tries to compare radiological doses associated with use of the Caliente rail alignment to radiological doses to the public from repository construction and operations.

This is inappropriate since the doses would be to different people. This section goes on to say that estimated dose to the maximally exposed member of the public from NTS [Nevada Test Site] operations receives 2.3 millirem and that the NTS dose would be a very small contribution of overall radiological impacts from a repository. The repository maximum annual dose to a member of the public is 6.8 millirem which comes 99.9 % from naturally occurring radon released from excavation activities, so the stated relationship is not valid. The Rail Alignment EIS should only say radiological impacts from the Proposed Action would be small without implying that impacts from a repository would be large. In fact the impacts from a repository would also be small and come almost entirely from naturally occurring sources, not from nuclear waste. This comment also applies to Section 5.3.2.10.2, page 5-79 in relation to the Mina corridor.

Response

The public dose from proposed repository operations would be the result of the combined dose from public exposure to naturally occurring radon from excavation activities and from radionuclides in the spent nuclear fuel and high-level radioactive waste that would be transported to the repository. However, the fact that the radon is naturally occurring does not mean the public dose from exposure to radon would not be relevant or the EIS should not report such a dose or compare it to other public doses. Release of naturally occurring radon would not occur without repository excavation activities, which would be an integral part of the Proposed Action. The public dose from exposure to this radon would not occur without the Proposed Action. Therefore, DOE categorized the dose from naturally occurring radon as directly related to the Proposed Action.

In radiological impact analyses in NEPA and related documents, DOE has assessed the total public dose from the Proposed Action. The alternative, under which DOE would not report the radon dose, would not provide an accurate and complete assessment of the total radiation dose to the public if the Department implemented the Proposed Action. To provide such an assessment, DOE reported the dose from naturally occurring radon and from radionuclides in spent nuclear fuel and high-level radioactive waste, and compared the total public dose to the total public dose from Nevada Test Site activities to provide context.

3.11 (2614)

<u>Comment</u> - RRR000523 / 0044

Section 4.3.9.2.4.2: Impacts to rail crossings should also be considered in the cumulative impacts section.

Response

Although the proposed project would result in additional traffic delays at rail crossings, the existing level of service for the roads would not change, so DOE does not anticipate cumulative impacts from the Proposed Action and the Shared-Use Option. See Sections 5.2.2.10.1 and 5.3.2.10.1 of the Rail Alignment EIS for more detail.

3.11 (3196)

<u>Comment</u> - RRR000671 / 0048

Page 5-38, Section 5.2.2.9, Socioeconomics: The text indicates that "Growth in Nye County is also linked to existing and future Yucca Mountain Site operations." According to information provided by the DOE and continuous budget reductions, YMP operations included funding for the American Indian Program have been scaled back significantly thereby raising question to the stated conclusion that Nye

County growth is being linked to existing YMP [Yucca Mountain Project] Site operations. In addition, there is no similar text or stated analysis devoted to those reservations in Nye County.

Response

The availability of funding for the Yucca Mountain Project is outside the scope of the Rail Alignment EIS. DOE worked with Nye County to include its perspective on cumulative impacts in the EIS (see Section 5.5). DOE identified the socioeconomic region of influence as the counties through which the rail line would pass. That region includes the Walker River Paiute Reservation and the Timbisha Shoshone Trust Lands near Scottys Junction. At present, there are no residents on the Timbisha Shoshone Trust Lands.

3.11 (4155)

<u>Comment</u> - RRR000524 / 0041

Section 5.2.2.2.3 concludes that small cumulative impacts would be associated with potential mineral and energy development along the alignment. However, no clear basis for this conclusion is presented.

Response

DOE added text to Sections 5.2.2.2.3 and 5.3.2.2.3 of the Rail Alignment EIS regarding the cumulative impacts on mineral and energy development from the various projects the Department analyzed.

3.11 (4170)

<u>Comment</u> – 9 comments summarized

Commenters suggested that DOE consider Churchill, Mineral, and Lyon County economic development plans and actions in the cumulative impacts analysis in relation to the Mina rail alignment. A commenter suggested that DOE review information that Churchill County submitted on the Matthews Ranch Project, which will have cumulative impacts on rail operations at the very northern end of the Mina rail route. The Matthews Ranch Project is a major economic development and residential project along the Mina route. Other commenters suggested that the impact analysis include future development initiatives in the Hazen and Fallon areas. Others asked why DOE included the Reno-Carson City area in the region of influence when the area is remote from the rail alignment.

Response

As described in Section 5.3 of the Rail Alignment EIS, DOE considered regional economic development plans and activities in Lyon, Mineral, Nye, and Esmeralda Counties. As described in Section 5.1.1 of the EIS, DOE generally did not include Clark, Churchill, and Washoe Counties in the region of influence, except for the socioeconomics and air quality analyses as necessary to maintain consistency with individual resource analyses. DOE added information on the Matthews Ranch Project to Section 5.3.2.9, discussing the planned development of approximately 2,300 acres of commercial, industrial, and residential structures (including more than 100,000 homes). Section 5.3.1.3.6 of the EIS describes developments in the Hazen area. As described in that section, Reno-Carson City area economic developments are in the defined region of influence. In the cumulative impacts analysis, DOE included in Section 5.3.1.3.6 a major project in the Reno-Carson City area – the master-planned community near Dayton, Nevada, which includes development of about 2,900 acres and 2,300 single-family homes. The Washoe County region is included in the region of influence because of the possibility that, as the second largest source of construction workers in Nevada, Washoe County could be a major supplier of construction workers for the proposed railroad.

3.11 (4171)

<u>Comment</u> – 3 comments summarized

Commenters stated that Section 5.3.2.10.2 should include a radiological health and safety analysis for all shipments under expanded repository scenarios. One commenter stated that the cumulative impacts analysis discusses only potential actions that could have cumulative impacts but there is no analysis of the actual impacts. Commenters asked how much waste DOE could actually transport to Yucca Mountain, including waste from reactors that are not currently built. DOE should estimate the shipments and assess the impacts, particularly in relation to transportation and radiological risk.

Response

DOE added clarifying language to Sections 5.2.2.10.2 and 5.3.2.10.2 of the Rail Alignment discussing the radiological impacts to health and safety for shipments under expanded repository scenarios. DOE added consideration of the effects the GNEP Program could have on the total number of shipments in Nevada. DOE has not quantified the potential effects of new reactors in its cumulative impacts analysis because certain factors are unknown, such as how many new reactors would receive licenses, complete construction, and begin operations; whether spent nuclear fuel would be recycled; and the nature of the waste forms that would require disposal.

3.11 (4172)

<u>Comment</u> – 3 comments summarized

Commenters cited Section 5.2.2.2.2 of the Rail Alignment EIS and stated that the assertion that "...cumulative impacts related to land use conflicts would be small" is absolutely wrong and based on incomplete and erroneous information and analyses.

Commenters stated that DOE must conduct a new analysis using an appropriate region of influence and accurate descriptions of affected features. Other commenters suggested that "the region of influence for impacts to land use must be expanded to include the entirety of grazing allotments, private parcels and grazing related water-based water sources potentially directly or indirectly impacted."

Response

Section 5.1.1 of the Rail Alignment EIS describes the DOE approach to defining the regions of influence for cumulative impacts analysis. DOE evaluated land use and ownership in the construction right-of-way to characterize direct impacts to land that DOE would access. Indirect impacts from the rail line outside the construction right-of-way would affect current grazing practices on allotments, particularly where the rail line acted as a barrier and isolated a portion of land. DOE revised Sections 5.2.2.2 and 5.3.2.2.2 of the EIS to acknowledge impacts associated with potential fragmentation of grazing allotments. The Department would work with affected permittees to mitigate adverse impacts to land inside and outside the construction right-of-way. DOE also revised Chapter 7 of the EIS to describe how it would work with affected permittees and the BLM to develop Interim Grazing Management Plans and Allotment Management Plans and could include compensation or range improvements for direct loss of crops, pastures, rangelands, or reductions in animal unit months.

3.11 (4174)

<u>**Comment**</u> – 4 comments summarized

Commenters suggested that DOE recognize potential cumulative impacts of the planned Crater Flat development, which could spur economic development in Nye County.

Response

DOE is committed to working with Nye County to assist the county in adopting DOE's proposed construction camp number 12 in Crater Flat for future use by the county. DOE added clarifying language to Section 5.2.1.3.5 of the Rail Alignment EIS on the potential spur to economic development in Nye

County. DOE also added clarifying language to Sections 5.2.1.3.5, 5.2.2.2.3, and 5.2.2.9 of the EIS on the change in ownership of land from the BLM to Nye County. Finally, DOE added clarifying language to Section 5.2.2.9 on possible new employment.

3.11 (4176)

<u>Comment</u> – 2 comments summarized

Commenters stated that "DOE did not make an attempt to ascertain the future development plans of the Timbisha Shoshone to include in this analysis." The commenters suggested that DOE revise the text to include "a systematic analysis of the cumulative impacts from this project on Timbisha Shoshone Trust Land." They also suggested that the text should be comparable to Rail Alignment EIS Section 5.3.1.2.4 on the Walker River Paiute Reservation.

Response

On several occasions, DOE has asked the Timbisha Shoshone Tribe for information on current economic development plans for the Timbisha Shoshone Trust Lands near Scottys Junction. At this time, DOE has not identified any such plans but anticipates that the Tribe will develop and implement economic plans for these lands. The *Final Legislative Environmental Impact Statement for the Timbisha Shoshone Homeland* (DIRS 154121-DOI 2000, all) stated that expected development of the Trust Lands would include a service station/convenience store, a gift/souvenir shop, and single-family detached housing units. DOE modified Section 3.2.9.1 of the Rail Alignment EIS to reflect the possibility of these plans. Based on the possibilities described in the Final Legislative EIS, there does not appear to be a significant cumulative impact from the rail line on economic plans for the Trust Lands.

3.11 (4177)

Comment - 2 comments summarized

Commenters stated that the discussions of cumulative effects lack details in relation to actions at the Nevada Test and Training Range; from combined groundwater withdrawals for the repository, new wells for the Caliente rail alignment, the Nevada Test Site, and the Test and Training Range; and from conflicts from mineral and energy development along the Caliente rail alignment. Commenters suggested the Rail Alignment EIS provide more detailed analyses of cumulative effects associated with Nevada Test and Training Range actions that could affect the boundary, combined groundwater withdrawals, and land use conflicts; as an alternative, the EIS should state why the existing analyses are bounding.

Commenters noted that the Caliente rail alignment borders a portion of the northern boundary and the entire western boundary of the Nevada Test and Training Range. They stated that multiple continuing and anticipated new actions at the Test and Training Range could contribute to cumulative impacts for the rail line, especially in relation to the boundary. Commenters stated that Section 5.2.2.6 of the EIS considers the combined impact from rail line construction and the Nevada Test Site, but there is no environmental assessment to consider the combined environmental impacts from the sites and activities mentioned above. In relation to mineral and energy development conflicts, the EIS provides no basis to support the conclusion in Section 5.2.2.3 that related impacts would be small.

Response

DOE revised Chapter 5 of the Rail Alignment EIS to clarify actions at the Nevada Test and Training Range, groundwater withdrawals for the repository, and new wells for the Caliente rail alignment, the Nevada Test Site, and the Test and Training Range. All existing and foreseeable projects would be subject to regulatory requirements and BLM policies and plans related to energy and mineral development. As discussed in Section 5.2.2.2.3, potential conflicts of the proposed railroad with energy and mineral development would be small to moderate and would occur in localized areas, and DOE would mitigate the effects of such conflicts through the existing regulatory framework and BLM policies and plans.

The U.S. Air Force agreed to be a cooperating agency in the preparation of the Rail Alignment EIS because of Air Force jurisdiction over airspace and land on the Test and Training Range that one or more of the alternative segments would affect. DOE coordinates and at times obtains approval from the responsible armed service branch when DOE actions could encroach on U.S. Department of Defense land and affect military operations. Although DOE has decided not to pursue alternative segments that would enter the Test and Training Range, the Department is coordinating with the Air Force (for example, on the nature, extent, and location of Air Force overflights) to minimize impacts of the proposed railroad to Air Force operations. DOE and the Air Force have not identified cumulative impacts associated with the Nevada Test and Training Range boundary.

3.12 Impact Mitigation and Compensation

3.12 (139)

Comment - 102 comments summarized

Many commenters expressed concern that rather than committing to implementing mitigative measures, DOE states that it will "consider" them and that the Rail Alignment EIS lacks specific committed mitigation measures and sufficient details on actual goals or methods. Commenters asserted that DOE does not identify appropriate long-term monitoring mechanisms to deal with the uncertainty of resource impacts. Moreover, some commenters questioned who would be responsible for the monitoring and enforcement of established programs and suggested that this responsibility should be the purview of an independent entity rather than DOE. Commenters suggested that DOE expand the mitigation section of the Rail Alignment EIS to outline the step-by-step process that would occur between issuance of the Record of Decision and construction of the railroad to ensure the identification and implementation of adequate mitigation measures. They contended that DOE must (1) identify and describe reasonable measures to mitigate impacts (consistent with the five means of mitigation identified by CEQ regulations (40 CFR 1508.20); (2) evaluate the environmental impacts of implementing alternative measures identified to mitigate rail construction and operational impacts; and (3) evaluate the expected benefit that implementation of alternative mitigation measures would have in relation to avoiding, minimizing, rectifying, reducing, or compensating impacts.

Commenters identified areas of concern and, in some cases, provided specific mitigation measures for impacts. Areas of concern covered a range of categories, including proposed measures to prevent, minimize, or compensate impacts to the ranching community focused on the loss of grazing and water sources, damage and displacement of capital improvements, displacement of water rights and groundwater, and spread of noxious weeds, and provided appeals for allotment-specific mitigations. Commenters provided lists of proposed measures to prevent, minimize, and compensate for impacts to individuals and local communities including radiation risk, community services, fire prevention and suppression, road closures, air emissions, noise and vibration, aesthetics, cultural resources, land acquisition, and use of industry standards for the construction and operations of the railroad.

Response

DOE recognizes that construction and operation of the proposed railroad could directly affect a number of parties, as discussed in Chapter 4 of the Rail Alignment EIS. Chapter 7 of the EIS sets forth the policy and lays out the steps DOE would follow in the longer-term mitigation process to develop, jointly with directly affected parties, measures that could be implemented and their effectiveness monitored.

Specifically, revisions throughout Chapter 7 provide details on the DOE mitigation process that demonstrate the Department's intent to consult with directly affected parties, acknowledge the mitigation process is ongoing, and describes the use of an adaptive management approach to account for changes, estimate impacts, and adjust mitigation measures.

As explained in new section 7.1.1 of the Rail Alignment EIS, DOE proposes to charter one or more Mitigation Advisory Boards, each to be lead by the governmental entities through which the rail line would pass. The mission of the board(s) would be to provide independent advice and recommendations to assist DOE, the BLM, and the STB in developing, detailing, and implementing and monitoring best management practices and mitigation measures during construction and operation of the proposed. DOE would also invite the BLM and the STB to serve as ex-officio members. In the future, DOE determine the exact structure of the Mitigation Advisory Board(s) and the processes under which they would operate.

DOE considered comments proposing activities to mitigate impacts as proposed best management practices or mitigation measures. Best management practices are practices commonly used throughout the construction and railroad industries that DOE would implement as part of the Proposed Action to facilitate compliance with applicable requirements that provide means of preventing or minimizing identified direct impacts. DOE regards mitigation measures as activities or actions that would be above and beyond compliance with statutory and regulatory requirements and the application of best management practices. Chapter 7 of the Rail Alignment EIS provides for the application of best management practices and mitigation measures to areas where DOE has identified adverse impacts and analysis has indicated that best management practices or mitigation measures have the potential to reduce those impacts. Chapter 7 does not discuss mitigations for areas for which analyses have not identified a potential for impacts.

DOE expanded its range of preliminary best management practices and mitigation measures (see revised tables in Chapter 7) to include measures suggested by commenters, offering alternative best management practices and mitigation measures to those proposed, and additional best management practices and measures from the STB Decision Document for the Dakota, Minnesota and Eastern Railroad EIS and BLM resource management plans. DOE anticipates that the design will continue to evolve, creating additional opportunities for mitigation and potentially eliminating the need for some best management practices and mitigation measures currently under consideration.

With these changes, DOE has identified a range of reasonable best management practices and mitigation measures for impacts presented in the Rail Alignment EIS, and an on-going process committed to applying mitigation in accordance with CEQ regulations (40 CFR 1508.20) by avoiding, minimizing, rectifying, reducing, or compensating for impacts.

3.12 (4186)

<u>Comment</u> – 16 comments summarized

Several comments on mitigation measures would fully or partially require actions outside of DOE or cooperating agency jurisdictions; these comments are addressed in this summary comment and the its response.

Commenters suggested methods to offset disturbances to grazing systems and livestock operations by DOE purchasing unused water rights from right-holders and allowing permittees to use the wells rather than closing or abandoning them. A commenter suggested using the wells for groundwater monitoring locations or as a source of water for firefighting.

Many commenters encouraged DOE to minimize road closures and suggested modifications to public highways that would reduce impacts from the construction and operation of the railroad.

Commenters called for mitigation measures by which DOE would place notification signs that showed the location of trains, and would notify communities, emergency response organizations, and schools of train schedules. Commenters expressed interest in providing input for the coordination of train movements.

Commenters proposed measures to help ensure that employment opportunities and increased purchases of goods and services would benefit local communities.

Commenters expressed concern about the capability of local emergency management systems to respond to an event that involved radioactive material and for DOE to guarantee to bear the full cost of cleanup activities.

Commenters stated that negative perceptions of the railroad would result in substantial adverse impacts to their communities and proposed mitigation measures to compensate for, offset, and minimize stigma or perceived risk impacts on their communities. Specifically, they expressed concerns that the rail line would disturb their quality of life and rural lifestyle, strain community cohesion, tax government programs, create political divisiveness, influence population growth, deter tourism, hinder economic development, decrease property values, increase demands on community services, and stop mining activities.

Response

DOE cannot commit to some of the proposed mitigation measures for impacts that concern water rights, road closures, and notifications of train movements because these matters are not under the sole jurisdiction of DOE. In some cases, the Department could hold discussions with the appropriate agencies to assist in the consideration and negotiation of support and mitigation measures.

How DOE procures goods and services, hires the workforce, provides emergency response support, and compensates for the clean up after an accident is established by federal policy with which DOE must comply. Mitigation measures beyond policy requirements would be considered during implementation of the policy.

Perceived risk and stigma: DOE did not attempt to include any potential mitigation measures for impacts from risk perceptions or stigma. Chapter 7 limits the application of best management practices and mitigation measures to areas where DOE has identified adverse impacts and analyses have indicated that best management practices or mitigation measures have the potential to reduce those impacts.

Water rights: If the water rights holder was allowed to sell these rights, DOE would consider purchasing them. Prior to the abandonment of groundwater wells, the Department would investigate whether there are other parties (for example, ranchers, the BLM, county governmental agencies) interested in using the wells to obtain water or monitor groundwater conditions, and DOE would work with those parties to ensure they could use the wells upon completion of the railroad. Those interested parties would be responsible for following Nevada laws to obtain water rights and, if necessary, would also be responsible for obtaining a right-of-way from the BLM. Because the Department anticipates that the majority of the water rights it would obtain would be for the specific and temporary purpose of constructing the rail line, it would not be possible to transfer those rights to other interested parties upon completion of construction.

Roads: DOE is committed to maintaining access to existing private and public roads across the proposed rail alignment. With the exception of short-term road closures during the construction period, the railroad would not affect access to public and private land. DOE recognizes that the BLM, in consultation with counties, would make the final decision regarding non-county or state roads and crossings on public land

as a part of the anticipated right-of-way grant for the proposed railroad construction and operations. DOE also recognizes that the affected counties and the state would make the final decision regarding county and state public roads on public and private land. DOE would embrace the following policies during rail line design and construction:

- DOE would not unilaterally close roads and public access would be preserved to the greatest extent practicable.
- DOE would work cooperatively with the BLM, counties, state, and private road owners to determine individual crossing status and needs. All crossings would be designed and constructed in compliance with accepted industry standards.

Train movements: As required by Section 180(b) of the NWPA, all shipments to the repository would comply with NRC regulations on advance notification to state governments. Currently, NRC regulations (10 CFR Part 73) provide for written notice to governors or their designees in advance of irradiated reactor fuel shipments through their states. Federal regulations allow states to release certain advance information to local officials on a need-to-know basis. In 1998, DOE requested that the NRC amend their regulations to permit notification to tribal authorities in addition to states. The NRC issued an Advance Notice of Proposed Rulemaking regarding tribal notification on December 21, 1999 (64 *FR* 71331). DOE's approach for shipment pre-notification is further detailed in DOE M 460.2-1 and articulated in the Yucca Mountain FEIS, Appendix M, page 6. Notification of shipments to a repository would be in accordance with NRC regulations in effect at that time.

Procurement of goods and services and hiring practices: DOE has made no decisions on the hiring of the workforce or procurement of material or services to support the construction and operation of the railroad. Final determinations would be subject to federal Equal Employment Opportunity hiring practices and procurement policies.

Emergency response and cleanup costs: The NWPA requires DOE to provide technical assistance and funds to states and American Indian tribes for training public safety officials of appropriate units of local governments through whose jurisdictions the Department would transport spent nuclear fuel or high-level radioactive waste. Section 180(c) of the Act mandates that training must cover procedures for safe routine and emergency response situations. Section 180(c) encompasses all modes of transportation; funding would come from the Nuclear Waste Fund. Once implemented, this program would provide funding and technical assistance to train firefighters, law enforcement officers, and other public safety officials in preparation for repository shipments through their jurisdictions.

DOE published four notices in the *Federal Register* to solicit public comments on its approach to the implementation of Section 180(c) of the NWPA. The Department responded to the comments in subsequent notices through April 1998. In 2004, DOE renewed efforts to develop the Section 180(c) policy and implementation procedures. The revisitation of Section 180(c) implementation began with the formation of a Topic Group of the Transportation External Coordination Working Group in April 2004. DOE worked with State Regional Groups and the Tribal Issues Topic Group of the Transportation External Coordination Working Group members wrote issue papers on specific Section 180(c) topics such as allowable activities, funding allocation method, timing and eligibility, and definitions. From these materials, DOE developed a draft policy that it issued in a *Federal Register* notice on July 23, 2007 (72 *FR* 40139) to request additional comments from directly affected parties and the public. DOE plans to conduct a pilot test of the program and then issue another draft Section 180(c) policy.

Under the proposed policy, DOE would make two grants available to eligible state and tribal governments. An initial assessment and planning grant would be available about 4 years before shipments through a jurisdiction began. Once the state or tribe completed the assessment and planning grant activities, it would be eligible for the training grant for every year shipments were planned through its jurisdiction.

The Price-Anderson Act establishes a system of financial protection (compensation for damages, loss, or injury suffered) for the public in a nuclear accident. DOE, the owners of the materials, and carriers would share cleanup responsibility under the Motor Carrier Act of 1980 and implementing regulations (49 CFR Part 387).

In the Yucca Mountain FEIS, DOE evaluated perceived risk and stigma associated with construction and operation of a repository at Yucca Mountain and from the transportation of spent nuclear fuel and high-level radioactive waste. DOE concluded that, although it could measure public perception of the repository and transportation, there is no valid method to translate these perceptions into quantifiable impacts.

While stigmatization would be possible, it would not be inevitable or numerically predictable. It would probably be an aftereffect of unpredictable future events, such as serious accidents, which might not occur. As a consequence, DOE did not attempt to include mitigation measures for impacts from risk perceptions or stigma.

DOE will continue to work with local communities and tribal nations to understand and mitigate potential negative perceptions of its operations. These activities include the use of an adaptive management approach to account for changes, estimate impacts, and make adjustments to mitigation measures for actual (rather than perceived) risks from the construction and operation of a railroad.

3.12.1 Impacts Mitigation

See 3.12 (139) and (4186).

3.12.2 Impacts Compensation

See 3.12 (139) and (4186).

3.13 DOE Credibility

3.14 Comments Outside the Scope of the Rail Alignment EIS

3.14 (2454)

<u>Comment</u> - RRR000072 / 0003

The commenter contends that the bottom line of the railroad is money, and cited a newspaper article claiming that DOE has \$109 million to spend on legal fees. The commenter stated that a small business only has a couple of thousand dollars to spend on legal fees fighting this project and that small businesses cannot make a big enough noise to be heard, like Las Vegas.

DOE notes the commenter's concern, but it is outside the scope of the Rail Alignment EIS.

3.14 (3832)

<u>Comment</u> - RRR000549 / 0010

The rail DEIS does not fully evaluate repository shipments into Nevada from California or the impacts to northern Nevada.

Response

The scope of the Rail Alignment EIS does not extend to California or the existing rail lines through northern Nevada, except the Union Pacific Hazen Branchline described in Section 2.2.1.2.1. However, Sections 6.3 and 6.4 of the Repository SEIS address potential impacts of transporting spent nuclear fuel and high-level radioactive waste from generator facilities to the proposed repository. Appendix G of the Repository SEIS discusses the methods and data DOE used for these analyses and contains state-level maps of representative routes. The Repository SEIS adequately analyzes environmental impacts that could result from shipments from California to Nevada as part of national transportation.

3.15 Presentation

3.15 (152)

<u>**Comment**</u> – 3 comments summarized

Draft Rail Alignment EIS, page 2-95, Figure 2-45: The figure shows the Caliente-Indian Cove Staging Yard option in the City of Caliente. It shows incorrect city limits. The Caliente-Indian Cove Staging Yard option is not within the Caliente city limits but is in unincorporated Lincoln County.

DOE should correct Figure 2-45 (and similar figures in the EIS) showing the location of the Caliente city limits. It should also correct the description of existing conditions (that is, land use) and environmental impacts (that is, land use and socioeconomics) in relation to the location of the Indian Cove option to reflect the location of the site outside the Caliente city limits.

Response

DOE revised Figure 2-45 in the Rail Alignment EIS to reflect the correct City of Caliente boundary.

3.15 (833)

<u>Comment</u> - RRR000641 / 0015

In Section 4.2.5.2.3.1 on page 4-143 of the Rail Alignment DEIS the first sentence of this section (which describes the Caliente City Hall as simply the "former Union Pacific Railroad Caliente Station") does accurately describe the subject building and leaves a possible impression that it might be unused or vacant. This is incorrect. The first sentence of Section 4.2.5.2.3.1 should be revised in the FEIS as follows, "The Interchange Yard on the Caliente alternative segment would be in the City of Caliente, directly across from the City of Caliente administrative complex which houses City offices, a public library, Community College of Southern Nevada classrooms, meeting rooms and a senior center."

Response

DOE revised the sentence in Section 4.2.5.2.3.1 (and the same sentence in Section F.3.2.1.1) of the Rail Alignment EIS as suggested by the commenter.

3.15 (1060)

<u>Comment</u> - RRR000617 / 0047

Page 2-1, Section 2.1: The description of the Proposed Action here is inappropriately narrow and the resultant analysis of impacts of the Proposed Action in chapters 4 and 5 and the identification and evaluation of mitigation in Chapter 7 of the DEIS are insufficient.

The description of the Proposed Action in the EIS should be expanded from that contained in the second paragraph of Page 2-1 to include the following: "Under the Proposed Action ... DOE would determine a rail alignment within the Caliente rail corridor; decide where to construct certain proposed railroad operations support facilities; decide whether to restrict use of the rail line to DOE trains, or whether to allow common carriers to operate over the line; determine what mitigation measures to implement and would construct, operate, and potentially abandon a railroad for the shipment of" The analysis of potential direct, indirect and cumulative impacts in chapters 4 and 5 and identification and evaluation of reasonable mitigation measures in Chapter 7 of the EIS should address the full extent of decisions to be made by DOE as defined by said expanded Proposed Action.

Response

Section 2.1 of the Rail Alignment EIS provides a brief overview of the Proposed Action; Section 2.2 provides the detail suggested by the commenter. Section 1.6 states that DOE will use the EIS to decide whether to construct and operate the proposed railroad and lists the other decisions the EIS will inform. The EIS is consistent with the requirements of NEPA and the NWPA. The level of information and analyses, the analytical methods and approaches DOE used to estimate conservatively the reasonably foreseeable impacts, and the use of bounding assumptions to address incomplete or unavailable information or uncertainties provide an assessment of environmental impacts consistent with applicable requirements.

3.15 (1541)

<u>Comment</u> - RRR000656 / 0087

The Rail Alignment EIS discusses 50 years of transportation activities and the Rail Corridor SEIS discusses 34 years of transportation. The analyses should be consistent.

Response

DOE updated the occupational and public health and safety analysis in the Nevada Rail Corridor SEIS (see Sections 3.2.6, 5.2.6, 5.3.6, and 5.4.6 of the SEIS) to be consistent with the 50-year operating period analyzed in the Rail Alignment EIS, including changes in the total number of recordable cases, lost workdays, and fatalities.

3.15 (1985)

<u>Comment</u> - RRR000682 / 0022 Page S-38, Table S-5 needs to include a comparison of costs.

Response

The last paragraph in Section S.3.2 of the Summary for the Nevada Rail Corridor SEIS and the Rail Alignment EIS contains a construction cost comparison for the Caliente and Mina rail alignments.

3.15 (1994)

<u>Comment</u> - RRR000656 / 0105

Table 5-4, page 5-58 says combined repository and Nevada railroad impacts related to health and safety are "Not applicable." The sum of the impacts should be included in this table, even if the sum is the same as the impacts estimated for the repository only.

DOE revised Table 5-6 in the Rail Alignment EIS to include a summary total of the impacts, including totals for totals for lost workday accidents and fatalities for the rail line and the repository.

3.15 (2315)

<u>Comment</u> - RRR000619 / 0006

Section 5.2.6.2 of the Draft Rail Corridor SEIS, page 5-21, references Section 2.2.3. It appears that the appropriate reference should be Section 3.2.6.

Response

DOE changed the reference to Section 3.2.6.

3.15 (2451)

<u>Comment</u> - RRR000664 / 0020

The Rail Alignment Draft EIS provides an incomplete and inconsistent description of the proposed action. The locations of quarries, staging areas, man camps, and other facilities are only shown on sketch maps, which do not show the exact location of the facility, or the existing terrain, vegetation, or other land features.

Response

NEPA evaluations are intended to be performed early in the process at the conceptual design phase(s) of the project. DOE used the best available information to prepare the Rail Alignment EIS. This information is sufficient to perform an adequate and meaningful evaluation for the project as it is defined. DOE would evaluate potential future changes under its NEPA implementing regulations and guidance and would determine the need for additional evaluations under those processes and mechanisms.

The Map Atlases for the Caliente and Mina rail alignments (DIRS 185492-DOE 2008, all; DIRS 185510-DOE, 2008, all) show the locations of features associated with the proposed railroad, including quarries, construction camps, and facilities, in greater detail than the figures in the EIS. The Map Atlases overlay project features on more than 1,000 aerial photos at a scale of 1 to 5,000. Because of their large volumes, DOE did not include the Map Atlases as part of the EIS, but made them a reference. DOE used the greater level of resolution in the Map Atlases and field work to develop the alternatives and conduct the analyses in the EIS.

3.15 (3199)

<u>Comment</u> - RRR000671 / 0050

Page 5-4, Section 5 5.2.2.15, Environmental Justice: The table of contents contained in Volume I indicates that Environmental Justice can be found in section 5.2.12 which appears to conflict with the section contained on Page 5-45. The numbering should be corrected to coincide with the proper sections.

Response

The Table of Contents for the Draft Rail Corridor SEIS was correct. Section 5.2.12 of the Draft SEIS discussed environmental justice for the Carlin rail corridor and began on page 5-27. Section 5.3.12 discussed environmental justice for the Jean rail corridor and began on page 5-45.

3.16 General Participation in the NEPA Process

3.16 (2653)

<u>Comment</u> - RRR000568 / 0001

If there are any planned activities which will disturb or destroy geodetic control monuments, NGS [National Geodetic Survey] requires notification not less than 90 days in advance of such activities in order to plan for their relocation. NGS recommends that funding for this project includes the cost of any required relocation(s).

Response

Implementation of the Proposed Action, if approved, could affect geodetic control monuments in areas construction and operation of the railroad would disturb. DOE revised Chapter 7 of the Rail Alignment EIS to state that, before ground disturbing activities for the construction and operation of the railroad, DOE would identify geodetic control monuments in areas it could disturb. If there was a need to relocate a geodetic control monument, DOE would notify the Office of the Director of the National Oceanic and Atmospheric Administration, National Geodetic Survey no less than 90 days in advance of any planned activities that could disturb or destroy the monument. Chapter 7 also states that if any identified geodetic control monuments would require relocation, DOE would consult with the National Oceanic and Atmospheric Administration to develop a mitigation measure that could include compensation for the cost of monument relocation.

COMMENT RESPONSE DOCUMENT

(CRD) INDEXES

LIST OF TABLES

Table <u>Number</u>

- CR-1 Index to Comments by Organizations
- CR-2 Index to Comments by Commenter Name
- CR-3 Cross Reference from Comments/Responses to Commenter(s) and Original Comments

Commenting Organization	Comment Document Number	Location of Comments/Responses
Alliance for Nuclear Accountability		
Meyer, Alfred	RRR000330	1.6.3 (73), 1.6.3.2 (176), 1.7.8 (268), 1.4.4 (29)
	RRR000726	1.1.3 (15), 1.9 (75), 1.3.2 (4167), 3.4.4 (36), 1.3.3 (4168), 1.6.3.2 (176), 1.6.2.5 (142), 1.11 (4193)
Alliance for Nuclear Responsibility		
Becker, Rochelle	RRR000603	1.2 (9), 1.2.1 (55), 1.6.2 (62), 1.2.1 (156), 1.6.2.7 (3014), 1.6.2 (3015), 1.7.14 (4198), 1.6.2.1 (61), 1.3.3 (4168), 1.2 (13)
Weisman, David	RRR000089	1.2 (12), 1.2.1 (156), 1.6.2.7 (431), 1.6.2.5 (144)
	RRR000120	1.2.1 (156), 1.6.2.7 (3014), 1.6.2 (3015)
Alphatech, Inc.		
Curtis, Steven P.	RRR000137	1.1.4 (16)
Beyond Nuclear		
Kamps, Kevin J.	RRR000237	1.6.2.1 (61)
	RRR000325	1.2 (9), 1.11 (4191), 1.6.3.2 (1556), 1.6.3 (1557), 1.7.15 (1593), 1.13 (28), 1.3.2 (4167), 1.1.3 (15), 1.9 (1561)
	RRR000357	1.6.2.1 (61)
	RRR000241	1.2 (9), 1.11 (4191), 1.6.3.2 (2600), 1.6.3 (74), 1.3.2 (4167), 1.1.3 (15), 1.7.8 (2604), 1.2.6 (27), 1.6.2 (52)
	RRR000260	1.4.6 (31)
Big Pine Paiute Tribe of the Owens Valley		
Moose, Virgil	RRR000675	1.7.18.2 (2725), 1.2 (9), 1.2 (13), 1.3.2 (4167), 1.7.3 (2804), 1.7.4 (2846), 1.7.4 (2850), 1.7.18.2 (2854), 1.7.18.1 (2855), 1.7.6 (4086), 1.7.6 (4179), 1.6.3.2 (175), 1.7.13 (171), 1.6.5 (58), 1.2 (111), 1.4.4 (29), 2.4.1 (41), 3.7.14.1 (4036), 2.7.7 (2319), 3.7.6 (2479), 3.7.14.2 (2489), 1.6.2.7 (2490), 3.7.14.2 (2492), 3.4.7 (2565), 1.1.3 (15), 1.6.3.2 (176)

Table CR-1Index to Comments by Organizations

Commenting Organization	Comment Document Number	Location of Comments/Responses
CSG Midwest		
Beetem, Jane	RRR000655	1.2.3 (25), 1.6.2.5 (155), 1.6.3.2 (176), 1.7.14.1 (3008), 1.7.14.1 (2962), 1.7.14.1 (2961), 1.3.3 (2960), 1.6.2.5 (2907), 1.6.2 (2906), 1.3.1 (2905), 1.6.2.5 (141), 1.6.2.2 (2837), 1.6.2.5 (2836), 1.6.2.5 (2835)
Caliente BLM Field Office		
Clementsen, Ron	RRR000017	3.2.4.1 (629)
California Energy Commission		
Boyd, James D.	RRR000642	1.2.1 (156), 1.2 (12), 1.4.1 (49), 1.7.14.1 (3348), 1.7.14.1 (3615), 1.7.14 (3616), 1.7.14 (3661), 1.7.14 (3662), 1.12.1 (3663), 1.6.2 (51), 1.11 (3703), 1.6.3.2 (176), 1.7.14.1 (3706), 1.7.14.1 (3744), 1.7.14.1 (3746), 1.7.14.1 (3747), 1.7.4 (3749), 1.12.1 (84), 1.6.3 (73), 1.6.3 (74), 1.3.3 (4168), 1.7.7 (4230)
California Valley Miwok Tribe		
Burley, Silvia	RRR000751	1.1.3 (15), 1.3.2 (4167)
Californians for Safe, Clean, Efficient Nuclear Power		
Walker, Daniel	RRR000176	1.1.4 (16), 2.1.4 (71), 3.4 (3589), 1.12.1 (4105), 3.4.3 (1), 1.7.7 (3590), 3.6 (120), 1.4.5 (30)
Center for Disease Control and Prevention, Dept. of Health and Human Services		
Dannenberg, Andrew L	RRR000452	3.7.8 (830)
	RRR000453	2.7.8 (936)
	RRR000454	1.7.8 (942)
Center for Safe Energy		
Macy, Francis U.	RRR000696	1.1.3 (15)
Churchill County Commissioners		
Washburn, Gwen	RRR000523	1.2.1 (72), 1.2 (60), 3.12 (139), 3.7.7 (81), 3.11 (4170), 1.7.14 (4192), 3.4.6 (99), 1.7.14.1 (2773), 1.6.2.2 (2772), 2.4.1 (1995), 2.4.2 (145), 2.6 (1946), 2.4.1 (151), 2.7.1 (1841), 2.7.1 (1839), 2.7.4 (2699), 2.7.4 (54), 2.7.4 (2697),

Commenting Organization	Comment Document Number	Location of Comments/Responses
	Indiniber	2.7.4 (2696), 2.7.4 (2695), 2.7.4 (2694), 2.7.6 (2693), 2.7.8 (2692), 2.7.7 (4175), 2.2.5 (2690), 2.7.7 (2689), 2.7.7 (4173), 2.7.7 (4164), 2.11 (1701), 2.7.4 (2623), 2.7.5 (2622), 3.2.1 (47), 3.3.2 (161), 3.7.1 (116), 3.7.11 (2617), 3.7.7 (63), 3.11 (2614), 3.7.7 (2613), 3.2.5 (2612), 3.11 (1528), 3.11 (1526), 3.11 (1525), 3.11 (1523), 3.11 (4171), 2.2 (1980), 2.7.1 (1724), 2.7.7 (4164), 2.11 (4182), 2.15 (147), 1.7.14 (1986), 3.15 (1985), 3.1.2 (2), 3.4.5 (1983), 3.6.4 (1982), 2.4.1 (151), 2.4.6 (1913), 3.4.3 (1912), 2.7.1 (1720), 2.7.1 (1910), 2.7.4 (1908),
City of Caliente		2.15 (1879)
Acklin, Tom	RRR000115	3.4.1 (23), 3.4.1 (22), 3.4.1 (38), 3.12 (139), 3.4.1 (602), 1.1.4 (16)
Larson, Keith	RRR000016	3.12 (139), 3.12 (4186)
Moore, Ashley	RRR000118	1.1.4 (16), 3.4.1 (23), 3.3.1 (169), 3.4.1 (22), 3.4.1 (38), 3.12 (139)
Phillips, Kevin	RRR000012	1.1.4 (16), 1.4.6 (31), 3.4.3 (1), 3.4.1 (23), 3.3.1 (169), 3.4.1 (3395), 3.4.1 (22), 3.4.1 (38), 3.12 (139)
	RRR000116	1.1.4 (16), 1.4.6 (31), 3.4.3 (1), 3.4.1 (23), 3.3.1 (169), 3.4.1 (3395), 3.4.1 (22), 3.4.1 (38), 3.12 (139)
	RRR000641	3.2.3 (890), 3.2.1 (47), 1.2.1 (55), 1.4.4 (29), 2.4.1 (41), 3.12 (139), 3.4.6 (911), 3.3.2 (161), 3.4.3 (914), 3.3.1 (826), 3.4.1 (1071), 3.7.8 (831), 3.3.1 (169), 3.15 (833), 3.7.9 (834), 3.7.9 (835), 3.7.9 (836), 3.6 (177)
City of Henderson Schroder, Gerri	RRR000269	1.1.3 (15), 1.6.3.2 (176), 1.3.1 (3828)
City of Las Vegas		
Goodman, Oscar	RRR000266	1.1.3 (15)
City of Las Vegas, Councilman		
Ross, Steve	RRR000268	1.1.3 (15), 1.3.1 (4169)
City of Reno		
Cashell, Robert A.	RRR000314	1.1.3 (15), 3.4.2 (669)
	RRR000680	1.2 (9), 1.2 (4), 1.1.3 (15), 1.2 (12), 3.4.2 (2040), 3.4.2 (2067), 1.7.14.2 (4180),

Commenting Organization	Comment Document Number	Location of Comments/Responses
		1.7.14.2 (2072), 1.7.14 (2074), 1.2.6 (27)
Clark County		
Brager, Susan	RRR000270	1.1.3 (15), 1.7.15 (4056), 1.3.1 (3829)
Clark County Nuclear Waste Program		
Navis, Irene	RRR000280	1.2.1 (72), 1.2.2 (50), 1.3.1 (344), 1.7.14 (4192), 1.6.2.5 (163), 1.6.5 (58), 1.4.5 (30), 1.3.3 (4168), 1.11 (4191), 1.6.5 (56), 1.13 (28)
Clark County, Nevada, Dept. of Comprehensive Planning		
Navis, Irene	RRR000681	1.2.6 (27), 1.13 (28), 1.6.3 (70), 1.11 (3006), 1.11 (3007), 1.11 (3037), 1.7.3 (3038), 1.7.7 (3039), 1.7.15 (3040), 1.7.15 (3084), 1.7.16 (4233), 1.8.1 (33), 3.4.2 (42), 1.7.14 (4192), 1.6.3.2 (176), 1.6.2 (51), 3.12 (139), 3.11 (4177), 3.2.1 (47), 3.7.8 (2337), 1.7.16 (2367), 3.7.8 (2369), 1.7.14 (2371), 3.7.8 (2398), 3.7.8 (2399), 3.6.4 (2400), 3.4.3 (2402), 3.6 (124), 1.7.4 (2450), 1.11 (2452), 1.11 (2453), 1.6.3 (74), 1.7.2 (2456), 3.7.2 (2531), 3.7.9 (2532), 1.12 (2533), 1.2.1 (72), 1.2 (4), 1.7.8 (3041), 1.7.2 (3042), 1.7.8 (3043)
Coalition 21		
Tanner, John	RRR000138	3.1.4 (69)
Colvin & Sons, LLC		
Colvin, Tom	RRR000665	3.2 (11), 3.12 (139), 3.2.4.1 (17), 3.7.1 (4185)
Commonwealth of Virginia, Dept. of Environmental Quality		
Irons, Ellie L.	RRR000679	1.7.14.1 (2794), 1.1.4 (16)
Concern Citizens of Amargosa Valley		

Commenting Organization	Comment Document Number	Location of Comments/Responses
Congress of the United States Reid, Harry	RRR000678	1.2.1 (55), 1.6.3.2 (176), 1.6.3 (70), 1.6.3 (73), 3.15 (152), 3.2.1 (47), 3.7.3 (1348), 3.7.4.1 (1349), 3.7.7 (1386), 3.7.7 (1387), 1.7.14 (4198), 1.2 (60), 1.2 (14)
	RRR000290	1.2.1 (113), 1.2 (14), 1.2.1 (55), 1.6.3.2 (176), 1.9 (426), 1.3.3 (427), 3.7.1 (428), 3.2.1 (47)
Consolidated Group of Tribes and Organizations		
Arnold, Richard W.	RRR000101	3.7.14.2 (2640), 3.7.4.1 (3664), 1.4.4 (29), 1.7.14 (4192), 3.7.6 (445), 3.7.7 (48), 3.7.6 (446), 3.7.6 (3666), 3.2.6 (94), 3.7.14.1 (2567), 3.7.14.2 (2568), 3.7.14.2 (2569), 3.7.2 (360), 3.7.14.2 (2571), 1.2 (9), 1.7.18.2 (4053)
	RRR000671	3.7.14.2 (3957), 1.7.4 (3959), 1.6.1 (67), 1.7.14 (4192), 1.3.3 (3963), 3.7.7 (48), 2.7.6 (3966), 1.7.18 (3968), 1.7.7 (4232), 1.3.1 (3971), 1.7.6 (4179), 1.2.6 (27), 2.7.6 (3976), 2.7.6 (4022), 3.7.6 (4026), 3.7.6 (4028), 3.7.14.2 (4032), 2.15 (4034), 2.6 (4035), 3.7.14.2 (4032), 2.15 (4070), 2.7.8 (4071), 2.11 (4181), 2.7.6 (4076), 3.7.14.2 (4081), 3.1.2 (4083), 3.6 (129), 3.7.14.1 (4120), 3.7.14.2 (4123), 3.7.1 (4126), 3.7.13 (168), 3.12 (139), 3.7.5 (3103), 3.7.14.1 (3104), 3.7.6 (3146), 3.7.6 (3147), 3.7.14.2 (2489), 3.7.1 (3152), 3.7.13 (3154), 3.7.6 (3156), 3.7.6 (3158), 3.7.6 (3192), 3.7.1 (3193), 3.11 (4176), 3.11 (3196), 3.7.6 (3198), 3.15 (3199), 3.7.13 (3982), 3.3.3 (3984), 3.3.3 (3985), 3.8 (3986), 3.7.6 (4037), 1.7.18.2 (4038), 1.7.6 (4039), 1.7.18.2 (4040), 1.7.18 (4042), 1.7.1 (4043), 1.7.1 (4044), 1.7.18.2 (4045), 1.7.13 (171), 1.7.6 (4086), 1.12.1 (4088), 1.7.6 (4090), 1.7.18.2 (4091)
Corporation of Newe Sogobia Wells, John	RRR000836	1.3.2 (4167), 3.4.2 (42), 1.4.6 (31), 1.11 (1684), 1.7.6 (1685), 1.7.7 (4231),

Commenting Organization	Comment Document Number	Location of Comments/Responses
		1.3.1 (4169), 3.7.1 (1688), 1.7.16 (1689),
		1.7.8 (1690), 1.7.8 (2321), 3.3.2 (161), 3.6 (120), 2.7.1 (2324), 1.6.3.2 (175), 3.2.4.2 (7), 3.3.2 (2327), 1.7.13 (171)
Council for a Livable World		
Day, Alice T.	RRR000643	1.1.3 (15)
County of Inyo, Yucca Mountain Repository Assessment Office		
Gaffney, Matt	RRR000239	1.7.4 (4188), 1.7.4 (4189), 1.12.1 (84), 1.7.7 (4230), 1.4.1 (49), 1.7.15 (3907), 1.6.2 (62), 1.6.3.2 (176), 1.7.7 (626)
County of Lincoln		
Rowe, Tommy	RRR000019	1.16 (170)
County of San Bernardino, Board of Supervisors		
Mitzelfelt, Brad	RRR000673	1.1.3 (15), 1.2 (4), 1.3.1 (2294), 1.7.14 (4198), 1.6.2.1 (61), 1.3.1 (4169)
D.C. Minerals, Inc.		
Fought, Dale	RRR000814	3.4 (24)
Dia Art Foundation		
Weiss, Jeffrey	RRR000652	3.4.1 (35)
Duckwater Shoshone Tribe		
Millett, Jerry	RRR000693	3.7.6 (4146), 2.7.13 (1485), 2.7.6 (1486), 2.7.6 (1488), 3.7.14.1 (1490), 3.7.14.1 (1492), 3.7.7 (48), 3.7.8 (4224), 3.7.6 (1497), 3.7.13 (168), 3.7.5 (1549), 3.7.6 (1551), 1.3.2 (4167)
Energy Communities Alliance		
Akuthota, Nithin	RRR000326	1.1.4 (16)
Environment America		
Linder, Josh	RRR000328	1.1.3 (15), 1.9 (263), 1.2.6 (27), 1.6.2 (52)
Esmeralda County		
Rannells, Ed	RRR000073	3.1.4 (69), 3.4 (24), 3.7.7 (2793)
	RRR000107	3.4 (24)
Esmeralda County, Board of County Commissioners		
Kirby, William C.	RRR000068	1.1.4 (16), 3.4.6 (98), 3.4.6 (99)

Commenting Organization	Comment Document Number	Location of Comments/Responses
	Tuinder	Comments/Responses
	RRR000235	1.6.3.2 (3338), 3.7.1 (4225), 3.4 (24), 3.4.6 (98), 1.6.2 (3402), 3.4.6 (99)
	RRR000666	1.6.3.2 (176), 3.4 (24), 3.4.6 (98), 1.6.2 (3743), 3.4.6 (99), 3.4.1 (3382), 3.7.6 (3640), 3.7.1 (3679), 3.7.1 (3683), 3.7.7 (3684)
Esmeralda County, Nevada, Board of County Commissioners		
Boland, Nancy	RRR000395	3.7.1 (4225), 3.4 (24)
Eureka County Assessor's Office		
Mears, Michael A.	RRR000669	2.7.1 (128)
Eureka County Board of Commissioners		
Ithurralde, James P.	RRR000664	$\begin{array}{c} 1.2.3 \ (25), 2.4.2 \ (2765), 1.2.1 \ (113), 1.2 \ (9),\\ 3.2 \ (11), 2.2.1 \ (43), 2.7.1 \ (128),\\ 2.4.2 \ (3087), 3.7.1 \ (116), 2.7.7 \ (4164),\\ 2.7.7 \ (4175), 3.7.7 \ (81), 2.7.5 \ (2372),\\ 2.7.5 \ (2401), 3.7.5 \ (148), 3.15 \ (2451),\\ 3.6.2 \ (130), 3.6.2 \ (87), 3.7.1 \ (3052),\\ 3.7.4.2 \ (1125), 3.7.5 \ (1122), 3.7.8 \ (3089),\\ 3.4.4 \ (36), 1.12 \ (4187), 3.12 \ (139),\\ 1.6.2 \ (52), 1.7.14 \ (2461), 1.6.2 \ (164),\\ 1.6.2.1 \ (61), 1.6.2 \ (2467), 1.3.1 \ (4169),\\ 1.8.1 \ (33), 1.6.3 \ (73), 1.11 \ (2392),\\ 2.4.2 \ (2654), 1.7.14 \ (2710), 1.9 \ (2714) \end{array}$
For A Better Nevada		
Phillips, Kevin J. HOME – Healing Ourselves and Mother Earth	RRR000706	1.1.4 (16)
Hadder, John	RRR000046	1.3.2 (4167), 1.2 (10), 3.4.2 (42), 1.3.3 (4168), 1.6.5 (56)
	RRR000737	1.2 (12), 1.2 (9), 1.3.1 (3913), 3.3.2 (1474), 2.2 (1475), 1.6.3.3 (3619), 1.6.3.2 (175), 1.6.3.3 (3620), 1.6.3 (70), 1.11 (4194), 1.2.1 (2387), 1.3.3 (3914), 1.9 (3132), 1.2.1 (113), 1.7.4 (4064), 1.2.1 (72), 1.7.8 (1482), 1.2.6 (27), 1.7.7 (3629), 1.7.7 (2709), 1.9 (4135), 1.9 (4107)
Viereck, Jennifer O.	RRR000061	1.2 (10), 1.7.4 (396), 1.1.3 (15), 1.3.2 (4167)
	RRR000092	1.1.3 (15), 1.7.4 (4050)

Commenting Organization	Comment Document Number	Location of Comments/Responses
	RRR000712	1.7.4 (4188), 1.7.4 (4189), 1.7.7 (2735), 1.7.7 (4231), 1.3.2 (4167), 1.6.3.2 (176), 1.7.12 (134), 1.11 (4193), 1.6.3 (74), 1.7.15 (2807), 1.2.1 (72), 3.4.4 (36), 1.6.2 (44), 1.7.14 (4198), 1.6.2.1 (61), 1.3.3 (2813), 1.2 (12), 1.2 (13)
Hornbeck Law Office		
Hornbeck, David A.	RRR000192	1.4.4 (29), 1.7.16 (4233)
Humboldt River Basin Water Authority		
Hodges, Bennie	RRR000029	1.2 (60), 2.4.1 (41)
Indigenous Law Institute		
Newcomb, Steven	RRR000660	1.3.2 (4167)
Institute for Energy and Environmental Research		
Chalmers, Lois	RRR000676	1.9 (76)
Inyo County, Board of Supervisors		
Bilyeu, Jim	RRR000396	1.7.4 (4188), 1.7.4 (4189), 1.12.1 (84), 1.7.7 (4230), 3.4.4 (36), 3.6.3 (467), 1.6.3.2 (176), 1.6.2 (62), 1.6.2.7 (356), 1.3.3 (4168), 1.3.1 (491), 1.7.6 (477), 1.2 (12), 1.7.3 (479), 1.7.3 (482), 1.7.3 (483), 1.7.3 (484), 1.7.4 (485), 1.7.4 (486), 1.7.4 (487), 1.7.4 (488), 1.7.4 (489), 1.7.4 (492), 1.7.4 (493), 1.7.4 (494), 1.11 (495), 1.12.1 (496)
	RRR000521 (duplicate of RRR000396)	1.7.4 (4188), 1.7.4 (4189), 1.12.1 (84), 1.7.7 (4230), 3.4.4 (36), 3.6.3 (467), 1.6.3.2 (176), 1.6.2 (62), 1.6.2.7 (356), 1.3.3 (4168), 1.3.1 (491), 1.7.6 (477), 1.2 (12), 1.7.3 (479), 1.7.3 (482), 1.7.3 (483), 1.7.3 (484), 1.7.4 (485), 1.7.4 (486), 1.7.4 (487), 1.7.4 (488), 1.7.4 (489), 1.7.4 (492), 1.7.4 (493), 1.7.4 (494), 1.11 (495), 1.12.1 (496)
Inyo County, Fifth District		
Cervantes, Richard Inyo County, Yucca Mountain Repository Assessment Office	RRR000080	1.16 (170)
Gaffney, Matt	RRR000059	1.7.4 (4188), 1.7.4 (4189), 1.12.1 (84), 1.7.7 (4230), 1.7.7 (626), 1.4.1 (49)

Commenting Organization	Comment Document Number	Location of Comments/Responses
	RRR000082	1.7.4 (3708), 1.3.3 (4168), 1.7.7 (4230), 1.4.6 (31), 1.6.3.2 (176), 1.7.13 (171)
J&K Expo		
Fleming, Jay	RRR000130	1.1.3 (15)
JOSSCH-LLC		
Wetch, Joe	RRR000011	1.4.6 (31)
	RRR000125	1.2 (101), 1.4.6 (31)
John Uhalde and Company Uhalde, Gracian	RRR000618	3.7.1 (116), 3.7.1 (1427), 3.6 (129), 3.12 (139), 3.6 (93), 3.6.2 (122), 3.6.3 (108), 3.4.3 (1375), 3.2.5 (167), 3.7.1 (117), 3.11 (4172), 3.7.1 (118), 3.6 (107), 3.6 (109), 3.6.3 (96), 3.6.2 (130), 3.6 (133), 3.6 (120), 3.6 (105), 3.6 (132), 3.7.4.2 (1443), 3.12 (4186)
LOC Inc. – Oak Ridge Reservation		
Local Oversight Committee	DDD 000 7 0 2	1 1 4 (1 2)
Mulvenon, Norman	RRR000702	1.1.4 (16)
La Comunidad Nichols, Jean	RRR000685	1 1 2 (15) 1 2 2 (4167)
Lander County, Board of Commissioners	KKK000085	1.1.3 (15), 1.3.2 (4167)
Chapin, Chuck	RRR000646	3.12 (139), 1.7.14 (4183), 3.2.1 (47), 1.7.14.2 (4162), 1.7.14.2 (2034), 3.4.6 (99), 1.7.14 (1725), 1.11 (4191), 3.12 (139), 3.7.7 (81), 1.7.14 (4192), 1.7.14 (1997), 2.4.2 (1931), 2.4.4 (37), 2.2.1 (43), 2.4.1 (1995), 2.7.1 (1724), 2.7.7 (4164), 2.11 (4182), 2.15 (147), 1.7.14 (1986), 3.15 (1985), 3.1.2 (2), 3.4.5 (1983), 3.6.4 (1982), 2.4.2 (145), 2.2 (1980), 2.6 (1946), 2.4.1 (151), 2.4.6 (1913), 3.4.3 (1912), 2.7.7 (4175), 2.7.1 (1720), 2.7.1 (1910), 2.7.4 (1908), 2.15 (1879), 2.7.1 (1841), 2.7.1 (1839), 2.7.4 (54), 1.7.14 (4183), 2.7.7 (4175), 2.2.5 (2690), 2.7.7 (2689), 2.7.7 (4173), 2.7.7 (4173), 2.7.7 (4164), 2.11 (1701), 3.6 (132), 2.11 (1697), 3.3.2 (161), 3.7.1 (116), 3.11 (1523), 3.7.7 (63), 3.7.7 (1532), 3.11 (1528), 3.11 (4170), 3.11 (1523), 3.11 (4171)

Commenting Organization	Comment Document Number	Location of Comments/Responses
Las Vegas Indian Center Reed, Debra	RRR000283	1.7.18 (630), 1.4.6 (31), 3.4.2 (42), 1.7.18.2 (633)
Las Vegas Paiute Tribe		
Anderson, Kenny Lincoln County, Nevada, Board of	RRR000273	1.1.3 (15)
County Commissioners		
Hornbeck, Ronda	RRR000617	1.2.2 (50), 1.3.3 (1000), 3.2 (11), 1.2.1 (55), 1.3.3 (1003), 1.9 (97), 1.12 (162), 1.12 (4187), 3.2.4 (1009), 1.2 (14), 3.6 (120), 1.1 (961), 2.4.7 (962), 1.4.1 (49), 1.1 (964), 1.7.8 (965), 2.4.7 (82), 1.6.2 (51), 1.7.14 (971), 1.12 (975), 1.12 (976), 2.1.1 (977), 2.2.4 (979), 2.1 (1033), 2.4.4 (37), 2.2.1 (43), 3.1.1 (1043), 3.2.4.1 (1047), 3.2.4.2 (1048), 3.12 (139), 3.4.7 (1051), 3.2 (1053), 3.4.6 (1058), 3.3.2 (161), 3.15 (1060), 3.4.3 (1061), 3.4.3 (1010), 3.6.2 (131), 3.6.2 (130), 3.4.5 (1014), 3.6.2 (122), 3.12 (4186), 3.4.1 (1021), 3.15 (152), 3.6.2 (102), 3.6 (92), 3.6.2 (91), 3.7.1 (1027), 3.7.1 (1028), 3.7 (1030), 3.3.2 (1031), 3.6.3 (1032), 3.6.3 (85), 3.6.3 (96), 3.6.2 (1091), 3.6 (132), 3.7.4.2 (1095), 3.6.3 (1102), 3.6.2 (106), 3.6.2 (88), 3.6.3 (110), 3.6.3 (1105), 3.6.3 (86), 3.6.4 (1063), 3.6 (133), 3.6.4 (126), 3.6.4 (83), 1.6.2.5 (1069), 3.4.1 (1071), 3.7.1 (118), 3.2.5 (167), 3.7.7 (79), 3.7.2 (1088), 3.7.3 (1089), 3.7.3 (1081), 3.7.3 (1082), 3.7.1 (1083), 3.7.3 (1084), 3.7.3 (1082), 3.7.1 (117), 3.7.1 (1136), 3.7.2 (114), 3.7.4.1 (174), 3.7.4.1 (1140), 3.7.4.2 (1141), 3.7.4.1 (115), 3.7.4.2 (1143), 3.7.5 (1144), 3.7.5 (1145), 3.7.5 (148), 3.7.5 (1147), 3.7.7 (1150), 3.6.3 (1155), 3.6 (112), 3.6 (93), 3.7.7 (1159), 3.7.10 (1162), 3.2.6 (94), 3.7.3 (1119), 3.7.1 (1120), 3.7.3 (1121), 3.7.1 (1123), 3.7.1 (1127), 3.7.1 (1200), 3.7.1 (1202), 3.7.10 (1204), 3.7.10 (1205), 3.7.10 (1206), 3.6.2 (87), 3.7.4.1 (1211), 3.7.10 (1206), 3.6.2 (87), 3.7.4.1 (1211), 3.7.10 (1206),

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		3.7.4.2 (140), 3.7.4.2 (154), 3.7.4.2 (159),
		3.7.4.2 (1216), 3.7.4.2 (1217),
		3.7.4.2 (1218), 3.7.4.2 (1168),
		3.7.4.2 (1170), 3.7.5 (1171), 3.7.5 (1194),
		3.7.5 (1197), 3.7.5 (1198), 3.6.2 (90),
		3.7.7 (64), 3.7.7 (63), 3.7.7 (1191), 3.7.7 (1193), 3.6 (177), 3.3.1 (169),
		3.7.8 (1301), 3.7.8 (1304), 3.11 (1307),
		3.11 (4172), 3.11 (1310), 3.11 (1311),
		3.11 (1312), 3.11 (1314), 3.11 (1315),
		3.11 (1316), 3.11 (1318), 3.6.4 (95),
		3.11 (1321), 3.11 (1323), 3.7.8 (1222), 3.8 (1356), 3.8 (1353), 3.8 (1354),
		3.8 (1355), 3.8 (1357), 3.8 (1354),
		3.2 (1360), 3.2 (1361), 1.6.2 (1363),
		1.6.2 (1364), 1.6.2 (1365), 3.2 (1366),
		3.4.4 (36), 2.2 (1368), 3.7.8 (1369), 3.7.5 (1370), 3.7.7 (48), 1.3.1 (1324),
		3.7.7 (66), 3.2 (1328), 3.7.2 (1330),
		3.7.8 (1331), 3.2.1 (47), 1.3.1 (4169),
		3.6 (105), 3.8 (4226), 3.8 (4227)
Los Angeles County Museum of Art		
Govan, Michael	RRR000433	3.4.1 (35)
Maryland Dept. of Planning		
Janey, Linda C.	RRR000129	2.2.3 (1269), 1.2.3 (25)
	RRR000306	1.2.3 (25)
Maryland Dept. of the Environment Mueller, Joanne D.	RRR000027	1.2.3 (25)
Mercy Investment Program, Sisters		
of Mercy-Detroit, Dominican Sisters		
of Hope and Ursuline Sisters of Tildonk		
Heinonen, Valerie	RRR000933	1.2 (9), 1.11 (4191), 1.6.3.2 (176),
Temonen, valene	KKK000755	1.3.2 (4167), 1.6.3 (74), 1.7.4 (150),
		1.7.8 (3680), 1.2.6 (27), 1.1.3 (15)
Metallic Goldfield, Inc.		
Ward, Jeffrey R.	RRR000002	3.4 (462)
Mid-Island Radiation Alert		
Goodman, Miriam	RRR000608	1.1.3 (15)
Midwest Coalition for Responsible Investment		
Jennings, Barbara	RRR000543	1.1.3 (15)

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Mineral County, Board of Commissioners		
Fowler, Ed	RRR000682	3.2.1 (47), 1.7.14.2 (4162), 1.7.14.2 (2034), 3.4.6 (99), 1.7.14 (2032), 1.7.14 (1725), 1.11 (4191), 3.12 (139), 3.7.7 (81), 1.7.14 (4192), 1.7.14 (1997), 2.4.1 (1995), 2.7.1 (1724), 2.7.7 (4164), 2.11 (4182), 2.15 (147), 1.7.14 (1986), 3.15 (1985), 3.1.2 (2), 3.4.5 (1983), 3.6.4 (1982), 2.4.2 (145), 2.2 (1980), 2.6 (1946), 2.4.1 (151), 2.4.6 (1913), 3.4.3 (1912), 2.7.1 (1720), 2.7.1 (1910), 2.7.4 (1908), 2.15 (1879), 2.7.1 (1841), 2.7.1 (1839), 2.7.4 (54), 2.7.4 (2697), 2.7.4 (2696), 2.7.4 (2695), 2.7.4 (2694), 2.7.6 (2693), 2.2.5 (2690), 1.7.14 (4183), 2.7.7 (4175), 2.7.7 (2689), 2.7.7 (4173), 2.11 (1701), 3.6 (132), 2.11 (1697), 3.3.2 (161), 3.7.1 (116), 3.7.7 (63), 3.7.7 (1532), 3.11 (1531), 3.11 (4170), 3.11 (1528), 3.11 (1526), 3.11 (1525), 3.11 (1523), 3.11 (4171)
Moapa Band of Paiutes Daboda, Darren	RRR000272	1.1.3 (15)
Monache Alliance	DDD 00000	1 1 2 (15)
Bongochi, Monty N-4 State Grazing Board	RRR000096	1.1.3 (15)
Flake, Merlin R.	RRR000621	3.7.1 (116), 3.2.4 (19), 3.2.1 (47), 3.7.1 (1427), 3.6 (129), 3.12 (139), 3.6 (93), 3.6.2 (122), 3.6.3 (108), 3.4.3 (1375), 3.2.5 (167), 3.7.1 (117), 3.11 (4172), 3.7.1 (118), 3.6 (107), 3.6 (109), 3.6.3 (96), 3.6.2 (130), 3.6 (133), 3.6 (120), 3.6 (105), 3.6 (132), 3.7.4.2 (1443), 3.12 (4186)
N-6 State Grazing Board Filippini, Hank	RRR000687	3.1.3 (53), 3.2.1 (47), 3.7.1 (116), 3.7.1 (1845), 3.6 (93), 3.6 (105), 3.6.3 (96), 3.6.2 (130), 3.6 (129), 3.6 (132), 3.6 (120), 3.12 (139), 3.6 (133), 3.7.1 (1952), 3.2.5 (167), 3.7.1 (117), 3.6.3 (85), 3.7.4.2 (2114), 3.12 (4186), 3.6 (109), 3.11 (4172), 3.7.1 (118), 3.8 (1651), 3.6 (107)

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NARUC – National Association of Regulatory Utility Commissioners Gray, Charles D.	RRR000525	1.3.1 (1857), 1.7 (1858), 1.15 (4161), 1.3.3 (1860), 1.3.1 (1861), 1.2.1 (1862), 1.6.3.2 (1865), 1.2.4 (1894), 1.11 (1895), 1.6.2 (1897), 3.4.3 (1), 1.7.8 (1899), 1.7.16 (4234), 1.3.3 (1737), 1.4.4 (29), 1.11 (1929), 1.3.1 (1932), 1.6.2 (1959), 3.1 (1962), 3.4 (1966), 1.6.3.2 (176), 1.6.2 (164), 2.4.1 (41), 3.4.6 (98), 2.4.2 (2051), 3.4.5 (2054), 3.4.5 (2055), 3.7.7 (2057), 3.4.4 (2059), 3.7.8 (1761), 3.4 (2085)
O'Connell, Brian	RRR000323	1.1.4 (16)
NEI Yucca Mountain Project		
McCullum, Rod Nevada Group Sierra Club	RRR000058	1.1.4 (16)
Blumensaadt, Eric C.	RRR000144	1.1.3 (15)
Native American Heritage		
Commission		
Singleton, Dave	RRR000032	1.7.6 (590)
Nevada Agency for Nuclear Projects		
Frishman, Steve	RRR000275	1.4.4 (29), 1.2 (111), 1.2 (9)
Nevada Nuclear Waste Task Force, Inc.		
Treichel, Judy	RRR000622	1.2.1 (55), 1.6.5 (58), 1.9 (1824), 1.6.3.2 (1823), 1.6.2 (1822), 1.6.3 (73), 3.4.2 (42), 1.7.7 (1798), 1.2.6 (27), 1.7.8 (1796), 1.2 (9)
Nevada Pharmacist Association		
Pham, Khanh	RRR000134	1.1.3 (15)
New Energy Corporation		
Vesperman, Gary	RRR000293	1.4.6 (31)
Nine Group		
Morton, Jenna	RRR000259	1.2.6 (27), 1.2 (12), 1.1.3 (15)
North Carolina, Dept. of Administration		
Baggett, Chrys	RRR000670	1.16 (170)
Northeast Pa. Audubon Society		
Dodge, Katharine	RRR000876	1.1.3 (15), 1.3.2 (4167)
Nuclear Age Peace Foundation	RRR000331	1.1.3 (15), 1.4.4 (29)

Commenting Organization	Comment Document Number	Location of Comments/Responses
Roth, Nick		
Nuclear Energy Institute		
Binzer, Chris	RRR000039	1.1.4 (16), 3.1.4 (69)
	RRR000070	1.1.4 (16), 3.1.4 (69)
	RRR000122	1.1.4 (16), 3.1.4 (69)
Kraft, Steven P.	RRR000318	1.1.4 (16), 3.1.4 (69)
	RRR000619	3.1.4 (69), 3.4.3 (1), 3.7.8 (2313), 3.7.8 (2314), 3.15 (2315), 3.4.6 (98), 3.1.2 (2)
McCullum, Rodney	RRR000279	1.1.4 (16)
	RRR000620	1.1.4 (16), 1.7.8 (1810), 1.8.1 (33), 1.6.1 (67), 1.2.1 (46), 1.7.16 (4234), 1.6.3.2 (1744), 1.2 (111), 1.6.2.2 (1714), 1.1 (1713), 1.15 (4161), 1.7.1 (1683), 1.7.15 (1682), 1.7.15 (1681)
Seidler, Paul	RRR000007	1.1.4 (16), 3.1.4 (69)
	RRR000057	1.1.4 (16)
	RRR000278	1.1.4 (16), 3.4.1 (23)
Nuclear Information and Resource Services		
Binette, Aja	RRR000324	1.1.3 (15), 1.6.3.2 (176)
Nuclear Waste Strategy Coalition – NWSC		
Wright, David	RRR000117	1.1.3 (15), 1.6.2.5 (163), 1.7.14 (4198), 2.1.4 (71), 2.4.1 (1708), 2.4.7 (1709), 3.4.1 (23), 3.4.3 (1), 1.4.4 (29), 3.1.4 (69), 1.1.4 (16)
Nuremberg Actions		
Getty, G.	RRR000022	1.1.3 (15)
Nye County Nuclear Waste Repository Project Office		
Jaszczak, Cash	RRR000044	1.2.4 (26)
Nye County, Board of Commissioners		
Borasky, Butch	RRR000055	1.2.4 (26)
Eastley, Joni	RRR000054	1.2.4 (26)
	RRR000240	1.2.4 (26)
	RRR000656	3.4.3 (1), 3.2 (1239), 3.4.6 (98),

	Comment	T (1) A
Commenting Organization	Document Number	Location of Comments/Responses
		3.4.6 (1241), 3.1.2 (2), 3.4.6 (1362), 3.7.8 (1327), 3.4.4 (36), 3.12 (139), 3.2.3 (59), 3.11 (1334), 2.7.8 (1335), 2.7.8 (1336), 2.7.8 (1337), 2.7.8 (1338), 2.7.8 (1345), 2.7.8 (1347), 2.2 (1350), 2.1.2 (1405), 2.1.1 (1406), 1.6.2 (1395), 3.4.6 (99), 2.7.7 (1397), 2.4.7 (1398), 2.7.7 (1399), 2.7.7 (1400), 1.7.1 (1404), 1.7.1 (1416), 2.11 (1419), 2.11 (1422), 2.11 (1428), 1.7.14.2 (1432), 2.11 (1434), 2.11 (1436), 2.11 (1437), 3.6.2 (131), 3.6 (92), 3.6 (120), 3.7.12 (1499), 3.6.2 (127), 3.4.3 (1502), 3.4.1 (1504), 3.7.7 (80), 3.7.7 (1506), 3.7.8 (1507), 3.7.12 (1508), 3.1.2 (3), 3.4.6 (1511), 3.7.3 (1470), 3.7.1 (1487), 3.7.4.1 (1491), 3.12 (4186), 3.7.4.2 (1496), 3.7.5 (1498), 3.6.2 (88), 3.7.8 (1620), 3.7.8 (1537), 3.15 (1541), 3.7.8 (1698), 3.7.3 (1717), 3.11 (1837), 3.11 (4174), 3.4.3 (1876), 1.6.2.5 (1941), 3.11 (1942), 3.11 (1979),
	RRR000657	2.7.7 (4175), 3.15 (1994), 3.7.8 (1996) 1.7.7 (1793), 1.12.1 (1696), 1.2.1 (46), 1.7.7 (1694), 1.2 (111), 1.6.3.2 (1792), 1.2.4 (26), 1.7.7 (1691), 1.9 (77), 1.7.16 (4234), 1.7.7 (1660), 1.7.7 (1659), 1.7.1 (1767), 1.7.7 (1633), 1.7.7 (2152), 1.7.7 (2151), 1.7.7 (2149), 1.7.8 (2146), 1.7.8 (2131), 1.7.15 (2129), 1.7.15 (1766), 1.11 (1764), 1.6.5 (58), 1.9 (1763), 1.7.8 (1816), 1.7.8 (1814), 1.11 (1790), 1.2.3 (25), 1.12.1 (1789), 1.3.1 (1732), 1.15 (4161), 1.12.1 (1780), 1.7.8 (1757)
Hollis, Gary	RRR000081	1.2.4 (26)
· · · ·	RRR000271	1.2.4 (26)
	RRR000320	1.2.4 (26)
Nye County, Nuclear Waste Repository Project Office		
Lacy, Darrell	RRR000658	3.12 (139), 3.4.1 (34), 3.12 (4186)
Owens Valley Indian Commission Heil, Darla	RRR000100	1.2 (9), 1.7.7 (4230), 1.7.4 (4195), 1.6.2.1 (61), 1.7.18.2 (332)
Pan-Am Legal Services	RRR000248	1.1.3 (15)

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Song, Robert		
	RRR000302	1.1.3 (15)
Physicians for Social Responsibility		
McCally, Michael	RRR000861	1.1.3 (15), 1.3.3 (4168), 1.7.8 (1948), 1.7.15 (1924), 1.7.8 (1923)
Parillo, Jill	RRR000329	1.6.1 (67), 1.9 (409), 1.7.8 (410), 1.7.15 (411), 1.7.8 (412)
Progressive Leadership Alliance of Nevada		
Rake, Launce	RRR000262	1.4.4 (29)
	RRR000263	1.1.3 (15)
Public Service Commission of Wisconsin		
Ebert, Daniel R.	RRR000757	1.1.4 (16), 1.2.1 (72)
Rainforest Action Network		
Brune, Mike	RRR000705	1.1.3 (15), 1.3.2 (4167)
Regional Association of Concerned Environmentalists (RACE)		
Donham, Mark	RRR000935	1.2 (9), 1.2 (9), 1.3.2 (4167), 1.7.4 (150), 1.7.8 (3793), 1.2.6 (27), 1.1.3 (15)
Remnant Yuchi Nation		
Vest, Lee	RRR000383	1.1.3 (15), 1.7.6 (4178)
SENAA West		
Hayes, Sara	RRR000746	1.1.3 (15), 1.3.2 (4167)
Sierra Club, Mendocino Group		
Wehren, Rixanne	RRR000816	1.1.3 (15)
Sierra Safe Energy		
Schieffer, Richard	RRR000394	1.1.3 (15)
Sinai, Schroeder, Mooney, Boetsch, Bradley & Pace		
Schroeder, Theodore J.	RRR000352	1.1.3 (15)
Sisters of St. Joseph of Carondelet		
Oleskevich, Diana	RRR000938	1.2 (9), 1.11 (4191), 1.6.3.2 (176), 1.3.2 (4167), 1.6.3 (74), 1.7.4 (150), 1.7.8 (3680), 1.2.6 (27), 1.1.3 (15)
Southern California Ecumenical Council		
Cohen, Albert G.	RRR000483	1.1.3 (15)

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Southern Ohio Neighbors Group		
Sea, Geoffrey	RRR000887	1.7.6 (4178), 1.1.3 (15)
Southwest Worker's Union		
Rendon, Genaro L. State of California, Dept. of Fish and Game	RRR000749	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167)
Racime, Denyse State of California, California	RRR001078	1.7.5 (2331), 1.7.4 (2360)
Energy Commission Byron, Barbara	RRR000043	1.2.1 (156)
Byton, Battara	RRR000045	1.2.1 (150) 1.2.1 (156), 1.6.2 (52), 1.6.3.2 (176), 1.6.2 (62), 1.7.4 (532), 1.7.7 (4230), 1.6.5 (56), 1.6.2.7 (3987)
State of California, Dept. of Justice		
Sullivan, Timothy	RRR000659	1.1.3 (15), 1.2.1 (156), 1.7.14 (4198), 1.7.14 (3056), 1.7.16 (2163), 1.7.14 (2164), 1.6.2 (44), 1.6.2 (62), 1.6.3.2 (176), 1.2 (12)
State of Nevada, Agency for Nuclear Projects		
Hall, Jim	RRR000321	1.6.2 (253), 1.6.1 (67), 1.6.3.2 (176), 1.7.14 (4198)
Halstead, Robert	RRR000006	1.2 (10), 1.2.1 (55), 1.6.2.7 (637), 1.7.14 (4198), 3.2.1 (47), 3.4.2 (42), 3.2.4.2 (7), 3.4.4 (36), 3.4.2 (643)
	RRR000013	1.2 (10), 1.2 (12), 1.2.2 (50), 1.2.1 (55), 1.6.2.7 (565), 3.7.1 (566), 3.4.1 (18), 3.12 (139), 1.7.14 (4198), 3.7.1 (117), 3.7.4.2 (140), 3.6.2 (106)
	RRR000038	1.2.1 (55), 3.1.3 (53), 3.4.2 (42), 3.2.4.2 (7), 1.6.2 (51), 1.6.2.5 (163), 1.7.14 (4198)
	RRR000056	1.2 (10), 1.1.3 (15), 1.6.3.2 (175), 3.2.1 (47), 2.4.1 (41), 3.2.4.2 (7), 1.6.2 (51), 3.4.4 (36), 1.6.2.5 (163), 3.7.1 (801), 3.4.1 (18), 3.7.1 (116), 3.7.4.2 (140), 3.6.2 (106), 3.2.4.2 (8)
	RRR000069	1.6.2.7 (815), 3.2.1 (47), 3.4.2 (42), 3.4.1 (18), 3.2.4.2 (8)
	RRR000274	1.1.3 (15), 1.2 (9), 1.6.2.5 (163)
	RRR000322	1.6.2.7 (726)

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Loux, Robert R. RRR000662	RRR000662	1.3.1 (944), 1.2.2 (50), 1.2 (4), 1.2 (111), 1.4.4 (29), 1.2.1 (55), 1.3.1 (956), 1.6.3 (73), 1.7.15 (917), 1.7.8 (918), 1.6.5 (58), 1.6.5 (57), 1.7.12 (922), 1.6.1 (67), 1.7.16 (4233), 1.2 (12), 1.6.2.5 (163), 1.6.2.5 (980), 1.7.14 (981), 1.6.2 (51), 1.6.2.7 (986), 1.6.2.5 (141), 1.6.2.5 (984), 1.6.2.7 (985), 1.6.2.7 (989), 1.6.2.7 (3181), 1.6.2.7 (990), 1.6.2.7 (991), 1.7.14.1 (992), 1.6.2.7 (993), 1.6.2.7 (994), 1.7.14 (4198), 1.6.2.5 (997), 1.2.6 (27)
	RRR000663	 1.1.1 ((1196)), 110:216 ((977)), 112.6 (217) 1.2.2 (50), 1.1 (841), 1.2 (4), 2.2 (32), 3.2.4.2 (7), 1.2 (60), 1.2 (9), 1.11 (930), 2.2.1 (43), 2.4.1 (41), 3.1 (933), 3.4.5 (937), 3.4.1 (18), 3.4.5 (939), 3.7.1 (940), 3.2.5 (941), 1.7.14 (949), 1.7.14 (4198), 3.7.14.1 (951), 1.7.16 (4233), 2.7.8 (953), 1.6.2 (164), 3.4.3 (919), 3.11 (1042), 3.4.4 (36), 1.6.2 (51), 1.7.14.2 (1046), 3.2.3 (1050), 3.2.4.1 (1052), 3.2.6 (94), 3.3.2 (1018), 3.7.10 (1093), 3.7.8 (1110), 3.7.4.2 (154), 2.1 (1132), 2.6 (1135), 2.7.1 (1148), 2.7.7 (4175), 3.6.2 (90), 3.7.1 (1153), 3.6 (93), 3.7.1 (116), 3.7.7 (66), 3.7.5 (1122), 3.7.4.2 (1125), 1.12 (4187), 3.7.1 (117), 3.6 (92), 3.7.10 (1176), 1.6.2 (1177), 3.2.3 (1178), 3.7.1 (1179), 3.7.4.2 (1181), 3.7.6 (1182), 3.7.6 (1183), 1.12.1 (4217)
State of Nevada, Dept. of Administration		
Coulter, Krista	RRR000450	1.16 (170)
	RRR000451	2.16 (755)
State of New Jersey, Dept. of Environmental Protection Koschek, Kenneth State of Utah	RRR000567	1.6.3.2 (1457)
Chancellor, Denise	RRR000677	1.2.1 (55), 1.6.1 (67), 1.6.3.2 (176), 1.6.2.5 (163), 1.6.3 (70), 1.6.3.2 (175), 1.7.15 (1937), 1.7.15 (1936), 1.6.2 (52), 1.6.2 (1934), 1.7.12 (1933), 1.3.1 (4169), 1.3.1 (1906), 1.7.8 (1905), 1.7.7 (1904), 1.7.11 (1903), 1.7.4 (1874), 1.7.11 (1873),

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		3.7.2 (1872), 2.7.7 (1871), 1.7.14 (1870), 3.7.4.2 (1869), 1.7.17 (4145)
The City of Sparks		
Martini, Geno R.	RRR000351	1.1.3 (15)
The Menil Collection		
Helfenstein, Josef	RRR000683	3.4.1 (35)
The Stella Group, Ltd.		
Sklar, Scott	RRR000848	1.1.3 (15)
The Toiyabe Chapter of the Sierra Club		
Strickland, Rose	RRR000745	1.2.2 (50), 1.2.1 (55), 1.4.4 (29), 1.7.14 (1250), 2.4.1 (41), 3.4.3 (20), 1.7.14 (1253), 1.2.1 (113), 1.1.3 (15)
Timbisha Shoshone Tribe		
Beaman, Ed	RRR000692	1.3.1 (4165), 1.2 (9), 1.7.4 (4188), 1.7.4 (4189), 1.7.4 (2365), 1.7.7 (4231), 3.4.4 (36), 1.6.3.2 (176), 1.6.2 (62), 1.6.2.7 (2672), 1.3.3 (4168), 1.7.18.1 (2674), 1.2 (12)
Kennedy, Joe	RRR000690 RRR000691	1.7.18.2 (1520), 1.2 (12), 1.6.2 (1627), 1.1.3 (15), 1.7.18.2 (1625), 1.7.18.1 (1624), 1.2.6 (27), 1.3.2 (4167), 1.7.18.1 (1621), 1.6.3.2 (176), 1.7.10 (1618), 1.7.2 (1616), 1.7.4 (1614), 1.7.5 (157), 1.7.7 (1612), 1.7.8 (1610), 1.7.11 (1609), 1.7.12 (1608), 1.7.6 (1606), 1.7.6 (1605), 1.7.13 (171), 1.3.1 (4169), 1.12.1 (1601), 1.7.18 (1599), 1.7.18.2 (1591), 1.7.18 (1590), 1.7.18.2 (1591), 1.7.18 (1588), 1.7.6 (1587), 1.7.7 (1586), 1.7.18 (1585), 1.7.18.2 (1584), 3.7.14.2 (1583), 1.7.4 (4197), 1.7.15 (1581), 1.7.18.2 (1580), 1.12.2 (1578), 1.7.1 (1577), 1.7.5 (1576), 1.7.15 (1575), 1.7.8 (1574) 1.7.18.2 (1520), 1.2 (12), 1.6.2 (1627), 1.1.3 (15), 1.7.18.2 (1625), 1.7.18.1 (1624), 3.2.6 (94), 3.3.2 (4133), 3.12 (139), 3.7.1 (3106), 3.6.2 (106), 3.7.8 (3108), 3.6 (120), 3.6 (93), 3.7.1 (3113), 3.6.2 (3114), 3.7.14.2 (1583), 3.7.10 (3116), 2.7.2 (3117), 3.7.2 (3120), 3.7.2 (3121), 3.7.4 (3160), 2.7.4 (3161), 3.7.4.1 (3162),

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		3.6.2 (88), 3.7.4.1 (3164), 1.7.5 (157),
		2.7.5 (3166), 3.7.5 (3167), 3.7.5 (3168),
		3.7.5 (3169), 2.7.7 (3349), 2.7.7 (3425),
		2.7.8 (3426), 2.7.11 (3427), 2.7.11 (3428),
		2.7.11 (3429), 2.7.12 (3430), 2.7.12 (3431),
		2.7.12 (3432), 2.7.12 (3433), 2.7.6 (3434),
		2.7.6 (3435), 2.7.13 (3436), 1.3.1 (4169),
		3.7.6 (4146), 1.6.2.7 (3170), 3.4.3 (3171),
		3.7.14.2 (3520), 3.7.3 (3521), 1.7.18.2 (1591), 1.7.18 (1590),
		1.7.18.2 (1591), 1.7.18 (1590), 1.7.16 (1587), 1.7.18.2 (1589), 1.7.18 (1588), 1.7.6 (1587),
		1.7.7 (1586), 1.7.18 (1585), 1.7.18.2 (1584), 1.7.7 (1586), 1.7.18 (1585), 1.7.18.2 (1584),
		3.7.14.2 (1583), 1.7.4 (4197), 1.7.15 (1581),
		1.7.18.2 (1580), 1.12.2 (1578), 1.7.1 (1577),
		1.7.5 (1576), 1.7.15 (1575), 1.7.8 (1574)
Triple Aught Foundation		
Heizer, Michael	RRR000674	3.4.1 (35), 3.2 (1830)
	Reference of the second	5.4.1 (55), 5.2 (1050)
Twin Springs Ranch	DDD 0000 70	
Fallini, Anna	RRR000072	3.2 (4144), 3.7.1 (116), 3.14 (2454), 3.2 (11), 3.4.1 (34)
Fallini, Joe	RRR000075	1.1.3 (15), 1.6.2 (52), 3.2 (237), 1.4.6 (31), 3.7.8 (2415)
Fallini, Joe B.	RRR000710	3.3.2 (161), 3.2.1 (47), 3.7.4.2 (154), 3.7.4.1 (1671), 3.2.5 (167), 3.6.4 (95),
		3.7.1 (116), 3.7.1 (117), 3.7.1 (1664),
		3.7.10 (1663), 3.7.5 (1645), 3.7.5 (1644),
		3.7.5 (1643), 3.7.5 (2158), 3.7.5 (2157),
		3.7.5 (2156), 3.7.5 (2137), 3.7.5 (2136),
		3.7.9 (2135), 3.6 (112), 3.7.5 (148),
		3.2.6 (94), 3.7.1 (2103), 3.7.1 (2101),
		3.7.5 (2100), 3.7.4.2 (2098), 3.7.4.2 (140),
		3.7.4.2 (2077), 3.7.4.2 (2076), 3.6.3 (85),
		3.7.5 (158), 3.7.5 (2000), 3.7.5 (2066),
		3.7.5 (1999), 3.7.9 (3045), 3.7.7 (4138),
		3.7.7 (79), 3.7.11 (1998), 3.11 (1956),
		3.11 (1955), 3.3.3 (2063), 3.3.3 (1954), 3.12 (139), 3.12 (4186)
U.S. Transport Council		J.12 (137), J.12 (4100)
U.S. Transport Council		114/10
Blee, David	RRR000008	1.1.4 (16)
	RRR000319	1.1.4 (16)

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U.S. Department of the Interior, Bureau of Land Management Palma, Juan	RRR001081	1.9 (77), 1.7.5 (3414)
	RRR001082	3.7.5 (3415), 3.7.7 (80), 3.7.4.1 (3419), 3.7.5 (148), 3.2.3 (3417), 3.12 (139)
US Nuclear Energy		
Duarte, Gary	RRR000037	1.1.4 (16)
	RRR000281	1.1.4 (16)
U.S. Transport Council		
Quinn, Bob	RRR000040	1.1.4 (16), 2.1.4 (71)
United States Department of the Interior		
Anspach, Allen	RRR000672	3.7.14.1 (1892)
United States Department of Commerce		
Harm, Christopher W.	RRR000568	3.16 (2653)
	RRR000569	1.12 (2656)
United States Environmental Protection Agency		
Miller, Anne Norton	RRR000667	1.3.3 (908), 1.9 (909), 1.2 (912)
	RRR000668	2.4.1 (915), 3.7.4.1 (824), 2.2 (825), 3.2 (4215)
United States Nuclear Regulatory Commission		
Weber, Michael F.	RRR000524	1.2 (3718), 1.2.1 (3719), 1.15 (4161), 1.2.1 (3721), 1.11 (3694), 1.7.12 (4010), 1.7.13 (4012), 1.2.3 (4013), 3.11 (4177), 3.6 (124), 3.7 (4109), 3.7.1 (4111), 3.2.1 (3141), 3.2.1 (3142), 3.7.13 (3143), 3.7.6 (3186), 3.7.6 (3187), 3.7.6 (3188), 3.3.3 (3189), 1.7.7 (4140), 1.7.2 (4141), 1.7.6 (4142), 1.7.15 (4143), 1.9 (3125), 1.7.8 (3126), 1.9 (3127), 1.12.1 (3128), 1.7.7 (3129), 1.7.13 (171), 3.7.3 (4150), 3.7.14.1 (4151), 3.7.4.1 (4152), 3.7.4.2 (4153), 3.7.4.2 (4154), 3.7.3 (4160), 3.11 (4155), 3.7.3 (4156), 3.7.3 (4166), 3.7.4.1 (4148), 3.7.4.1 (4149)

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Veterans in Politics		
Sanson, Steve	RRR000295	1.1.3 (15)
	RRR000356	1.1.3 (15)
Walker Lake Working Group		
Treharne, Rolanda	RRR000392	1.16 (170)
Western Interstate Energy Board - WIEB		
Williams, Jim	RRR000661	1.6.2.5 (165), 1.6.2.5 (2573), 1.6.2.5 (155), 1.3.1 (4169), 1.6.2 (2657), 1.6.3.2 (2658), 1.6.2 (2664), 1.1 (2665), 1.7.14.1 (2742), 1.4.1 (49), 1.7.14 (4192), 1.6.2 (2806), 1.7.14 (2859), 1.7.14 (2939), 1.6.2.2 (2985), 1.6.2 (164), 1.11 (3030), 1.6.2.5 (141), 1.7.14 (3032)
Western Range Service		
Steninger, Al	RRR000020	3.12 (139)
Western Shoshone		
Gardipe, Janice	RRR000052	1.1.3 (15)
Western Shoshone Defense Project		
Bill, Larson R.	RRR000686	1.1.3 (15), 1.3.2 (4167), 3.2.4.1 (1750), 1.7.6 (2491), 1.11 (2421), 1.13 (28)
Western Shoshone National Council		
Moss, Allen	RRR000865	1.3.2 (4167)
Zabarte, Ian	RRR000121	1.7.18.2 (4078), 1.7.6 (4122), 1.7.18 (4125), 1.7.18.1 (4127), 1.3.2 (4167), 1.7.18.2 (3096), 1.7.13 (171), 1.7.18.1 (3101), 1.7.18.1 (3102), 1.3.1 (3145), 1.11 (3148), 1.7.6 (3149), 1.12 (3151), 1.2.6 (27), 1.7.5 (3191), 1.7.15 (3195), 1.6.2.7 (3979), 1.7.18.2 (3197), 1.7.8 (3200), 2.7.6 (3201), 1.7.4 (4197), 1.7.7 (4231), 1.7.1 (3981), 1.7.5 (157)
	RRR000276	1.7.18 (456), 1.3.1 (4165), 1.2.6 (27)
	RRR000327	1.7.18 (450), 1.3.1 (4165), 1.2.6 (27), 1.2 (9)
	RRR000347	1.7.18 (450), 1.3.1 (4165), 1.2.6 (27)
Westinghouse		
Liparulo, Nick	RRR000727	1.1.4 (16)

Commenting Organization	Comment Document Number	Location of Comments/Responses
Westinghouse Electric Company Rickman, Robin	RRR000221	1.1.4 (16)
White Pine Nuclear Waste Project Office		
Simon, Mike	RRR000522	1.2.2 (50), 1.7.14.1 (3048), 1.2.6 (27), 1.2.3 (25), 1.4.1 (49), 1.2.5 (2159), 1.9 (97), 1.6.2 (51), 1.6.2 (2162), 1.7.7 (2341), 1.3.1 (4169), 1.11 (2374), 1.15 (4161), 1.12 (4187), 2.4.1 (41), 2.4.4 (37), 1.2.1 (72), 1.12.1 (4210)
Women's International League for Peace and Freedom		
Birnie, Patricia T.	RRR000862	1.1.3 (15), 1.3.2 (4167)

Table CR-2Index to Comments by Commenter Name

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Aaron, Grace		RRR000973	1.1.3 (15)
Abbott, Leal		RRR000636	1.7.6 (4178)
Abeldt, Vern		RRR000344	1.1.3 (15)
Abraham, Natalie		RRR000790	1.1.3 (15), 1.3.2 (4167)
Ace, Tom		RRR000094	1.1.4 (16)
Acklin, Tom	City of Caliente	RRR000115	3.4.1 (23), 3.4.1 (22), 3.4.1 (38), 3.12 (139), 3.4.1 (602), 1.1.4 (16)
Adair, Margo		RRR000945	1.1.3 (15)
Adams, Steven		RRR000905	1.1.3 (15)
Agan, Steven D.		RRR000950	1.1.3 (15)
Akuthota, Nithin	Energy Communities Alliance	RRR000326	1.1.4 (16)
Albert, Georgia New		RRR000438	1.7.18 (676)
Allen, Danielle		RRR000220	1.1.4 (16)
Allen, John		RRR000034	3.7.1 (888)
Alley, Charles		RRR000995	1.2 (13), 1.2.1 (55), 3.4.2 (42), 3.6.2 (90), 1.11 (3973), 1.6.1 (67), 1.6.2.5 (143), 1.6.2.5 (4021), 1.3.3 (4025), 1.6.2 (52), 1.6.3.3 (4033), 3.4.7 (4074), 1.1 (4075), 1.6.2 (4077), 1.7.5 (4079), 1.2 (9), 1.3.3 (4082), 1.6.3.2 (176), 1.3.1 (4121), 1.15 (4161), 1.6.2 (3095), 1.6.2 (3100), 1.1 (3105)
Amonette, Amber		RRR000813	1.1.3 (15)
Anderson, Andrew		RRR000256	1.1.3 (15)
Anderson, Jezreela		RRR000835	1.1.3 (15)
Anderson, Kenny	Las Vegas Paiute Tribe	RRR000273	1.1.3 (15)
Andrews, Gerald E.		RRR001019	1.1.4 (16)
Anonymous		RRR000131	1.1.3 (15)
		RRR000160	1.1.3 (15)
		RRR000207	1.1.3 (15)
		RRR000236	1.1.4 (16), 3.1.4 (69)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
		RRR000377	1.1.3 (15)
		RRR000418	1.1.3 (15)
		RRR000425	1.1.3 (15), 1.3.2 (4167), 1.9 (75) 1.7.4 (89)
		RRR000586	1.1.3 (15), 3.2.1 (47), 3.4.2 (42), 3.2.4.2 (7), 1.6.2 (51)
		RRR000602	1.1.3 (15), 1.3.2 (4167), 1.2.1 (72)
		RRR000629	1.1.3 (15)
		RRR000798	1.1.3 (15)
		RRR000841	1.6.5 (58), 1.9 (3826), 1.9 (3214
		RRR000856	1.1.3 (15)
		RRR000895	1.1.3 (15)
		RRR000959	1.1.3 (15)
		RRR000979	1.1.3 (15)
		RRR000980	1.1.3 (15)
		RRR000997	1.1.4 (16)
		RRR000998	1.1.4 (16)
		RRR001005	1.1.3 (15)
		RRR001016	1.1.3 (15)
		RRR001017	1.1.3 (15)
		RRR001031	1.12.2 (160)
		RRR001041	1.1.3 (15)
		RRR001044	1.1.3 (15)
		RRR001045	1.1.3 (15)
		RRR001046	1.1.3 (15)
		RRR001051	1.1.3 (15)
		RRR001057	1.1.3 (15), 1.3.2 (4167)
		RRR001059	1.1.3 (15)
		RRR001060	1.1.3 (15)
		RRR001063	1.1.4 (16)
		RRR001064	1.1.3 (15)
		RRR001067	1.1.3 (15)
		RRR001069	1.1.3 (15)
		RRR001070	1.13 (28)
		RRR001072	1.1.3 (15)
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Commenter	Organization	Comment Document Number	Location of Comments/Responses
Anspach, Allen	United States Department of the Interior	RRR000672	3.7.14.1 (1892)
Arnason, Deb		RRR000376	1.1.3 (15)
Arnason, Deb/Arne		RRR000826	1.1.3 (15)
Arnold, Davide		RRR000460	1.1.3 (15)
Arnold, Richard W.	Consolidated Group of Tribes and Organizations	RRR000671	3.7.14.2 (3957), 1.7.4 (3959), 1.6.1 (67), 1.7.14 (4192), 1.3.3 (3963), 3.7.7 (48), 2.7.6 (3966), 1.7.18 (3968), 1.7.7 (4232), 1.3.1 (3971), 1.7.6 (4179), 1.2.6 (27), 2.7.6 (3976), 2.7.6 (4022), 3.7.6 (4026), 3.7.6 (4028), 3.7.14.2 (4032), 2.15 (4034), 2.6 (4035), 3.7.14.1 (4036), 2.7.5 (4070), 2.7.8 (4071), 2.11 (4181), 2.7.6 (4076), 3.7.14.2 (4081), 3.1.2 (4083), 3.6 (129), 3.7.14.1 (4120), 3.7.14.2 (4081), 3.1.2 (4083), 3.6 (129), 3.7.14.1 (4120), 3.7.14.2 (4123), 3.7.1 (4126), 3.7.13 (168), 3.12 (139), 3.7.5 (3103), 3.7.14.1 (3104), 3.7.6 (3146), 3.7.6 (3147), 3.7.14.2 (2489), 3.7.1 (3152), 3.7.13 (3154), 3.7.6 (3156), 3.7.6 (3158), 3.7.6 (3192), 3.7.1 (3193), 3.11 (4176), 3.11 (3196), 3.7.6 (3198), 3.15 (3199), 3.7.13 (3982), 3.3.3 (3984), 3.3.3 (3985), 3.8 (3986), 3.7.6 (4037), 1.7.18.2 (4038), 1.7.6 (4039), 1.7.18.2 (4040), 1.7.18 (4042), 1.7.1 (4043), 1.7.1 (4044), 1.7.7 (4048), 1.7.7 (4049), 1.7.13 (171), 1.7.6 (4086), 1.12.1 (4088), 1.7.6 (4090),
			1.7.18.2 (4091)
		RRR000101	3.7.14.2 (2640), 3.7.4.1 (3664), 1.4.4 (29), 1.7.14 (4192), 3.7.6 (445), 3.7.7 (48), 3.7.6 (446), 3.7.6 (3666),

		Comment	
Commenter	Organization	Document Number	Location of Comments/Responses
			3.2.6 (94), 3.7.14.1 (2567), 3.7.14.2 (2568), 3.7.14.2 (2569), 3.7.2 (360), 3.7.14.2 (2571), 1.2 (9), 1.7.18.2 (4053)
Askren, Anne C.		RRR000615	1.1.3 (15)
Atencio, Sandra J.		RRR000187	1.1.3 (15)
Baggett, Chrys	North Carolina, Dept. of Administration	RRR000670	1.16 (170)
Bailey, John		RRR000553	1.1.3 (15)
Bailey, John		RRR000638	1.1.3 (15)
Bailey, W.R. (Bill)		RRR001013	1.12.2 (160)
Baker, Alan		RRR000533	1.2.1 (55)
Bakula, Marcelle		RRR000499	1.1.3 (15)
Baleria, David		RRR000009	1.1.3 (15)
Ballerano, Chrys		RRR000389	1.1.3 (15)
Ballou, Debi		RRR001071	1.1.3 (15)
Balogh, Karen		RRR000375	1.16 (170)
Balum, Anne F.		RRR000989	1.1.3 (15)
Bancroft, Kathy		RRR000098	1.1.3 (15)
Banks, Elizabeth		RRR000765	1.1.3 (15), 1.7.16 (4233)
Barber, Frank R.		RRR000873	1.1.3 (15)
Barnell, Todd		RRR000730	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Barnes, Kathryn		RRR000562	1.1.3 (15), 3.1.3 (53), 1.3.2 (4167), 3.4.3 (20), 1.7.16 (4233), 1.8.1 (33)
		RRR000580	1.1.3 (15), 3.1.3 (53), 1.3.2 (4167), 3.4.3 (20), 1.7.16 (4233), 1.8.1 (33)
Barnes, Sophie		RRR000472	1.16 (170)
Baronvine, Sonia		RRR000509	1.1.3 (15)
Baroudi, Mat		RRR001039	1.1.3 (15)
Bartholomew, Alice		RRR000529	1.1.3 (15), 1.3.2 (4167), 1.9 (75) 1.7.4 (89), 1.6.3.2 (176),

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Commenter	Organization	Comment Document Number	Location of Comments/Responses
			3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 1.6.2 (44), 2.1.2 (1418), 3.2.4.2 (7), 1.6.2 (51)
Barton-Russell, Rachel		RRR000846	1.1.3 (15)
Baseler, Rhonda		RRR000639	1.1.3 (15)
Bashiti, Amy B.		RRR000647	1.1.3 (15)
Bass, Patrice A.		RRR000206	1.1.3 (15)
Bassik, Renee		RRR001035	1.1.3 (15)
Batterden, James		RRR000804	1.1.3 (15), 1.7.6 (4178)
Bauer, Benjamin D.		RRR000782	1.1.3 (15), 1.3.2 (4167)
Baydoun, Gibran		RRR000210	1.1.3 (15)
Beaman, Ed	Timbisha Shoshone	RRR000692	1.3.1 (4165), 1.2 (9), 1.7.4 (4188), 1.7.4 (4189), 1.7.4 (2365), 1.7.7 (4231), 3.4.4 (36), 1.6.3.2 (176), 1.6.2 (62), 1.6.2.7 (2672), 1.3.3 (4168), 1.7.18.1 (2674), 1.2 (12)
Beazlie, Janet L.		RRR000610	1.1.3 (15)
Bechtel, Dennis A.		RRR000305	1.1.3 (15), 3.4.4 (273), 1.2.6 (27), 1.7.16 (4233), 1.2 (276)
		RRR000981	1.2.1 (72), 1.2 (9), 1.2 (14), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.2.6 (27), 1.7.16 (4233), 1.6.2 (51)
Becker, Rochelle	Alliance for Nuclear Responsibility	RRR000603	1.2 (9), 1.2.1 (55), 1.6.2 (62), 1.2.1 (156), 1.6.2.7 (3014), 1.6.2 (3015), 1.7.14 (4198), 1.6.2.1 (61), 1.3.3 (4168), 1.2 (13)
Beckwith, Nan J.		RRR000589	1.1.3 (15), 1.3.2 (4167)
		RRR000772	1.1.3 (15), 1.7.6 (4178), 1.2.1 (72)
Bedoe, Bev		RRR000960	1.1.3 (15)

RRR000655

1.2.3 (25), 1.6.2.5 (155), 1.6.3.2 (176), 1.7.14.1 (3008), 1.7.14.1 (2962), 1.7.14.1 (2961), 1.3.3 (2960), 1.6.2.5 (2907), 1.6.2 (2906), 1.3.1 (2905), 1.6.2.5 (141), 1.6.2.2 (2837), 1.6.2.5 (2836), 1.6.2.5 (2835)

CSG Midwest

Beetem, Jane

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Behrendt, Tim		RRR001033	1.1.4 (16)
Belcastro, Frank		RRR000458	1.1.3 (15)
Benham, Joan		RRR000480	1.1.3 (15)
Benningson, Barbara		RRR000489	1.1.3 (15)
Benti, Wynne		RRR000071	1.1.3 (15), 2.4.1 (413), 2.4.2 (2574), 1.7.15 (3993), 1.3.3 (4168), 1.6.3.2 (176), 1.6.5 (57), 1.11 (416)
		RRR000083 (duplicate of RRR000071)	1.1.3 (15), 2.4.1 (413), 2.4.2 (2574), 1.7.15 (3993), 1.3.3 (4168), 1.6.3.2 (176), 1.6.5 (57), 1.11 (416)
		RRR000238 (duplicate of RRR000071)	1.1.3 (15), 2.4.1 (413), 2.4.2 (2574), 1.7.15 (3993), 1.3.3 (4168), 1.6.3.2 (176), 1.6.5 (57), 1.11 (416)
Berg, Joel		RRR000123	1.1.3 (15)
Berhan, Mary		RRR000625	1.1.3 (15)
Berk, Larry		RRR000193	1.1.3 (15)
Bernard, Larry		RRR000551	1.1.3 (15), 1.3.2 (4167), 1.7.4 (89), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36)
		RRR000728	1.1.3 (15), 1.3.2 (4167), 1.7.4 (89), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36)
Berrigan, Gail		RRR000763	1.1.3 (15), 1.3.2 (4167)
Berry, Michael		RRR000805	1.1.3 (15), 1.7.6 (4178)
Bertell, Rosalie		RRR000381	1.1.3 (15)
Bess, Jana R.		RRR000136	1.1.3 (15)
Bidwell, Joshua John		RRR000889	1.1.3 (15)
Bigda, Mitch		RRR001027	1.2.1 (72)
Bill, Larson R.	Western Shoshone Defense Project	RRR000686	1.1.3 (15), 1.3.2 (4167), 3.2.4.1 (1750), 1.7.6 (2491), 1.11 (2421), 1.13 (28)
Billmeier, G. J.		RRR000464	1.1.3 (15)
Bilyeu, Jim	Inyo County, Board of Supervisors	RRR000396	1.7.4 (4188), 1.7.4 (4189), 1.12.1 (84), 1.7.7 (4230), 3.4.4 (36), 3.6.3 (467), 1.6.3.2 (176), 1.6.2 (62), 1.6.2.7 (356), 1.3.3 (4168),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			1.3.1 (491), 1.7.6 (477), 1.2 (12) 1.7.3 (479), 1.7.3 (482), 1.7.3 (483), 1.7.3 (484), 1.7.4 (485), 1.7.4 (486), 1.7.4 (487), 1.7.4 (488), 1.7.4 (489), 1.7.4 (492), 1.7.4 (493), 1.7.4 (494), 1.11 (495), 1.12.1 (496)
		RRR000521 (duplicate of RRR000396)	1.7.4 (4188), 1.7.4 (4189), 1.12.1 (84), 1.7.7 (4230), 3.4.4 (36), 3.6.3 (467), 1.6.3.2 (176), 1.6.2 (62), 1.6.2.7 (356), 1.3.3 (4168), 1.3.1 (491), 1.7.6 (477), 1.2 (12) 1.7.3 (479), 1.7.3 (482), 1.7.3 (483), 1.7.3 (484), 1.7.4 (485), 1.7.4 (486), 1.7.4 (487), 1.7.4 (488), 1.7.4 (489), 1.7.4 (492), 1.7.4 (493), 1.7.4 (494), 1.11 (495), 1.12.1 (496)
Binette, Aja	Nuclear Information and Resource Services	RRR000324	1.1.3 (15), 1.6.3.2 (176)
Binzer, Chris	Nuclear Energy Institute	RRR000039	1.1.4 (16), 3.1.4 (69)
		RRR000070	1.1.4 (16), 3.1.4 (69)
		RRR000122	1.1.4 (16), 3.1.4 (69)
Birnie, Patricia T.	Women's International League for Peace and Freedom	RRR000862	1.1.3 (15), 1.3.2 (4167)
Bjork, Nancy J.		RRR000925	1.16 (170)
Black, Leroy G.		RRR000214	1.1.3 (15)
Blackburn, Lee A.		RRR000850	1.1.3 (15)
Blanton, Patricia A.		RRR000185	1.1.3 (15)
Blee, David	U.S. Transport Council	RRR000008	1.1.4 (16)
		RRR000319	1.1.4 (16)
Bliss, Ryan		RRR000371	1.1.3 (15)
Block, Dixie P.		RRR000768	1.1.3 (15), 1.3.2 (4167)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Bloom, Cheryl		RRR000829	1.1.3 (15)
Bloom, Paul		RRR000062	1.1.3 (15)
Blumensaadt, Eric C.	NV Group Sierra Club	RRR000144	1.1.3 (15)
Bodde, Mary A.		RRR000497	1.1.3 (15), 1.3.2 (4167), 1.9 (75), 1.7.4 (89)
Boeve, May		RRR000380	1.1.3 (15), 1.3.3 (4168), 1.3.2 (4167)
Boisvert, Barbara E		RRR000986	1.1.3 (15)
Boisvert, John H		RRR000988	1.1.3 (15)
Boland, Nancy	Esmeralda County, Nevada, Board of County Commissioners	RRR000395	3.7.1 (4225), 3.4 (24)
Bolduc, William T.	000000000000000000000000000000000000000	RRR000992	1.1.4 (16)
Bonafine, Julia A.		RRR000946	1.1.3 (15)
Bonds, Julia		RRR000403	1.7.6 (4178), 1.7.3 (172), 1.7.6 (4178), 1.7.3 (172), 1.1.3 (15), 1.3.2 (4167), 1.9 (75), 1.7.4 (89), 1.6.3.2 (175), 2.4.1 (41), 3.4.4 (36), 1.4.1 (49), 1.6.2.1 (61), 1.7.16 (4233), 1.6.2 (44), 2.1.2 (1418), 3.4.2 (42), 3.2.4.2 (7), 1.6.2 (51)
Bongochi, Monty	Monache Alliance	RRR000096	1.1.3 (15)
Booe, Kenneth C		RRR000968	1.1.4 (16), 1.8.1 (33), 1.12.2 (160)
Borasky, Butch	Nye County, Board of Commissioners	RRR000055	1.2.4 (26)
Border, Myram		RRR000819	1.1.3 (15)
Bourgoin, Ron C.		RRR000140	1.7.16 (4233)
Boutis, Kathleen		RRR000857	1.1.3 (15)
Bowen, Dora A.		RRR000993	1.1.3 (15)
Bowman, Brent		RRR000528	1.1.3 (15)
Boyce, James		RRR000793	1.1.3 (15), 1.3.2 (4167)
Boyd, Benedict		RRR000074	3.7.11 (232), 3.1.4 (69)
Boyd, James D.	California Energy Commission	RRR000642	1.2.1 (156), 1.2 (12), 1.4.1 (49), 1.7.14.1 (3348), 1.7.14.1 (3615), 1.7.14 (3616), 1.7.14 (3661),

		Comment	
Commenter	Organization	Document Number	Location of Comments/Responses
			1.7.14 (3662), 1.12.1 (3663), 1.6.2 (51), 1.11 (3703), 1.6.3.2 (176), 1.7.14.1 (3706), 1.7.14.1 (3744), 1.7.14.1 (3746), 1.7.14.1 (3747), 1.7.4 (3749), 1.12.1 (84), 1.6.3 (73), 1.6.3 (74), 1.3.3 (4168), 1.7.7 (4230)
Boydston, Donald	Concern Citizens of Amargosa Valley	RRR000104	1.3.1 (577)
Brager, Susan	Clark County	RRR000270	1.1.3 (15), 1.7.15 (4056), 1.3.1 (3829)
Bravo, Eliseo Lopez		RRR000797	1.1.3 (15), 1.3.2 (4167)
Brooks, Eric		RRR000411	1.1.3 (15)
Broth, Mitchell		RRR001010	1.1.3 (15)
Brown, Diana		RRR000518	1.1.3 (15)
Brown, Merleen		RRR000519	1.1.3 (15)
Brown, Richard H.		RRR000024	1.1.3 (15), 3.7.8 (3497), 1.6.1 (67), 1.8.1 (33)
Brown, Shiela		RRR001011	1.7.7 (3371)
Brune, Mike	Rainforest Action Network	RRR000705	1.1.3 (15), 1.3.2 (4167)
Brunner, Demise		RRR001047	1.1.3 (15)
Brush, Deray		RRR000132	1.1.4 (16)
		RRR000257	1.1.4 (16)
Bullock, Mary L.		RRR000864	1.16 (170)
Buonaiuto, Shelley		RRR000684	1.1.3 (15), 1.3.2 (4167)
Burkland, Monica		RRR001014	1.1.3 (15)
Burley, Silvia	California Valley Miwok Tribe	RRR000751	1.1.3 (15), 1.3.2 (4167)
Burris, Laurence		RRR000511	1.1.3 (15)
Burton, Brandon C.		RRR000198	1.1.3 (15)
Bush, Pat E.		RRR000787	1.1.3 (15), 1.3.2 (4167)
Bute, Holly M.		RRR000336	1.1.3 (15)
Byron, Barbara	State of California, California Energy Commission	RRR000043	1.2.1 (156)
		RRR000108	1.2.1 (156), 1.6.2 (52), 1.6.3.2 (176), 1.6.2 (62), 1.7.4 (532), 1.7.7 (4230), 1.6.5 (56), 1.6.2.7 (3987)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Calabro, Richard A.		RRR000818	1.1.3 (15)
Cameron, Jan		RRR000105	2.1.4 (71), 1.3.1 (2782), 3.4 (584)
Campbell, Hugh		RRR000211	1.1.3 (15)
Carey, Corinne F.		RRR000361	1.1.3 (15)
Carlson, Gertrude		RRR001066	1.1.3 (15)
Carnine, Berkley		RRR000747	1.1.3 (15), 1.3.2 (4167)
Carroll, Richard		RRR000405	1.1.3 (15)
Carter, C.		RRR000457	1.1.3 (15)
Casal, Jan R.		RRR000951	1.12.2 (160)
Cashel, Kathleen		RRR000556	1.1.3 (15), 1.3.2 (4167)
Cashell, Robert A.	City of Reno	RRR000314	1.1.3 (15), 3.4.2 (669)
		RRR000680	1.2 (9), 1.2 (4), 1.1.3 (15), 1.2 (12), 3.4.2 (2040), 3.4.2 (2067), 1.7.14.2 (4180), 1.7.14.2 (2072), 1.7.14 (2074), 1.2.6 (27)
Cast, Dom		RRR000126	1.1.3 (15), 1.4.4 (29)
		RRR000127	1.4.6 (31)
Castleberry, George		RRR000731	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Castro, Alchesay Rinaldi		RRR000546	1.1.3 (15)
Cecil, Pat		RRR000091	1.7.7 (4230), 1.7.4 (325), 1.6.2 (62), 1.6.3.2 (175), 1.7.15 (3994)
Cervantes, Richard	Inyo County, Fifth District	RRR000080	1.16 (170)
Cesena, Frank		RRR000018	3.1.3 (53), 1.1.3 (15)
Chalmers, Lois	Institute for Energy and Environmental Research	RRR000676	1.9 (76)
Chancellor, Denise	State of Utah	RRR000677	1.2.1 (55), 1.6.1 (67), 1.6.3.2 (176), 1.6.2.5 (163), 1.6.3 (70), 1.6.3.2 (175), 1.7.15 (1937), 1.7.15 (1936), 1.6.2 (52), 1.6.2 (1934), 1.7.12 (1933), 1.3.1 (4169), 1.3.1 (1906), 1.7.8 (1905),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			1.7.7 (1904), 1.7.11 (1903), 1.7.4 (1874), 1.7.11 (1873), 3.7.2 (1872), 2.7.7 (1871), 1.7.14 (1870), 3.7.4.2 (1869), 1.7.17 (4145)
Chandler, Stuart M.		RRR000758	1.1.3 (15)
Chang, Claire		RRR000874	1.2 (9), 1.1.3 (15)
Chapin, Chuck	Lander County, Board of Commissioners	RRR000646	3.12 (139), 1.7.14 (4183), 3.2.1 (47), 1.7.14.2 (4162), 1.7.14.2 (2034), 3.4.6 (99), 1.7.14 (1725), 1.11 (4191), 3.12 (139), 3.7.7 (81), 1.7.14 (4192), 1.7.14 (1997), 2.4.2 (1931), 2.4.4 (37), 2.2.1 (43), 2.4.1 (1995), 2.7.1 (1724), 2.7.7 (4164), 2.11 (4182), 2.15 (147), 1.7.14 (1986), 3.15 (1985), 3.1.2 (2), 3.4.5 (1983), 3.6.4 (1982), 2.4.2 (145), 2.2 (1980), 2.6 (1946), 2.4.1 (151), 2.4.6 (1913), 3.4.3 (1912), 2.7.7 (4175), 2.7.1 (1720), 2.7.1 (1910), 2.7.4 (1908), 2.15 (1879), 2.7.1 (1841), 2.7.1 (1839), 2.7.4 (54), 1.7.14 (4183), 2.7.7 (4175), 2.2.5 (2690), 2.7.7 (2689), 2.7.7 (4173), 2.7.7 (4173), 2.7.7 (4164), 2.11 (1701), 3.6 (132), 2.11 (1697), 3.3.2 (161), 3.7.7 (63), 3.7.7 (1532), 3.11 (1531), 3.11 (4170), 3.11 (4170), 3.11 (1528), 3.11 (1526), 3.11 (1525),
			3.11 (1523), 3.11 (4171)
Chase, Jim		RRR000388	1.14 (539)
Chelette, Iona		RRR000550	1.7.14 (4198), 1.7.13 (2145), 1.1.3 (15), 1.6.2 (2148), 1.7.12 (1751), 1.4.6 (31), 1.6.2 (52), 1.7.13 (171), 1.7.12 (1637), 1.8.1 (33),

		Comment	
Commenter	Organization	Document Number	Location of Comments/Responses
			1.6.2.1 (61), 1.6.3.2 (1640),
			1.3.1 (1641), 1.6.1 (67), 1.3.1 (1658)
Chester, Greg		RRR000406	1.3.2 (4167)
Chiucarello, Ed		RRR000461	1.1.3 (15)
Chozahinoff, Barbara		RRR001009	1.1.3 (15)
Christian, Amy		RRR000698	1.1.3 (15), 1.3.2 (4167)
Christiansen, Holly		RRR000717	1.1.3 (15)
Christine, Alexi		RRR000794	1.1.3 (15), 1.3.2 (4167)
Clark, Al		RRR000031	1.1.4 (16)
Clark, Robert R.		RRR000309	1.1.3 (15)
Clementsen, Ron	Caliente BLM Field Office	RRR000017	3.2.4.1 (629)
Clemons, Ronald D.		RRR000230	1.1.4 (16)
Cohen, Albert G.	Southern California Ecumenical Council	RRR000483	1.1.3 (15)
Cohen, Isabel/Carl		RRR000474	1.1.3 (15)
Cole, Jan		RRR000014	3.2.5 (166), 3.7.1 (2300), 3.2.6 (94), 1.7.14.2 (3988)
		RRR000292	3.4.1 (21), 3.2.5 (166)
Colleen		RRR001025	1.1.4 (16)
Collins, Nicola M.		RRR000984	1.1.3 (15)
Collins-Ranadive, Gail		RRR000349	1.4.4 (29)
Colvin, Tom	Colvin & Sons, LLC	RRR000665	3.2 (11), 3.12 (139), 3.2.4.1 (17), 3.7.1 (4185)
Comnes, Barbara M.		RRR000640	1.1.3 (15)
Conley, Jack B.		RRR000183	1.1.4 (16)
Conroy, Barbara		RRR000711	1.1.3 (15), 1.3.2 (4167)
Cooley, Marian		RRR000487	1.1.3 (15), 1.6.2.1 (61)
Cooper, William R.		RRR001022	1.1.4 (16)
Cooper-Vasquez, Lori		RRR001002	1.1.3 (15)
Corbett, Patrick J.		RRR000644	1.1.3 (15)
Corcoran, David		RRR000493	1.1.3 (15)
Corneli, Helen M		RRR000869	1.2 (9)
Corson, Jamie		RRR000379	1.1.3 (15)
Corwin, Stanley		RRR000752	1.1.3 (15), 1.3.2 (4167)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Coulter, Krista	State of Nevada, Dept. of Administration	RRR000450	1.16 (170)
		RRR000451	2.16 (755)
Covington, Cathy		RRR000492	1.1.3 (15), 1.3.2 (4167), 1.9 (75) 1.7.4 (89), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 1.6.2 (44), 2.1.2 (1418), 3.2.4.2 (7), 1.6.2 (51)
Cowan, James R.		RRR000148	1.1.3 (15)
Cox, Mike		RRR000921	1.1.3 (15), 1.3.2 (4167)
Cravens, Marisa E.		RRR000650	1.1.3 (15), 1.7.7 (4231)
Crawford, B. J.		RRR000311	1.1.3 (15)
Credille, Ellen L.		RRR000582	1.1.3 (15)
Cullen, Noreen P.		RRR000475	1.1.3 (15), 1.6.2.1 (61)
Curran, John		RRR000801	1.1.3 (15), 1.7.6 (4178)
Curtis, David		RRR000416	1.1.3 (15)
Curtis, Steven P.	Alphatech, Inc.	RRR000137	1.1.4 (16)
Cuzze, Donna		RRR001086	1.7.15 (4214)
Cuzze, Ron		RRR001085	1.1.3 (15)
D'Aquanni, Beverly Ann		RRR000514	1.1.3 (15)
Daboda, Darren	Moapa Band of Paiutes	RRR000272	1.1.3 (15)
Daggett, Becky		RRR000733	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Dalton, Eric M.		RRR000970	1.1.4 (16)
Damaschke, Jon		RRR000803	1.1.3 (15), 1.7.6 (4178)
Dannenberg, Andrew L.	Center for Disease Control and Prevention, Dept. of Health and Human Services	RRR000452	3.7.8 (830)
		RRR000454	1.7.8 (942)
		RRR000453	2.7.8 (936)
Daum, Chris		RRR000604	1.1.3 (15)
Davies, William		RRR000792	1.1.3 (15), 1.3.2 (4167)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Davis, Grace J.		RRR000312	1.1.3 (15)
Davis, Thomas M.		RRR000738	1.1.3 (15)
Day, Alice T.	Council for a Livable World	RRR000643	1.1.3 (15)
Day, Elena		RRR000486	1.1.3 (15)
DeKlever, Richard		RRR000223	1.1.4 (16), 1.3.3 (885), 1.8.1 (33), 1.3.3 (3713)
		RRR000315	1.1.4 (16), 1.8.1 (33), 1.3.3 (4228)
		RRR001000	1.2.1 (72), 1.3.3 (4228)
DeLee, Michael		RRR000065	1.2 (12)
DeMare, Joseph		RRR000595	1.1.3 (15), 1.6.2.1 (61), 1.6.3.2 (176)
DePauw, Jolie Diane		RRR000852	1.1.3 (15), 1.3.2 (4167), 1.7.4 (89), 1.6.3.2 (176)
DeVries, Laura		RRR000554	1.1.3 (15)
DeWitt, Ellen		RRR000901	1.1.3 (15)
Dean, David		RRR000222	1.1.4 (16)
Delucchi, Joy		RRR000421	1.1.3 (15)
Detweiler, Donna		RRR000539	1.1.3 (15)
Devers, Ann W.		RRR000709	1.1.4 (16)
Devine, Don		RRR000459	1.1.3 (15), 1.3.2 (4167), 1.7.4 (89)
DiSalvo, Nicole S.		RRR000704	1.1.3 (15), 1.3.2 (4167)
Dias, Michael		RRR000342	1.1.3 (15)
Dickison, Thomas D.		RRR000348	1.1.4 (16)
Dickman, Elizabeth		RRR000548	1.1.3 (15)
Dillion, Teri		RRR000561	1.1.3 (15), 1.3.2 (4167)
Dillon, Mary		RRR000215	1.1.3 (15)
Dilorenzo, M. D.		RRR000182	1.1.3 (15)
Dodge, Katharine	Northeast Pa. Audubon Society	RRR000876	1.1.3 (15), 1.3.2 (4167)
Donham, Mark	Regional Association of Concerned Environmentalists (RACE)	RRR000935	1.2 (9), 1.2 (9), 1.3.2 (4167), 1.7.4 (150), 1.7.8 (3793), 1.2.6 (27), 1.1.3 (15)
Donn, Marjory/Bertram		RRR000516	1.1.3 (15)
Donovan, Mary		RRR000817	1.1.3 (15)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Douglass, Robert L.		RRR000501	1.1.3 (15)
Downey, J.		RRR000197	1.1.3 (15)
Drew, Robin		RRR000282	1.16 (230)
Drey, Kay		RRR000708	1.1.3 (15)
Drost, Edward J.		RRR000334	1.1.4 (16)
DuBois, Gwen L.		RRR000890	1.1.3 (15)
Duarte, Gary	US Nuclear Energy	RRR000037	1.1.4 (16)
·		RRR000281	1.1.4 (16)
Duffy, Diana		RRR000830	1.1.3 (15)
Dukelow-Burton, Darlene		RRR000431	1.1.3 (15)
Dumont, Nellie		RRR000482	1.1.3 (15)
Duncil, Bruce R.		RRR000503	1.1.3 (15)
Dunn, Kim		RRR000547	1.16 (170)
Durante, Charles T.		RRR000429	1.1.3 (15), 1.3.2 (4167)
Durham, Barbara		RRR000067	1.7.14 (4192), 1.7.4 (4195), 3.7.7 (48)
Durham, Barbara		RRR000102	3.7.8 (364)
Dye, Patsy L.		RRR000990	1.1.3 (15)
Dyken, Carl		RRR000063	1.1.3 (15)
Dyken, Mark		RRR000350	1.1.3 (15)
Dziegiel, Henry		RRR000226	1.1.3 (15), 1.13 (28)
		RRR000264	1.3.1 (3715)
		RRR000284	1.1.3 (15)
Earl, Gretchen		RRR000343	1.1.3 (15)
Eastley, Joni	Nye County, Board of County Commissioners	RRR000054	1.2.4 (26)
		RRR000240	1.2.4 (26)
		RRR000656	3.4.3 (1), 3.2 (1239), 3.4.6 (98), 3.4.6 (1241), 3.1.2 (2), 3.4.6 (1362), 3.7.8 (1327), 3.4.4 (36), 3.12 (139), 3.2.3 (59) 3.11 (1334), 2.7.8 (1335), 2.7.8 (1336), 2.7.8 (1337), 2.7.8 (1338), 2.7.8 (1347), 2.7.8 (1347), 2.2 (1350), 2.1.2 (1405), 2.1.1 (1406), 1.6.2 (1395), 3.4.6 (99),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			2.7.7 (1399), 2.7.7 (1400), 1.7.1 (1404), 1.7.1 (1416), 2.11 (1419), 2.11 (1422), 2.11 (1428), 1.7.14.2 (1432), 2.11 (1434), 2.11 (1436), 2.11 (1437), 3.6.2 (131), 3.6 (92), 3.6 (120), 3.7.12 (1499), 3.6.2 (127), 3.4.3 (1502), 3.4.1 (1504), 3.7.7 (80), 3.7.7 (1506), 3.7.8 (1507), 3.7.12 (1508), 3.1.2 (3), 3.4.6 (1511), 3.7.3 (1470), 3.7.1 (1487), 3.7.4.1 (1491), 3.12 (4186), 3.7.4.2 (1496), 3.7.5 (1498), 3.6.2 (88), 3.7.8 (1620), 3.7.8 (1537), 3.15 (1541), 3.7.8 (1698), 3.7.8 (1803), 3.7.3 (1717), 3.11 (1837), 3.11 (4174), 3.4.3 (1876), 1.6.2.5 (1941), 3.11 (1942), 3.11 (1979), 2.7.7 (4175), 3.15 (1994), 3.7.8 (1996)
		RRR000657	$\begin{array}{l} 1.7.7 \ (1793), \ 1.12.1 \ (1696), \\ 1.2.1 \ (46), \ 1.7.7 \ (1694), \\ 1.2 \ (111), \ 1.6.3.2 \ (1792), \\ 1.2.4 \ (26), \ 1.7.7 \ (1691), \ 1.9 \ (77), \\ 1.7.16 \ (4234), \ 1.7.7 \ (1660), \\ 1.7.7 \ (1659), \ 1.7.1 \ (1767), \\ 1.7.7 \ (1659), \ 1.7.1 \ (1767), \\ 1.7.7 \ (1633), \ 1.7.7 \ (2152), \\ 1.7.7 \ (2151), \ 1.7.7 \ (2152), \\ 1.7.7 \ (2151), \ 1.7.7 \ (2149), \\ 1.7.8 \ (2146), \ 1.7.8 \ (2131), \\ 1.7.15 \ (2129), \ 1.7.15 \ (1766), \\ 1.11 \ (1764), \ 1.6.5 \ (58), \\ 1.9 \ (1763), \ 1.7.8 \ (1816), \\ 1.7.8 \ (1814), \ 1.11 \ (1790), \\ 1.2.3 \ (25), \ 1.12.1 \ (1789), \\ 1.3.1 \ (1732), \ 1.15 \ (4161), \\ 1.12.1 \ (1780), \ 1.7.8 \ (1757) \end{array}$
Eastling, Matt		RRR000611	1.1.3 (15)
Ebert, Daniel R.	Public Service Commission of Wisconsin	RRR000757	1.1.4 (16), 1.2.1 (72)

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Edwards, Carolyn		RRR000251	1.1.3 (15)
Eichbaum, Barlane/Ronal	d	RRR000233	1.1.4 (16)
Eichbaum, Ike		RRR000051	1.1.4 (16)
Ellen, Linda/Ron		RRR001037	1.1.3 (15)
Emerson, Eric S.		RRR000871	1.3.2 (4167), 1.6.1 (67)
Emmerick, Kevin R.		RRR000555	3.7.4.2 (1563), 3.7.1 (1594), 3.7.5 (1564), 3.7.2 (1565), 3.7.8 (2417), 3.7.8 (2418), 3.4.3 (20), 3.7.6 (1567), 3.7.10 (2478), 3.1.3 (53)
Erb, Cheryl		RRR000634	1.1.3 (15)
Ertelt, Sabrina		RRR000914	1.1.3 (15)
Esparza, Mary Alica		RRR000297	1.1.3 (15)
Esteves, Pauline		RRR000066	3.7.14.1 (387), 3.7.14.2 (2670)
Estey, Kara		RRR000750	1.1.3 (15), 1.3.2 (4167)
Etheridge, Kelly J.		RRR000408	1.1.3 (15)
Evans, Dinda		RRR000496	1.1.3 (15)
Evans, Jim		RRR000296	1.6.5 (57)
Fairchild, Stephanie M.		RRR000892	1.1.3 (15)
Fallini, Anna	Twin Springs Ranch	RRR000072	3.2 (4144), 3.7.1 (116), 3.14 (2454), 3.2 (11), 3.4.1 (34)
Fallini, Joe B.	Twin Springs Ranch	RRR000710	3.3.2 (161), 3.2.1 (47), 3.7.4.2 (154), 3.7.4.1 (1671), 3.2.5 (167), 3.6.4 (95), 3.7.1 (116), 3.7.1 (117), 3.7.1 (1664), 3.7.10 (1663), 3.7.5 (1645), 3.7.5 (1644), 3.7.5 (1643), 3.7.5 (2158), 3.7.5 (2157), 3.7.5 (2156), 3.7.5 (2137), 3.7.5 (2136), 3.7.9 (2135), 3.6 (112), 3.7.5 (148), 3.2.6 (94), 3.7.1 (2103), 3.7.1 (2101), 3.7.5 (2100), 3.7.4.2 (2098), 3.7.4.2 (140), 3.7.4.2 (2077), 3.7.5 (158), 3.7.5 (2000), 3.7.5 (2066), 3.7.5 (1999), 3.7.9 (3045), 3.7.1 (1998), 3.11 (1956), 3.11 (1955),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			3.3.3 (2063), 3.3.3 (1954), 3.12 (139), 3.12 (4186)
Fallini, Joe	Twin Springs Ranch	RRR000075	1.1.3 (15), 1.6.2 (52), 3.2 (237), 1.4.6 (31), 3.7.8 (2415)
Fancher, Clyde C.		RRR001079	2.4.2 (4027), 2.4.7 (4030), 2.4.6 (4092), 1.1.4 (16)
Farias, Corinne		RRR000424	1.1.3 (15), 1.3.2 (4167), 1.9 (75), 1.7.4 (89)
Farm, D.W.		RRR001004	1.1.3 (15)
Fazzalaro, Mary		RRR000243	1.1.3 (15)
Feder, Malina		RRR000366	1.1.3 (15)
Felich, Tara		RRR000748	1.1.3 (15), 1.3.2 (4167)
Fellows, Kevin		RRR000332	1.2 (9), 1.1.3 (15)
Fellows, Richard M.		RRR000900	1.6.2.1 (61)
Filippini, Hank	N-6 State Grazing Board	RRR000687	3.1.3 (53), 3.2.1 (47), 3.7.1 (116), 3.7.1 (1845), 3.6 (93), 3.6 (105), 3.6.3 (96), 3.6.2 (130), 3.6 (129), 3.6 (132), 3.6 (120), 3.12 (139), 3.6 (133), 3.7.1 (1952), 3.2.5 (167), 3.7.1 (117), 3.6.3 (85), 3.7.4.2 (2114), 3.12 (4186), 3.6 (109), 3.11 (4172), 3.7.1 (118), 3.8 (1651), 3.6 (107)
Filmore, Laura		RRR000048	1.1.3 (15)
Finch, David A.		RRR000155	1.1.4 (16)
Fine, Bill		RRR000053	1.1.3 (15)
Fitzell, Anne Marie		RRR000592	1.1.3 (15), 1.3.2 (4167)
Flake, Merlin R.	N-4 State Grazing Board	RRR000621	3.7.1 (116), 3.2.4 (19), 3.2.1 (47), 3.7.1 (1427), 3.6 (129), 3.12 (139), 3.6 (93), 3.6.2 (122), 3.6.3 (108), 3.4.3 (1375), 3.2.5 (167), 3.7.1 (117), 3.11 (4172), 3.7.1 (118), 3.6 (107), 3.6 (109), 3.6.3 (96), 3.6.2 (130), 3.6 (133), 3.6 (120), 3.6 (105), 3.6 (132), 3.7.4.2 (1443), 3.12 (4186)
Fleming, Jay	J&K Expo	RRR000130	1.1.3 (15)
Flores, Gabriel/Raven		RRR000811	1.1.3 (15), 1.7.6 (4178)
Fofrich, Robert		RRR000802	1.1.3 (15), 1.7.6 (4178)

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Follins, Bryan		RRR000584	1.1.3 (15)
Foreman, Mary Jo		RRR000167	1.1.3 (15)
Foremaster, Judd		RRR000253	3.4.1 (34)
Foremaster, Kelly		RRR000254	3.4.1 (34)
Fought, Dale	D.C. Minerals, Inc.	RRR000814	3.4 (24)
Fowler, Ed	Mineral County, Board of Commissioners	RRR000682	3.2.1 (47), 1.7.14.2 (4162), 1.7.14.2 (2034), 3.4.6 (99), 1.7.14 (2032), 1.7.14 (1725), 1.11 (4191), 3.12 (139), 3.7.7 (81), 1.7.14 (4192), 1.7.14 (1997), 2.4.1 (1995), 2.7.1 (1724), 2.7.7 (4164), 2.11 (4182), 2.15 (147), 1.7.14 (1986), 3.15 (1985), 3.1.2 (2), 3.4.5 (1983), 3.6.4 (1982), 2.4.2 (145), 2.2 (1980), 2.6 (1946), 2.4.1 (151), 2.4.6 (1913), 3.4.3 (1912), 2.7.1 (1720), 2.7.1 (1910), 2.7.4 (1908), 2.15 (1879), 2.7.1 (1841), 2.7.4 (2697), 2.7.4 (2696), 2.7.4 (2695), 2.7.4 (2696), 2.7.4 (2695), 2.7.4 (2694), 2.7.7 (2689), 2.7.7 (4173), 2.11 (1701), 3.6 (132), 2.11 (1697), 3.3.2 (161), 3.7.7 (1532), 3.11 (1531), 3.11 (4170), 3.11 (1528), 3.11 (1526), 3.11 (1525),
Fox, Vicki		RRR000495	3.11 (1523), 3.11 (4171) 1.1.3 (15), 1.6.2.1 (61)
Fox, William/Myrna		RRR000926	1.3.2 (4167), 1.1.3 (15)
Francia, Carol		RRR000541	1.1.3 (15)
Freedlund, Mary M.		RRR000630	1.1.3 (15)
Freeman, Fred H.		RRR000212	1.1.4 (16), 1.7.15 (4054)
Freeman, Jacqueline		RRR000530	1.1.3 (15)
Freeman, Lu		RRR000026	1.1.3 (15)
Fretheim, Paul		RRR000093	1.1.3 (15), 1.2.6 (27)

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Friedman, Judi		RRR000463	1.1.3 (15)
Frishman, Steve	Nevada Agency for Nuclear Projects	RRR000275	1.4.4 (29), 1.2 (111), 1.2 (9)
Frost, Debra		RRR000001	1.1.3 (15)
Fujiyoshi, Ronald S.		RRR000724	1.1.3 (15), 1.3.2 (4167)
Fuller, Ernest		RRR000870	1.1.3 (15)
Futrell, Susan		RRR000585	1.1.3 (15)
Gaffney, Matt	Inyo County, Yucca Mountain Repository Assessment Office	RRR000059	1.7.4 (4188), 1.7.4 (4189), 1.12.1 (84), 1.7.7 (4230), 1.7.7 (626), 1.4.1 (49)
		RRR000082	1.7.4 (3708), 1.3.3 (4168), 1.7.7 (4230), 1.4.6 (31), 1.6.3.2 (176), 1.7.13 (171)
		RRR000239	1.7.4 (4188), 1.7.4 (4189), 1.12.1 (84), 1.7.7 (4230), 1.4.1 (49), 1.7.15 (3907), 1.6.2 (62), 1.6.3.2 (176), 1.7.7 (626)
Gagnon, Lisa		RRR000540	1.3.2 (4167), 1.7.4 (89), 1.7.14 (2839), 1.6.3 (73), 1.6.5 (56), 1.7.3 (172), 1.3.3 (2843)
Gaia, Fabiana G.		RRR000337	1.1.4 (16), 1.6.5 (56)
Gallagher, Sarah Woodside		RRR000654	1.1.3 (15)
Ganson, Mike		RRR000242	1.1.3 (15)
Garcia, Jeffery		RRR000821	1.1.3 (15)
Gardipe, Janice	Western Shoshone	RRR000052	1.1.3 (15)
Gardner, Jean		RRR000432	1.1.3 (15)
Garison, Ann		RRR000414	1.1.3 (15)
Garrett, Jo Anne		RRR000694	1.1.3 (15), 1.3.3 (4168), 3.2 (3387)
Garriott, Helen M.		RRR000333	1.1.3 (15)
Garrison, Ann		RRR000409	1.1.3 (15)
Garry, Rebecca		RRR000355	1.1.3 (15)
Garvey, Lydia		RRR000527	1.1.3 (15)
Geno, Debbie		RRR000500	1.1.3 (15)
Gentry, Don		RRR000559	1.1.3 (15)
Gere, Kathy		RRR000624	1.6.2.1 (61), 1.1.3 (15)

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Gerstung, April S.		RRR000648	1.1.3 (15)
Getty, G.	Nuremberg Actions	RRR000022	1.1.3 (15)
Gibson, Joyce		RRR000437	1.1.3 (15)
Giese, Mark M.		RRR000574	3.2.1 (47), 3.4.2 (42), 3.2.4.2 (7), 1.6.2 (51)
Gillette, Karl/Joan		RRR000983	3.1.3 (53)
Gilliam, Lynnette M.		RRR000949	1.1.4 (16)
Gillum, Rita		RRR000079	3.7.7 (64)
Gilmore, Roseann		RRR001061	1.1.3 (15)
Gitersonke, Don		RRR000194	1.1.3 (15)
Givens, Nancy		RRR000479	1.3.2 (4167), 1.6.5 (57), 1.6.2.2 (1886), 1.7.8 (1887), 1.2.6 (27), 1.4.5 (30), 1.7.15 (4058), 1.4.4 (29), 1.1.3 (15)
Glenn, Rob		RRR000370	1.1.3 (15)
Globerle, W.		RRR000393	1.1.3 (15)
Godfrey, Marci T.		RRR000163	1.1.4 (16)
Godinez, Jacob		RRR000789	1.1.3 (15), 1.3.2 (4167)
Goit, John		RRR000097	1.1.4 (16)
Goodison, Jason		RRR000776	1.1.3 (15), 1.3.2 (4167)
Goodman, Miriam	Mid-Island Radiation Alert	RRR000608	1.1.3 (15)
Goodman, Oscar	City of Las Vegas, Mayor	RRR000266	1.1.3 (15)
Govan, Michael	Los Angeles County Museum of Art	RRR000433	3.4.1 (35)
Grant, Abbie		RRR000954	1.1.3 (15)
Grant, Patrick		RRR000741	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Gray, Charles D.	National Association of Regulatory Utility Commissioners (NARUC)	RRR000525	1.3.1 (1857), 1.7 (1858), 1.15 (4161), 1.3.3 (1860), 1.3.1 (1861), 1.2.1 (1862), 1.6.3.2 (1865), 1.2.4 (1894), 1.11 (1895), 1.6.2 (1897), 3.4.3 (1), 1.7.8 (1899), 1.7.16 (4234), 1.3.3 (1737),

		Comment Document	Location of
Commenter	Organization	Number	Comments/Responses
			1.4.4 (29), 1.11 (1929), 1.3.1 (1932), 1.6.2 (1959), 3.1 (1962), 3.4 (1966), 1.6.3.2 (176), 1.6.2 (164), 2.4.1 (41), 3.4.6 (98), 2.4.2 (2051), 3.4.5 (2054), 3.4.5 (2055), 3.7.7 (2057), 3.4.4 (2059), 3.7.8 (1761), 3.4 (2085)
Greaser, John		RRR000827	1.1.3 (15)
Greco, Tom		RRR000110	1.1.4 (16)
Green, Karen		RRR000565	1.1.3 (15), 1.3.2 (4167)
Green, Morgan		RRR000722	1.1.3 (15)
Greene, Eileen		RRR000994	1.7.7 (3724), 1.6.2.5 (143), 1.4.6 (31), 1.7.6 (4178)
Greenhaw, Rhonda J.		RRR000520	1.1.3 (15), 1.1.3 (15), 1.3.2 (4167), 1.9 (75), 1.7.4 (89), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.4.1 (49), 1.6.2.1 (61), 1.7.16 (4233), 1.6.2 (44), 2.1.2 (1418), 3.2.4.2 (7), 1.6.2 (51)
Grenell, Jason C.		RRR000961	1.1.3 (15)
Griffith, Donna		RRR000633	1.7.6 (4178)
Griffith, Linda		RRR000365	1.3.2 (4167), 1.1.3 (15)
Groom, Warren		RRR000151	1.1.3 (15)
Grote, Jennifer R.		RRR000165	1.1.3 (15), 1.3.2 (4167)
Grover, Ravi		RRR000607	1.7.14 (2239)
Guzman, Tony		RRR000932	1.2 (9), 1.11 (4191), 1.6.3.2 (176), 1.3.2 (4167), 1.7.4 (150), 1.1.3 (15)
Haas, Shannon		RRR000766	1.1.3 (15), 1.3.2 (4167)
Hadder, John	Healing Ourselves and Mother Earth (HOME)	RRR000046	1.3.2 (4167), 1.2 (10), 3.4.2 (42), 1.3.3 (4168), 1.6.5 (56)
		RRR000737	1.2 (12), 1.2 (9), 1.3.1 (3913), 3.3.2 (1474), 2.2 (1475), 1.6.3.3 (3619), 1.6.3.2 (175), 1.6.3.3 (3620), 1.6.3 (70), 1.11 (4194), 1.2.1 (2387), 1.3.3 (3914), 1.9 (3132),

		Commont	
Commenter	Organization	Comment Document Number	Location of Comments/Responses
			1.2.1 (113), 1.7.4 (4064), 1.2.1 (72), 1.7.8 (1482), 1.2.6 (27), 1.7.7 (3629), 1.7.7 (2709), 1.9 (4135), 1.9 (4107)
Hagan, Tootie		RRR000400	1.3.2 (4167)
Haggerty, Bernard P.		RRR000872	1.2 (9), 1.1.3 (15), 1.6.1 (67)
Hale, Ann		RRR000494	1.1.3 (15)
Hall, James A.		RRR000744	1.1.3 (15), 1.3.2 (4167)
Hall, Jim	State of Nevada, Agency for Nuclear Projects	RRR000321	1.6.2 (253), 1.6.1 (67), 1.6.3.2 (176), 1.7.14 (4198)
Hall, Tressie		RRR000886	1.1.3 (15)
Halstead, Robert	State of Nevada, Agency for Nuclear Projects	RRR000006	1.2 (10), 1.2.1 (55), 1.6.2.7 (637), 1.7.14 (4198), 3.2.1 (47), 3.4.2 (42), 3.2.4.2 (7), 3.4.4 (36), 3.4.2 (643)
		RRR000013	1.2 (10), 1.2 (12), 1.2.2 (50), 1.2.1 (55), 1.6.2.7 (565), 3.7.1 (566), 3.4.1 (18), 3.12 (139), 1.7.14 (4198), 3.7.1 (117), 3.7.4.2 (140), 3.6.2 (106)
		RRR000038	1.2.1 (55), 3.1.3 (53), 3.4.2 (42), 3.2.4.2 (7), 1.6.2 (51), 1.6.2.5 (163), 1.7.14 (4198)
		RRR000056	1.2 (10), 1.1.3 (15), 1.6.3.2 (175), 3.2.1 (47), 2.4.1 (41), 3.2.4.2 (7), 1.6.2 (51), 3.4.4 (36), 1.6.2.5 (163), 3.7.1 (801), 3.4.1 (18), 3.7.1 (116), 3.7.4.2 (140), 3.6.2 (106), 3.2.4.2 (8)
		RRR000069	1.6.2.7 (815), 3.2.1 (47), 3.4.2 (42), 3.4.1 (18), 3.2.4.2 (8)
		RRR000274	1.1.3 (15), 1.2 (9), 1.6.2.5 (163)
		RRR000322	1.6.2.7 (726)
Halt, Joanne		RRR000723	1.1.3 (15), 1.1.3 (15)
Hamburg, Robert A.		RRR000537	1.1.3 (15)
Hamilton, Mary		RRR000760	1.1.3 (15)
Hampson, Judith A.		RRR000168	1.1.3 (15)

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Hansen, Jean		RRR000196	1.14 (4190)
Hansen, John P.		RRR000023	1.1.3 (15)
Hanson, Art		RRR000467	1.7.3 (172), 1.7.6 (4178), 1.6.3.2 (176)
		RRR000612	1.1.3 (15), 1.6.3.2 (175)
Hanson, Natalie		RRR000468	1.7.3 (172), 1.7.6 (4178), 1.6.3.2 (176)
Hardacker, Tracy L.		RRR000842	1.1.4 (16)
Harden, Cory/Martha		RRR000404	1.1.3 (15), 1.3.2 (4167), 1.9 (75) 1.7.4 (89), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.4.1 (49), 1.6.2.1 (61), 1.7.16 (4233), 1.6.2 (44), 2.1.2 (1418), 3.2.4.2 (7), 1.6.2 (51)
Harkins, Joanne		RRR000490	1.1.3 (15)
Harm, Christopher W.	United States Department of Commerce	RRR000568	3.16 (2653)
		RRR000569	1.12 (2656)
Hartle, Sherie		RRR000534	1.1.3 (15)
Harvey, Pauline		RRR000942	1.1.3 (15)
Harvey, Vivian		RRR000218	1.1.3 (15)
Haslam, Malissa		RRR000695	1.1.3 (15), 1.3.2 (4167)
Haslett, Dora		RRR000505	1.1.3 (15)
Hatley, Earl		RRR000420	1.6.2.1 (61), 1.3.2 (4167)
Hatt, Greg		RRR000795	1.1.3 (15), 1.3.2 (4167)
Haustermanns, Josine		RRR000596	1.1.3 (15)
Hawkins, Keith		RRR000141	1.1.4 (16)
Hayes, Sara	SENAA West	RRR000746	1.1.3 (15), 1.3.2 (4167)
Haymaker, Annie		RRR000506	1.3.2 (4167), 1.7.4 (89), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2 (51), 1.6.2.1 (61), 1.7.16 (4233)
Headington, Maureen K.		RRR000974	1.1.3 (15)
		RRR000975	1.1.3 (15)
		RRR000977	1.1.3 (15)
Headington, Vincent		RRR000815	1.2.6 (27)

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Heil, Darla	Owens Valley Indian Commission	RRR000100	1.2 (9), 1.7.7 (4230), 1.7.4 (4195), 1.6.2.1 (61), 1.7.18.2 (332)
Heinonen, Valerie	Mercy Investment Program, Sisters of Mercy-Detroit, Dominican Sisters of Hope and Ursuline Sisters of Tildonk	RRR000933	1.2 (9), 1.11 (4191), 1.6.3.2 (176), 1.3.2 (4167), 1.6.3 (74), 1.7.4 (150), 1.7.8 (3680), 1.2.6 (27), 1.1.3 (15)
Heizer, Michael	Triple Aught Foundation	RRR000674	3.4.1 (35), 3.2 (1830)
Helfenstein, Josef	The Menil Collection	RRR000683	3.4.1 (35)
Hellman, Codie		RRR000139	1.1.3 (15), 1.7.16 (4233)
Henderson, Matt		RRR001048	1.1.4 (16)
Hendrick, Paula		RRR000626	1.1.3 (15)
Henning, Bill		RRR001018	1.6.2.1 (61)
Herbst, Jeff		RRR000498	1.1.3 (15)
Hernesman, Barbara		RRR000908	1.1.3 (15), 1.3.2 (4167)
Higginbotham, lames/Joyce		RRR001040	1.1.4 (16)
Higginson, Judy Ann		RRR000928	1.1.3 (15), 1.3.2 (4167)
Hilfer, Eric S.		RRR000645	1.2 (9), 1.1.3 (15)
Hill, Gayle		RRR000225	1.1.4 (16)
		RRR000244	1.1.4 (16)
Hodges, Bennie	Humboldt River Basin Water Authority	RRR000029	1.2 (60), 2.4.1 (41)
Hollis, Charles Gary		RRR000004	1.1.4 (16)
Hollis, Gary	Nye County, Board of County Commissioners	RRR000081	1.2.4 (26)
		RRR000271	1.2.4 (26)
		RRR000320	1.2.4 (26)
Holmes-Litvak, Veronika J.		RRR001029	1.6.2.1 (61)
Holzberg, Steve		RRR000491	1.1.3 (15), 1.3.2 (4167), 1.9 (75), 1.7.4 (89), 1.6.3.2 (176), 3.4.2 (42) 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 1.6.2 (44), 2.1.2 (1418), 3.2.4.2 (7), 1.6.2 (51)

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Hornbeck, David A.	Hornbeck Law Office	RRR000192	1.4.4 (29), 1.7.16 (4233)
Hornbeck, Ronda	Lincoln County, Nevada, Board of County Commissioners	RRR000617	1.2.2 (50), 1.3.3 (1000), 3.2 (11) 1.2.1 (55), 1.3.3 (1003), 1.9 (97) 1.12 (162), 1.12 (4187), 3.2.4 (1009), 1.2 (14), 3.6 (120), 1.1 (961), 2.4.7 (962), 1.4.1 (49) 1.1 (964), 1.7.8 (965), 2.4.7 (82) 1.6.2 (51), 1.7.14 (971), 1.12 (975), 1.12 (976), 2.1.1 (977), 2.2.4 (979), 2.1 (1033), 2.4.4 (37), 2.2.1 (43) 3.1.1 (1043), 3.2.4.1 (1047), 3.2.4.2 (1048), 3.12 (139), 3.4.7 (1051), 3.2 (1053), 3.4.6 (1058), 3.3.2 (161), 3.15 (1060), 3.4.3 (1061), 3.4.3 (1010), 3.6.2 (131), 3.6.2 (130), 3.4.5 (1014), 3.6.2 (122), 3.12 (4186), 3.4.1 (1021), 3.15 (152), 3.6.2 (102), 3.6 (92), 3.6.2 (91), 3.7.1 (1027), 3.7.1 (1028), 3.7 (1030), 3.3.2 (1031), 3.6.3 (1032), 3.6.3 (85), 3.6.3 (96), 3.6.2 (1091), 3.6.3 (1102), 3.6.2 (1091), 3.6.3 (1102), 3.6.2 (106), 3.6.3 (1102), 3.6.2 (106), 3.6.4 (1063), 3.6 (133), 3.6.4 (126), 3.6.4 (83), 1.6.2.5 (1069), 3.4.1 (1071), 3.4.7 (78), 3.4.7 (1075), 3.7 (1079), 3.7.1 (118), 3.2.5 (167), 3.7.3 (1089), 3.7.3 (1081), 3.7.3 (1084), 3.7.1 (116), 3.7.5 (1131), 3.7.3 (1133), 3.7.3 (1134), 3.7.1 (117), 3.7.1 (1136), 3.7.2 (114), 3.7.4.2 (1141), 3.7.4.1 (1140), 3.7.4.2 (1141), 3.7.4.1 (1140), 3.7.4.2 (1141), 3.7.4.1 (1140), 3.7.4.2 (1141), 3.7.4.1 (1140), 3.7.4.2 (1141),

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			3.7.5 (1144), 3.7.5 (1145),
			3.7.5 (148), 3.7.5 (1147),
			3.7.7 (1150), 3.6.3 (1155),
			3.6 (112), 3.6 (93), 3.7.7 (1159),
			3.7.10 (1162), 3.2.6 (94),
			3.7.3 (1119), 3.7.3 (1120),
			3.7.3 (1121), 3.7.1 (1123),
			3.7.1 (1127), 3.7.1 (1200),
			3.7.1 (1202), 3.7.10 (1204), 3.7.10 (1205), 3.7.10 (1206),
			3.6.2 (87), 3.7.4.1 (1211),
			3.7 (1213), 3.7.4.2 (140),
			3.7.4.2 (154), 3.7.4.2 (159),
			3.7.4.2 (1216), 3.7.4.2 (1217),
			3.7.4.2 (1218), 3.7.4.2 (1168),
			3.7.4.2 (1170), 3.7.5 (1171),
			3.7.5 (1194), 3.7.5 (1197),
			3.7.5 (1198), 3.6.2 (90),
			3.7.7 (64), 3.7.7 (63),
			3.7.7 (1191), 3.7.7 (1193),
			3.6 (177), 3.3.1 (169),
			3.7.8 (1301), 3.7.8 (1304),
			3.11 (1307), 3.11 (4172),
			3.11 (1310), 3.11 (1311),
			3.11 (1312), 3.11 (1314),
			3.11 (1315), 3.11 (1316), 3.11 (1318), 3.6.4 (95),
			3.11 (1318), 3.04 (93), 3.11 (1323),
			3.7.8 (1222), 3.8 (1356),
			3.8 (1353), 3.8 (1354),
			3.8 (1355), 3.8 (1357),
			3.8 (1359), 3.2 (1360),
			3.2 (1361), 1.6.2 (1363),
			1.6.2 (1364), 1.6.2 (1365),
			3.2 (1366), 3.4.4 (36), 2.2 (1368),
			3.7.8 (1369), 3.7.5 (1370),
			3.7.7 (48), 1.3.1 (1324),
			3.7.7 (66), 3.2 (1328),
			3.7.2 (1330), 3.7.8 (1331),
			3.2.1 (47), 1.3.1 (4169), 3.6 (105), 3.8 (4226), 3.8 (4227)
Houck, Sherry		RRR000754	1.1.3 (15)
Houston, James N.		RRR000985	1.6.2.1 (61)
Hovey, Kenneth		RRR000245	1.1.4 (16)
Hovey, Keimeth		11111000243	1.1.7 (10)

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Huber, Melissa		RRR000824	1.1.3 (15)
Hudig, Dorothy		RRR000145	1.4.4 (29), 1.7.16 (4233)
		RRR000307	1.4.4 (29), 1.7.16 (4233)
Huet-Vaughn, Yolanda		RRR000599	1.1.3 (15)
		RRR000878	1.1.3 (15)
Huffman, Garrett		RRR000786	1.1.3 (15), 1.3.2 (4167)
Hulbert, Dan		RRR001053	1.1.4 (16)
Huston, John		RRR000015	1.2 (12), 3.1.2 (604), 3.4.3 (605) 1.7.15 (606)
Huston, Jon		RRR000298	3.4.1 (21), 3.4.3 (20)
Huston/Cole, John/Jan		RRR000317	2.4 (65), 3.4.1 (21), 3.2.1 (47), 3.7.3 (173), 1.6.2.7 (3699), 3.7.4.1 (174), 3.4.1 (3737), 1.7.15 (3738), 3.4.1 (3739), 3.7.7 (3740), 2.15 (146), 1.7.14 (4198), 3.2.5 (166), 2.2 (32)
Illegible		RRR000573	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Illo, Dana		RRR000446	1.1.3 (15)
Irizarry, Mesha Monge		RRR000415	1.1.3 (15)
Irons, Ellie L.	Commonwealth of Virginia, Dept. of Environmental Quality	RRR000679	1.7.14.1 (2794), 1.1.4 (16)
Irwin, Larry		RRR000478	1.1.3 (15), 1.3.2 (4167), 1.9 (75) 1.7.4 (89), 2.1.2 (1418), 3.4.2 (42), 3.2.4.2 (7), 1.6.2 (51)
Israel, Carolyn Trupti		RRR000398	1.1.3 (15)
Ithurralde, James P.	Eureka County Board of Commissioners	RRR000664	1.2.3 (25), 2.4.2 (2765), 1.2.1 (113), 1.2 (9), 3.2 (11), 2.2.1 (43), 2.7.1 (128), 2.4.2 (3087), 3.7.1 (116), 2.7.7 (4164), 2.7.7 (4175), 3.7.7 (81), 2.7.5 (2372), 2.7.5 (2401), 3.7.5 (148), 3.15 (2451), 3.6.2 (130), 3.6.2 (87), 3.7.1 (3052),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			3.7.4.2 (1125), 3.7.5 (1122), 3.7.8 (3089), 3.4.4 (36), 1.12 (4187), 3.12 (139), 1.6.2 (52), 1.7.14 (2461), 1.6.2 (164), 1.6.2.1 (61), 1.6.2 (2467), 1.2.1 (4160)
			1.6.2 (2467), 1.3.1 (4169), 1.8.1 (33), 1.6.3 (73), 1.11 (2392), 2.4.2 (2654), 1.7.14 (2710), 1.9 (2714)
Izen, Ray L.		RRR000184	1.1.3 (15)
Jacobsen, Elaine		RRR000614	1.1.3 (15)
Jacobsen, Kathleen		RRR000250	1.1.3 (15)
James, Earl		RRR000927	1.1.3 (15), 1.3.2 (4167)
Janey, Linda C.	Maryland Dept. of Planning	RRR000129	2.2.3 (1269), 1.2.3 (25)
		RRR000306	1.2.3 (25)
Jaszczak, Cash		RRR000003	1.1.4 (16)
Jaszczak, Cash	Nye County Nuclear Waste Repository Project Office	RRR000044	1.2.4 (26)
Jennings, Barbara	Midwest Coalition for Responsible Investment	RRR000543	1.1.3 (15)
Jetter, Judy		RRR000958	1.1.3 (15)
Jindra, Jo Ann E.		RRR000181	1.1.3 (15)
Johnson, Bruce		RRR000111	1.1.4 (16)
Johnson, Catherine		RRR000448	1.1.3 (15)
Johnson, Marcia		RRR000112	1.1.4 (16)
Johnson, Sharon		RRR000466	1.1.3 (15)
Johnson, Zach		RRR000825	1.1.3 (15)
Johnston, Jill		RRR000590	1.1.3 (15), 1.3.2 (4167)
Johnstone, Myna Lee		RRR000367	1.1.3 (15)
Jones, Barbara T.		RRR000564	1.1.3 (15), 1.3.2 (4167)
Jones, Cecil		RRR001036	1.1.3 (15)
Jones, Derek		RRR000436	1.1.3 (15)
Kaim, Ronald M.		RRR000190	1.1.3 (15)
Kaminski, Steven T.	_	RRR000359	1.1.4 (16)
Kamps, Kevin J.	Beyond Nuclear	RRR000237	1.6.2.1 (61)

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		RRR000325	1.2 (9), 1.11 (4191), 1.6.3.2 (1556), 1.6.3 (1557), 1.7.15 (1593), 1.13 (28), 1.3.2 (4167), 1.1.3 (15), 1.9 (1561)
		RRR000357	1.6.2.1 (61)
		RRR000241	1.2 (9), 1.11 (4191), 1.6.3.2 (2600), 1.6.3 (74), 1.3.2 (4167), 1.1.3 (15), 1.7.8 (2604), 1.2.6 (27), 1.6.2 (52)
		RRR000260	1.4.6 (31)
Kaplan, Karen		RRR000382	1.1.3 (15)
Karas, Anna		RRR000743	1.1.3 (15), 1.3.2 (4167)
Karpen, Leah R		RRR000578	1.6.3.2 (176), 1.7.14 (1569), 1.6.2 (51), 1.1.3 (15)
Katz, Lorie		RRR000186	1.1.3 (15)
Kaufmann, Ellen		RRR000893	1.1.3 (15)
Kausch, George K.		RRR000477	1.1.3 (15)
Kean, Beth		RRR000637	1.1.3 (15)
Keele, Harold E		RRR000170	1.13 (28), 1.1.3 (15)
Keller, Nina		RRR000557	1.1.3 (15)
Kelly, Carla		RRR000563	1.1.3 (15)
Kelly, Mike		RRR000289	1.1.3 (15)
Kennedy, Joe	Timbisha Shoshone Tribe	RRR000690	1.7.18.2 (1520), 1.2 (12), 1.6.2 (1627), 1.1.3 (15), 1.7.18.2 (1625), 1.7.18.1 (1624) 1.2.6 (27), 1.3.2 (4167), 1.7.18.1 (1621), 1.6.3.2 (176), 1.7.10 (1618), 1.7.2 (1616), 1.7.4 (1614), 1.7.5 (157), 1.7.7 (1612), 1.7.8 (1610), 1.7.11 (1609), 1.7.12 (1608), 1.7.6 (1606), 1.7.6 (1605), 1.7.13 (171), 1.3.1 (4169), 1.12.1 (1601), 1.7.18 (1599), 1.7.18.2 (1591), 1.7.18 (1599), 1.7.18.2 (1589), 1.7.18 (1588), 1.7.6 (1587), 1.7.7 (1586), 1.7.18 (1585), 1.7.18.2 (1584), 3.7.14.2 (1583), 1.7.4 (4197),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			1.7.15 (1581), 1.7.18.2 (1580), 1.12.2 (1578), 1.7.1 (1577), 1.7.5 (1576), 1.7.15 (1575), 1.7.8 (1574)
		RRR000691	1.7.18.2 (1520), 1.2 (12), 1.6.2 (1627), 1.1.3 (15), 1.7.18.2 (1625), 1.7.18.1 (1624), 3.2.6 (94), 3.3.2 (4133), 3.12 (139), 3.7.1 (3106), 3.6.2 (106), 3.7.8 (3108), 3.6 (120), 3.6 (93), 3.7.1 (3113), 3.6.2 (3114), 3.7.14.2 (1583), 3.7.10 (3116), 2.7.2 (3117), 3.7.2 (3120), 3.7.2 (3121), 3.7.2 (3120), 3.7.2 (3123), 3.7.2 (3120), 3.7.2 (3123), 3.7.2 (3159), 2.7.4 (3160), 2.7.4 (3161), 3.7.4.1 (3162), 3.6.2 (88), 3.7.4.1 (3164), 1.7.5 (157), 2.7.5 (3166), 3.7.5 (3167), 3.7.5 (3168), 3.7.5 (3167), 3.7.5 (3168), 3.7.5 (3169), 2.7.7 (3349), 2.7.7 (3425), 2.7.8 (3426), 2.7.11 (3427), 2.7.11 (3428), 2.7.11 (3429), 2.7.12 (3430), 2.7.12 (3431), 2.7.12 (3430), 2.7.12 (3433), 2.7.6 (3434), 2.7.6 (3435), 2.7.13 (3436), 1.3.1 (4169), 3.7.6 (4146), 1.6.2.7 (3170), 3.4.3 (3171), 3.7.14.2 (3520), 3.7.3 (3521), 1.7.18.2 (1589), 1.7.18 (1588), 1.7.6 (1587), 1.7.7 (1586), 1.7.18 (1585), 1.7.18.2 (1584), 3.7.14.2 (1583), 1.7.4 (4197), 1.7.15 (1581), 1.7.18.2 (1580), 1.12.2 (1578), 1.7.1 (1577), 1.7.5 (1576), 1.7.15 (1575),
Kowas Japica M		DDD000502	1.7.8 (1574)
Keyes, Janice M. Kibble, Carol		RRR000593 RRR000854	1.1.3 (15), 1.3.2 (4167) 1.1.3 (15)
			1.1.3 (15)
Kimball, Don		RRR000385	1.1.3 (15)
Kincaide, Delores		RRR000941	1.1.3 (15), 1.3.2 (4167)
King, Joan O.		RRR000627	1.1.3 (15)

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King, Stephen E.		RRR000860	1.1.3 (15)
Kipen, Ken/Ethel		RRR000435	1.1.3 (15)
Kirby, William C.	Esmeralda County, Board of County Commissioners	RRR000068	1.1.4 (16), 3.4.6 (98), 3.4.6 (99)
		RRR000235	1.6.3.2 (3338), 3.7.1 (4225), 3.4 (24), 3.4.6 (98), 1.6.2 (3402), 3.4.6 (99)
		RRR000666	1.6.3.2 (176), 3.4 (24), 3.4.6 (98), 1.6.2 (3743), 3.4.6 (99), 3.4.1 (3382), 3.7.6 (3640), 3.7.1 (3679), 3.7.1 (3683), 3.7.7 (3684)
Kirk, Dave		RRR000099	1.1.3 (15)
Klevorick, Phillip		RRR000005	1.15 (4161)
Knittle, Christa		RRR000362	1.1.3 (15)
Kochaver, Marie		RRR000441	1.1.3 (15)
Kolar, Sanda		RRR000832	1.1.3 (15)
Kortes, Genny		RRR000419	1.1.3 (15)
Koschek, Kenneth	State of New Jersey, Dept. of Environmental Protection	RRR000567	1.6.3.2 (1457)
Kosmides, Kathryn L.		RRR000166	1.1.3 (15)
Kostmayer, Martha Ferris		RRR000542	1.1.3 (15)
Kraft, Steven P.	Nuclear Energy Institute (NEI)	RRR000318	1.1.4 (16), 3.1.4 (69)
		RRR000619	3.1.4 (69), 3.4.3 (1), 3.7.8 (2313), 3.7.8 (2314), 3.15 (2315), 3.4.6 (98), 3.1.2 (2)
Kreis, Deborah		RRR000512	1.1.3 (15)
Kriesler, Leonard		RRR000285	1.2 (10), 3.4.3 (354)
Kuehnhackl, Krista M		RRR000867	1.11 (1445), 1.7.12 (1446), 1.7.12 (1447), 3.4.3 (1), 1.6.2 (1449), 1.7.11 (1450), 1.7.1 (1451), 1.7.11 (1452), 1.7.7 (1453), 1.7.15 (1454), 1.8.1 (33), 1.2 (1950)
LaForge, John		RRR000701	1.1.3 (15)
		RRR000840	1.1.3 (15)

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LaPlaca, Nancy		RRR000839	1.1.3 (15)
LaVoie, Johny		RRR000255	3.2.7 (40)
Lacy, Darrell	Nye County, Nuclear Waste Repository Project Office	RRR000658	3.12 (139), 3.4.1 (34), 3.12 (4186)
Ladeira, Amber	·	RRR000601	1.1.3 (15)
Landguth, David M.		RRR000755	1.1.3 (15), 1.3.2 (4167)
Landguth, David		RRR000781	1.1.3 (15), 1.3.2 (4167)
Landon, Matt		RRR000587	1.1.3 (15)
Lanphear, Raymond A.		RRR000969	1.1.3 (15)
Larson, Keith	City of Caliente	RRR000016	3.12 (139), 3.12 (4186)
Lauchengco, Dennis		RRR000199	1.2 (101)
Law, Dennis/Theodora		RRR001058	1.1.3 (15)
LeFevre, Kathy		RRR000021	3.2.7 (40), 3.2.1 (47)
Lea, Robert J.		RRR000345	3.4.1 (23)
Lehman, Mary		RRR000606	1.1.3 (15), 1.6.2.1 (61)
Lewis, Judy		RRR001042	1.1.3 (15)
Lewis, Marvin I.		RRR000538	1.7.14.1 (2799), 1.7.16 (4233)
Lewis, Tonya D.		RRR000784	1.1.3 (15), 1.3.2 (4167), 1.2.1 (72)
Liesner, Joseph		RRR000742	1.1.3 (15)
Lightfoot, Jack		RRR000390	1.1.4 (16), 3.4.2 (542)
Lim, Kingman G.		RRR000373	1.1.3 (15), 1.6.3.2 (176), 1.6.2.7 (3646), 1.8.1 (33), 1.6.2 (3648), 3.7.8 (3649)
Lincoln, Robert		RRR000552	1.1.3 (15), 1.3.2 (4167), 1.9 (75), 1.7.4 (89), 1.6.3.2 (176)
Linda, Deb		RRR000577	1.1.3 (15), 1.6.2.1 (61), 1.2.1 (55), 1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Linda, Tom		RRR000732	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Linder, Josh	Environment America	RRR000328	1.1.3 (15), 1.9 (263), 1.2.6 (27), 1.6.2 (52)

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Linesch, Catherine		RRR000047	1.1.3 (15)
Lintner, Michael F.		RRR000991	1.1.4 (16)
Liparulo, Nick	Westinghouse	RRR000727	1.1.4 (16)
Long, Patricia		RRR000033	3.4.1 (34)
Lonsumpun		RRR001006	1.1.4 (16)
Loux, Robert R.	State of Nevada, Agency for Nuclear Projects	RRR000662	1.3.1 (944), 1.2.2 (50), 1.2 (4), 1.2 (111), 1.4.4 (29), 1.2.1 (55), 1.3.1 (956), 1.6.3 (73), 1.7.15 (917), 1.7.8 (918), 1.6.5 (58), 1.6.5 (57), 1.7.12 (922), 1.6.1 (67), 1.7.16 (4233), 1.2 (12), 1.6.2.5 (163), 1.6.2.5 (980), 1.7.14 (981), 1.6.2 (51), 1.6.2.7 (986), 1.6.2.5 (141), 1.6.2.7 (986), 1.6.2.7 (985), 1.6.2.7 (989), 1.6.2.7 (3181), 1.6.2.7 (990), 1.6.2.7 (991), 1.7.14.1 (992), 1.6.2.7 (993), 1.6.2.7 (994), 1.7.14 (4198), 1.6.2.5 (997), 1.2.6 (27)
		RRR000663	1.2.2 (50), 1.1 (841), 1.2 (4), 2.2 (32), 3.2.4.2 (7), 1.2 (60), 1.2 (9), 1.11 (930), 2.2.1 (43), 2.4.1 (41), 3.1 (933), 3.4.5 (937), 3.4.1 (18), 3.4.5 (939), 3.7.1 (940), 3.2.5 (941), 1.7.14 (949), 1.7.14 (4198), 3.7.14.1 (951), 1.7.16 (4233), 2.7.8 (953), 1.6.2 (164), 3.4.3 (919), 3.11 (1042), 3.4.4 (36), 1.6.2 (51), 1.7.14.2 (1046), 3.2.3 (1050), 3.2.4.1 (1052), 3.2.6 (94), 3.3.2 (1018), 3.7.10 (1093), 3.7.8 (1110), 3.7.4.2 (154), 2.1 (1132), 2.6 (1135), 2.7.1 (1148), 2.7.7 (4175), 3.6.2 (90), 3.7.1 (1153), 3.6 (93), 3.7.5 (1122), 3.7.4.2 (1125), 1.12 (4187), 3.7.1 (117), 3.6 (92), 3.7.10 (1176), 1.6.2 (1177), 3.2.3 (1178), 3.7.1 (1179),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			3.7.4.2 (1181), 3.7.6 (1182), 3.7.6 (1183), 1.12.1 (4217)
Lupo, Vivian		RRR000774	1.3.2 (4167), 1.1.3 (15)
Mackenzie, Therese		RRR000812	1.1.3 (15)
Maclean, Gary		RRR000987	1.1.4 (16)
Macy, Francis U.	Center for Safe Energy	RRR000696	1.1.3 (15)
Macy, Joanna R.		RRR000753	1.3.2 (4167), 1.1.3 (15)
Maestas, Lisa Marie		RRR000785	1.1.3 (15), 1.3.2 (4167)
Magar, Mary Jo/Joe		RRR000635	1.1.3 (15)
Mahoney, Stephen		RRR000469	1.7.4 (89)
Malkin, Mort		RRR000558	1.1.3 (15)
Mallory, Kelli		RRR000791	1.1.3 (15), 1.3.2 (4167)
Malloy, Max		RRR000252	1.1.3 (15)
Malmedal, Kelley		RRR000154	1.1.3 (15)
Manion, Patricia Jean		RRR000697	1.1.3 (15), 1.3.2 (4167)
Maniscalco, Peter		RRR000940	1.1.3 (15), 1.3.2 (4167)
Manner, Jim		RRR001084	3.1.4 (69), 3.4.1 (4212)
Maple, Susan L.		RRR000340	1.1.3 (15)
Marchese, John		RRR000173	1.1.3 (15), 1.4.4 (29)
Marchese, Rich J.		RRR000174	1.1.3 (15), 1.4.4 (29)
Mareck, Katherine		RRR000571	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Margison, Bob		RRR000740	1.1.3 (15)
Mark, Jonathan		RRR000882	1.1.3 (15)
Markey, Darlene		RRR000623	1.7.18.1 (2229)
Marks, Luan Fautech Makes		RRR000916	1.1.3 (15)
Marsh, Amy Hadden		RRR000560	1.1.3 (15), 1.3.2 (4167), 1.7.3 (172), 1.6.3.2 (176), 1.3.3 (4168)
Martini, Geno R.	The City of Sparks	RRR000351	1.1.3 (15)
Martz, Douglas		RRR001024	1.12.2 (160)
Marvin, Anne		RRR000718	1.1.3 (15)
Matsuda, Thomas		RRR000399	1.1.3 (15), 1.3.2 (4167)

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Matsuda, Thomas		RRR000762	1.1.3 (15), 1.3.2 (4167)
Matt, Jane R.		RRR000739	1.1.3 (15), 1.3.2 (4167)
Mayo, Paul		RRR000897	1.1.3 (15), 1.3.2 (4167)
Mazzotti, Amanda		RRR000736	1.1.3 (15), 1.3.2 (4167)
McCabe, Eileen		RRR000929	1.2 (9), 1.11 (4191), 1.6.3.2 (176), 1.6.3 (74), 1.7.3 (172), 1.7.16 (3470), 1.3.2 (4167), 1.7.6 (3539), 1.7.4 (3756), 1.7.8 (3543), 1.2.6 (27), 1.1.3 (15)
McCabe, George		RRR001034	1.1.3 (15)
McCally, Michael	Physicians for Social Responsibility	RRR000861	1.1.3 (15), 1.3.3 (4168), 1.7.8 (1948), 1.7.15 (1924), 1.7.8 (1923)
McCarthy, Karen		RRR000156	1.1.3 (15)
McClellan, Scott		RRR000030	1.1.4 (16), 1.12.2 (160)
McClintock, Francene		RRR000831	1.1.3 (15)
McCullum, Rod	NEI Yucca Mountain Project	RRR000058	1.1.4 (16)
McCullum, Rodney	Nuclear Energy Institute (NEI)	RRR000279	1.1.4 (16)
		RRR000620	1.1.4 (16), 1.7.8 (1810), 1.8.1 (33), 1.6.1 (67), 1.2.1 (46), 1.7.16 (4234), 1.6.3.2 (1744), 1.2 (111), 1.6.2.2 (1714), 1.1 (1713), 1.15 (4161), 1.7.1 (1683), 1.7.15 (1682), 1.7.15 (1681)
McDannald, John A.		RRR000177	1.1.3 (15)
McGill, Mike		RRR000605	1.1.3 (15)
McGoldrick, Suzanne L.		RRR000231	1.6.3.2 (175), 2.4.1 (41), 3.7.7 (79), 3.7.8 (3584), 3.1.3 (53)
McInnis, May		RRR000201	3.3.2 (161)
		RRR000249	3.12 (139)
McMahon, Diane M.		RRR000957	1.1.3 (15)
McMullen, Penelope		RRR000877	1.1.3 (15), 1.3.2 (4167)
McPheeters, Greg T.		RRR000875	1.1.3 (15)
McWhite, Nancy		RRR000808	1.1.3 (15), 1.7.6 (4178)
Meadow, Norman D.		RRR000866	1.8.1 (33)

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Mears, Michael A.	Eureka County Assessor's Office	RRR000669	2.7.1 (128)
Medina, Amanda G.		RRR000700	1.1.3 (15), 1.3.2 (4167)
Meikle, John F.		RRR000150	1.4.4 (29)
Mejia, Sergio		RRR000807	1.1.3 (15), 1.7.6 (4178)
Melvin, Jerry L.		RRR000962	1.4.6 (31)
Mengelkamp, Robert A.		RRR000164	1.1.3 (15)
Mersereau, K. K.		RRR000488	1.1.3 (15)
Meshkoff, Rose		RRR000088	1.1.3 (15)
Metz, Marc		RRR000799	1.1.3 (15), 1.7.14 (1569)
Meyer, Alfred	Alliance for Nuclear Accountability	RRR000330	1.6.3 (73), 1.6.3.2 (176), 1.7.8 (268), 1.4.4 (29)
		RRR000726	1.1.3 (15), 1.9 (75), 1.3.2 (4167), 3.4.4 (36), 1.3.3 (4168), 1.6.3.2 (176), 1.6.2.5 (142), 1.11 (4193)
Miller, Anne Norton	United States Environmental Protection Agency	RRR000667	1.3.3 (908), 1.9 (909), 1.2 (912)
		RRR000668	2.4.1 (915), 3.7.4.1 (824), 2.2 (825), 3.2 (4215)
Miller, Katya		RRR000699	1.1.3 (15), 1.3.2 (4167)
Miller, Marilyn		RRR000526	1.1.3 (15)
Miller, Mark		RRR000729	1.1.3 (15), 1.7.3 (172), 1.7.4 (89) 1.9 (75)
Miller, Sue		RRR001075	1.1.3 (15)
Miller, Suzanne M.		RRR000609	1.1.3 (15)
Miller, Virginia J.		RRR000833	1.1.3 (15), 1.3.2 (4167)
Millett, Jerry	Duckwater Shoshone Tribe	RRR000693	3.7.6 (4146), 2.7.13 (1485), 2.7.6 (1486), 2.7.6 (1488), 3.7.14.1 (1490), 3.7.14.1 (1492), 3.7.7 (48), 3.7.8 (4224), 3.7.6 (1497), 3.7.13 (168), 3.7.5 (1549), 3.7.6 (1551), 1.3.2 (4167)
Minard, Maryal		RRR000978	1.1.3 (15)
Minch, Allen		RRR000767	1.1.3 (15), 1.3.2 (4167)
Miner, Judy		RRR000507	1.1.3 (15)
Miranda, Daniel		RRR000397	1.7.6 (4178)

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	Organization		
Mirisch, Judy		RRR000205	1.1.3 (15)
Mitchell, Delbert		RRR000189	1.1.4 (16), 1.12.2 (160)
Mitzelfelt, Brad	County of San Bernardino, Board of Supervisors	RRR000673	1.1.3 (15), 1.2 (4), 1.3.1 (2294), 1.7.14 (4198), 1.6.2.1 (61), 1.3.1 (4169)
Mizdrak, Marko		RRR000778	1.1.3 (15), 1.3.2 (4167)
Moffat, Jay		RRR000834	1.2 (9)
Moline, Alex		RRR000428	1.1.3 (15)
Molnar, Katrina		RRR000715	1.1.3 (15)
Monachelli, Carolyn		RRR000545	1.1.3 (15)
Monastero, Joan		RRR000716	1.1.3 (15)
Moncada, Patricia		RRR000888	1.7.6 (4178)
Moore, Ashley	City of Caliente	RRR000118	1.1.4 (16), 3.4.1 (23), 3.3.1 (169), 3.4.1 (22), 3.4.1 (38), 3.12 (139)
Moore, Richard C.		RRR000943	3.7.1 (116), 3.7.5 (3946)
Moore, Roanne		RRR000119	1.1.4 (16), 3.4.1 (23), 3.3.1 (169), 3.4.1 (22), 3.4.1 (38), 3.12 (139)
Moose, Virgil	Big Pine Paiute Tribe of the Owens Valley	RRR000675	1.7.18.2 (2725), 1.2 (9), 1.2 (13), 1.3.2 (4167), 1.7.3 (2804), 1.7.4 (2846), 1.7.4 (2850), 1.7.18.2 (2854), 1.7.18.1 (2855), 1.7.6 (4086), 1.7.6 (4179), 1.6.3.2 (175), 1.7.13 (171), 1.6.5 (58), 1.2 (111), 1.4.4 (29), 2.4.1 (41), 3.7.14.1 (4036), 2.7.7 (2319), 3.7.6 (2479), 3.7.14.2 (2489), 1.6.2.7 (2490), 3.7.14.2 (2492), 3.4.7 (2565), 1.1.3 (15), 1.6.3.2 (176)
Morano, Lana		RRR000465	1.6.2.1 (61), 1.1.3 (15)
Morgan, Charles W.		RRR000504	1.1.3 (15)
Morgan, Judy A.		RRR000971	1.1.3 (15)
Morrow, Theresa		RRR000224	1.1.3 (15)
Morton, Jenna		RRR000219	1.2.6 (27), 1.2 (12), 1.1.3 (15)
Morton, Jenna	Nine Group	RRR000259	1.2.6 (27), 1.2 (12), 1.1.3 (15)
Moss, Allen	Western Shoshone National Council	RRR000865	1.3.2 (4167)
Mueller, Joanne D.	Maryland Dept. of the Environment	RRR000027	1.2.3 (25)
Mullen, Mary		RRR000434	1.1.3 (15)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Mullings, Diamond		RRR000769	1.7.4 (4188), 1.7.4 (4189), 1.7.7 (4230), 1.7.18.1 (2272), 1.3.2 (4167), 1.6.3.2 (176), 1.7.12 (134), 1.11 (4193), 1.6.3 (74), 1.7.15 (2278), 1.2.1 (72), 3.2.4.2 (7), 1.6.2 (44), 1.7.14 (2282), 1.6.2.1 (61), 1.3.3 (4168), 1.2 (12), 1.2 (13)
Mulvenon, Norman	LOC Inc. – Oak Ridge Reservation Local Oversight Committee	RRR000702	1.1.4 (16)
Murray, Jacqueline		RRR000369	1.1.3 (15), 1.3.3 (4115)
Murtensen, Larry		RRR000391	1.1.3 (15)
Muson, Ray		RRR000200	1.1.3 (15)
Myers, Calvin		RRR000304	1.1.3 (15)
Myers, Stephanie		RRR000354	1.1.3 (15)
Myrick, Patrick T.		RRR000844	1.1.4 (16)
Nagle, Susan		RRR000858	1.1.3 (15)
Naha, Cynthia		RRR000485	1.7.6 (4178)
Naranjo, Marian		RRR000810	1.1.3 (15), 1.7.6 (4178)
Nash, Nora		RRR000931	1.2 (9), 1.11 (4191), 1.6.3.2 (176), 1.2 (9), 1.6.3 (74), 1.7.4 (150)
Navis, Irene	Clark County Nuclear Waste Program	RRR000280	1.2.1 (72), 1.2.2 (50), 1.3.1 (344), 1.7.14 (4192), 1.6.2.5 (163), 1.6.5 (58), 1.4.5 (30), 1.3.3 (4168), 1.11 (4191), 1.6.5 (56), 1.13 (28)
Navis, Irene	Clark County, Nevada, Dept. of Comprehensive Planning	RRR000681	1.2.6 (27), 1.13 (28), 1.6.3 (70), 1.11 (3006), 1.11 (3007), 1.11 (3037), 1.7.3 (3038), 1.7.7 (3039), 1.7.15 (3040), 1.7.15 (3084), 1.7.16 (4233), 1.8.1 (33), 3.4.2 (42), 1.7.14 (4192), 1.6.3.2 (176), 1.6.2 (51), 3.12 (139), 3.11 (4177), 3.2.1 (47), 3.7.8 (2337), 1.7.16 (2367), 3.7.8 (2369), 1.7.14 (2371), 3.7.8 (2398), 3.7.8 (2399), 3.6.4 (2400), 3.4.3 (2402),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			3.6 (124), 1.7.4 (2450), 1.11 (2452), 1.11 (2453), 1.6.3 (74), 1.7.2 (2456), 3.7.2 (2531), 3.7.9 (2532), 1.12 (2533), 1.2.1 (72), 1.2 (4), 1.7.8 (3041), 1.7.2 (3042), 1.7.8 (3043)
Nelis, Elizabeth A		RRR000966	1.1.3 (15)
Nelis, William D.		RRR000964	1.1.3 (15)
Nelson, Dennis P.		RRR000588	1.1.3 (15)
Nelson, Dennis R.		RRR000820	1.1.3 (15), 1.3.2 (4167), 1.9 (3451)
		RRR000896	1.1.3 (15)
Newcomb, Steven	Indigenous Law Institute	RRR000660	1.3.2 (4167)
Newman, Roberta E.		RRR000649	1.1.3 (15)
Newman, Sarah F.		RRR000430	1.1.3 (15)
Newton, Sharon A.		RRR000982	1.1.3 (15)
Nicholl, Robert L.		RRR000171	1.1.3 (15)
Nichols, Jean	La Comunidad	RRR000685	1.1.3 (15), 1.3.2 (4167)
Nidess, Rael		RRR000502	1.1.3 (15), 1.4.5 (30)
No last name given, Aaron		RRR000455	1.1.3 (15)
No last name given, Barbara		RRR000967	1.1.3 (15)
No last name given, Bob		RRR000161	1.1.4 (16)
No last name given, Dave		RRR001074	1.1.4 (16)
No last name given, Emily		RRR000410	1.1.3 (15)
No last name given, Jacquey		RRR001030	1.1.3 (15)
No last name given, Joe		RRR001062	1.1.4 (16)
No last name given, Lindalou		RRR000423	1.1.3 (15)
No last name given, P.J.		RRR000999	1.1.3 (15)
Nole, Zeb		RRR000287	1.4.6 (31)
Novick, Leah		RRR000386	1.1.3 (15)
O'Brien, William J.		RRR000209	3.1.3 (53)

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O'Connell, Brian	National Association of Regulatory Utility Commissioners (NARUC)	RRR000323	1.1.4 (16)
O'Connor, Michael		RRR000077	3.4 (24)
		RRR000106	1.1.4 (16)
O'Neill, Bobbie Hart		RRR000413	1.16 (170)
ODonnell, Deb		RRR000387	1.1.3 (15)
Oberman, Robert M		RRR000956	1.1.3 (15)
		RRR000963	1.1.3 (15)
Ogren, Lorrie		RRR000532	1.1.3 (15)
Oleskevich, Diana	Sisters of St. Joseph of Carondelet	RRR000938	1.2 (9), 1.11 (4191), 1.6.3.2 (176), 1.3.2 (4167), 1.6.3 (74), 1.7.4 (150), 1.7.8 (3680), 1.2.6 (27), 1.1.3 (15)
Omuhundro, Charlotte		RRR000175	1.1.3 (15), 3.2.1 (47), 1.7.14.2 (4098)
One Feather, Harold J.		RRR000937	1.2 (9), 1.11 (4191), 1.6.3.2 (176), 1.6.3 (74), 1.3.2 (4167), 1.7.4 (150), 1.7.8 (3680), 1.2.6 (27), 1.1.3 (15)
Ornstein, Herbert		RRR000010	3.1.3 (53)
Oropeza, Carlos		RRR000374	1.1.3 (15)
Orr, Lisa		RRR000616	1.1.3 (15), 1.4.5 (30)
Osborne, Dan		RRR001052	1.12.2 (160)
Overton, Patrick		RRR000779	1.1.3 (15), 1.3.2 (4167)
Paape, Joyce		RRR000915	1.1.3 (15)
Palma, Juan	U.S. Department of the Interior, Bureau of Land Management	RRR001081	1.9 (77), 1.7.5 (3414)
		RRR001082	3.7.5 (3415), 3.7.7 (80), 3.7.4.1 (3419), 3.7.5 (148), 3.2.3 (3417), 3.12 (139)
Parillo, Jill	Physicians for Social Responsibility	RRR000329	1.6.1 (67), 1.9 (409), 1.7.8 (410), 1.7.15 (411), 1.7.8 (412)
Parise, Mary J.		RRR000247	1.1.3 (15)
Parks, Terry P.		RRR000159	1.1.3 (15)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Parsons, Roland M.		RRR000288	1.1.4 (16)
		RRR000346	1.1.4 (16)
Patrie, Lewis E.		RRR000597	1.1.3 (15)
Payer, Tax		RRR000188	1.1.3 (15), 1.8.1 (33)
Pellett, Simon		RRR000651	1.1.3 (15), 1.3.2 (4167)
Pepin, Carolan		RRR000229	1.1.3 (15)
Perry, Sybil M.		RRR000598	1.6.2.1 (61), 1.1.3 (15)
Pham, Khanh	Nevada Pharmacist Association	RRR000134	1.1.3 (15)
Phillips, Kevin	City of Caliente	RRR000012	1.1.4 (16), 1.4.6 (31), 3.4.3 (1), 3.4.1 (23), 3.3.1 (169), 3.4.1 (3395), 3.4.1 (22), 3.4.1 (38), 3.12 (139)
		RRR000116	1.1.4 (16), 1.4.6 (31), 3.4.3 (1), 3.4.1 (23), 3.3.1 (169), 3.4.1 (3395), 3.4.1 (22), 3.4.1 (38), 3.12 (139)
		RRR000641	3.2.3 (890), 3.2.1 (47), 1.2.1 (55 1.4.4 (29), 2.4.1 (41), 3.12 (139) 3.4.6 (911), 3.3.2 (161), 3.4.3 (914), 3.3.1 (826), 3.4.1 (1071), 3.7.8 (831), 3.3.1 (169), 3.15 (833), 3.7.9 (834), 3.7.9 (835), 3.7.9 (836), 3.6 (177)
Phillips, Kevin J.	For A Better Nevada	RRR000706	1.1.4 (16)
Pickett, Carol J.		RRR000153	1.1.3 (15)
Pikus, Barbara		RRR000481	1.1.3 (15)
Piszczekand, Rosemary		RRR001020	1.6.2.1 (61)
Plaski, Lisa		RRR000202	1.1.3 (15)
		RRR001028	1.1.3 (15)
Pope, Kay A.		RRR000922	1.6.2.1 (61)
Porter, Al D.		RRR000180	1.1.3 (15)
Porter, Johanna		RRR000440	1.1.3 (15)
Price, Norma J.		RRR000143	1.1.3 (15)
		RRR000246	1.1.3 (15)
Pringle, Bruce M.		RRR000484	1.3.2 (4167), 1.1.3 (15), 1.7.4 (89), 1.6.2 (715), 1.6.3.2 (176)
Purpel, Elaine		RRR000473	1.1.3 (15)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Quinn, Bob	U.S. Transport Council	RRR000040	1.1.4 (16), 2.1.4 (71)
Quiroz, Mike		RRR000535	1.3.2 (4167), 1.7.4 (89)
Racime, Denyse	State of California, Dept. of Fish and Game	RRR001078	1.7.5 (2331), 1.7.4 (2360)
Rake, Launce	Progressive Leadership Alliance of Nevada	RRR000262	1.4.4 (29)
		RRR000263	1.1.3 (15)
Rana, Avis		RRR000719	1.1.3 (15), 1.6.2.1 (61), 1.7.16 (4233)
Rannells, Ed	Esmeralda County	RRR000073	3.1.4 (69), 3.4 (24), 3.7.7 (2793
		RRR000107	3.4 (24)
Ransom, Rita L.		RRR000261	1.1.3 (15)
Rasche, Roger		RRR000087	1.16 (170)
Ray, Dorothy		RRR000035	1.1.3 (15), 3.4.1 (34), 3.7.1 (3486), 3.7.8 (3487), 3.2.6 (94)
Reback, Mark		RRR000936	1.2 (9), 1.11 (4191), 1.6.3.2 (176), 1.6.3 (74), 1.3.2 (4167), 1.7.4 (150), 1.7.8 (3680), 1.2.6 (27), 1.1.3 (15)
Rebman, Marilyn		RRR000149	1.1.3 (15)
Reed, Debra	Las Vegas Indian Center	RRR000283	1.7.18 (630), 1.4.6 (31), 3.4.2 (42), 1.7.18.2 (633)
Reese, Gary		RRR000267	1.1.3 (15)
Reese, Joy		RRR000581	1.1.3 (15)
Reid, Harry	Congress of the United States	RRR000290	1.2.1 (113), 1.2 (14), 1.2.1 (55), 1.6.3.2 (176), 1.9 (426), 1.3.3 (427), 3.7.1 (428), 3.2.1 (47)
		RRR000678	1.2.1 (55), 1.6.3.2 (176), 1.6.3 (70), 1.6.3 (73), 3.15 (152 3.2.1 (47), 3.7.3 (1348), 3.7.4.1 (1349), 3.7.7 (1386), 3.7.7 (1387), 1.7.14 (4198), 1.2 (60), 1.2 (14)
Reilly, Jennifer		RRR000759	1.1.3 (15)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Reimer, Nancy		RRR000713	1.1.3 (15), 1.3.2 (4167)
Rendon, Genaro L.	Southwest Worker's Union	RRR000749	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167)
Reuschel, Warren		RRR000851	1.11 (3825)
Reuther, Sandra		RRR001073	1.1.3 (15)
Reynolds, Bruce		RRR000208	1.1.3 (15)
Reynolds-Sparks, Darla		RRR000904	1.1.3 (15)
Rhodes, Rick C.		RRR001023	1.1.3 (15)
Rice, Megan		RRR000300	1.1.3 (15)
Richardson, John		RRR000775	1.1.3 (15), 1.3.2 (4167)
Richmond, Ray		RRR001083	1.1.3 (15), 1.3.2 (4167)
Rickman, Robin	Westinghouse Electric Company	RRR000221	1.1.4 (16)
Ridgway, Virginia		RRR000076	3.4 (24)
Rigby, Dan		RRR000041	1.1.4 (16)
Rigby, Samantha		RRR000881	1.7.3 (172)
Riley, Amber-Renee		RRR000800	1.1.3 (15), 1.3.2 (4167)
Rivers, Victoria		RRR000948	1.7.16 (4233)
Rizzo, Sandi		RRR000050	1.1.3 (15)
Robert, Rene		RRR000907	1.1.3 (15)
Roberts, James C.		RRR000510	1.1.3 (15)
Roberts, Tommy J.		RRR000372	1.1.3 (15)
Rogers, Philip		RRR001021	1.6.2.1 (61)
Rohrbach, Kim		RRR000544	1.3.2 (4167), 1.1.3 (15)
Rojas, Jessica		RRR000443	1.1.3 (15)
Rolfe, Kenneth		RRR000471	1.1.3 (15), 1.3.2 (4167)
Rolfe, Megan		RRR000470	1.1.3 (15), 1.3.2 (4167)
		RRR000653	1.1.3 (15), 1.3.2 (4167)
Rolofson, Kay F.		RRR000172	1.1.3 (15)
Romero, Bernie		RRR000996	1.1.4 (16), 1.1.3 (15)
Rosenthal, Judi		RRR001055	1.1.3 (15)
Ross, Candace		RRR000277	1.1.3 (15)
Ross, Robert		RRR000427	1.1.3 (15), 1.3.3 (674)
Ross, Steve	City of Las Vegas, Councilman	RRR000268	1.1.3 (15), 1.3.1 (4169)
Rossi, Joe		RRR000036	3.4.1 (21)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Roth, Erik B.		RRR000930	1.2 (9), 1.11 (4191), 1.6.3.2 (176), 1.6.3 (74), 1.3.2 (4167), 1.7.4 (150), 1.7.8 (3680), 1.2.6 (27), 1.1.3 (15)
Roth, Nick	Nuclear Age Peace Foundation	RRR000331	1.1.3 (15), 1.4.4 (29)
Rothermel, Phil/Kathryn		RRR001068	1.1.3 (15)
Rothgal, John		RRR000095	1.7.8 (326)
Rouvier, Julia		RRR000570	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Rowe, Tommy	County of Lincoln	RRR000019	1.16 (170)
Royce, Lottie		RRR000339	1.1.3 (15)
Rudestam, Kirsten		RRR000444	1.1.3 (15)
Russo, Kathy		RRR000045	1.2 (10), 1.3.2 (4167), 1.1.4 (16)
Ryan, Sheila		RRR000412	1.1.3 (15)
Rytinova, Zdenka		RRR000806	1.1.3 (15), 1.7.6 (4178)
Saba, Marcel A.		RRR000796	1.1.3 (15), 1.3.2 (4167)
Sabbadini, Gail		RRR000910	1.1.3 (15)
Salamon, Jeffrey IK.		RRR000360	1.1.3 (15)
Sampson, Irene M.		RRR000124	1.1.3 (15), 1.7.16 (4233), 1.12.2 (608), 1.7.7 (616)
Sanabria, Julie		RRR000902	1.1.3 (15)
Sanborn, Hugh		RRR000476	1.1.3 (15)
Sandness, Robert C.		RRR000313	1.14 (4190), 1.1.4 (16), 1.8.1 (33), 2.1.4 (71), 1.4.6 (31), 1.1.3 (15), 1.6.2.5 (3815), 1.6.2.5 (141), 1.6.2.5 (143), 1.6.2.5 (144)
Sanford, Warren		RRR000575	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Sanson, Steve	Veterans in Politics	RRR000295	1.1.3 (15)
		RRR000356	1.1.3 (15)
Saul, Kathleen M.		RRR000899	1.1.3 (15)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Savage, Joan Cope		RRR000417	1.1.3 (15)
Scheid, Ann		RRR000920	1.1.3 (15)
Schieffer, Richard	Sierra Safe Energy	RRR000394	1.1.3 (15)
Schitaroff, Nina		RRR000294	1.1.3 (15)
Schlaf, Bill		RRR000955	1.1.3 (15)
Schmieding, Quentin A.		RRR000823	1.1.3 (15)
Schmieding, Rhea E.		RRR000517	1.1.3 (15)
Schmitt, Sean D.		RRR000179	1.1.4 (16)
Schmitz, Gladys M		RRR000976	1.1.3 (15)
Schneider, Keri		RRR000203	1.1.3 (15)
Schneider, Seth		RRR000363	1.1.3 (15)
Schroder, Gerri	City of Henderson	RRR000269	1.1.3 (15), 1.6.3.2 (176), 1.3.1 (3828)
Schroeder, Theodore J.	Sinai, Schroeder, Mooney, Boetsch, Bradley & Pace	RRR000352	1.1.3 (15)
Schultz, Jeffrey		RRR000884	1.1.3 (15)
Scott, Joyce		RRR000316	1.1.3 (15)
Scurlock, Rodger		RRR000764	1.1.3 (15), 1.7.4 (89), 1.3.2 (4167), 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 3.2.4.2 (7), 1.6.2 (51)
Sea, Geoffrey	Southern Ohio Neighbors Group	RRR000887	1.7.6 (4178), 1.1.3 (15)
Secor, Nathanael		RRR000401	1.1.3 (15)
Sedlock, Cheryl		RRR000426	1.1.3 (15)
Seely, Clover L.		RRR000913	1.1.3 (15), 1.1.3 (15), 1.3.2 (4167), 1.9 (75), 1.7.4 (89) 1.6.3.2 (176), 3.4.2 (42), 3.4.4 (36), 1.4.1 (49), 1.6.2.1 (61), 1.7.16 (4233), 1.6.2 (44), 2.1.2 (1418), 3.2.4.2 (7), 1.6.2 (51)
Seidler, Paul	Nuclear Energy Institute	RRR000007	1.1.4 (16), 3.1.4 (69)
		RRR000057	1.1.4 (16)
		RRR000278	1.1.4 (16), 3.4.1 (23)
Sewall, Christopher		RRR000822	1.1.3 (15), 1.3.2 (4167)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Shahrooz, William		RRR000286	1.7.3 (4199), 1.1.3 (15)
Sharpe, Trudy J.		RRR000228	1.1.3 (15)
Shaw, Gary		RRR000953	1.7.8 (3936)
Sheldon-Scurlock, Peggy		RRR000572	1.1.3 (15), 1.7.4 (4061), 1.2.1 (72), 1.7.4 (4062), 1.2 (12), 1.7.16 (4233)
Shields, Randall		RRR000883	1.1.3 (15)
Shillinglaw, Fawn		RRR000688	2.4.1 (41), 1.7.14 (4198), 1.6.5 (45), 1.6.1 (67), 1.6.3.3 (2953), 1.6.2 (5), 1.7.8 (2951), 1.8.1 (33), 1.6.3.2 (175), 1.6.3.2 (2948), 1.6.3.2 (2947), 1.7.16 (2946), 1.6.3 (73), 1.7.8 (2945), 1.6.3 (73), 1.7.8 (2945), 1.6.3 (74), 1.6.3.3 (2903), 1.6.5 (2902), 1.6.2.5 (163), 1.6.5 (2902), 1.6.2.5 (163), 1.6.2.6 (2897), 1.13 (28), 1.6.5 (58), 1.7.4 (2894), 1.7.8 (2893), 1.7.8 (2892), 1.7.16 (4233), 1.7.15 (2880), 1.7.15 (2888), 1.7.15 (2885), 1.7.2 (2884), 1.6.5 (2832), 1.7.16 (2828), 1.6.3.2 (2826), 1.4.4 (29), 1.1.3 (15), 1.11 (2766), 1.11 (4194), 1.9 (76), 1.7.17 (2760), 3.7.2 (2759), 3.7.11 (2758), 3.7.2 (2757), 3.7.2 (2754), 1.7.4 (2753), 1.3.2 (4184), 1.6.3.3 (2333), 1.7.4 (2747), 1.7.4 (2746), 1.3.2 (4167), 1.7.3 (2744), 1.7.9 (2685), 1.7.11 (2684), 1.6.3.2 (2680), 1.7.15 (2677)
		RRR000689	2.4.1 (41)
Shively, Daniel		RRR000513	1.1.3 (15)
Shock, Howard		RRR001008	1.1.3 (15)
Shyduroff, Sasha		RRR000891	1.1.3 (15)
Siegel, Larry		RRR000631	1.1.3 (15), 1.13 (28), 1.3.2 (4167), 1.9 (75), 1.7.4 (89), 1.6.3.2 (176), 3.4.2 (42),

		<u> </u>	
Commenter	Organization	Comment Document Number	Location of Comments/Responses
			3.4.4 (36), 1.6.2.1 (61), 1.7.16 (4233), 1.6.2 (44), 2.1.2 (1418), 3.2.4.2 (7), 1.6.2 (51)
Sill, Marjorie		RRR000042	1.1.3 (15), 2.4.1 (41), 3.4.1 (34), 3.7.8 (210), 1.6.2.1 (61)
Silvaggio, Janie		RRR001003	1.1.3 (15)
Silver, Sid		RRR000338	1.1.3 (15)
Silverstein, Mark E.		RRR001007	1.12.2 (160)
Simon, Laura		RRR000894	1.1.3 (15)
Simon, Mike	White Pine Nuclear Waste Project Office	RRR000522	1.2.2 (50), 1.7.14.1 (3048), 1.2.6 (27), 1.2.3 (25), 1.4.1 (49), 1.2.5 (2159), 1.9 (97), 1.6.2 (51), 1.6.2 (2162), 1.7.7 (2341), 1.3.1 (4169), 1.11 (2374), 1.15 (4161), 1.12 (4187), 2.4.1 (41), 2.4.4 (37), 1.2.1 (72), 1.12.1 (4210)
Sims, Marcus		RRR000449	1.1.3 (15)
Singleton, Dave	Native American Heritage Commission	RRR000032	1.7.6 (590)
Sinno, Moe		RRR000335	1.1.3 (15)
Sitnick, Leni		RRR000880	1.1.3 (15)
Sklar, Scott	The Stella Group, Ltd.	RRR000848	1.1.3 (15)
Slack, Susan		RRR000142	1.1.3 (15), 1.7.8 (3602), 1.7.16 (4233), 1.6.3 (73), 1.3.3 (4168), 1.7.3 (3606), 1.7.4 (4189), 1.7.4 (3608), 1.7.8 (3609), 1.6.3.2 (175), 1.11 (4191)
Smith, Catherine P.		RRR000146	1.4.4 (29)
Smith, Doug		RRR000060	1.6.2.5 (383)
Smith, Jamee R.		RRR000761	1.1.3 (15), 1.3.2 (4167)
Smith, Ross W.		RRR000358	1.1.4 (16)
Snow, Rick		RRR000049	3.1.3 (53), 1.13 (28), 1.6.2.5 (144), 1.6.2.7 (1267), 1.1.3 (15)
Snyder, Philip A.		RRR000944	1.1.3 (15)
Sojourner, Mary E.		RRR000924	1.1.3 (15), 1.3.2 (4167)

		Comment	
Commenter	Organization	Document Number	Location of Comments/Responses
Sollinger, Nancy		RRR000078	3.7.4.2 (2316), 3.12 (139)
Sollitt, Shannyn		RRR000566	1.1.3 (15), 1.3.2 (4167)
Solomon, Laurie		RRR000721	1.1.3 (15), 1.7.4 (89), 1.6.2 (44), 3.2.4.2 (7), 1.3.2 (4167), 1.6.2 (2868)
		RRR000934	1.1.3 (15), 1.7.4 (89), 1.6.2 (44), 3.2.4.2 (7), 1.6.2 (2868), 1.3.2 (4167)
Song, Robert	Pan-Am Legal Services	RRR000248	1.1.3 (15)
		RRR000302	1.1.3 (15)
Songer, Betty		RRR000917	1.1.3 (15)
Sorrells, Marla		RRR000909	1.1.3 (15)
Spake, Colin		RRR000853	1.1.3 (15)
St. Blaze, Scott		RRR000809	1.1.3 (15)
Stafford, Paula M.		RRR000771	1.1.3 (15), 1.3.2 (4167), 1.2.1 (72)
Staggs, Donna		RRR000725	1.1.3 (15), 1.3.2 (4167)
Stalsworth, Wayne		RRR000898	1.1.3 (15)
Stambaugh, Melanie		RRR000341	1.1.3 (15)
Stanton, Dolly P.		RRR000157	1.1.3 (15)
Stanton, William E.		RRR000158	1.1.3 (15)
Starr, Steven		RRR000868	1.1.3 (15)
Steinberg, Michael		RRR000918	1.1.3 (15)
Steninger, Al	Western Range Service	RRR000020	3.12 (139)
Steup, John		RRR000591	1.1.3 (15), 1.3.2 (4167)
Stewart, Max		RRR000291	1.1.3 (15)
Stewart, Valerie		RRR001043	1.1.3 (15)
Stone, Lynne		RRR000442	1.1.3 (15)
Stover, George/Sharon M.		RRR001032	1.1.3 (15)
Strick, James		RRR000906	1.3.3 (3541), 1.2.1 (55)
Strickland, Rose		RRR000109	1.2 (12), 1.3.2 (4184)
Strickland, Rose	The Toiyabe Chapter of the Sierra Club	RRR000745	1.2.2 (50), 1.2.1 (55), 1.4.4 (29), 1.7.14 (1250), 2.4.1 (41), 3.4.3 (20), 1.7.14 (1253), 1.2.1 (113), 1.1.3 (15)
Sturonas, Mark		RRR000213	1.1.3 (15)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Sullivan, John CC		RRR000972	1.1.4 (16)
Sullivan, Timothy	State of California, Dept. of Justice	RRR000659	1.1.3 (15), 1.2.1 (156), 1.7.14 (4198), 1.7.14 (3056), 1.7.16 (2163), 1.7.14 (2164), 1.6.2 (44), 1.6.2 (62), 1.6.3.2 (176), 1.2 (12)
Sulock, Dot		RRR000508	1.1.3 (15)
Svien, Kaia		RRR000462	1.1.3 (15)
Swain, Lornita R.		RRR000911	1.1.3 (15), 1.3.2 (4167)
Sweeney, Jay		RRR000536	1.1.3 (15)
Sweet, Carol		RRR001076	1.1.4 (16)
Taber, Christina		RRR000788	1.1.3 (15), 1.3.2 (4167)
Taino, Mark		RRR000368	1.1.3 (15)
Tanner, John	Coalition 21	RRR000138	3.1.4 (69)
Taylor, F.D.		RRR000859	1.3.2 (4167), 1.1.3 (15)
Teale, Laulani		RRR000594	1.1.3 (15), 1.7.6 (4178)
Tedesco, Concetta		RRR000843	1.1.3 (15)
Teer, Bill R.		RRR000191	2.15 (3801), 2.15 (3802), 3.7.6 (3803)
Thieme, Marilyn		RRR000952	1.12.2 (160)
Thomas, Kristen		RRR000301	3.4.1 (21), 1.1.3 (15)
Thomason, Amy		RRR001038	1.1.3 (15)
		RRR001050	1.1.3 (15)
Thompson, Alysha M.		RRR000734	1.1.3 (15), 1.3.2 (4167)
Thompson, Charles		RRR000299	1.1.4 (16)
Thompson, David		RRR000735	1.3.2 (4167), 1.1.3 (15)
Throckmorton, Arthur		RRR000439	1.1.4 (16)
Tieri, Anna		RRR001054	1.7.3 (172), 1.3.1 (3239)
Timmerman, Dan		RRR000378	1.1.3 (15)
Timmerman, Don		RRR000879	1.3.2 (4167), 1.1.3 (15)
		RRR000903	1.3.2 (4167), 1.1.3 (15)
Tittman, Jack B.		RRR000965	1.1.3 (15)
Tomkins, Pat		RRR000579	1.1.3 (15), 1.6.3 (73)
Toste, Jeff		RRR000576	1.1.3 (15)
Tousseau, Laura J.		RRR000152	1.1.3 (15)
Travis, Joan Stalking Bear		RRR000531	1.1.3 (15)
Treadway, Carolyn		RRR000445	1.1.3 (15), 1.6.5 (45), 1.3.3 (935) 1.3.2 (4167)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
		RRR000583	1.3.2 (4167), 1.1.3 (15), 1.6.5 (45), 1.3.3 (3412)
Treadway, Roy C.		RRR000838	1.1.3 (15)
Treharne, Rolanda	Walker Lake Working Group	RRR000392	1.16 (170)
Treichel, Judy	Nevada Nuclear Waste Task Force, Inc.	RRR000622	1.2.1 (55), 1.6.5 (58), 1.9 (1824), 1.6.3.2 (1823), 1.6.2 (1822), 1.6.3 (73), 3.4.2 (42), 1.7.7 (1798), 1.2.6 (27), 1.7.8 (1796), 1.2 (9)
Tritt, Eleanor		RRR000133	1.1.3 (15)
Tronto, Marlise		RRR000407	1.7.6 (4178)
Tuler, Seth		RRR000837	1.2.6 (27), 1.6.3.2 (175), 1.6.1 (67), 1.6.3 (74), 1.7.8 (4097), 1.2 (9)
Turk, Lawrence		RRR000515	1.16 (170)
Turner, Rose E.		RRR000169	1.1.3 (15)
Turner, Scott		RRR000845	1.1.3 (15)
Tyler, Jake		RRR000422	1.1.3 (15)
Uchino, Crystal		RRR000756	1.1.3 (15), 1.3.2 (4167)
Uferet, Lora		RRR000947	1.1.3 (15)
Uhalde, Gracian	John Uhalde and Company	RRR000618	3.7.1 (116), 3.7.1 (1427), 3.6 (129), 3.12 (139), 3.6 (93), 3.6.2 (122), 3.6.3 (108), 3.4.3 (1375), 3.2.5 (167), 3.7.1 (117), 3.11 (4172), 3.7.1 (118), 3.6 (107), 3.6 (109), 3.6.3 (96), 3.6.2 (130), 3.6 (133), 3.6 (120), 3.6 (105), 3.6 (132), 3.7.4.2 (1443), 3.12 (4186)
Ullrich, Anita L.		RRR000310	1.1.3 (15)
Van Diepen, Rick		RRR000912	1.1.3 (15)
Van Druten, Sarah		RRR000777	1.1.3 (15), 1.3.2 (4167)
Van Pelt, Pamela K.		RRR000135	1.1.3 (15)
Vandenbosch, Robert/ Susanne		RRR000232	1.6.3 (74), 1.6.2.5 (142), 1.15 (4161), 1.9 (3479), 1.9 (3481), 1.9 (3482)
van der Kamp, Dixie		RRR000770	1.1.3 (15), 1.3.2 (4167)
von Ranson, Jonathan		RRR000923	1.6.3.2 (176), 3.4.2 (42)
Vargas, Alicia		RRR000849	1.1.3 (15)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Vasquez, David A.		RRR000780	1.1.3 (15), 1.3.2 (4167)
Vatalaro, Jean A.		RRR000178	1.1.3 (15)
Vaught, Ron		RRR000353	1.1.3 (15)
Vesperman, Gary		RRR000265	1.4.6 (31)
Vesperman, Gary	New Energy Corporation	RRR000293	1.4.6 (31)
Vest, Lee	Remnant Yuchi Nation	RRR000383	1.1.3 (15), 1.7.6 (4178)
Viata, John		RRR000303	1.1.4 (16)
Vick, T.A.		RRR001049	1.1.3 (15)
Viereck, Jennifer O.	HOME - Healing Ourselves and Mother Earth	RRR000061	1.2 (10), 1.7.4 (396), 1.1.3 (15), 1.3.2 (4167)
		RRR000092	1.1.3 (15), 1.7.4 (4050)
		RRR000712	1.7.4 (4188), 1.7.4 (4189), 1.7.7 (2735), 1.7.7 (4231), 1.3.2 (4167), 1.6.3.2 (176), 1.7.12 (134), 1.11 (4193), 1.6.3 (74), 1.7.15 (2807), 1.2.1 (72), 3.4.4 (36), 1.6.2 (44), 1.7.14 (4198), 1.6.2.1 (61), 1.3.3 (2813), 1.2 (12), 1.2 (13)
Vocke, Sharon		RRR000863	1.1.3 (15)
Volk, Barbara		RRR001056	1.1.3 (15)
Volpe-Gunsell, Amie Elizabeth		RRR000703	1.6.2.1 (61)
Wadsworth, Gordon		RRR000113	1.1.4 (16), 3.4.1 (23), 3.4.1 (22), 3.12 (139)
Wadsworth, Michele		RRR000114	3.4.1 (23), 3.4.1 (38), 3.12 (4186), 3.12 (139)
Walen, Tommy		RRR000234	1.1.3 (15)
Walker, Daniel	Californians for Safe, Clean, Efficient Nuclear Power	RRR000176	1.1.4 (16), 2.1.4 (71), 3.4 (3589), 1.12.1 (4105), 3.4.3 (1), 1.7.7 (3590), 3.6 (120), 1.4.5 (30)
Walla, Diana		RRR000195	1.1.3 (15)
Ward, Dick/Korla		RRR000028	3.2 (575), 1.7.16 (4233), 3.4.1 (34), 1.1.3 (15), 1.4.6 (31)
Ward, Jeffrey R.	Metallic Goldfield, Inc.	RRR000002	3.4 (462)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Washburn, Gwen	Churchill County Commissioners	RRR000523	1.2.1 (72), 1.2 (60), 3.12 (139), 3.7.7 (81), 3.11 (4170), 1.7.14 (4192), 3.4.6 (99), 1.7.14.1 (2773), 1.6.2.2 (2772) 2.4.1 (1995), 2.4.2 (145), 2.6 (1946), 2.4.1 (151), 2.7.1 (1841), 2.7.1 (1839), 2.7.4 (2699), 2.7.4 (54), 2.7.4 (2697), 2.7.4 (2696), 2.7.4 (2695), 2.7.4 (2694), 2.7.6 (2693), 2.7.8 (2692), 2.7.7 (4175), 2.2.5 (2690), 2.7.7 (2689), 2.7.7 (4173), 2.7.7 (2689), 2.7.7 (4173), 2.7.7 (4164), 2.11 (1701), 2.7.4 (2623), 2.7.5 (2622), 3.2.1 (47), 3.3.2 (161), 3.7.1 (116), 3.7.11 (2617), 3.7.7 (63), 3.11 (2614), 3.7.7 (2613), 3.2.5 (2612), 3.11 (1528), 3.11 (1526), 3.11 (1525), 3.11 (1523), 3.11 (4171), 2.2 (1980), 2.7.1 (1724), 2.7.7 (4164), 2.11 (4182), 2.15 (147), 1.7.14 (1986), 3.15 (1985), 3.1.2 (2), 3.4.5 (1983), 3.6.4 (1982), 2.4.1 (151), 2.4.6 (1913), 3.4.3 (1912), 2.7.1 (1720), 2.7.1 (1910), 2.7.4 (1908), 2.15 (1879)
Wastewin, Wambdi A. Weber, Michael F.	United States Nuclear Regulatory Commission	RRR000632 RRR000524	1.7.6 (4178) 1.2 (3718), 1.2.1 (3719), 1.15 (4161), 1.2.1 (3721), 1.11 (3694), 1.7.12 (4010), 1.7.13 (4012), 1.2.3 (4013), 3.11 (4177), 3.6 (124), 3.7 (4109), 3.7.1 (4111), 3.2.1 (3141), 3.2.1 (3142), 3.7.13 (3143), 3.7.6 (3186), 3.7.6 (3187), 3.7.6 (3188), 3.3.3 (3189), 1.7.7 (4140), 1.7.2 (4141), 1.7.6 (4142), 1.7.15 (4143), 1.9 (3125), 1.7.8 (3126), 1.9 (3127),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			1.12.1 (3128), 1.7.7 (3129), 1.7.13 (171), 3.7.3 (4150), 3.7.14.1 (4151), 3.7.4.1 (4152), 3.7.4.2 (4153), 3.7.4.2 (4154), 3.7.3 (4160), 3.11 (4155), 3.7.3 (4156), 3.7.3 (4166), 3.7.4.1 (4159), 3.7.4.2 (4147), 3.7.4.1 (4148), 3.7.4.1 (4149)
Wehren, Rixanne	Sierra Club, Mendocino Group	RRR000816	1.1.3 (15)
Weiskopf, Daniel	Ĩ	RRR000828	1.1.3 (15)
Weisman, David	Alliance for Nuclear Responsibility	RRR000089	1.2 (12), 1.2.1 (156), 1.6.2.7 (431), 1.6.2.5 (144)
Weisman, David	Alliance for Nuclear Responsibility	RRR000120	1.2.1 (156), 1.6.2.7 (3014), 1.6.2 (3015)
Weiss, Jeffrey	Dia Art Foundation	RRR000652	3.4.1 (35)
Wells, John	Corporation of Newe Sogobia	RRR000836	1.3.2 (4167), 3.4.2 (42), 1.4.6 (31), 1.11 (1684), 1.7.6 (1685), 1.7.7 (4231), 1.3.1 (4169), 3.7.1 (1688), 1.7.16 (1689), 1.7.8 (1690), 1.7.8 (2321), 3.3.2 (161), 3.6 (120), 2.7.1 (2324), 1.6.3.2 (175), 3.2.4.2 (7), 3.3.2 (2327), 1.7.13 (171)
West, Cat		RRR000364	1.7.6 (4178), 1.1.3 (15)
Wetch, Joe	JOSSCH-LLC	RRR000011	1.4.6 (31)
		RRR000125	1.2 (101), 1.4.6 (31)
Wetzel, Robert		RRR000216	1.4.6 (31)
Wheeler, Mark		RRR000613	1.1.3 (15)
Wheeler, Wilma A.		RRR000147	1.1.3 (15)
		RRR000308	1.1.3 (15)
Whetstone, Joe		RRR000456	1.1.3 (15)
White, Andrew		RRR000783	1.1.3 (15), 1.3.2 (4167)
Wieck, Chris		RRR000855	1.1.3 (15)
Wiegel, Ryan		RRR000064	1.1.3 (15), 1.6.2.1 (61), 1.2 (12)
Williams, Eesha		RRR000885	1.1.3 (15)
Williams, Harry		RRR000084	1.1.3 (15)
		RRR000103	3.7.8 (2416), 1.6.1 (67)

Commenter	Organization	Comment Document Number	Location of Comments/Responses
Williams, Jack		RRR000085	1.1.3 (15)
Williams, Jim	Western Interstate Energy Board - WIEB	RRR000661	1.6.2.5 (165), 1.6.2.5 (2573), 1.6.2.5 (155), 1.3.1 (4169), 1.6.2 (2657), 1.6.3.2 (2658), 1.6.2 (2664), 1.1 (2665), 1.7.14.1 (2742), 1.4.1 (49), 1.7.14 (4192), 1.6.2 (2806), 1.7.14 (2859), 1.7.14 (2939), 1.6.2.2 (2985), 1.6.2 (164), 1.11 (3030), 1.6.2.5 (141), 1.7.14 (3032)
Williams, Kathy		RRR000939	1.1.3 (15), 1.3.2 (4167)
Williams, Richard		RRR001012	1.1.4 (16)
Wilson, Bill		RRR000204	1.1.3 (15)
Wilson, Joy		RRR000086	1.1.3 (15)
Wilson, Lois		RRR000090	1.1.3 (15)
Win, Zwe P.		RRR001001	1.1.3 (15)
Winsten, Michele		RRR001077	1.1.3 (15)
Wood, Brad		RRR000402	1.1.3 (15)
Wood, Lea		RRR000714	1.7.3 (172), 1.6.2.1 (61), 1.6.1 (67), 1.3.2 (4167)
		RRR000847	1.1.3 (15), 1.3.2 (4167)
Woods, Stanford C.		RRR000258	1.7.3 (4199)
Woodward, Holly		RRR000707	1.1.4 (16)
Woolley, Dorothy		RRR000162	1.1.3 (15)
Wright, Amber		RRR000227	1.1.4 (16)
Wright, David	Nuclear Waste Strategy Coalition (NWSC)	RRR000117	1.1.3 (15), 1.6.2.5 (163), 1.7.14 (4198), 2.1.4 (71), 2.4.1 (1708), 2.4.7 (1709), 3.4.1 (23), 3.4.3 (1), 1.4.4 (29), 3.1.4 (69), 1.1.4 (16)
Wynn, Isaac		RRR000600	1.1.3 (15)
Yazzie, Penelope P.		RRR001015	1.1.3 (15)
Young, Aaron		RRR000919	1.1.3 (15)
Young, Joyce		RRR000128	1.1.3 (15)
Young, Peter		RRR000384	1.1.3 (15)
Yourgules-Scholes, Bella		RRR001065	1.1.3 (15)
Zabarte, Ian	Western Shoshone National Council	RRR000121	1.7.18.2 (4078), 1.7.6 (4122), 1.7.18 (4125), 1.7.18.1 (4127), 1.3.2 (4167), 1.7.18.2 (3096),

Commenter	Organization	Comment Document Number	Location of Comments/Responses
			1.7.13 (171), 1.7.18.1 (3101), 1.7.18.1 (3102), 1.3.1 (3145), 1.11 (3148), 1.7.6 (3149), 1.12 (3151), 1.2.6 (27), 1.7.5 (3191), 1.7.15 (3195), 1.6.2.7 (3979), 1.7.18.2 (3197), 1.7.8 (3200), 2.7.6 (3201), 1.7.4 (4197), 1.7.7 (4231), 1.7.1 (3981), 1.7.5 (157)
		RRR000276	1.7.18 (456), 1.3.1 (4165), 1.2.6 (27)
		RRR000327	1.7.18 (450), 1.3.1 (4165), 1.2.6 (27), 1.2 (9)
		RRR000347	1.7.18 (450), 1.3.1 (4165), 1.2.6 (27)
Zarchin, Paul		RRR000628	1.1.3 (15)
Ziegler, Maggie		RRR000447	1.1.3 (15)
Zitney, Lisa		RRR000217	1.1.4 (16), 2.4.2 (380)
Zolkover, Adrian		RRR000025	2.15 (146), 1.1.3 (15), 1.7.3 (172), 1.7.16 (619), 1.4.6 (31), 1.6.2.5 (144), 1.14 (4190), 1.7.16 (623)
Zuziak, Denise M.		RRR000773	1.1.3 (15), 1.3.2 (4167), 1.2.1 (72)
Zwicker, Marie Long		RRR000720	1.1.3 (15), 1.6.2.1 (61), 1.7.4 (4059), 1.3.2 (4167), 1.6.3.2 (176), 1.7.15 (3785), 1.7.16 (4233), 2.4.1 (41), 3.4.4 (36), 3.14 (3832), 3.2.4.2 (7), 1.6.2 (51)
Zwicker, Marie Louise Morandi Long		RRR000549	1.1.3 (15), 1.6.2.1 (61), 1.7.4 (4059), 1.3.2 (4167), 1.6.3.2 (176), 1.7.15 (3785), 1.7.16 (4233), 2.4.1 (41), 3.4.4 (36), 3.14 (3832), 3.2.4.2 (7), 1.6.2 (51)

Table CR-3 Cross Reference from Comments/Responses to Commenter(s) and Original Comments

Comment-Response Document Location	Commenter	Comment Document Comment Number
1.1 (841)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0002
1.1 (961)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0015
1.1 (964)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0018
1.1 (1713)	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0012
1.1 (2665)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0008
1.1 (3105)	Alley, Charles	RRR000995 / 0026
1.1 (4075)	Alley, Charles	RRR000995 / 0016
1.1.3 (15)	Aaron, Grace	RRR000973 / 0001
	Abeldt, Vern	RRR000344 / 0001
	Abraham, Natalie	RRR000790 / 0001
	Adair, Margo	RRR000945 / 0001
	Adams, Steven	RRR000905 / 0001
	Agan, Steven	RRR000950 / 0001
	Amonette, Amber	RRR000813 / 0001
	Anderson, Andrew	RRR000256 / 0001
	Anderson, Jezreela	RRR000835 / 0001
	Las Vegas Paiute Tribe Anderson, Kenny	RRR000273 / 0001
	Anonymous	RRR000131 / 0001
		RRR000160 / 0001
		RRR000207 / 0001
		RRR000377 / 0001
		RRR000418 / 0001
		RRR000425 / 0001
		RRR000586 / 0001
		RRR000602 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Anonymous	RRR000629 / 0001
		RRR000798 / 0001
		RRR000856 / 0001
		RRR000895 / 0001
		RRR000959 / 0001
		RRR000979 / 0001
		RRR000980 / 0001
		RRR001005 / 0001
		RRR001016 / 0001
		RRR001017 / 0001
		RRR001041 / 0001
		RRR001044 / 0001
		RRR001045 / 0001
		RRR001046 / 0001
		RRR001051 / 0001
		RRR001057 / 0001
		RRR001059 / 0001
		RRR001060 / 0001
		RRR001064 / 0001
		RRR001067 / 0001
		RRR001069 / 0001
		RRR001072 / 0001
		RRR001080 / 0001
	Arnason, Deb	RRR000376 / 0001
	Arnason, Deb/Arne	RRR000826 / 0001
	Arnold, Davide	RRR000460 / 0001
	Askren, Anne	RRR000615 / 0001
	Atencio, Sandra	RRR000187 / 0001
	Bailey, John	RRR000553 / 0001
	Bailey, John	RRR000638 / 0001
	Bakula, Marcelle	RRR000499 / 0001
	Baleria, David	RRR000009 / 0001
	Ballerano, Chrys	RRR000389 / 0001
	Ballou, Debi	RRR001071 / 0001
	Balum, Anne	RRR000989 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Bancroft, Kathy	RRR000098 / 0001
	Banks, Elizabeth	RRR000765 / 0001
	Barber, Frank	RRR000873 / 0001
	Barnell, Todd	RRR000730 / 0001
	Barnes, Kathryn	RRR000562 / 0001
	Baronvine, Sonia	RRR000509 / 0001
	Baroudi, Mat	RRR001039 / 0001
	Bartholomew, Alice	RRR000529 / 0001
	Barton-Russell, Rachel	RRR000846 / 0001
	Baseler, Rhonda	RRR000639 / 0001
	Bashiti, Amy	RRR000647 / 0001
	Bass, Patrice	RRR000206 / 0001
	Bassik, Renee	RRR001035 / 0001
	Batterden, James	RRR000804 / 0001
	Bauer, Benjamin	RRR000782 / 0001
	Baydoun, Gibran	RRR000210 / 0001
	Beazlie, Janet	RRR000610 / 0001
	Bechtel, Dennis	RRR000305 / 0001
	Beckwith, Nan	RRR000589 / 0001
		RRR000772 / 0001
	Bedoe, Bev	RRR000960 / 0001
	Belcastro, Frank	RRR000458 / 0001
	Benham, Joan	RRR000480 / 0001
	Benningson, Barbara	RRR000489 / 0001
	Benti, Wynne	RRR000071 / 0001
	Berg, Joel	RRR000123 / 0001
	Berhan, Mary	RRR000625 / 0001
	Berk, Larry	RRR000193 / 0001
	Bernard, Larry	RRR000551 / 0001
	-	RRR000728 / 0001
	Berrigan, Gail	RRR000763 / 0001
	Berry, Michael	RRR000805 / 0001
	Bertell, Rosalie	RRR000381 / 0001
	Bess, Jana	RRR000136 / 0001
	Bidwell, Joshua	RRR000889 / 0001

Comment-Response Document Location	Commenter	Comment Document
1.1.3 (15) (continued)	Western Shoshone Defense Project Bill, Larson	RRR000686 / 0001
	Billmeier, G.	RRR000464 / 0001
	Nuclear Information and Resource Services Binette, Aja	RRR000324 / 0001
	Women's International League for Peace and Freedom Birnie, Patricia	RRR000862 / 0001
	Black, Leroy	RRR000214 / 0001
	Blackburn, Lee	RRR000850 / 0001
	Blanton, Patricia	RRR000185 / 0001
	Bliss, Ryan	RRR000371 / 0001
	Block, Dixie	RRR000768 / 0001
	Bloom, Cheryl	RRR000829 / 0001
	Bloom, Paul	RRR000062 / 0001
	NV Group Sierra Club Blumensaadt, Eric	RRR000144 / 0001
	Bodde, Mary	RRR000497 / 0001
	Boeve, May	RRR000380 / 0001
	Boisvert, Barbara	RRR000986 / 0001
	Boisvert, John	RRR000988 / 0001
	Bonafine, Julia	RRR000946 / 0001
	Bonds, Julia	RRR000403 / 0003
	Monache Alliance Bongochi, Monty	RRR000096 / 0001
	Border, Myram	RRR000819 / 0001
	Boutis, Kathleen	RRR000857 / 0001
	Bowen, Dora	RRR000993 / 0001
	Bowman, Brent	RRR000528 / 0001
	Boyce, James	RRR000793 / 0001
	Clark County Brager, Susan	RRR000270 / 0001
	Bravo, Eliseo	RRR000797 / 0001
	Brooks, Eric	RRR000411 / 0001
	Broth, Mitchell	RRR001010 / 0001
	Brown, Diana	RRR000518 / 0001
	Brown, Merleen	RRR000519 / 0001

Comment-Response Document Location	Commenter	Comment Document Comment Number
1.1.3 (15) (continued)	Brown, Richard	RRR000024 / 0001
	Rainforest Action Network Brune, Mike	RRR000705 / 0001
	Brunner, Demise	RRR001047 / 0001
	Buonaiuto, Shelley	RRR000684 / 0001
	Burkland, Monica	RRR001014 / 0001
	California Valley Miwok Tribe Burley, Silvia	RRR000751 / 0001
	Burris, Laurence	RRR000511 / 0001
	Burton, Brandon	RRR000198 / 0001
	Bush, Pat	RRR000787 / 0001
	Bute, Holly	RRR000336 / 0001
	Calabro, Richard	RRR000818 / 0001
	Campbell, Hugh	RRR000211 / 0001
	Carey, Corinne	RRR000361 / 0001
	Carlson, Gertrude	RRR001066 / 0001
	Carnine, Berkley	RRR000747 / 0001
	Carroll, Richard	RRR000405 / 0001
	Carter, C.	RRR000457 / 0001
	Cashel, Kathleen	RRR000556 / 0001
	City of Reno Cashell, Robert	RRR000314 / 0001
		RRR000680 / 0003
	Cast, Dom	RRR000126 / 0001
	Castleberry, George	RRR000731 / 0001
	Castro, Alchesay	RRR000546 / 0001
	Cesena, Frank	RRR000018 / 0002
	Chandler, Stuart	RRR000758 / 0001
	Chang, Claire	RRR000874 / 0002
	Chelette, Iona	RRR000550 / 0003
	Chiucarello, Ed	RRR000461 / 0001
	Chozahinoff, Barbara	RRR001009 / 0001
	Christian, Amy	RRR000698 / 0001
	Christiansen, Holly	RRR000717 / 0001
	Christine, Alexi	RRR000794 / 0001
	Clark, Robert	RRR000309 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Southern California Ecumenical Council Cohen, Albert	RRR000483 / 0001
	Cohen, Isabel/Carl	RRR000474 / 0001
	Collins, Nicola	RRR000984 / 0001
	Comnes, Barbara	RRR000640 / 0001
	Conroy, Barbara	RRR000711 / 0001
	Cooley, Marian	RRR000487 / 0001
	Cooper-Vasquez, Lori	RRR001002 / 0001
	Corbett, Patrick	RRR000644 / 0001
	Corcoran, David	RRR000493 / 0001
	Corson, Jamie	RRR000379 / 0001
	Corwin, Stanley	RRR000752 / 0001
	Covington, Cathy	RRR000492 / 0001
	Cowan, James	RRR000148 / 0001
	Cox, Mike	RRR000921 / 0001
	Cravens, Marisa	RRR000650 / 0001
	Crawford, B.	RRR000311 / 0001
	Credille, Ellen	RRR000582 / 0001
	Cullen, Noreen	RRR000475 / 0001
	Curran, John	RRR000801 / 0001
	Curtis, David	RRR000416 / 0001
	Cuzze, Ron	RRR001085 / 0001
	D'Aquanni, Beverly	RRR000514 / 0001
	Moapa Band of Paiutes Daboda, Darren	RRR000272 / 0001
	Daggett, Becky	RRR000733 / 0001
	Damaschke, Jon	RRR000803 / 0001
	Daum, Chris	RRR000604 / 0001
	Davies, William	RRR000792 / 0001
	Davis, Grace	RRR000312 / 0001
	Davis, Thomas	RRR000738 / 0001
	Council for a Livable World Day, Alice	RRR000643 / 0001
	Day, Elena	RRR000486 / 0001
	DeMare, Joseph	RRR000595 / 0001
	DePauw, Jolie	RRR000852 / 0001

Comment-Response Document Location	Commenter	Comment Document Comment Number
1.1.3 (15) (continued)	DeVries, Laura	RRR000554 / 0001
	DeWitt, Ellen	RRR000901 / 0001
	Delucchi, Joy	RRR000421 / 0001
	Detweiler, Donna	RRR000539 / 0001
	Devine, Don	RRR000459 / 0001
	DiSalvo, Nicole	RRR000704 / 0001
	Dias, Michael	RRR000342 / 0001
	Dickman, Elizabeth	RRR000548 / 0001
	Dillion, Teri	RRR000561 / 0001
	Dillon, Mary	RRR000215 / 0001
	Dilorenzo, M.	RRR000182 / 0001
	Northeast Pa. Audubon Society Dodge, Katharine	RRR000876 / 0001
	Regional Association of Concerned Environmentalists (RACE) Donham, Mark	RRR000935 / 0007
	Donn, Marjory/Bertram	RRR000516 / 0001
	Donovan, Mary	RRR000817 / 0001
	Douglass, Robert	RRR000501 / 0001
	Downey, J.	RRR000197 / 0001
	Drey, Kay	RRR000708 / 0001
	DuBois, Gwen	RRR000890 / 0001
	Duffy, Diana	RRR000830 / 0001
	Dukelow-Burton, Darlene	RRR000431 / 0001
	Dumont, Nellie	RRR000482 / 0001
	Duncil, Bruce	RRR000503 / 0001
	Durante, Charles	RRR000429 / 0001
	Dye, Patsy	RRR000990 / 0001
	Dyken, Carl	RRR000063 / 0001
	Dyken, Mark	RRR000350 / 0001
	Dziegiel, Henry	RRR000226 / 0001
		RRR000284 / 0001
	Earl, Gretchen	RRR000343 / 0001
	Eastling, Matt	RRR000611 / 0001
	Edwards, Carolyn	RRR000251 / 0001
	Ellen, Linda/Ron	RRR001037 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Erb, Cheryl	RRR000634 / 0001
	Ertelt, Sabrina	RRR000914 / 0001
	Esparza, Mary	RRR000297 / 0001
	Estey, Kara	RRR000750 / 0001
	Etheridge, Kelly	RRR000408 / 0001
	Evans, Dinda	RRR000496 / 0001
	Fairchild, Stephanie	RRR000892 / 0001
	Twin Springs Ranch Fallini, Joe	RRR000075 / 0001
	Farias, Corinne	RRR000424 / 0001
	Farm, D.W.	RRR001004 / 0001
	Fazzalaro, Mary	RRR000243 / 0001
	Feder, Malina	RRR000366 / 0001
	Felich, Tara	RRR000748 / 0001
	Fellows, Kevin	RRR000332 / 0002
	Filmore, Laura	RRR000048 / 0001
	Fine, Bill	RRR000053 / 0001
	Fitzell, Anne	RRR000592 / 0001
	J&K Expo Fleming, Jay	RRR000130 / 0001
	Flores, Gabriel/Raven	RRR000811 / 0001
	Fofrich, Robert	RRR000802 / 0001
	Follins, Bryan	RRR000584 / 0001
	Foreman, Mary Jo	RRR000167 / 0001
	Fox, Vicki	RRR000495 / 0001
	Fox, William/Myrna	RRR000926 / 0002
	Francia, Carol	RRR000541 / 0001
	Freedlund, Mary	RRR000630 / 0001
	Freeman, Jacqueline	RRR000530 / 0001
	Freeman, Lu	RRR000026 / 0001
	Fretheim, Paul	RRR000093 / 0001
	Friedman, Judi	RRR000463 / 0001
	Frost, Debra	RRR000001 / 0001
	Fujiyoshi, Ronald	RRR000724 / 0001
	Fuller, Ernest	RRR000870 / 0001
	Futrell, Susan	RRR000585 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Gallagher, Sarah	RRR000654 / 0001
	Ganson, Mike	RRR000242 / 0001
	Garcia, Jeffery	RRR000821 / 0001
	Western Shoshone Gardipe, Janice	RRR000052 / 0001
	Gardner, Jean	RRR000432 / 0001
	Garison, Ann	RRR000414 / 0001
	Garrett, Jo Anne	RRR000694 / 0001
	Garriott, Helen	RRR000333 / 0001
	Garrison, Ann	RRR000409 / 0001
	Garry, Rebecca	RRR000355 / 0001
	Garvey, Lydia	RRR000527 / 0001
	Geno, Debbie	RRR000500 / 0001
	Gentry, Don	RRR000559 / 0001
	Gere, Kathy	RRR000624 / 0002
	Gerstung, April	RRR000648 / 0001
	Nuremberg Actions Getty, G.	RRR000022 / 0001
	Gibson, Joyce	RRR000437 / 0001
	Gilmore, Roseann	RRR001061 / 0001
	Gitersonke, Don	RRR000194 / 0001
	Givens, Nancy	RRR000479 / 0009
	Glenn, Rob	RRR000370 / 0001
	Globerle, W.	RRR000393 / 0001
	Godinez, Jacob	RRR000789 / 0001
	Goodison, Jason	RRR000776 / 0001
	Mid-Island Radiation Alert Goodman, Miriam	RRR000608 / 0001
	City of Las Vegas Goodman, Oscar	RRR000266 / 0001
	Grant, Abbie	RRR000954 / 0001
	Grant, Patrick	RRR000741 / 0001
	Greaser, John	RRR000827 / 0001
	Green, Karen	RRR000565 / 0001
	Green, Morgan	RRR000722 / 0001
	Greenhaw, Rhonda	RRR000520 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Grenell, Jason	RRR000961 / 0001
	Griffith, Linda	RRR000365 / 0002
	Groom, Warren	RRR000151 / 0001
	Grote, Jennifer	RRR000165 / 0001
	Guzman, Tony	RRR000932 / 0006
	Haas, Shannon	RRR000766 / 0001
	Haggerty, Bernard	RRR000872 / 0002
	Hale, Ann	RRR000494 / 0001
	Hall, James	RRR000744 / 0001
	Hall, Tressie	RRR000886 / 0001
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000056 / 0002
		RRR000274 / 0001
	Halt, Joanne	RRR000723 / 0001
	Hamburg, Robert	RRR000537 / 0001
	Hamilton, Mary	RRR000760 / 0001
	Hampson, Judith	RRR000168 / 0001
	Hansen, John	RRR000023 / 0001
	Hanson, Art	RRR000612 / 0001
	Harden, Cory/Martha	RRR000404 / 0001
	Harkins, Joanne	RRR000490 / 0001
	Hartle, Sherie	RRR000534 / 0001
	Harvey, Pauline	RRR000942 / 0001
	Harvey, Vivian	RRR000218 / 0001
	Haslam, Malissa	RRR000695 / 0001
	Haslett, Dora	RRR000505 / 0001
	Hatt, Greg	RRR000795 / 0001
	Haustermanns, Josine	RRR000596 / 0001
	SENAA West Hayes, Sara	RRR000746 / 0001
	Headington, Maureen	RRR000974 / 0001
		RRR000975 / 0001
		RRR000977 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Mercy Investment Program, Sisters of Mercy- Detroit, Dominican Sisters of Hope and Ursuline Sisters of Tildonk Heinonen, Valerie	RRR000933 / 0009
	Hellman, Codie	RRR000139 / 0001
	Hendrick, Paula	RRR000626 / 0001
	Herbst, Jeff	RRR000498 / 0001
	Hernesman, Barbara	RRR000908 / 0001
	Higginson, Judy	RRR000928 / 0001
	Hilfer, Eric	RRR000645 / 0002
	Holzberg, Steve	RRR000491 / 0001
	Houck, Sherry	RRR000754 / 0001
	Huber, Melissa	RRR000824 / 0001
	Huet-Vaughn, Yolanda	RRR000599 / 0001
		RRR000878 / 0001
	Huffman, Garrett	RRR000786 / 0001
	Illegible	RRR000573 / 0001
	Illo, Dana	RRR000446 / 0001
	Irizarry, Mesha Monge	RRR000415 / 0001
	Irwin, Larry	RRR000478 / 0001
	Israel, Carolyn	RRR000398 / 0001
	Izen, Ray	RRR000184 / 0001
	Jacobsen, Elaine	RRR000614 / 0001
	Jacobsen, Kathleen	RRR000250 / 0001
	James, Earl	RRR000927 / 0001
	Midwest Coalition for Responsible Investment Jennings, Barbara	RRR000543 / 0001
	Jetter, Judy	RRR000958 / 0001
	Jindra, Jo Ann	RRR000181 / 0001
	Johnson, Catherine	RRR000448 / 0001
	Johnson, Sharon	RRR000466 / 0001
	Johnson, Zach	RRR000825 / 0001
	Johnston, Jill	RRR000590 / 0001
	Johnstone, Myna Lee	RRR000367 / 0001
	Jones, Barbara	RRR000564 / 0001
	Jones, Cecil	RRR001036 / 0001

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1.1.3 (15) (continued)	Jones, Derek	RRR000436 / 0001
	Kaim, Ronald	RRR000190 / 0001
	Beyond Nuclear Kamps, Kevin	RRR000241 / 0006
	Beyond Nuclear Kamps, Kevin	RRR000325 / 0008
	Kaplan, Karen	RRR000382 / 0001
	Karas, Anna	RRR000743 / 0001
	Karpen, Leah	RRR000578 / 0004
	Katz, Lorie	RRR000186 / 0001
	Kaufmann, Ellen	RRR000893 / 0001
	Kausch, George	RRR000477 / 0001
	Kean, Beth	RRR000637 / 0001
	Keele, Harold	RRR000170 / 0002
	Keller, Nina	RRR000557 / 0001
	Kelly, Carla	RRR000563 / 0001
	Kelly, Mike	RRR000289 / 0001
	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0004
		RRR000691 / 0004
	Keyes, Janice	RRR000593 / 0001
	Kibble, Carol	RRR000854 / 0001
	Kimball, Don	RRR000385 / 0001
	Kincaide, Delores	RRR000941 / 0001
	King, Joan	RRR000627 / 0001
	King, Stephen	RRR000860 / 0001
	Kipen, Ken/Ethel	RRR000435 / 0001
	Kirk, Dave	RRR000099 / 0001
	Knittle, Christa	RRR000362 / 0001
	Kochaver, Marie	RRR000441 / 0001
	Kolar, Sanda	RRR000832 / 0001
	Kortes, Genny	RRR000419 / 0001
	Kosmides, Kathryn	RRR000166 / 0001
	Kostmayer, Martha	RRR000542 / 0001
	Kreis, Deborah	RRR000512 / 0001
	LaForge, John	RRR000701 / 0001

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1.1.3 (15) (continued)	LaPlaca, Nancy	RRR000839 / 0001
	Ladeira, Amber	RRR000601 / 0001
	Landguth, David	RRR000755 / 0001
	Landguth, David	RRR000781 / 0001
	Landon, Matt	RRR000587 / 0001
	Lanphear, Raymond	RRR000969 / 0001
	Law, Dennis/Theodora	RRR001058 / 0001
	Lehman, Mary	RRR000606 / 0001
	Lewis, Judy	RRR001042 / 0001
	Lewis, Tonya	RRR000784 / 0001
	Liesner, Joseph	RRR000742 / 0001
	Lim, Kingman	RRR000373 / 0001
	Lincoln, Robert	RRR000552 / 0001
	Linda, Deb	RRR000577 / 0001
	Linda, Tom	RRR000732 / 0001
	Environment America Linder, Josh	RRR000328 / 0001
	Linesch, Catherine	RRR000047 / 0001
	Lupo, Vivian	RRR000774 / 0002
	Mackenzie, Therese	RRR000812 / 0001
	Center for Safe Energy Macy, Francis	RRR000696 / 0001
	Macy, Joanna	RRR000753 / 0002
	Maestas, Lisa	RRR000785 / 0001
	Magar, Mary Jo/Joe	RRR000635 / 0001
	Malkin, Mort	RRR000558 / 0001
	Mallory, Kelli	RRR000791 / 0001
	Malloy, Max	RRR000252 / 0001
	Malmedal, Kelley	RRR000154 / 0001
	Manion, Patricia	RRR000697 / 0001
	Maniscalco, Peter	RRR000940 / 0001
	Maple, Susan	RRR000340 / 0001
	Marchese, John	RRR000173 / 0001
	Marchese, Rich	RRR000174 / 0001
	Mareck, Katherine	RRR000571 / 0001
	Margison, Bob	RRR000740 / 0001

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1.1.3 (15) (continued)	Mark, Jonathan	RRR000882 / 0001
	Marks, Luan	RRR000916 / 0001
	Marsh, Amy	RRR000560 / 0001
	The City of Sparks Martini, Geno	RRR000351 / 0001
	Marvin, Anne	RRR000718 / 0001
	Matsuda, Thomas	RRR000399 / 0001
	Matsuda, Thomas	RRR000762 / 0001
	Matt, Jane	RRR000739 / 0001
	Mayo, Paul	RRR000897 / 0001
	Mazzotti, Amanda	RRR000736 / 0001
	McCabe, Eileen	RRR000929 / 0012
	McCabe, George	RRR001034 / 0001
	Physicians for Social Responsibility McCally, Michael	RRR000861 / 0001
	McCarthy, Karen	RRR000156 / 0001
	McClintock, Francene	RRR000831 / 0001
	McDannald, John	RRR000177 / 0001
	McGill, Mike	RRR000605 / 0001
	McMahon, Diane	RRR000957 / 0001
	McMullen, Penelope	RRR000877 / 0001
	McPheeters, Greg	RRR000875 / 0001
	McWhite, Nancy	RRR000808 / 0001
	Medina, Amanda	RRR000700 / 0001
	Mejia, Sergio	RRR000807 / 0001
	Mengelkamp, Robert	RRR000164 / 0001
	Mersereau, K.	RRR000488 / 0001
	Meshkoff, Rose	RRR000088 / 0001
	Metz, Marc	RRR000799 / 0001
	Alliance for Nuclear Accountability Meyer, Alfred	RRR000726 / 0001
	Miller, Katya	RRR000699 / 0001
	Miller, Marilyn	RRR000526 / 0001
	Miller, Mark	RRR000729 / 0001
	Miller, Sue	RRR001075 / 0001
	Miller, Suzanne	RRR000609 / 0001

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1.1.3 (15) (continued)	Miller, Virgina	RRR000833 / 0001
	Minard, Maryal	RRR000978 / 0001
	Minch, Allen	RRR000767 / 0001
	Miner, Judy	RRR000507 / 0001
	Mirisch, Judy	RRR000205 / 0001
	County of San Bernardino, Board of Supervisors Mitzelfelt, Brad	RRR000673 / 0001
	Mizdrak, Marko	RRR000778 / 0001
	Moline, Alex	RRR000428 / 0001
	Molnar, Katrina	RRR000715 / 0001
	Monachelli, Carolyn	RRR000545 / 0001
	Monastero, Joan	RRR000716 / 0001
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0026
	Morano, Lana	RRR000465 / 0002
	Morgan, Charles	RRR000504 / 0001
	Morgan, Judy	RRR000971 / 0001
	Morrow, Theresa	RRR000224 / 0001
	Morton, Jenna	RRR000219 / 0003
	Mullen, Mary	RRR000434 / 0001
	Murray, Jacqueline	RRR000369 / 0001
	Murtensen, Larry	RRR000391 / 0001
	Muson, Ray	RRR000200 / 0001
	Myers, Calvin	RRR000304 / 0001
	Myers, Stephanie	RRR000354 / 0001
	Nagle, Susan	RRR000858 / 0001
	Naranjo, Marian	RRR000810 / 0001
	Nelis, Elizabeth	RRR000966 / 0001
	Nelis, William	RRR000964 / 0001
	Nelson, Dennis	RRR000588 / 0001
	Nelson, Dennis	RRR000820 / 0001
	Nelson, Dennis	RRR000896 / 0001
	Newman, Roberta	RRR000649 / 0001
	Newman, Sarah	RRR000430 / 0001
	Newton, Sharon	RRR000982 / 0001
	Nicholl, Robert	RRR000171 / 0001

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1.1.3 (15) (continued)	La Comunidad Nichols, Jean	RRR000685 / 0001
	Nidess, Rael	RRR000502 / 0001
	No last name given, Aaron	RRR000455 / 0001
	No last name given, Barbara	RRR000967 / 0001
	No last name given, Emily	RRR000410 / 0001
	No last name given, Jacquey	RRR001030 / 0001
	No last name given, Lindalou	RRR000423 / 0001
	No last name given, P.J.	RRR000999 / 0001
	Novick, Leah	RRR000386 / 0001
	ODonnell, Deb	RRR000387 / 0001
	Oberman, Robert	RRR000956 / 0001
	Oberman, Robert	RRR000963 / 0001
	Ogren, Lorrie	RRR000532 / 0001
	Sisters of St. Joseph of Carondelet Oleskevich, Diana	RRR000938 / 0009
	Omuhundro, Charlotte	RRR000175 / 0001
	One Feather, Harold	RRR000937 / 0009
	Oropeza, Carlos	RRR000374 / 0001
	Orr, Lisa	RRR000616 / 0001
	Overton, Patrick	RRR000779 / 0001
	Paape, Joyce	RRR000915 / 0001
	Parise, Mary	RRR000247 / 0001
	Parks, Terry	RRR000159 / 0001
	Patrie, Lewis	RRR000597 / 0001
	Payer, Tax	RRR000188 / 0001
	Pellett, Simon	RRR000651 / 0001
	Pepin, Carolan	RRR000229 / 0001
	Perry, Sybil	RRR000598 / 0002
	Nevada Pharmacist Association Pham, Khanh	RRR000134 / 0001
	Pickett, Carol	RRR000153 / 0001
	Pikus, Barbara	RRR000481 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Plaski, Lisa	RRR000202 / 0001
		RRR001028 / 0001
	Porter, Al	RRR000180 / 0001
	Porter, Johanna	RRR000440 / 0001
	Price, Norma	RRR000143 / 0001
		RRR000246 / 0001
	Pringle, Bruce	RRR000484 / 0002
	Purpel, Elaine	RRR000473 / 0001
	Progressive Leadership Alliance of Nevada Rake, Launce	RRR000263 / 0001
	Rana, Avis	RRR000719 / 0001
	Ransom, Rita	RRR000261 / 0001
	Ray, Dorothy	RRR000035 / 0001
	Reback, Mark	RRR000936 / 0009
	Rebman, Marilyn	RRR000149 / 0001
	Reese, Gary	RRR000267 / 0001
	Reese, Joy	RRR000581 / 0001
	Reilly, Jennifer	RRR000759 / 0001
	Reimer, Nancy	RRR000713 / 0001
	Southwest Worker's Union Rendon, Genaro	RRR000749 / 0001
	Reuther, Sandra	RRR001073 / 0001
	Reynolds, Bruce	RRR000208 / 0001
	Reynolds-Sparks, Darla	RRR000904 / 0001
	Rhodes, Rick	RRR001023 / 0001
	Rice, Megan	RRR000300 / 0001
	Richardson, John	RRR000775 / 0001
	Richmond, Ray	RRR001083 / 0001
	Riley, Amber-Renee	RRR000800 / 0001
	Rizzo, Sandi	RRR000050 / 0001
	Robert, Rene	RRR000907 / 0001
	Roberts, James	RRR000510 / 0001
	Roberts, Tommy	RRR000372 / 0001
	Rohrbach, Kim	RRR000544 / 0002
	Rojas, Jessica	RRR000443 / 0001
	Rolfe, Kenneth	RRR000471 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Rolfe, Megan	RRR000470 / 0001
	-	RRR000653 / 0001
	Rolofson, Kay	RRR000172 / 0001
	Romero, Bernie	RRR000996 / 0002
	Rosenthal, Judi	RRR001055 / 0001
	Ross, Candace	RRR000277 / 0001
	Ross, Robert	RRR000427 / 0001
	City of Las Vegas, Councilman Ross, Steve	RRR000268 / 0001
	Roth, Erik	RRR000930 / 0009
	Nuclear Age Peace Foundation Roth, Nick	RRR000331 / 0001
	Rothermel, Phil/Kathryn	RRR001068 / 0001
	Rouvier, Julia	RRR000570 / 0001
	Royce, Lottie	RRR000339 / 0001
	Rudestam, Kirsten	RRR000444 / 0001
	Ryan, Sheila	RRR000412 / 0001
	Rytinova, Zdenka	RRR000806 / 0001
	Saba, Marcel	RRR000796 / 0001
	Sabbadini, Gail	RRR000910 / 0001
	Salamon, Jeffrey	RRR000360 / 0001
	Sampson, Irene	RRR000124 / 0001
	Sanabria, Julie	RRR000902 / 0001
	Sanborn, Hugh	RRR000476 / 0001
	Sandness, Robert	RRR000313 / 0006
	Sanford, Warren	RRR000575 / 0001
	Veterans in Politics Sanson, Steve	RRR000295 / 0001
		RRR000356 / 0001
	Saul, Kathleen	RRR000899 / 0001
	Savage, Joan	RRR000417 / 0001
	Scheid, Ann	RRR000920 / 0001
	Sierra Safe Energy Schieffer, Richard	RRR000394 / 0001
	Schitaroff, Nina	RRR000294 / 0001
	Schlaf, Bill	RRR000955 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.1.3 (15) (continued)	Schmieding, Quentin	RRR000823 / 0001
	Schmieding, Rhea	RRR000517 / 0001
	Schmitz, Gladys	RRR000976 / 0001
	Schneider, Keri	RRR000203 / 0001
	Schneider, Seth	RRR000363 / 0001
	City of Henderson Schroder, Gerri	RRR000269 / 0001
	Sinai, Schroeder, Mooney, Boetsch, Bradley & Pace Schroeder, Theodore	RRR000352 / 0001
	Schultz, Jeffrey	RRR000884 / 0001
	Scott, Ms.	RRR000316 / 0001
	Scurlock, Rodger	RRR000764 / 0001
	Southern Ohio Neighbors Group Sea, Geoffrey	RRR000887 / 0002
	Secor, Nathanael	RRR000401 / 0001
	Sedlock, Cheryl	RRR000426 / 0001
	Seely, Clover	RRR000913 / 0001
	Sewall, Christopher	RRR000822 / 0001
	Shahrooz, William	RRR000286 / 0002
	Sharpe, Trudy	RRR000228 / 0001
	Sheldon-Scurlock, Peggy	RRR000572 / 0001
	Shields, Randall	RRR000883 / 0001
	Shillinglaw, Fawn	RRR000688 / 0045
	Shively, Daniel	RRR000513 / 0001
	Shock, Howard	RRR001008 / 0001
	Shyduroff, Sasha	RRR000891 / 0001
	Siegel, Larry	RRR000631 / 0001
	Sill, Marjorie	RRR000042 / 0001
	Silvaggio, Janie	RRR001003 / 0001
	Silver, Sid	RRR000338 / 0001
	Simon, Laura	RRR000894 / 0001
	Sims, Marcus	RRR000449 / 0001
	Sinno, Moe	RRR000335 / 0001
	Sitnick, Leni	RRR000880 / 0001

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1.1.3 (15) (continued)	The Stella Group, Ltd. Sklar, Scott	RRR000848 / 0001
	Slack, Susan	RRR000142 / 0001
	Smith, Jamee	RRR000761 / 0001
	Snow, Rick	RRR000049 / 0005
	Snyder, Philip	RRR000944 / 0001
	Sojourner, Mary	RRR000924 / 0001
	Sollitt, Shannyn	RRR000566 / 0001
	Solomon, Laurie	RRR000721 / 0001
		RRR000934 / 0001
	Pan-Am Legal Services Song, Robert	RRR000248 / 0001
		RRR000302 / 0001
	Songer, Betty	RRR000917 / 0001
	Sorrells, Marla	RRR000909 / 0001
	Spake, Colin	RRR000853 / 0001
	St. Blaze, Scott	RRR000809 / 0001
	Stafford, Paula	RRR000771 / 0001
	Staggs, Donna	RRR000725 / 0001
	Stalsworth, Wayne	RRR000898 / 0001
	Stambaugh, Melanie	RRR000341 / 0001
	Stanton, Dolly	RRR000157 / 0001
	Stanton, William	RRR000158 / 0001
	Starr, Steven	RRR000868 / 0001
	Steinberg, Michael	RRR000918 / 0001
	Steup, John	RRR000591 / 0001
	Stewart, Max	RRR000291 / 0001
	Stewart, Valerie	RRR001043 / 0001
	Stone, Lynne	RRR000442 / 0001
	Stover, George/Sharon	RRR001032 / 0001
	The Toiyabe Chapter of the Sierra Club Strickland, Rose	RRR000745 / 0009
	Sturonas, Mark	RRR000213 / 0001
	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0001
	Sulock, Dot	RRR000508 / 0001

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1.1.3 (15) (continued)	Svien, Kaia	RRR000462 / 0001
	Swain, Lornita	RRR000911 / 0001
	Sweeney, Jay	RRR000536 / 0001
	Taber, Christina	RRR000788 / 0001
	Taino, Mark	RRR000368 / 0001
	Taylor, F.D.	RRR000859 / 0002
	Teale, Laulani	RRR000594 / 0001
	Tedesco, Concetta	RRR000843 / 0001
	Thomas, Kristen	RRR000301 / 0002
	Thomason, Amy	RRR001038 / 0001
		RRR001050 / 0001
	Thompson, Alysha	RRR000734 / 0001
	Thompson, David	RRR000735 / 0002
	Timmerman, Dan	RRR000378 / 0001
	Timmerman, Don	RRR000879 / 0002
		RRR000903 / 0002
	Tittman, Jack	RRR000965 / 0001
	Tomkins, Pat	RRR000579 / 0001
	Toste, Jeff	RRR000576 / 0001
	Tousseau, Laura	RRR000152 / 0001
	Travis, Joan	RRR000531 / 0001
	Treadway, Carolyn	RRR000445 / 0001
		RRR000583 / 0002
	Treadway, Roy	RRR000838 / 0001
	Tritt, Eleanor	RRR000133 / 0001
	Turner, Rose	RRR000169 / 0001
	Turner, Scott	RRR000845 / 0001
	Tyler, Jake	RRR000422 / 0001
	Uchino, Crystal	RRR000756 / 0001
	Uferet, Lora	RRR000947 / 0001
	Ullrich, Anita	RRR000310 / 0001
	van der Kamp, Dixie	RRR000770 / 0001
	Van Diepen, Rick	RRR000912 / 0001
	Van Druten, Sarah	RRR000777 / 0001
	Van Pelt, Pamela	RRR000135 / 0001

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1.1.3 (15) (continued)	Vargas, Alicia	RRR000849 / 0001
	Vasquez, David	RRR000780 / 0001
	Vatalaro, Jean	RRR000178 / 0001
	Vaught, Ron	RRR000353 / 0001
	Remnant Yuchi Nation Vest, Lee	RRR000383 / 0001
	Vick, T.A.	RRR001049 / 0001
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000061 / 0003
		RRR000092 / 0001
	Vocke, Sharon	RRR000863 / 0001
	Volk, Barbara	RRR001056 / 0001
	Walen, Tommy	RRR000234 / 0001
	Walla, Diana	RRR000195 / 0001
	Ward, Dick/Korla	RRR000028 / 0004
	Sierra Club, Mendocino Group Wehren, Rixanne	RRR000816 / 0001
	Weiskopf, Daniel	RRR000828 / 0001
	West, Cat	RRR000364 / 0002
	Wheeler, Mark	RRR000613 / 0001
	Wheeler, Wilma	RRR000147 / 0001
	Wheeler, Wilma	RRR000308 / 0001
	Whetstone, Joe	RRR000456 / 0001
	White, Andrew	RRR000783 / 0001
	Wieck, Chris	RRR000855 / 0001
	Wiegel, Ryan	RRR000064 / 0001
	Williams, Eesha	RRR000885 / 0001
	Williams, Harry	RRR000084 / 0001
	Williams, Jack	RRR000085 / 0001
	Williams, Kathy	RRR000939 / 0001
	Wilson, Bill	RRR000204 / 0001
	Wilson, Joy	RRR000086 / 0001
	Wilson, Lois	RRR000090 / 0001
	Win, Zwe	RRR001001 / 0001
	Winsten, Michele	RRR001077 / 0001
	Wood, Brad	RRR000402 / 0001

Comment-Response Document Location	Commenter	Comment Document
1.1.3 (15) (continued)	Wood, Lea	RRR000847 / 0001
	Woolley, Dorothy	RRR000162 / 0001
	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0001
	Wynn, Isaac	RRR000600 / 0001
	Yazzie, Penelope	RRR001015 / 0001
	Young, Aaron	RRR000919 / 0001
	Young, Joyce	RRR000128 / 0001
	Young, Peter	RRR000384 / 0001
	Yourgules-Scholes, Bella	RRR001065 / 0001
	Zarchin, Paul	RRR000628 / 0001
	Ziegler, Maggie	RRR000447 / 0001
	Zolkover, Adrian	RRR000025 / 0002
	Zuziak, Denise	RRR000773 / 0001
	Zwicker, Marie Louise	RRR000549 / 0001
1.1.4 (16)	Ace, Tom	RRR000094 / 0001
	City of Caliente Acklin, Tom	RRR000115 / 0006
	Energy Communities Alliance Akuthota, Nithin	RRR000326 / 0001
	Allen, Danielle	RRR000220 / 0001
	Anonymous	RRR000236 / 0001
		RRR000997 / 0001
		RRR000998 / 0001
		RRR001063 / 0001
	Andrews, Gerald	RRR001019 / 0001
	Behrendt, Tim	RRR001033 / 0001
	Nuclear Energy Institute Binzer, Chris	RRR000039 / 0001
		RRR000070 / 0001
		RRR000122 / 0001
	U.S. Transport Council Blee, David	RRR000008 / 0001
		RRR000319 / 0001
	Bolduc, William	RRR000992 / 0001
	Booe, Kenneth	RRR000968 / 0001

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1.1.4 (16) (continued)	Brush, Deray	RRR000132 / 0001
		RRR000257 / 0001
	Clark, Al	RRR000031 / 0001
	Clemons, Ronald	RRR000230 / 0001
	Colleen	RRR001025 / 0001
	Conley, Jack	RRR000183 / 0001
	Cooper, William	RRR001022 / 0001
	Alphatech, Inc. Curtis, Steven	RRR000137 / 0001
	Dalton, Eric	RRR000970 / 0001
	DeKlever, Richard	RRR000223 / 0001
		RRR000315 / 0001
	Dean, David	RRR000222 / 0001
	Devers, Ann	RRR000709 / 0001
	Dickison, Thomas	RRR000348 / 0001
	Drost, Edward	RRR000334 / 0001
	US Nuclear Energy Duarte, Gary	RRR000037 / 0001
		RRR000281 / 0001
	Public Service Commission of Wisconsin Ebert, Daniel	RRR000757 / 0001
	Eichbaum, Barlane	RRR000233 / 0001
	Eichbaum, Ike	RRR000051 / 0001
	Fancher, Clyde	RRR001079 / 0004
	Finch, David	RRR000155 / 0001
	Freeman, Fred	RRR000212 / 0001
	Gaia, Fabiana	RRR000337 / 0001
	Gilliam, Lynnette	RRR000949 / 0001
	Godfrey, Marci	RRR000163 / 0001
	Goit, John	RRR000097 / 0001
	Greco, Tom	RRR000110 / 0001
	Hardacker, Tracy	RRR000842 / 0001
	Hawkins, Keith	RRR000141 / 0001
	Henderson, Matt	RRR001048 / 0001
	Higginbotham, James/Joyce	RRR001040 / 0001

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1.1.4 (16) (continued)	Hill, Gayle	RRR000225 / 0001 RRR000244 / 0001
	Hollis, Charles	RRR000004 / 0001
	Hovey, Kenneth	RRR000245 / 0001
	Hulbert, Dan	RRR001053 / 0001
	Commonwealth of Virginia, Dept. of Environmental Quality Irons, Ellie	RRR000679 / 0002
	Jaszczak, Cash	RRR000003 / 0001
	Johnson, Bruce	RRR000111 / 0001
	Johnson, Marcia	RRR000112 / 0001
	Kaminski, Steven	RRR000359 / 0001
	Esmeralda County Kirby, William	RRR000068 / 0001
	Nuclear Energy Institute – NEI Kraft, Steven	RRR000318 / 0001
	Lightfoot, Jack	RRR000390 / 0001
	Lintner, Michael	RRR000991 / 0001
	Westinghouse Liparulo, Nick	RRR000727 / 0001
	Lonsumpun	RRR001006 / 0001
	Maclean, Gary	RRR000987 / 0001
	McClellan, Scott	RRR000030 / 0001
	NEI Yucca Mountain Project McCullum, Rod	RRR000058 / 0001
	Nuclear Energy Institute McCullum, Rodney	RRR000279 / 0001
	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0001
	Mitchell, Delbert	RRR000189 / 0001
	City of Caliente Moore, Ashley	RRR000118 / 0001
	Moore, Roanne	RRR000119 / 0001
	LOC Inc. Oak Ridge Reservation Local Oversight Committee Mulvenon, Norman	RRR000702 / 0001
	Myrick, Patrick	RRR000844 / 0001
	No last name given, Bob	RRR000161 / 0001

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1.1.4 (16) (continued)	No last name given, Dave	RRR001074 / 0001
	No last name given, Joe	RRR001062 / 0001
	National Association of Regulatory Utility Commissioners, NARUC O'Connell, Brian	RRR000323 / 0001
	O'Connor, Michael	RRR000106 / 0001
	Parsons, Roland	RRR000288 / 0001
	City of Caliente Phillips, Kevin	RRR000012 / 0001
		RRR000116 / 0001
	For A Better Nevada Phillips, Kevin	RRR000706 / 0001
	US Transport Council Quinn, Bob	RRR000040 / 0001
	Westinghouse Electric Company Rickman, Robin	RRR000221 / 0001
	Rigby, Dan	RRR000041 / 0001
	Romero, Bernie	RRR000996 / 0001
	Russo, Kathy	RRR000045 / 0003
	Sandness, Robert	RRR000313 / 0002
	Schmitt, Sean	RRR000179 / 0001
	Nuclear Energy Institute Seidler, Paul	RRR000007 / 0001
		RRR000057 / 0001
		RRR000278 / 0001
	Smith, Ross	RRR000358 / 0001
	Sullivan, John	RRR000972 / 0001
	Sweet, Carol	RRR001076 / 0001
	Thompson, Charles	RRR000299 / 0001
	Throckmorton, Arthur	RRR000439 / 0001
	Viata, John	RRR000303 / 0001
	Wadsworth, Gordon	RRR000113 / 0001
	Californians for Safe, Clean, Efficient Nuclear Power	RRR000176 / 0001
	Walker, Daniel	
	Williams, Richard	RRR001012 / 0001
	Woodward, Holly	RRR000707 / 0001

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1.1.4 (16) (continued)	Wright, Amber	RRR000227 / 0001
	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0011
	Zitney, Lisa	RRR000217 / 0001
1.2 (4)	City of Reno Cashell, Robert	RRR000680 / 0002
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0003
		RRR000663 / 0003
	County of San Bernardino, Board of Supervisors Mitzelfelt, Brad	RRR000673 / 0002
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0044
1.2 (9)	Alley, Charles	RRR000995 / 0019
	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0016
	Timbisha Shoshone Beaman, Ed	RRR000692 / 0002
	Bechtel, Dennis	RRR000981 / 0002
	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0001
	City of Reno Cashell, Robert	RRR000680 / 0001
	Chang, Claire	RRR000874 / 0001
	Corneli, Helen	RRR000869 / 0001
	Regional Association of Concerned Environmentalists (RACE) Donham, Mark	RRR000935 / 0001
	Fellows, Kevin	RRR000332 / 0001
	Nevada Agency for Nuclear Projects Frishman, Steve	RRR000275 / 0003
	Guzman, Tony	RRR000932 / 0001
	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0002
	Haggerty, Bernard	RRR000872 / 0001
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000274 / 0002

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1.2 (9) (continued)	Owens Valley Indian Commission Heil, Darla	RRR000100 / 0001
	Mercy Investment Program, Sisters of Mercy- Detroit, Dominican Sisters of Hope and Ursuline Sisters of Tildonk Heinonen, Valerie	RRR000933 / 0001
	Hilfer, Eric	RRR000645 / 0001
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0004
	Beyond Nuclear Kamps, Kevin	RRR000241 / 0001
	Beyond Nuclear Kamps, Kevin	RRR000325 / 0001
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0007
	McCabe, Eileen	RRR000929 / 0001
	Moffat, Jay	RRR000834 / 0001
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0002
	Nash, Nora	RRR000931 / 0001
	Sisters of St. Joseph of Carondelet Oleskevich, Diana	RRR000938 / 0001
	One Feather, Harold	RRR000937 / 0001
	Reback, Mark	RRR000936 / 0001
	Roth, Erik	RRR000930 / 0001
	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0011
	Tuler, Seth	RRR000837 / 0006
	Western Shoshone National Council Zabarte, Ian	RRR000327 / 0004
1.2 (10)	HOME – Healing Ourselves and Mother Earth Hadder, John	RRR000046 / 0002
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000006 / 0001
		RRR000013 / 0001
		RRR000056 / 0001
	Kriesler, Leonard	RRR000285 / 0001
	Russo, Kathy	RRR000045 / 0001

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1.2 (10) (continued)	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000061 / 0001
1.2 (12)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0013
	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0013
	California Energy Commission Boyd, James	RRR000642 / 0003
	City of Reno Cashell, Robert	RRR000680 / 0004
	DeLee, Michael	RRR000065 / 0001
	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0001
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000013 / 0002
	Huston, John	RRR000015 / 0001
	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0002
		RRR000691 / 0002
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0018
	Morton, Jenna	RRR000219 / 0002
	Mullings, Diamond	RRR000769 / 0017
	Sheldon-Scurlock, Peggy	RRR000572 / 0005
	Strickland, Rose	RRR000109 / 0001
	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0011
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0017
	Alliance for Nuclear Responsibility Weisman, David	RRR000089 / 0001
	Wiegel, Ryan	RRR000064 / 0003
1.2 (13)	Alley, Charles	RRR000995 / 0001
	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0011
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0003
	Mullings, Diamond	RRR000769 / 0018

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1.2 (13) (continued)	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0018
1.2 (14)	Bechtel, Dennis	RRR000981 / 0003
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0012
	Congress of the United States Reid, Harry	RRR000290 / 0002
		RRR000678 / 0014
1.2 (60)	Humboldt River Basin Water Authority Hodges, Bennie	RRR000029 / 0001
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0006
	Congress of the United States Reid, Harry	RRR000678 / 0013
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0002
1.2 (101)	Lauchengco, Dennis	RRR000199 / 0001
	JOSSCH-LLC Wetch, Joe	RRR000125 / 0001
1.2 (111)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0005
	Nevada Agency for Nuclear Projects Frishman, Steve	RRR000275 / 0002
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0004
	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0010
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0015
1.2 (276)	Bechtel, Dennis	RRR000305 / 0005
1.2 (912)	United States Environmental Protection Agency Miller, Anne	RRR000667 / 0003
1.2 (1950)	Kuehnhackl, Krista	RRR000867 / 0012
1.2 (3718)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0001
1.2.1 (46)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0003

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1.2.1 (46) (continued)	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0007
1.2.1 (55)	Alley, Charles	RRR000995 / 0002
	Baker, Alan	RRR000533 / 0001
	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0002
	State of Utah Chancellor, Denise	RRR000677 / 0001
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000006 / 0002
		RRR000013 / 0004
		RRR000038 / 0001
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0004
	Linda, Deb	RRR000577 / 0003
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0006
	City of Caliente Phillips, Kevin	RRR000641 / 0003
	Congress of the United States Reid, Harry	RRR000290 / 0003
		RRR000678 / 0001
	Strick, James	RRR000906 / 0002
	The Toiyabe Chapter of the Sierra Club Strickland, Rose	RRR000745 / 0002
	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0001
1.2.1 (72)	Anonymous	RRR000602 / 0003
	Bechtel, Dennis	RRR000981 / 0001
	Beckwith, Nan	RRR000772 / 0003
	Bigda, Mitch	RRR001027 / 0001
	DeKlever, Richard	RRR001000 / 0001
	Public Service Commission of Wisconsin Ebert, Daniel	RRR000757 / 0002
	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0017
	Lewis, Tonya	RRR000784 / 0003

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1.2.1 (72) (continued)	Mullings, Diamond	RRR000769 / 0011
	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0001
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0043
	Sheldon-Scurlock, Peggy	RRR000572 / 0003
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0017
	Stafford, Paula	RRR000771 / 0003
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0011
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0001
	Zuziak, Denise	RRR000773 / 0003
1.2.1 (113)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0015
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0003
	Congress of the United States Reid, Harry	RRR000290 / 0001
	The Toiyabe Chapter of the Sierra Club Strickland, Rose	RRR000745 / 0008
1.2.1 (156)	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0004
	California Energy Commission Boyd, James	RRR000642 / 0001
	State of California, California Energy Commission Byron, Barbara	RRR000043 / 0001
		RRR000108 / 0001
	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0002
	Alliance for Nuclear Responsibility Weisman, David	RRR000089 / 0002
	Alliance for Nuclear Responsibility Weisman, David	RRR000120 / 0001
1.2.1 (1862)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0006

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.2.1 (2387)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0012
1.2.1 (3719)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0002
1.2.1 (3721)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0004
1.2.2 (50)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000013 / 0003
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0001
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0002
		RRR000663 / 0001
	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0002
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0001
	The Toiyabe Chapter of the Sierra Club Strickland, Rose	RRR000745 / 0001
1.2.3 (25)	CSG Midwest Beetem, Jane	RRR000655 / 0001
	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0038
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0001
	Maryland Dept. of Planning Janey, Linda	RRR000129 / 0002
		RRR000306 / 0001
	Maryland Dept. of the Environment Mueller, Joanne	RRR000027 / 0001
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0004
1.2.3 (4013)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0008
1.2.4 (26)	Nye County, Board of Commissioners Borasky, Butch	RRR000055 / 0001
	Nye County, Board of County Commissioners Eastley, Joni	RRR000054 / 0001

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.2.4 (26) (continued)	Nye County, Board of County Commissioners Eastley, Joni	RRR000240 / 0001
		RRR000657 / 0007
	Nye County, Board of County Commissioners Hollis, Gary	RRR000081 / 0001
		RRR000271 / 0001
		RRR000320 / 0001
	Nye County Nuclear Waste Repository Project Office Jaszczak, Cash	RRR000044 / 0001
1.2.4 (1894)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0009
1.2.5 (2159)	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0006
1.2.6 (27)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0012
	Bechtel, Dennis	RRR000305 / 0003
		RRR000981 / 0007
	City of Reno Cashell, Robert	RRR000680 / 0011
	Regional Association of Concerned Environmentalists (RACE) Donham, Mark	RRR000935 / 0006
	Fretheim, Paul	RRR000093 / 0002
	Givens, Nancy	RRR000479 / 0005
	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0019
	Headington, Vincent	RRR000815 / 0001
	Mercy Investment Program, Sisters of Mercy- Detroit, Dominican Sisters of Hope and Ursuline Sisters of Tildonk Heinonen, Valerie	RRR000933 / 0008
	Beyond Nuclear Kamps, Kevin	RRR000241 / 0008
	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0007
	Environment America Linder, Josh	RRR000328 / 0003

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.2.6 (27) (continued)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0039
	McCabe, Eileen	RRR000929 / 0011
	Morton, Jenna	RRR000219 / 0001
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0001
	Sisters of St. Joseph of Carondelet Oleskevich, Diana	RRR000938 / 0008
	One Feather, Harold	RRR000937 / 0008
	Reback, Mark	RRR000936 / 0008
	Roth, Erik	RRR000930 / 0008
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0003
	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0009
	Tuler, Seth	RRR000837 / 0001
	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0014
		RRR000276 / 0003
		RRR000327 / 0003
		RRR000347 / 0003
1.3.1 (344)	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0003
1.3.1 (491)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0011
1.3.1 (577)	Concern Citizens of Amargosa Valley Boydston, Donald	RRR000104 / 0001
1.3.1 (944)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0001
1.3.1 (956)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0007
1.3.1 (1324)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0258
1.3.1 (1641)	Chelette, Iona	RRR000550 / 0017
1.3.1 (1658)	Chelette, Iona	RRR000550 / 0019

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.3.1 (1732)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0040
1.3.1 (1857)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0001
1.3.1 (1861)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0005
1.3.1 (1906)	State of Utah Chancellor, Denise	RRR000677 / 0013
1.3.1 (1932)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0021
1.3.1 (2294)	County of San Bernardino, Board of Supervisors Mitzelfelt, Brad	RRR000673 / 0003
1.3.1 (2782)	Cameron, Jan	RRR000105 / 0002
1.3.1 (2905)	CSG Midwest Beetem, Jane	RRR000655 / 0011
1.3.1 (3145)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0010
1.3.1 (3239)	Tieri, Anna	RRR001054 / 0002
1.3.1 (3715)	Dziegiel, Henry	RRR000264 / 0001
1.3.1 (3828)	City of Henderson Schroder, Gerri	RRR000269 / 0003
1.3.1 (3829)	Clark County Brager, Susan	RRR000270 / 0003
1.3.1 (3913)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0003
1.3.1 (3971)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0010
1.3.1 (4121)	Alley, Charles	RRR000995 / 0022
1.3.1 (4165)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0001
	Western Shoshone National Council Zabarte, Ian	RRR000276 / 0002
		RRR000327 / 0002
		RRR000347 / 0002
1.3.1 (4169)	State of Utah Chancellor, Denise	RRR000677 / 0012

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.3.1 (4169) (continued)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0266
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0040
	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0022
		RRR000691 / 0053
	County of San Bernardino, Board of Supervisors Mitzelfelt, Brad	RRR000673 / 0006
	City of Las Vegas, Councilman Ross, Steve	RRR000268 / 0002
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0011
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0007
	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0004
1.3.2 (4167)	Abraham, Natalie	RRR000790 / 0002
	Anonymous	RRR000425 / 0002
		RRR000602 / 0002
		RRR001057 / 0002
	Barnell, Todd	RRR000730 / 0003
	Barnes, Kathryn	RRR000562 / 0003
	Bartholomew, Alice	RRR000529 / 0003
	Bauer, Benjamin	RRR000782 / 0002
	Beckwith, Nan	RRR000589 / 0002
	Bernard, Larry	RRR000551 / 0003
		RRR000728 / 0002
	Berrigan, Gail	RRR000763 / 0002
	Western Shoshone Defense Project Bill, Larson	RRR000686 / 0002
	Women's International League for Peace and Freedom Birnie, Patricia	RRR000862 / 0002
	Block, Dixie	RRR000768 / 0002
	Bodde, Mary	RRR000497 / 0002
	Boeve, May	RRR000380 / 0003

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.3.2 (4167) (continued)	Bonds, Julia	RRR000403 / 0004
	Boyce, James	RRR000793 / 0002
	Bravo, Eliseo	RRR000797 / 0002
	Rainforest Action Network Brune, Mike	RRR000705 / 0002
	Buonaiuto, Shelley	RRR000684 / 0002
	California Valley Miwok Tribe Burley, Silvia	RRR000751 / 0002
	Bush, Pat	RRR000787 / 0002
	Carnine, Berkley	RRR000747 / 0002
	Cashel, Kathleen	RRR000556 / 0002
	Castleberry, George	RRR000731 / 0003
	Chester, Greg	RRR000406 / 0001
	Christian, Amy	RRR000698 / 0002
	Christine, Alexi	RRR000794 / 0002
	Conroy, Barbara	RRR000711 / 0002
	Corwin, Stanley	RRR000752 / 0002
	Covington, Cathy	RRR000492 / 0002
	Cox, Mike	RRR000921 / 0002
	Daggett, Becky	RRR000733 / 0003
	Davies, William	RRR000792 / 0002
	DePauw, Jolie	RRR000852 / 0002
	Devine, Don	RRR000459 / 0002
	DiSalvo, Nicole	RRR000704 / 0002
	Dillion, Teri	RRR000561 / 0002
	Northeast Pa. Audubon Society Dodge, Katharine	RRR000876 / 0002
	Regional Association of Concerned Environmentalists (RACE) Donham, Mark	RRR000935 / 0003
	Durante, Charles	RRR000429 / 0002
	Emerson, Eric	RRR000871 / 0001
	Estey, Kara	RRR000750 / 0002
	Farias, Corinne	RRR000424 / 0002
	Felich, Tara	RRR000748 / 0002
	Fitzell, Anne	RRR000592 / 0002

Cross Reference from Comments/Responses to Commenter(s) and Original Comments		
Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.3.2 (4167) (continued)	Fox, William/Myrna	RRR000926 / 0001
	Fujiyoshi, Ronald	RRR000724 / 0002
	Gagnon, Lisa	RRR000540 / 0001
	Givens, Nancy	RRR000479 / 0001
	Godinez, Jacob	RRR000789 / 0002
	Goodison, Jason	RRR000776 / 0002
	Grant, Patrick	RRR000741 / 0003
	Green, Karen	RRR000565 / 0002

HOME - Healing Ourselves and Mother Earth

Mercy Investment Program, Sisters of Mercy-

Detroit, Dominican Sisters of Hope and Ursuline

RRR000520 / 0003

RRR000365 / 0001

RRR000165 / 0002

RRR000932 / 0004

RRR000766 / 0002

RRR000046 / 0001

RRR000400 / 0001

RRR000744 / 0002

RRR000404 / 0002

RRR000695 / 0002

RRR000420 / 0003

RRR000795 / 0002

RRR000746 / 0002

RRR000506 / 0001

RRR000573 / 0003

RRR000933 / 0004

RRR000908 / 0002 RRR000928 / 0002

RRR000491 / 0003

RRR000786 / 0002

RRR000478 / 0002

RRR000927 / 0002

RRR000590 / 0002

Greenhaw, Rhonda

Griffith, Linda

Grote, Jennifer

Guzman, Tony

Haas, Shannon

Hadder, John Hagan, Tootie

Harden, Cory/Martha

Haslam, Malissa

Hall, James

Hatley, Earl

Hatt, Greg

SENAA West

Sisters of Tildonk Heinonen, Valerie Hernesman, Barbara

Higginson, Judy Holzberg, Steve

Huffman, Garrett

Irwin, Larry

James, Earl

Johnston, Jill

Hayes, Sara Haymaker, Annie

Illegible

Comment-Response Document Location	Commenter	Comment Document Comment Number
1.3.2 (4167) (continued)	Jones, Barbara	RRR000564 / 0002
	Beyond Nuclear	RRR000241 / 0005
	Kamps, Kevin	
		RRR000325 / 0007
	Karas, Anna	RRR000743 / 0002
	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0008
	Keyes, Janice	RRR000593 / 0002
	Kincaide, Delores	RRR000941 / 0002
	Landguth, David	RRR000755 / 0002
	C .	RRR000781 / 0002
	Lewis, Tonya	RRR000784 / 0002
	Lincoln, Robert	RRR000552 / 0002
	Linda, Deb	RRR000577 / 0006
	Linda, Tom	RRR000732 / 0003
	Lupo, Vivian	RRR000774 / 0001
	Macy, Joanna	RRR000753 / 0001
	Maestas, Lisa	RRR000785 / 0002
	Mallory, Kelli	RRR000791 / 0002
	Manion, Patricia	RRR000697 / 0002
	Maniscalco, Peter	RRR000940 / 0002
	Mareck, Katherine	RRR000571 / 0003
	Marsh, Amy	RRR000560 / 0002
	Matsuda, Thomas	RRR000399 / 0002
	Matsuda, Thomas	RRR000762 / 0002
	Matt, Jane	RRR000739 / 0002
	Mayo, Paul	RRR000897 / 0002
	Mazzotti, Amanda	RRR000736 / 0002
	McCabe, Eileen	RRR000929 / 0007
	McMullen, Penelope	RRR000877 / 0002
	Medina, Amanda	RRR000700 / 0002
	Alliance for Nuclear Accountability Meyer, Alfred	RRR000726 / 0003
	Miller, Katya	RRR000699 / 0002
	Miller, Virginia	RRR000833 / 0002

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.3.2 (4167) (continued)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0015
	Minch, Allen	RRR000767 / 0002
	Mizdrak, Marko	RRR000778 / 0002
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0004
	Western Shoshone National Council Moss, Allen	RRR000865 / 0001
	Mullings, Diamond	RRR000769 / 0005
	Nelson, Dennis	RRR000820 / 0002
	Indigenous Law Institute Newcomb, Steven	RRR000660 / 0001
	La Comunidad Nichols, Jean	RRR000685 / 0002
	Sisters of St. Joseph of Carondelet Oleskevich, Diana	RRR000938 / 0004
	One Feather, Harold	RRR000937 / 0005
	Overton, Patrick	RRR000779 / 0002
	Pellett, Simon	RRR000651 / 0002
	Pringle, Bruce	RRR000484 / 0001
	Quiroz, Mike	RRR000535 / 0001
	Reback, Mark	RRR000936 / 0005
	Reimer, Nancy	RRR000713 / 0002
	Southwest Worker's Union Rendon, Genaro	RRR000749 / 0003
	Richardson, John	RRR000775 / 0002
	Richmond, Ray	RRR001083 / 0002
	Riley, Amber-Renee	RRR000800 / 0002
	Rohrbach, Kim	RRR000544 / 0001
	Rolfe, Kenneth	RRR000471 / 0002
	Rolfe, Megan	RRR000470 / 0002
		RRR000653 / 0002
	Roth, Erik	RRR000930 / 0005
	Rouvier, Julia	RRR000570 / 0003
	Russo, Kathy	RRR000045 / 0002
	Saba, Marcel	RRR000796 / 0002
	Sanford, Warren	RRR000575 / 0003

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.3.2 (4167) (continued)	Scurlock, Rodger	RRR000764 / 0003
	Seely, Clover	RRR000913 / 0003
	Sewall, Christopher	RRR000822 / 0002
	Shillinglaw, Fawn	RRR000688 / 0067
	Siegel, Larry	RRR000631 / 0005
	Smith, Jamee	RRR000761 / 0002
	Sojourner, Mary	RRR000924 / 0002
	Sollitt, Shannyn	RRR000566 / 0002
	Solomon, Laurie	RRR000721 / 0006
		RRR000934 / 0007
	Stafford, Paula	RRR000771 / 0002
	Staggs, Donna	RRR000725 / 0002
	Steup, John	RRR000591 / 0002
	Swain, Lornita	RRR000911 / 0002
	Taber, Christina	RRR000788 / 0002
	Taylor, F.D.	RRR000859 / 0001
	Thompson, Alysha	RRR000734 / 0002
	Thompson, David	RRR000735 / 0001
	Timmerman, Don	RRR000879 / 0001
		RRR000903 / 0001
	Treadway, Carolyn	RRR000445 / 0004
		RRR000583 / 0001
	Uchino, Crystal	RRR000756 / 0002
	van der Kamp, Dixie	RRR000770 / 0002
	Van Druten, Sarah	RRR000777 / 0002
	Vasquez, David	RRR000780 / 0002
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000061 / 0004
		RRR000712 / 0005
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0001
	White, Andrew	RRR000783 / 0002
	Williams, Kathy	RRR000939 / 0002
	Wood, Lea	RRR000714 / 0004
	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0005

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.3.2 (4167) (continued)	Zuziak, Denise	RRR000773 / 0002
	Zwicker, Marie Louise	RRR000549 / 0004
1.3.2 (4184)	Shillinglaw, Fawn	RRR000688 / 0059
	Strickland, Rose	RRR000109 / 0002
1.3.3 (427)	Congress of the United States Reid, Harry	RRR000290 / 0006
1.3.3 (674)	Ross, Robert	RRR000427 / 0002
1.3.3 (885)	DeKlever, Richard	RRR000223 / 0002
1.3.3 (908)	United States Environmental Protection Agency Miller, Anne	RRR000667 / 0001
1.3.3 (935)	Treadway, Carolyn	RRR000445 / 0003
1.3.3 (1000)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0002
1.3.3 (1003)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0005
1.3.3 (1737)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0016
1.3.3 (1860)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0004
1.3.3 (2813)	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0016
1.3.3 (2843)	Gagnon, Lisa	RRR000540 / 0007
1.3.3 (2960)	CSG Midwest Beetem, Jane	RRR000655 / 0008
1.3.3 (3412)	Treadway, Carolyn	RRR000583 / 0004
1.3.3 (3541)	Strick, James	RRR000906 / 0001
1.3.3 (3713)	DeKlever, Richard	RRR000223 / 0004
1.3.3 (3914)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0013
1.3.3 (3963)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0005
1.3.3 (4025)	Alley, Charles	RRR000995 / 0012
1.3.3 (4082)	Alley, Charles	RRR000995 / 0020
1.3.3 (4115)	Murray, Jacqueline	RRR000369 / 0002

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.3.3 (4168)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0011
	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0010
	Benti, Wynne	RRR000071 / 0005
	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0010
	Boeve, May	RRR000380 / 0002
	California Energy Commission Boyd, James	RRR000642 / 0025
	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000082 / 0002
	Garrett, Jo Anne	RRR000694 / 0002
	HOME – Healing Ourselves and Mother Earth Hadder, John	RRR000046 / 0004
	Marsh, Amy	RRR000560 / 0005
	Physicians for Social Responsibility McCally, Michael	RRR000861 / 0002
	Alliance for Nuclear Accountability Meyer, Alfred	RRR000726 / 0005
	Mullings, Diamond	RRR000769 / 0016
	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0008
	Slack, Susan	RRR000142 / 0005
1.3.3 (4228)	DeKlever, Richard	RRR000315 / 0004
		RRR001000 / 0002
1.4.1 (49)	Bonds, Julia	RRR000403 / 0010
	California Energy Commission Boyd, James	RRR000642 / 0007
	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000059 / 0006
	County of Inyo, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000239 / 0005
	Greenhaw, Rhonda	RRR000520 / 0009
	Harden, Cory/Martha	RRR000404 / 0008

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.4.1 (49) (continued)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0017
	Seely, Clover	RRR000913 / 0009
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0005
	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0011
1.4.4 (29)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0003
	Cast, Dom	RRR000126 / 0002
	Collins-Ranadive, Gail	RRR000349 / 0001
	Nevada Agency for Nuclear Projects Frishman, Steve	RRR000275 / 0001
	Givens, Nancy	RRR000479 / 0008
	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0018
	Hornbeck Law Office Hornbeck, David	RRR000192 / 0001
	Hudig, Dorothy	RRR000145 / 0001
		RRR000307 / 0001
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0005
	Marchese, John	RRR000173 / 0003
	Marchese, Rich	RRR000174 / 0003
	Meikle, John	RRR000150 / 0001
	Alliance for Nuclear Accountability Meyer, Alfred	RRR000330 / 0004
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0016
	City of Caliente Phillips, Kevin	RRR000641 / 0004
	Progressive Leadership Alliance of Nevada Rake, Launce	RRR000262 / 0001
	Nuclear Age Peace Foundation Roth, Nick	RRR000331 / 0002
	Shillinglaw, Fawn	RRR000688 / 0044

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1.4.4 (29) (continued)	Smith, Catherine	RRR000146 / 0001
	The Toiyabe Chapter of the Sierra Club Strickland, Rose	RRR000745 / 0003
	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0009
1.4.5 (30)	Givens, Nancy	RRR000479 / 0006
	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0007
	Nidess, Rael	RRR000502 / 0002
	Orr, Lisa	RRR000616 / 0002
	Californians for Safe, Clean, Efficient Nuclear Power Walker, Daniel	RRR000176 / 0010
1.4.6 (31)	Cast, Dom	RRR000127 / 0001
	Chelette, Iona	RRR000550 / 0009
	Twin Springs Ranch Fallini, Joe	RRR000075 / 0004
	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000082 / 0004
	Greene, Eileen	RRR000994 / 0003
	Beyond Nuclear Kamps, Kevin	RRR000260 / 0001
	Melvin, Jerry	RRR000962 / 0001
	Nole, Zeb	RRR000287 / 0001
	City of Caliente Phillips, Kevin	RRR000012 / 0002
		RRR000116 / 0002
	Las Vegas Indian Center Reed, Debra	RRR000283 / 0002
	Sandness, Robert	RRR000313 / 0005
	Vesperman, Gary	RRR000265 / 0001
	New Energy Corporation Vesperman, Gary	RRR000293 / 0001
	Ward, Dick/Korla	RRR000028 / 0005
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0003

Comment-Response Document Location	Commenter	Comment Document Comment Number
1.4.6 (31) (continued)	JOSSCH-LLC Wetch, Joe	RRR000011 / 0001
		RRR000125 / 0002
	Wetzel, Robert	RRR000216 / 0001
	Zolkover, Adrian	RRR000025 / 0005
1.6.1 (67)	Alley, Charles	RRR000995 / 0007
	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0003
	Brown, Richard	RRR000024 / 0003
	State of Utah Chancellor, Denise	RRR000677 / 0002
	Chelette, Iona	RRR000550 / 0018
	Emerson, Eric	RRR000871 / 0002
	Haggerty, Bernard	RRR000872 / 0003
	State of Nevada, Agency for Nuclear Projects Hall, Jim	RRR000321 / 0002
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0014
	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0006
	Physicians for Social Responsibility Parillo, Jill	RRR000329 / 0001
	Shillinglaw, Fawn	RRR000688 / 0004
	Tuler, Seth	RRR000837 / 0003
	Williams, Harry	RRR000103 / 0002
	Wood, Lea	RRR000714 / 0003
1.6.2 (5)	Shillinglaw, Fawn	RRR000688 / 0006
1.6.2 (44)	Bartholomew, Alice	RRR000529 / 0011
	Bonds, Julia	RRR000403 / 0013
	Covington, Cathy	RRR000492 / 0010
	Greenhaw, Rhonda	RRR000520 / 0012
	Harden, Cory/Martha	RRR000404 / 0011
	Holzberg, Steve	RRR000491 / 0011
	Mullings, Diamond	RRR000769 / 0013
	Seely, Clover	RRR000913 / 0012
	Siegel, Larry	RRR000631 / 0013

Comment-Response Document Location	Commenter	Comment Document Comment Number
1.6.2 (44) (continued)	Solomon, Laurie	RRR000721 / 0004
		RRR000934 / 0004
	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0008
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0013
1.6.2 (51)	Anonymous	RRR000586 / 0005
	Barnell, Todd	RRR000730 / 0010
	Bartholomew, Alice	RRR000529 / 0015
	Bechtel, Dennis	RRR000981 / 0009
	Bonds, Julia	RRR000403 / 0017
	California Energy Commission Boyd, James	RRR000642 / 0014
	Castleberry, George	RRR000731 / 0010
	Covington, Cathy	RRR000492 / 0014
	Daggett, Becky	RRR000733 / 0010
	Giese, Mark	RRR000574 / 0004
	Grant, Patrick	RRR000741 / 0010
	Greenhaw, Rhonda	RRR000520 / 0015
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000038 / 0005
		RRR000056 / 0007
	Harden, Cory/Martha	RRR000404 / 0014
	Haymaker, Annie	RRR000506 / 0006
	Holzberg, Steve	RRR000491 / 0015
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0024
	Illegible	RRR000573 / 0010
	Irwin, Larry	RRR000478 / 0008
	Karpen, Leah	RRR000578 / 0003
	Linda, Deb	RRR000577 / 0013
	Linda, Tom	RRR000732 / 0010
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0023
		RRR000663 / 0026
	Mareck, Katherine	RRR000571 / 0010

Comment-Response Document Location	Commenter	Comment Document / Comment Number
1.6.2 (51) (continued)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0017
	Rouvier, Julia	RRR000570 / 0010
	Sanford, Warren	RRR000575 / 0010
	Scurlock, Rodger	RRR000764 / 0010
	Seely, Clover	RRR000913 / 0015
	Siegel, Larry	RRR000631 / 0017
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0008
	Zwicker, Marie Louise	RRR000549 / 0012
1.6.2 (52)	Alley, Charles	RRR000995 / 0013
	State of California, California Energy Commission Byron, Barbara	RRR000108 / 0003
	State of Utah Chancellor, Denise	RRR000677 / 0009
	Chelette, Iona	RRR000550 / 0010
	Twin Springs Ranch Fallini, Joe	RRR000075 / 0002
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0034
	Beyond Nuclear Kamps, Kevin	RRR000241 / 0009
	Environment America Linder, Josh	RRR000328 / 0004
1.6.2 (62)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0009
	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0003
	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0008
	State of California, California Energy Commission Byron, Barbara	RRR000108 / 0005
	Cecil, Pat	RRR000091 / 0003
	County of Inyo, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000239 / 0007

Comment-Response Document Location	Commenter	Comment Document
1.6.2 (62) (continued)	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0009
1.6.2 (164)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0026
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0036
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0022
	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0017
1.6.2 (253)	State of Nevada, Agency for Nuclear Projects Hall, Jim	RRR000321 / 0001
1.6.2 (715)	Pringle, Bruce	RRR000484 / 0004
1.6.2 (1177)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0053
1.6.2 (1363)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0246
1.6.2 (1364)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0247
1.6.2 (1365)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0248
1.6.2 (1395)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0021
1.6.2 (1449)	Kuehnhackl, Krista	RRR000867 / 0005
1.6.2 (1627)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0003
		RRR000691 / 0003
1.6.2 (1822)	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0005
1.6.2 (1897)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0012
1.6.2 (1934)	State of Utah Chancellor, Denise	RRR000677 / 0010

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1.6.2 (1959)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0022
1.6.2 (2148)	Chelette, Iona	RRR000550 / 0004
1.6.2 (2162)	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0009
1.6.2 (2467)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0038
1.6.2 (2657)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0005
1.6.2 (2664)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0007
1.6.2 (2806)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0013
1.6.2 (2868)	Solomon, Laurie	RRR000721 / 0008
		RRR000934 / 0006
1.6.2 (2906)	CSG Midwest Beetem, Jane	RRR000655 / 0010
1.6.2 (3015)	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0006
	Alliance for Nuclear Responsibility Weisman, David	RRR000120 / 0003
1.6.2 (3095)	Alley, Charles	RRR000995 / 0024
1.6.2 (3100)	Alley, Charles	RRR000995 / 0025
1.6.2 (3402)	Kirby, William	RRR000235 / 0005
1.6.2 (3648)	Lim, Kingman	RRR000373 / 0005
1.6.2 (3743)	Esmeralda County, Board of County Commissioners Kirby, William	RRR000666 / 0004
1.6.2 (4077)	Alley, Charles	RRR000995 / 0017
1.6.2.1 (61)	Barnell, Todd	RRR000730 / 0007
	Bartholomew, Alice	RRR000529 / 0009
	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0009
	Bonds, Julia	RRR000403 / 0011
	Bourgoin, Ron	RRR001026 / 0001
	Castleberry, George	RRR000731 / 0007
	Chelette, Iona	RRR000550 / 0015

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1.6.2.1 (61) (continued)	Cooley, Marian	RRR000487 / 0002
	Covington, Cathy	RRR000492 / 0008
	Cullen, Noreen	RRR000475 / 0002
	Daggett, Becky	RRR000733 / 0007
	DeMare, Joseph	RRR000595 / 0002
	Fellows, Richard	RRR000900 / 0001
	Fox, Vicki	RRR000495 / 0002
	Gere, Kathy	RRR000624 / 0001
	Grant, Patrick	RRR000741 / 0007
	Greenhaw, Rhonda	RRR000520 / 0010
	Harden, Cory/Martha	RRR000404 / 0009
	Hatley, Earl	RRR000420 / 0001
	Haymaker, Annie	RRR000506 / 0007
	Owens Valley Indian Commission Heil, Darla	RRR000100 / 0004
	Henning, Bill	RRR001018 / 0001
	Holmes-Litvak, Veronika	RRR001029 / 0001
	Holzberg, Steve	RRR000491 / 0009
	Houston, James	RRR000985 / 0001
	Illegible	RRR000573 / 0007
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0037
	Beyond Nuclear Kamps, Kevin	RRR000237 / 0001
	Beyond Nuclear Kamps, Kevin	RRR000357 / 0001
	Lehman, Mary	RRR000606 / 0002
	Linda, Deb	RRR000577 / 0002
	Linda, Tom	RRR000732 / 0007
	Mareck, Katherine	RRR000571 / 0007
	County of San Bernardino, Board of Supervisors Mitzelfelt, Brad	RRR000673 / 0005
	Morano, Lana	RRR000465 / 0001
	Mullings, Diamond	RRR000769 / 0015
	Perry, Sybil	RRR000598 / 0001
	Piszczekand, Rosemary	RRR001020 / 0001

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1.6.2.1 (61) (continued)	Pope, Kay	RRR000922 / 0001
	Rana, Avis	RRR000719 / 0002
	Rogers, Philip	RRR001021 / 0001
	Rouvier, Julia	RRR000570 / 0007
	Sanford, Warren	RRR000575 / 0007
	Scurlock, Rodger	RRR000764 / 0007
	Seely, Clover	RRR000913 / 0010
	Shillinglaw, Fawn	RRR000688 / 0022
	Siegel, Larry	RRR000631 / 0011
	Sill, Marjorie	RRR000042 / 0005
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0015
	Volpe-Gunsell, Amie	RRR000703 / 0001
	Wiegel, Ryan	RRR000064 / 0002
	Wood, Lea	RRR000714 / 0002
	Zwicker, Marie Louise	RRR000549 / 0002
1.6.2.2 (1714)	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0011
1.6.2.2 (1886)	Givens, Nancy	RRR000479 / 0003
1.6.2.2 (2772)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0010
1.6.2.2 (2837)	CSG Midwest Beetem, Jane	RRR000655 / 0013
1.6.2.2 (2985)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0016
1.6.2.5 (141)	CSG Midwest Beetem, Jane	RRR000655 / 0012
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0025
	Sandness, Robert	RRR000313 / 0008
	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0019
1.6.2.5 (142)	Alliance for Nuclear Accountability Meyer, Alfred	RRR000726 / 0007
	Vandenbosch, Robert/Susanne	RRR000232 / 0002
1.6.2.5 (143)	Alley, Charles	RRR000995 / 0010
	Greene, Eileen	RRR000994 / 0002

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1.6.2.5 (143) (continued)	Sandness, Robert	RRR000313 / 0009
1.6.2.5 (144)	Sandness, Robert	RRR000313 / 0010
	Snow, Rick	RRR000049 / 0003
	Alliance for Nuclear Responsibility Weisman, David	RRR000089 / 0005
	Zolkover, Adrian	RRR000025 / 0006
1.6.2.5 (155)	CSG Midwest Beetem, Jane	RRR000655 / 0002
	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0003
1.6.2.5 (163)	State of Utah Chancellor, Denise	RRR000677 / 0004
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000038 / 0006
		RRR000056 / 0009
		RRR000274 / 0003
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0019
	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0005
	Shillinglaw, Fawn	RRR000688 / 0021
	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0002
1.6.2.5 (165)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0001
1.6.2.5 (383)	Smith, Doug	RRR000060 / 0001
1.6.2.5 (980)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0020
1.6.2.5 (984)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0026
1.6.2.5 (997)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0038
1.6.2.5 (1069)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0111
1.6.2.5 (1941)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0100

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1.6.2.5 (2573)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0002
1.6.2.5 (2835)	CSG Midwest Beetem, Jane	RRR000655 / 0015
1.6.2.5 (2836)	CSG Midwest Beetem, Jane	RRR000655 / 0014
1.6.2.5 (2907)	CSG Midwest Beetem, Jane	RRR000655 / 0009
1.6.2.5 (3815)	Sandness, Robert	RRR000313 / 0007
1.6.2.5 (4021)	Alley, Charles	RRR000995 / 0011
1.6.2.6 (2897)	Shillinglaw, Fawn	RRR000688 / 0025
1.6.2.7 (356)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0009
1.6.2.7 (431)	Alliance for Nuclear Responsibility Weisman, David	RRR000089 / 0004
1.6.2.7 (565)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000013 / 0005
1.6.2.7 (637)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000006 / 0003
1.6.2.7 (726)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000322 / 0001
1.6.2.7 (815)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000069 / 0001
1.6.2.7 (985)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0028
1.6.2.7 (986)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0024
1.6.2.7 (989)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0029
1.6.2.7 (990)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0031
1.6.2.7 (991)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0032
1.6.2.7 (993)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0034
1.6.2.7 (994)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0035
1.6.2.7 (1267)	Snow, Rick	RRR000049 / 0004

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1.6.2.7 (2490)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0023
1.6.2.7 (2672)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0010
1.6.2.7 (3014)	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0005
	Alliance for Nuclear Responsibility Weisman, David	RRR000120 / 0002
1.6.2.7 (3170)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0055
1.6.2.7 (3181)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0030
1.6.2.7 (3646)	Lim, Kingman	RRR000373 / 0003
1.6.2.7 (3699)	Huston/Cole, John/Jan	RRR000317 / 0007
1.6.2.7 (3979)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0018
1.6.2.7 (3987)	State of California, California Energy Commission Byron, Barbara	RRR000108 / 0009
1.6.3 (70)	State of Utah Chancellor, Denise	RRR000677 / 0005
	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0010
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0003
	Congress of the United States Reid, Harry	RRR000678 / 0004
1.6.3 (73)	California Energy Commission Boyd, James	RRR000642 / 0023
	Gagnon, Lisa	RRR000540 / 0004
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0045
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0008
	Alliance for Nuclear Accountability Meyer, Alfred	RRR000330 / 0001
	Congress of the United States Reid, Harry	RRR000678 / 0005
	Shillinglaw, Fawn	RRR000688 / 0013

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1.6.3 (73) (continued)	Slack, Susan	RRR000142 / 0004
	Tomkins, Pat	RRR000579 / 0002
	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0006
1.6.3 (74)	California Energy Commission Boyd, James	RRR000642 / 0024
	Mercy Investment Program, Sisters of Mercy- Detroit, Dominican Sisters of Hope and Ursuline Sisters of Tildonk Heinonen, Valerie	RRR000933 / 0005
	Beyond Nuclear Kamps, Kevin	RRR000241 / 0004
	McCabe, Eileen	RRR000929 / 0004
	Mullings, Diamond	RRR000769 / 0009
	Nash, Nora	RRR000931 / 0005
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0038
	Sisters of St. Joseph of Carondelet Oleskevich, Diana	RRR000938 / 0005
	One Feather, Harold	RRR000937 / 0004
	Reback, Mark	RRR000936 / 0004
	Roth, Erik	RRR000930 / 0004
	Shillinglaw, Fawn	RRR000688 / 0017
	Tuler, Seth	RRR000837 / 0004
	Vandenbosch, Robert/Susanne	RRR000232 / 0001
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0009
1.6.3 (1557)	Beyond Nuclear Kamps, Kevin	RRR000325 / 0004
1.6.3.2 (175)	Bonds, Julia	RRR000403 / 0007
	Cecil, Pat	RRR000091 / 0004
	State of Utah Chancellor, Denise	RRR000677 / 0006
	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0008
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000056 / 0003

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1.6.3.2 (175) (continued)	Hanson, Art	RRR000612 / 0002
	McGoldrick, Suzanne	RRR000231 / 0001
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0012
	Shillinglaw, Fawn	RRR000688 / 0009
	Slack, Susan	RRR000142 / 0010
	Tuler, Seth	RRR000837 / 0002
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0015
1.6.3.2 (176)	Alley, Charles	RRR000995 / 0021
	Barnell, Todd	RRR000730 / 0004
	Bartholomew, Alice	RRR000529 / 0006
	Timbisha Shoshone Beaman, Ed	RRR000692 / 0008
	Bechtel, Dennis	RRR000981 / 0004
	CSG Midwest Beetem, Jane	RRR000655 / 0004
	Benti, Wynne	RRR000071 / 0006
	Bernard, Larry	RRR000551 / 0005
		RRR000728 / 0005
	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0007
	Nuclear Information and Resource Services Binette, Aja	RRR000324 / 0002
	California Energy Commission Boyd, James	RRR000642 / 0016
	State of California, California Energy Commission Byron, Barbara	RRR000108 / 0004
	Castleberry, George	RRR000731 / 0004
	State of Utah Chancellor, Denise	RRR000677 / 0003
	Covington, Cathy	RRR000492 / 0005
	Daggett, Becky	RRR000733 / 0004
	DeMare, Joseph	RRR000595 / 0003
	DePauw, Jolie	RRR000852 / 0004

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1.6.3.2 (176) (continued)	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000082 / 0005
	County of Inyo, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000239 / 0008
	Grant, Patrick	RRR000741 / 0004
	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0025
	Greenhaw, Rhonda	RRR000520 / 0006
	Guzman, Tony	RRR000932 / 0003
	State of Nevada, Agency for Nuclear Projects Hall, Jim	RRR000321 / 0003
	Hanson, Art	RRR000467 / 0003
	Hanson, Natalie	RRR000468 / 0003
	Harden, Cory/Martha	RRR000404 / 0005
	Haymaker, Annie	RRR000506 / 0003
	Mercy Investment Program, Sisters of Mercy- Detroit, Dominican Sisters of Hope and Ursuline Sisters of Tildonk Heinonen, Valerie	RRR000933 / 0003
	Holzberg, Steve	RRR000491 / 0006
	Illegible	RRR000573 / 0004
	Karpen, Leah	RRR000578 / 0001
	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0010
	Esmeralda County, Board of County Commissioners Kirby, William	RRR000666 / 0001
	Lim, Kingman	RRR000373 / 0002
	Lincoln, Robert	RRR000552 / 0005
	Linda, Deb	RRR000577 / 0007
	Linda, Tom	RRR000732 / 0004
	Mareck, Katherine	RRR000571 / 0004
	Marsh, Amy	RRR000560 / 0004
	McCabe, Eileen	RRR000929 / 0003

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1.6.3.2 (176) (continued)	Alliance for Nuclear Accountability Meyer, Alfred	RRR000330 / 0002
		RRR000726 / 0006
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0027
	Mullings, Diamond	RRR000769 / 0006
	Nash, Nora	RRR000931 / 0003
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0016
	Sisters of St. Joseph of Carondelet Oleskevich, Diana	RRR000938 / 0003
	One Feather, Harold	RRR000937 / 0003
	Pringle, Bruce	RRR000484 / 0005
	Reback, Mark	RRR000936 / 0003
	Congress of the United States Reid, Harry	RRR000290 / 0004
		RRR000678 / 0003
	Roth, Erik	RRR000930 / 0003
	Rouvier, Julia	RRR000570 / 0004
	Sanford, Warren	RRR000575 / 0004
	City of Henderson Schroder, Gerri	RRR000269 / 0002
	Scurlock, Rodger	RRR000764 / 0004
	Seely, Clover	RRR000913 / 0006
	Siegel, Larry	RRR000631 / 0008
	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0010
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0006
	von Ranson, Jonathan	RRR000923 / 0001
	Zwicker, Marie Louise	RRR000549 / 0005
1.6.3.2 (1457)	State of New Jersey, Dept. of Environmental Protection Koschek, Kenneth	RRR000567 / 0001
1.6.3.2 (1556)	Beyond Nuclear Kamps, Kevin	RRR000325 / 0003
1.6.3.2 (1640)	Chelette, Iona	RRR000550 / 0016

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1.6.3.2 (1744)	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0009
1.6.3.2 (1792)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0006
1.6.3.2 (1823)	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0004
1.6.3.2 (1865)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0008
1.6.3.2 (2600)	Beyond Nuclear Kamps, Kevin	RRR000241 / 0003
1.6.3.2 (2658)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0006
1.6.3.2 (2680)	Shillinglaw, Fawn	RRR000688 / 0075
1.6.3.2 (2826)	Shillinglaw, Fawn	RRR000688 / 0041
1.6.3.2 (2947)	Shillinglaw, Fawn	RRR000688 / 0011
1.6.3.2 (2948)	Shillinglaw, Fawn	RRR000688 / 0010
1.6.3.2 (3338)	Kirby, William	RRR000235 / 0001
1.6.3.3 (2333)	Shillinglaw, Fawn	RRR000688 / 0060
1.6.3.3 (2903)	Shillinglaw, Fawn	RRR000688 / 0019
1.6.3.3 (2942)	Shillinglaw, Fawn	RRR000688 / 0016
1.6.3.3 (2944)	Shillinglaw, Fawn	RRR000688 / 0015
1.6.3.3 (2953)	Shillinglaw, Fawn	RRR000688 / 0005
1.6.3.3 (3619)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0007
1.6.3.3 (3620)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0009
1.6.3.3 (4033)	Alley, Charles	RRR000995 / 0014
1.6.5 (45)	Shillinglaw, Fawn	RRR000688 / 0003
	Treadway, Carolyn	RRR000445 / 0002
		RRR000583 / 0003
1.6.5 (56)	State of California, California Energy Commission Byron, Barbara	RRR000108 / 0008
	Gagnon, Lisa	RRR000540 / 0005
	Gaia, Fabiana	RRR000337 / 0002
	HOME – Healing Ourselves and Mother Earth Hadder, John	RRR000046 / 0005

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1.6.5 (56) (continued)	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0011
1.6.5 (57)	Benti, Wynne	RRR000071 / 0007
	Evans, Jim	RRR000296 / 0001
	Givens, Nancy	RRR000479 / 0002
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0012
1.6.5 (58)	Anonymous	RRR000841 / 0001
	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0026
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0011
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0014
	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0006
	Shillinglaw, Fawn	RRR000688 / 0027
	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0002
1.6.5 (2832)	Shillinglaw, Fawn	RRR000688 / 0038
1.6.5 (2902)	Shillinglaw, Fawn	RRR000688 / 0020
1.7 (1858)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0002
1.7.1 (1404)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0028
1.7.1 (1416)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0029
1.7.1 (1451)	Kuehnhackl, Krista	RRR000867 / 0007
1.7.1 (1577)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0040
		RRR000691 / 0076
1.7.1 (1683)	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0014
1.7.1 (1767)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0014
1.7.1 (3981)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0024

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1.7.1 (4043)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0062
1.7.1 (4044)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0063
1.7.2 (1616)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0012
1.7.2 (2456)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0039
1.7.2 (2884)	Shillinglaw, Fawn	RRR000688 / 0036
1.7.2 (3042)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0046
1.7.2 (4141)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0025
1.7.3 (172)	Bonds, Julia	RRR000403 / 0002
	Gagnon, Lisa	RRR000540 / 0006
	Hanson, Art	RRR000467 / 0001
	Hanson, Natalie	RRR000468 / 0001
	Marsh, Amy	RRR000560 / 0003
	McCabe, Eileen	RRR000929 / 0005
	Miller, Mark	RRR000729 / 0002
	Rigby, Samantha	RRR000881 / 0001
	Tieri, Anna	RRR001054 / 0001
	Wood, Lea	RRR000714 / 0001
	Zolkover, Adrian	RRR000025 / 0003
1.7.3 (479)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0014
1.7.3 (482)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0015
1.7.3 (483)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0016
1.7.3 (484)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0017
1.7.3 (2744)	Shillinglaw, Fawn	RRR000688 / 0068
1.7.3 (2804)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0005

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1.7.3 (3038)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0007
1.7.3 (3606)	Slack, Susan	RRR000142 / 0006
1.7.3 (4199)	Shahrooz, William	RRR000286 / 0001
	Woods, Stanford	RRR000258 / 0001
1.7.4 (89)	Anonymous	RRR000425 / 0004
	Barnell, Todd	RRR000730 / 0002
	Bartholomew, Alice	RRR000529 / 0005
	Bernard, Larry	RRR000551 / 0004
		RRR000728 / 0004
	Bodde, Mary	RRR000497 / 0004
	Bonds, Julia	RRR000403 / 0006
	Castleberry, George	RRR000731 / 0002
	Covington, Cathy	RRR000492 / 0004
	Daggett, Becky	RRR000733 / 0002
	DePauw, Jolie	RRR000852 / 0003
	Devine, Don	RRR000459 / 0003
	Farias, Corinne	RRR000424 / 0004
	Gagnon, Lisa	RRR000540 / 0002
	Grant, Patrick	RRR000741 / 0002
	Greenhaw, Rhonda	RRR000520 / 0005
	Harden, Cory/Martha	RRR000404 / 0004
	Haymaker, Annie	RRR000506 / 0002
	Holzberg, Steve	RRR000491 / 0005
	Illegible	RRR000573 / 0002
	Irwin, Larry	RRR000478 / 0004
	Lincoln, Robert	RRR000552 / 0004
	Linda, Deb	RRR000577 / 0005
	Linda, Tom	RRR000732 / 0002
	Mahoney, Stephen	RRR000469 / 0001
	Mareck, Katherine	RRR000571 / 0002
	Miller, Mark	RRR000729 / 0003
	Pringle, Bruce	RRR000484 / 0003
	Quiroz, Mike	RRR000535 / 0002

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1.7.4 (89) (continued)	Southwest Worker's Union Rendon, Genaro	RRR000749 / 0002
	Rouvier, Julia	RRR000570 / 0002
	Sanford, Warren	RRR000575 / 0002
	Scurlock, Rodger	RRR000764 / 0002
	Seely, Clover	RRR000913 / 0005
	Siegel, Larry	RRR000631 / 0007
	Solomon, Laurie	RRR000721 / 0002
		RRR000934 / 0002
1.7.4 (150)	Regional Association of Concerned Environmentalists (RACE) Donham, Mark	RRR000935 / 0004
	Guzman, Tony	RRR000932 / 0005
	Mercy Investment Program, Sisters of Mercy- Detroit, Dominican Sisters of Hope and Ursuline Sisters of Tildonk Heinonen, Valerie	RRR000933 / 0006
	Nash, Nora	RRR000931 / 0006
	Sisters of St. Joseph of Carondelet Oleskevich, Diana	RRR000938 / 0006
	One Feather, Harold	RRR000937 / 0006
	Reback, Mark	RRR000936 / 0006
	Roth, Erik	RRR000930 / 0006
1.7.4 (325)	Cecil, Pat	RRR000091 / 0002
1.7.4 (396)	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000061 / 0002
1.7.4 (485)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0018
1.7.4 (486)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0019
1.7.4 (487)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0020
1.7.4 (488)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0021
1.7.4 (489)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0022
1.7.4 (492)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0023

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1.7.4 (493)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0024
1.7.4 (494)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0025
1.7.4 (532)	State of California, California Energy Commission Byron, Barbara	RRR000108 / 0006
1.7.4 (1614)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0013
1.7.4 (1874)	State of Utah Chancellor, Denise	RRR000677 / 0017
1.7.4 (2360)	State of Caifornia, Dept. of Fish and Game Racime, Denyse	RRR001078 / 0002
1.7.4 (2365)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0005
1.7.4 (2450)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0035
1.7.4 (2746)	Shillinglaw, Fawn	RRR000688 / 0066
1.7.4 (2747)	Shillinglaw, Fawn	RRR000688 / 0065
1.7.4 (2753)	Shillinglaw, Fawn	RRR000688 / 0058
1.7.4 (2846)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0006
1.7.4 (2850)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0007
1.7.4 (2894)	Shillinglaw, Fawn	RRR000688 / 0028
1.7.4 (3608)	Slack, Susan	RRR000142 / 0008
1.7.4 (3708)	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000082 / 0001
1.7.4 (3749)	California Energy Commission Boyd, James	RRR000642 / 0021
1.7.4 (3756)	McCabe, Eileen	RRR000929 / 0009
1.7.4 (3959)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0002
1.7.4 (4050)	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000092 / 0002
1.7.4 (4059)	Zwicker, Marie Louise	RRR000549 / 0003
1.7.4 (4061)	Sheldon-Scurlock, Peggy	RRR000572 / 0002

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1.7.4 (4062)	Sheldon-Scurlock, Peggy	RRR000572 / 0004
1.7.4 (4064)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0016
1.7.4 (4188)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0003
	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0001
	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000059 / 0001
	County of Inyo, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000239 / 0001
	Mullings, Diamond	RRR000769 / 0001
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0001
1.7.4 (4189)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0004
	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0002
	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000059 / 0002
	County of Inyo, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000239 / 0002
	Mullings, Diamond	RRR000769 / 0002
	Slack, Susan	RRR000142 / 0007
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0002
1.7.4 (4195)	Durham, Barbara	RRR000067 / 0002
	Owens Valley Indian Commission Heil, Darla	RRR000100 / 0003
1.7.4 (4197)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0035
		RRR000691 / 0071
	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0022

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1.7.5 (157)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0014
		RRR000691 / 0035
	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0025
1.7.5 (1576)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0041
		RRR000691 / 0077
1.7.5 (2331)	State of Caifornia, Dept. of Fish and Game Racime, Denyse	RRR001078 / 0001
1.7.5 (3191)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0016
1.7.5 (3414)	U.S. Department of the Interior, Bureau of Land Management Palma, Juan	RRR001081 / 0002
1.7.5 (4079)	Alley, Charles	RRR000995 / 0018
1.7.6 (477)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0012
1.7.6 (590)	Native American Heritage Commission Singleton, Dave	RRR000032 / 0001
1.7.6 (1587)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0030
		RRR000691 / 0066
1.7.6 (1605)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0020
1.7.6 (1606)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0019
1.7.6 (1685)	Corporation of Newe Sogobia Wells, John	RRR000836 / 0005
1.7.6 (2491)	Western Shoshone Defense Project Bill, Larson	RRR000686 / 0004
1.7.6 (3149)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0012
1.7.6 (3539)	McCabe, Eileen	RRR000929 / 0008
1.7.6 (4039)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0058
1.7.6 (4086)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0070

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1.7.6 (4086) (continued)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0010
1.7.6 (4090)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0074
1.7.6 (4122)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0002
1.7.6 (4142)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0026
1.7.6 (4178)	Abbott, Leal	RRR000636 / 0001
	Batterden, James	RRR000804 / 0002
	Beckwith, Nan	RRR000772 / 0002
	Berry, Michael	RRR000805 / 0002
	Bonds, Julia	RRR000403 / 0001
	Curran, John	RRR000801 / 0002
	Damaschke, Jon	RRR000803 / 0002
	Flores, Gabriel/Raven	RRR000811 / 0002
	Fofrich, Robert	RRR000802 / 0002
	Greene, Eileen	RRR000994 / 0004
	Griffith, Donna	RRR000633 / 0001
	Hanson, Art	RRR000467 / 0002
	Hanson, Natalie	RRR000468 / 0002
	McWhite, Nancy	RRR000808 / 0002
	Mejia, Sergio	RRR000807 / 0002
	Miranda, Daniel	RRR000397 / 0001
	Moncada, Patricia	RRR000888 / 0001
	Naha, Cynthia	RRR000485 / 0001
	Naranjo, Marian	RRR000810 / 0002
	Rytinova, Zdenka	RRR000806 / 0002
	Southern Ohio Neighbors Group Sea, Geoffrey	RRR000887 / 0001
	Teale, Laulani	RRR000594 / 0002
	Tronto, Marlise	RRR000407 / 0001
	Remnant Yuchi Nation Vest, Lee	RRR000383 / 0002
	Wastewin, Wambdi	RRR000632 / 0001
	West, Cat	RRR000364 / 0001

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1.7.6 (4179)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0011
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0011
1.7.7 (616)	Sampson, Irene	RRR000124 / 0004
1.7.7 (626)	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000059 / 0005
	County of Inyo, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000239 / 0009
1.7.7 (1453)	Kuehnhackl, Krista	RRR000867 / 0009
1.7.7 (1586)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0031
		RRR000691 / 0067
1.7.7 (1612)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0015
1.7.7 (1633)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0015
1.7.7 (1659)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0012
1.7.7 (1660)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0011
1.7.7 (1691)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0008
1.7.7 (1694)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0004
1.7.7 (1793)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0001
1.7.7 (1798)	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0008
1.7.7 (1904)	State of Utah Chancellor, Denise	RRR000677 / 0015
1.7.7 (2149)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0018
1.7.7 (2151)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0017
1.7.7 (2152)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0016

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1.7.7 (2341)	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0010
1.7.7 (2709)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0021
1.7.7 (2735)	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0003
1.7.7 (3039)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0008
1.7.7 (3129)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0032
1.7.7 (3371)	Brown, Shiela	RRR001011 / 0001
1.7.7 (3590)	Californians for Safe, Clean, Efficient Nuclear Power Walker, Daniel	RRR000176 / 0007
1.7.7 (3629)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0020
1.7.7 (3724)	Greene, Eileen	RRR000994 / 0001
1.7.7 (4048)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0067
1.7.7 (4049)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0068
1.7.7 (4140)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0024
1.7.7 (4230)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0004
	California Energy Commission Boyd, James	RRR000642 / 0026
	State of California, California Energy Commission Byron, Barbara	RRR000108 / 0007
	Cecil, Pat	RRR000091 / 0001
	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000059 / 0004
	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000082 / 0003

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1.7.7 (4230) (continued)	County of Inyo, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000239 / 0004
	Owens Valley Indian Commission Heil, Darla	RRR000100 / 0002
	Mullings, Diamond	RRR000769 / 0003
1.7.7 (4231)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0006
	Cravens, Marisa	RRR000650 / 0002
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0004
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0006
	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0023
1.7.7 (4232)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0009
1.7.8 (268)	Alliance for Nuclear Accountability Meyer, Alfred	RRR000330 / 0003
1.7.8 (326)	Rothgal, John	RRR000095 / 0001
1.7.8 (410)	Physicians for Social Responsibility Parillo, Jill	RRR000329 / 0003
1.7.8 (412)	Physicians for Social Responsibility Parillo, Jill	RRR000329 / 0005
1.7.8 (918)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0010
1.7.8 (942)	Center for Disease Control and Prevention, Dept. of Health and Human Services Dannenberg, Andrew	RRR000454 / 0001
1.7.8 (965)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0019
1.7.8 (1482)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0018
1.7.8 (1574)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0043
		RRR000691 / 0079
1.7.8 (1610)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0016

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1.7.8 (1690)	Corporation of Newe Sogobia Wells, John	RRR000836 / 0010
1.7.8 (1757)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0044
1.7.8 (1796)	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0010
1.7.8 (1810)	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0004
1.7.8 (1814)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0034
1.7.8 (1816)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0033
1.7.8 (1887)	Givens, Nancy	RRR000479 / 0004
1.7.8 (1899)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0014
1.7.8 (1905)	State of Utah Chancellor, Denise	RRR000677 / 0014
1.7.8 (1923)	Physicians for Social Responsibility McCally, Michael	RRR000861 / 0006
1.7.8 (1948)	Physicians for Social Responsibility McCally, Michael	RRR000861 / 0004
1.7.8 (2131)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0020
1.7.8 (2146)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0019
1.7.8 (2321)	Corporation of Newe Sogobia Wells, John	RRR000836 / 0011
1.7.8 (2604)	Beyond Nuclear Kamps, Kevin	RRR000241 / 0007
1.7.8 (2892)	Shillinglaw, Fawn	RRR000688 / 0030
1.7.8 (2893)	Shillinglaw, Fawn	RRR000688 / 0029
1.7.8 (2945)	Shillinglaw, Fawn	RRR000688 / 0014
1.7.8 (2951)	Shillinglaw, Fawn	RRR000688 / 0007
1.7.8 (3041)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0045

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1.7.8 (3043)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0047
1.7.8 (3126)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0029
1.7.8 (3200)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0020
1.7.8 (3543)	McCabe, Eileen	RRR000929 / 0010
1.7.8 (3602)	Slack, Susan	RRR000142 / 0002
1.7.8 (3609)	Slack, Susan	RRR000142 / 0009
1.7.8 (3680)	Mercy Investment Program, Sisters of Mercy- Detroit, Dominican Sisters of Hope and Ursuline Sisters of Tildonk Heinonen, Valerie	RRR000933 / 0007
	Sisters of St. Joseph of Carondelet Oleskevich, Diana	RRR000938 / 0007
	One Feather, Harold	RRR000937 / 0007
	Reback, Mark	RRR000936 / 0007
	Roth, Erik	RRR000930 / 0007
1.7.8 (3793)	Regional Association of Concerned Environmentalists (RACE) Donham, Mark	RRR000935 / 0005
1.7.8 (3936)	Shaw, Gary	RRR000953 / 0001
1.7.8 (4097)	Tuler, Seth	RRR000837 / 0005
1.7.9 (2685)	Shillinglaw, Fawn	RRR000688 / 0070
1.7.10 (1618)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0011
1.7.11 (1450)	Kuehnhackl, Krista	RRR000867 / 0006
1.7.11 (1452)	Kuehnhackl, Krista	RRR000867 / 0008
1.7.11 (1609)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0017
1.7.11 (1873)	State of Utah Chancellor, Denise	RRR000677 / 0018
1.7.11 (1903)	State of Utah Chancellor, Denise	RRR000677 / 0016
1.7.11 (2684)	Shillinglaw, Fawn	RRR000688 / 0071
1.7.12 (134)	Mullings, Diamond	RRR000769 / 0007

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1.7.12 (134) (continued)	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0007
1.7.12 (922)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0013
1.7.12 (1446)	Kuehnhackl, Krista	RRR000867 / 0002
1.7.12 (1447)	Kuehnhackl, Krista	RRR000867 / 0003
1.7.12 (1608)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0018
1.7.12 (1637)	Chelette, Iona	RRR000550 / 0013
1.7.12 (1751)	Chelette, Iona	RRR000550 / 0006
1.7.12 (1933)	State of Utah Chancellor, Denise	RRR000677 / 0011
1.7.12 (4010)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0006
1.7.13 (171)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0069
	Chelette, Iona	RRR000550 / 0012
	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000082 / 0006
	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0021
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0013
	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0033
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0019
	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0007
1.7.13 (2145)	Chelette, Iona	RRR000550 / 0002
1.7.13 (4012)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0007
1.7.14 (949)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0017
1.7.14 (971)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0025

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1.7.14 (981)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0021
1.7.14 (1250)	The Toiyabe Chapter of the Sierra Club Strickland, Rose	RRR000745 / 0004
1.7.14 (1253)	The Toiyabe Chapter of the Sierra Club Strickland, Rose	RRR000745 / 0007
1.7.14 (1569)	Karpen, Leah	RRR000578 / 0002
	Metz, Marc	RRR000799 / 0002
1.7.14 (1725)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0009
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0006
1.7.14 (1870)	State of Utah Chancellor, Denise	RRR000677 / 0021
1.7.14 (1986)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0028
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0021
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0066
1.7.14 (1997)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0016
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0012
1.7.14 (2032)	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0005
1.7.14 (2074)	City of Reno Cashell, Robert	RRR000680 / 0010
1.7.14 (2164)	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0007
1.7.14 (2239)	Grover, Ravi	RRR000607 / 0001
1.7.14 (2282)	Mullings, Diamond	RRR000769 / 0014
1.7.14 (2371)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0028
1.7.14 (2461)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0035
1.7.14 (2710)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0049

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1.7.14 (2839)	Gagnon, Lisa	RRR000540 / 0003
1.7.14 (2859)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0014
1.7.14 (2939)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0015
1.7.14 (3032)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0020
1.7.14 (3056)	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0005
1.7.14 (3616)	California Energy Commission Boyd, James	RRR000642 / 0010
1.7.14 (3661)	California Energy Commission Boyd, James	RRR000642 / 0011
1.7.14 (3662)	California Energy Commission Boyd, James	RRR000642 / 0012
1.7.14 (4183)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0054
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0047
1.7.14 (4192)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0004
	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0004
	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0015
	Durham, Barbara	RRR000067 / 0001
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0011
	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0004
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0015
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0007
	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0012
1.7.14 (4198)	Alliance for Nuclear Responsibility Becker, Rochelle	RRR000603 / 0008

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1.7.14 (4198) (continued)	Chelette, Iona	RRR000550 / 0001
	State of Nevada, Agency for Nuclear Projects Hall, Jim	RRR000321 / 0004
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000006 / 0004
		RRR000013 / 0009
		RRR000038 / 0007
	Huston/Cole, John/Jan	RRR000317 / 0015
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0036
		RRR000663 / 0018
	County of San Bernardino, Board of Supervisors Mitzelfelt, Brad	RRR000673 / 0004
	Congress of the United States Reid, Harry	RRR000678 / 0012
	Shillinglaw, Fawn	RRR000688 / 0002
	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0003
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0014
	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0003
1.7.14.1 (992)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0033
1.7.14.1 (2742)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0010
1.7.14.1 (2773)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0009
1.7.14.1 (2794)	Commonwealth of Virginia, Dept. of Environmental Quality Irons, Ellie	RRR000679 / 0001
1.7.14.1 (2799)	Lewis, Marvin	RRR000538 / 0001
1.7.14.1 (2961)	CSG Midwest Beetem, Jane	RRR000655 / 0007
1.7.14.1 (2962)	CSG Midwest Beetem, Jane	RRR000655 / 0006
1.7.14.1 (3008)	CSG Midwest Beetem, Jane	RRR000655 / 0005

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1.7.14.1 (3048)	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0002
1.7.14.1 (3348)	California Energy Commission Boyd, James	RRR000642 / 0008
1.7.14.1 (3615)	California Energy Commission Boyd, James	RRR000642 / 0009
1.7.14.1 (3706)	California Energy Commission Boyd, James	RRR000642 / 0017
1.7.14.1 (3744)	California Energy Commission Boyd, James	RRR000642 / 0018
1.7.14.1 (3746)	California Energy Commission Boyd, James	RRR000642 / 0019
1.7.14.1 (3747)	California Energy Commission Boyd, James	RRR000642 / 0020
1.7.14.2 (1046)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0027
1.7.14.2 (1432)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0033
1.7.14.2 (2034)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0007
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0003
1.7.14.2 (2072)	City of Reno Cashell, Robert	RRR000680 / 0009
1.7.14.2 (3988)	Cole, Jan	RRR000014 / 0004
1.7.14.2 (4098)	Omuhundro, Charlotte	RRR000175 / 0003
1.7.14.2 (4162)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0006
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0002
1.7.14.2 (4180)	City of Reno Cashell, Robert	RRR000680 / 0007
1.7.15 (411)	Physicians for Social Responsibility Parillo, Jill	RRR000329 / 0004
1.7.15 (606)	Huston, John	RRR000015 / 0004
1.7.15 (917)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0009
1.7.15 (1454)	Kuehnhackl, Krista	RRR000867 / 0010

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1.7.15 (1575)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0042
		RRR000691 / 0078
1.7.15 (1581)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0036
		RRR000691 / 0072
1.7.15 (1593)	Beyond Nuclear Kamps, Kevin	RRR000325 / 0005
1.7.15 (1681)	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0016
1.7.15 (1682)	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0015
1.7.15 (1766)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0022
1.7.15 (1924)	Physicians for Social Responsibility McCally, Michael	RRR000861 / 0005
1.7.15 (1936)	State of Utah Chancellor, Denise	RRR000677 / 0008
1.7.15 (1937)	State of Utah Chancellor, Denise	RRR000677 / 0007
1.7.15 (2129)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0021
1.7.15 (2278)	Mullings, Diamond	RRR000769 / 0010
1.7.15 (2677)	Shillinglaw, Fawn	RRR000688 / 0077
1.7.15 (2807)	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0010
1.7.15 (2885)	Shillinglaw, Fawn	RRR000688 / 0035
1.7.15 (2888)	Shillinglaw, Fawn	RRR000688 / 0034
1.7.15 (2890)	Shillinglaw, Fawn	RRR000688 / 0032
1.7.15 (3040)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0009
1.7.15 (3084)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0010
1.7.15 (3195)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0017
1.7.15 (3738)	Huston/Cole, John/Jan	RRR000317 / 0011

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1.7.15 (3785)	Zwicker, Marie Louise	RRR000549 / 0006
1.7.15 (3907)	County of Inyo, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000239 / 0006
1.7.15 (3993)	Benti, Wynne	RRR000071 / 0004
1.7.15 (3994)	Cecil, Pat	RRR000091 / 0005
1.7.15 (4054)	Freeman, Fred	RRR000212 / 0002
1.7.15 (4056)	Clark County Brager, Susan	RRR000270 / 0002
1.7.15 (4058)	Givens, Nancy	RRR000479 / 0007
1.7.15 (4143)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0027
1.7.15 (4214)	Cuzze, Donna	RRR001086 / 0001
1.7.16 (619)	Zolkover, Adrian	RRR000025 / 0004
1.7.16 (623)	Zolkover, Adrian	RRR000025 / 0008
1.7.16 (1689)	Corporation of Newe Sogobia Wells, John	RRR000836 / 0009
1.7.16 (2163)	State of California, Dept. of Justice Sullivan, Timothy	RRR000659 / 0006
1.7.16 (2367)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0024
1.7.16 (2828)	Shillinglaw, Fawn	RRR000688 / 0040
1.7.16 (2946)	Shillinglaw, Fawn	RRR000688 / 0012
1.7.16 (3470)	McCabe, Eileen	RRR000929 / 0006
1.7.16 (4233)	Banks, Elizabeth	RRR000765 / 0002
	Barnell, Todd	RRR000730 / 0008
	Barnes, Kathryn	RRR000562 / 0005
	Bartholomew, Alice	RRR000529 / 0010
	Bechtel, Dennis	RRR000305 / 0004
		RRR000981 / 0008
	Bonds, Julia	RRR000403 / 0012
	Bourgoin, Ron	RRR000140 / 0001
	Castleberry, George	RRR000731 / 0008
	Covington, Cathy	RRR000492 / 0009
	Daggett, Becky	RRR000733 / 0008
	Grant, Patrick	RRR000741 / 0008

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1.7.16 (4233) (continued)) Greenhaw, Rhonda	RRR000520 / 0011
	Harden, Cory/Martha	RRR000404 / 0010
	Haymaker, Annie	RRR000506 / 0008
	Hellman, Codie	RRR000139 / 0002
	Holzberg, Steve	RRR000491 / 0010
	Hornbeck Law Office Hornbeck, David	RRR000192 / 0002
	Hudig, Dorothy	RRR000145 / 0002
		RRR000307 / 0002
	Illegible	RRR000573 / 0008
	Lewis, Marvin	RRR000538 / 0002
	Linda, Deb	RRR000577 / 0011
	Linda, Tom	RRR000732 / 0008
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000662 / 0016
		RRR000663 / 0020
	Mareck, Katherine	RRR000571 / 0008
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0011
	Rana, Avis	RRR000719 / 0003
	Rivers, Victoria	RRR000948 / 0001
	Rouvier, Julia	RRR000570 / 0008
	Sampson, Irene	RRR000124 / 0002
	Sanford, Warren	RRR000575 / 0008
	Scurlock, Rodger	RRR000764 / 0008
	Seely, Clover	RRR000913 / 0011
	Sheldon-Scurlock, Peggy	RRR000572 / 0006
	Shillinglaw, Fawn	RRR000688 / 0031
	Siegel, Larry	RRR000631 / 0012
	Slack, Susan	RRR000142 / 0003
	Ward, Dick/Korla	RRR000028 / 0002
	Zwicker, Marie Louise	RRR000549 / 0007
1.7.16 (4234)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0010

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1.7.16 (4234) (continued)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0015
	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0008
1.7.17 (2760)	Shillinglaw, Fawn	RRR000688 / 0051
1.7.17 (4145)	State of Utah Chancellor, Denise	RRR000677 / 0023
1.7.18 (450)	Western Shoshone National Council Zabarte, Ian	RRR000327 / 0001
		RRR000347 / 0001
1.7.18 (456)	Western Shoshone National Council Zabarte, Ian	RRR000276 / 0001
1.7.18 (630)	Las Vegas Indian Center Reed, Debra	RRR000283 / 0001
1.7.18 (676)	Albert, Georgia	RRR000438 / 0001
1.7.18 (1585)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0032
		RRR000691 / 0068
1.7.18 (1588)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0029
		RRR000691 / 0065
1.7.18 (1590)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0027
		RRR000691 / 0063
1.7.18 (1599)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0024
1.7.18 (3968)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0008
1.7.18 (4042)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0061
1.7.18 (4125)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0003
1.7.18.1 (1621)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0009
1.7.18.1 (1624)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0006
		RRR000691 / 0006

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1.7.18.1 (2229)	Markey, Darlene	RRR000623 / 0001
1.7.18.1 (2272)	Mullings, Diamond	RRR000769 / 0004
1.7.18.1 (2674)	Timbisha Shoshone Beaman, Ed	RRR000692 / 0012
1.7.18.1 (2855)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0009
1.7.18.1 (3101)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0008
1.7.18.1 (3102)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0009
1.7.18.1 (4046)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0065
1.7.18.1 (4127)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0004
1.7.18.2 (332)	Owens Valley Indian Commission Heil, Darla	RRR000100 / 0005
1.7.18.2 (633)	Las Vegas Indian Center Reed, Debra	RRR000283 / 0004
1.7.18.2 (1520)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0001
		RRR000691 / 0001
1.7.18.2 (1580)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0037
		RRR000691 / 0073
1.7.18.2 (1584)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0033
		RRR000691 / 0069
1.7.18.2 (1589)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0028
		RRR000691 / 0064
1.7.18.2 (1591)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0026
		RRR000691 / 0062
1.7.18.2 (1625)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0005
		RRR000691 / 0005
1.7.18.2 (2725)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0001

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1.7.18.2 (2854)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0008
1.7.18.2 (3096)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0006
1.7.18.2 (3197)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0019
1.7.18.2 (4038)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0057
1.7.18.2 (4040)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0059
1.7.18.2 (4045)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0064
1.7.18.2 (4053)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0017
1.7.18.2 (4078)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0001
1.7.18.2 (4091)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0075
1.8.1 (33)	Barnes, Kathryn	RRR000562 / 0006
	Booe, Kenneth	RRR000968 / 0002
	Brown, Richard	RRR000024 / 0004
	Chelette, Iona	RRR000550 / 0014
	DeKlever, Richard	RRR000223 / 0003
		RRR000315 / 0002
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0042
	Kuehnhackl, Krista	RRR000867 / 0011
	Lim, Kingman	RRR000373 / 0004
	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0005
	Meadow, Norman	RRR000866 / 0001
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0012
	Payer, Tax	RRR000188 / 0002
	Sandness, Robert	RRR000313 / 0003
	Shillinglaw, Fawn	RRR000688 / 0008
1.9 (75)	Anonymous	RRR000425 / 0003

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1.9 (75) (continued)	Bartholomew, Alice	RRR000529 / 0004
	Bodde, Mary	RRR000497 / 0003
	Bonds, Julia	RRR000403 / 0005
	Covington, Cathy	RRR000492 / 0003
	Farias, Corinne	RRR000424 / 0003
	Greenhaw, Rhonda	RRR000520 / 0004
	Harden, Cory/Martha	RRR000404 / 0003
	Holzberg, Steve	RRR000491 / 0004
	Irwin, Larry	RRR000478 / 0003
	Lincoln, Robert	RRR000552 / 0003
	Alliance for Nuclear Accountability Meyer, Alfred	RRR000726 / 0002
	Miller, Mark	RRR000729 / 0004
	Seely, Clover	RRR000913 / 0004
	Siegel, Larry	RRR000631 / 0006
1.9 (76)	Institute for Energy and Environmental Research Chalmers, Lois	RRR000676 / 0001
	Shillinglaw, Fawn	RRR000688 / 0050
1.9 (77)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0009
	U.S. Department of the Interior, Bureau of Land Management Palma, Juan	RRR001081 / 0001
1.9 (97)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0007
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0007
1.9 (263)	Environment America Linder, Josh	RRR000328 / 0002
1.9 (409)	Physicians for Social Responsibility Parillo, Jill	RRR000329 / 0002
1.9 (426)	Congress of the United States Reid, Harry	RRR000290 / 0005
1.9 (909)	United States Environmental Protection Agency Miller, Anne	RRR000667 / 0002
1.9 (1561)	Beyond Nuclear Kamps, Kevin	RRR000325 / 0009

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1.9 (1763)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0028
1.9 (1824)	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0003
1.9 (2714)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0050
1.9 (3125)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0028
1.9 (3127)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0030
1.9 (3132)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0014
1.9 (3214)	Anonymous	RRR000841 / 0003
1.9 (3451)	Nelson, Dennis	RRR000820 / 0003
1.9 (3479)	Vandenbosch, Robert/Susanne	RRR000232 / 0004
1.9 (3481)	Vandenbosch, Robert/Susanne	RRR000232 / 0006
1.9 (3482)	Vandenbosch, Robert/Susanne	RRR000232 / 0007
1.9 (3826)	Anonymous	RRR000841 / 0002
1.9 (4107)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0023
1.9 (4135)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0022
1.11 (416)	Benti, Wynne	RRR000071 / 0008
1.11 (495)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0026
1.11 (930)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0008
1.11 (1445)	Kuehnhackl, Krista	RRR000867 / 0001
1.11 (1684)	Corporation of Newe Sogobia Wells, John	RRR000836 / 0004
1.11 (1764)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0025
1.11 (1790)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0037
1.11 (1895)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0010

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1.11 (1929)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0019
1.11 (2374)	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0012
1.11 (2392)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0046
1.11 (2421)	Western Shoshone Defense Project Bill, Larson	RRR000686 / 0005
1.11 (2452)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0036
1.11 (2453)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0037
1.11 (2766)	Shillinglaw, Fawn	RRR000688 / 0046
1.11 (3006)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0004
1.11 (3007)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0005
1.11 (3030)	Western Interstate Energy Board – WIEB Williams, Jim	RRR000661 / 0018
1.11 (3037)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0006
1.11 (3148)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0011
1.11 (3694)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0005
1.11 (3703)	California Energy Commission Boyd, James	RRR000642 / 0015
1.11 (3825)	Reuschel, Warren	RRR000851 / 0001
1.11 (3973)	Alley, Charles	RRR000995 / 0006
1.11 (4191)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0010
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0007

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1.11 (4191) (continued)	Guzman, Tony	RRR000932 / 0002
	Mercy Investment Program, Sisters of Mercy- Detroit, Dominican Sisters of Hope and Ursuline Sisters of Tildonk Heinonen, Valerie	RRR000933 / 0002
	Beyond Nuclear Kamps, Kevin	RRR000241 / 0002
	Beyond Nuclear Kamps, Kevin	RRR000325 / 0002
	McCabe, Eileen	RRR000929 / 0002
	Nash, Nora	RRR000931 / 0002
	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0009
	Sisters of St. Joseph of Carondelet Oleskevich, Diana	RRR000938 / 0002
	One Feather, Harold	RRR000937 / 0002
	Reback, Mark	RRR000936 / 0002
	Roth, Erik	RRR000930 / 0002
	Slack, Susan	RRR000142 / 0011
1.11 (4193)	Alliance for Nuclear Accountability Meyer, Alfred	RRR000726 / 0008
	Mullings, Diamond	RRR000769 / 0008
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0008
1.11 (4194)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0011
	Shillinglaw, Fawn	RRR000688 / 0047
1.12 (162)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0008
1.12 (975)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0029
1.12 (976)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0030
1.12 (2533)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0042

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1.12 (2656)	United States Department of Commerce Harm, Christopher	RRR000569 / 0001
1.12 (3151)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0013
1.12 (4187)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0009
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0029
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0049
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0014
1.12.1 (84)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0003
	California Energy Commission Boyd, James	RRR000642 / 0022
	Inyo County, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000059 / 0003
	County of Inyo, Yucca Mountain Repository Assessment Office Gaffney, Matt	RRR000239 / 0003
1.12.1 (496)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0027
1.12.1 (1601)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0023
1.12.1 (1696)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0002
1.12.1 (1780)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0043
1.12.1 (1789)	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0039
1.12.1 (3128)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0031
1.12.1 (3663)	California Energy Commission Boyd, James	RRR000642 / 0013
1.12.1 (4088)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0072

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1.12.1 (4105)	Californians for Safe, Clean, Efficient Nuclear Power Walker, Daniel	RRR000176 / 0004
1.12.1 (4210)	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0018
1.12.1 (4217)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0060
1.12.2 (160)	Anonymous	RRR001031 / 0001
	Bailey, W.R.	RRR001013 / 0001
	Booe, Kenneth	RRR000968 / 0003
	Casal, Jan	RRR000951 / 0001
	Martz, Douglas	RRR001024 / 0001
	McClellan, Scott	RRR000030 / 0002
	Mitchell, Delbert	RRR000189 / 0002
	Osborne, Dan	RRR001052 / 0001
	Silverstein, Mark	RRR001007 / 0001
	Thieme, Marilyn	RRR000952 / 0001
1.12.2 (608)	Sampson, Irene	RRR000124 / 0003
1.12.2 (1578)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0039
		RRR000691 / 0075
1.13 (28)	Anonymous	RRR001070 / 0001
	Western Shoshone Defense Project Bill, Larson	RRR000686 / 0006
	Dziegiel, Henry	RRR000226 / 0002
	Beyond Nuclear Kamps, Kevin	RRR000325 / 0006
	Keele, Harold	RRR000170 / 0001
	Clark County Nuclear Waste Program Navis, Irene	RRR000280 / 0012
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0002
	Shillinglaw, Fawn	RRR000688 / 0026
	Siegel, Larry	RRR000631 / 0002
	Snow, Rick	RRR000049 / 0002
1.14 (539)	Chase, Jim	RRR000388 / 0001

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1.14 (4190)	Hansen, Jean	RRR000196 / 0001
	Sandness, Robert	RRR000313 / 0001
	Zolkover, Adrian	RRR000025 / 0007
1.15 (4161)	Alley, Charles	RRR000995 / 0023
	Nye County, Board of County Commissioners Eastley, Joni	RRR000657 / 0042
	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0003
	Klevorick, Phillip	RRR000005 / 0001
	Nuclear Energy Institute – NEI McCullum, Rodney	RRR000620 / 0013
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0013
	Vandenbosch, Robert/Susanne	RRR000232 / 0003
	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0003
1.16 (170)	North Carolina, Dept. of Administration Baggett, Chrys	RRR000670 / 0001
	Balogh, Karen	RRR000375 / 0001
	Barnes, Sophie	RRR000472 / 0001
	Bjork, Nancy	RRR000925 / 0001
	Bullock, Mary	RRR000864 / 0001
	Inyo County, Fifth District Cervantes, Richard	RRR000080 / 0001
	State of Nevada, Dept. of Administration Coulter, Krista	RRR000450 / 0001
	Dunn, Kim	RRR000547 / 0001
	O'Neill, Bobbie	RRR000413 / 0001
	Rasche, Roger	RRR000087 / 0001
	County of Lincoln Rowe, Tommy	RRR000019 / 0001
	Walker Lake Working Group Treharne, Rolanda	RRR000392 / 0001
	Turk, Lawrence	RRR000515 / 0001
1.16 (230)	Drew, Robin	RRR000282 / 0001

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2.1 (1033)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0034
2.1 (1132)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0036
2.1.1 (977)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0031
2.1.1 (1406)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0020
2.1.2 (1405)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0019
2.1.2 (1418)	Bartholomew, Alice	RRR000529 / 0012
	Bonds, Julia	RRR000403 / 0014
	Covington, Cathy	RRR000492 / 0011
	Greenhaw, Rhonda	RRR000520 / 0013
	Harden, Cory/Martha	RRR000404 / 0012
	Holzberg, Steve	RRR000491 / 0012
	Irwin, Larry	RRR000478 / 0005
	Seely, Clover	RRR000913 / 0013
	Siegel, Larry	RRR000631 / 0014
2.1.4 (71)	Cameron, Jan	RRR000105 / 0001
	US Transport Council Quinn, Bob	RRR000040 / 0003
	Sandness, Robert	RRR000313 / 0004
	Californians for Safe, Clean, Efficient Nuclear Power Walker, Daniel	RRR000176 / 0002
	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0004
2.2 (32)	Huston/Cole, John/Jan	RRR000317 / 0017
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0004
2.2 (825)	United States Environmental Protection Agency Miller, Anne	RRR000668 / 0003
2.2 (1350)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0018

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2.2 (1368)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0251
2.2 (1475)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0005
2.2 (1980)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0034
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0027
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0058
2.2.1 (43)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0019
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0036
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0007
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0009
2.2.3 (1269)	Maryland Dept. of Planning Janey, Linda	RRR000129 / 0001
2.2.4 (979)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0033
2.2.5 (2690)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0056
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0046
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0026
2.4 (65)	Huston/Cole, John/Jan	RRR000317 / 0001
2.4.1 (41)	Bonds, Julia	RRR000403 / 0008
	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0027
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000056 / 0005

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2.4.1 (41) (continued)	Humboldt River Basin Water Authority Hodges, Bennie	RRR000029 / 0002
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0010
	McGoldrick, Suzanne	RRR000231 / 0003
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0017
	City of Caliente Phillips, Kevin	RRR000641 / 0005
	Shillinglaw, Fawn	RRR000688 / 0001
		RRR000689 / 0001
	Sill, Marjorie	RRR000042 / 0002
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0015
	The Toiyabe Chapter of the Sierra Club Strickland, Rose	RRR000745 / 0005
	Zwicker, Marie Louise	RRR000549 / 0008
2.4.1 (151)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0036
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0029
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0071
2.4.1 (413)	Benti, Wynne	RRR000071 / 0002
2.4.1 (915)	United States Environmental Protection Agency Miller, Anne	RRR000668 / 0001
2.4.1 (1708)	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0005
2.4.1 (1995)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0020
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0013
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0011
2.4.2 (145)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0033
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0026

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2.4.2 (145) (continued)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0012
2.4.2 (380)	Zitney, Lisa	RRR000217 / 0002
2.4.2 (1931)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0017
2.4.2 (2051)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0029
2.4.2 (2574)	Benti, Wynne	RRR000071 / 0003
2.4.2 (2654)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0047
2.4.2 (2765)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0002
2.4.2 (3087)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0011
2.4.2 (4027)	Fancher, Clyde	RRR001079 / 0001
2.4.4 (37)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0018
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0035
	White Pine Nuclear Waste Project Office Simon, Mike	RRR000522 / 0016
2.4.6 (1913)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0037
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0030
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0072
2.4.6 (4092)	Fancher, Clyde	RRR001079 / 0003
2.4.7 (82)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0023
2.4.7 (962)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0016
2.4.7 (1398)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0024

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2.4.7 (1709)	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0006
2.4.7 (4030)	Fancher, Clyde	RRR001079 / 0002
2.6 (1135)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0037
2.6 (1946)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0035
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0028
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0013
2.6 (4035)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0019
2.7.1 (128)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0008
	Eureka County Assessor's Office Mears, Michael	RRR000669 / 0001
2.7.1 (1148)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0038
2.7.1 (1720)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0040
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0032
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0075
2.7.1 (1724)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0022
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0015
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0060
2.7.1 (1839)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0046
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0038
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0016
2.7.1 (1841)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0045

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2.7.1 (1841) (continued)	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0037
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0015
2.7.1 (1910)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0041
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0033
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0076
2.7.1 (2324)	Corporation of Newe Sogobia Wells, John	RRR000836 / 0014
2.7.2 (3117)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0021
2.7.4 (54)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0047
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0039
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0018
2.7.4 (1908)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0042
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0034
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0077
2.7.4 (2623)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0035
2.7.4 (2694)	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0044
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0022
2.7.4 (2695)	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0043
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0021
2.7.4 (2696)	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0042

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2.7.4 (2696) (continued)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0020
2.7.4 (2697)	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0041
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0019
2.7.4 (2699)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0017
2.7.4 (3160)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0030
2.7.4 (3161)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0031
2.7.5 (2372)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0017
2.7.5 (2401)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0018
2.7.5 (2622)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0036
2.7.5 (3166)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0036
2.7.5 (4070)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0021
2.7.6 (1486)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0003
2.7.6 (1488)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0004
2.7.6 (2693)	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0045
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0023
2.7.6 (3201)	Western Shoshone National Council Zabarte, Ian	RRR000121 / 0021
2.7.6 (3434)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0050
2.7.6 (3435)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0051
2.7.6 (3966)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0007

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2.7.6 (3976)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0013
2.7.6 (4022)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0014
2.7.6 (4076)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0025
2.7.7 (1397)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0023
2.7.7 (1399)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0025
2.7.7 (1400)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0026
2.7.7 (1871)	State of Utah Chancellor, Denise	RRR000677 / 0020
2.7.7 (2319)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0019
2.7.7 (2689)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0057
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0049
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0027
2.7.7 (3349)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0040
2.7.7 (3425)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0041
2.7.7 (4164)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0025
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0018
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0013
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0063
2.7.7 (4173)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0059
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0051

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2.7.7 (4173) (continued)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0029
2.7.7 (4175)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0055
	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0103
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0048
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0014
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0039
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0025
2.7.8 (936)	Center for Disease Control and Prevention, Dept. of Health and Human Services Dannenberg, Andrew	RRR000453 / 0001
2.7.8 (953)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0021
2.7.8 (1335)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0012
2.7.8 (1336)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0013
2.7.8 (1337)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0014
2.7.8 (1338)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0015
2.7.8 (1345)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0016
2.7.8 (1347)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0017
2.7.8 (2692)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0024
2.7.8 (3426)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0042
2.7.8 (4071)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0022
2.7.11 (3427)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0043

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2.7.11 (3428)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0044
2.7.11 (3429)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0045
2.7.12 (3430)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0046
2.7.12 (3431)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0047
2.7.12 (3432)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0048
2.7.12 (3433)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0049
2.7.13 (1485)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0002
2.7.13 (3436)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0052
2.11 (1419)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0030
2.11 (1422)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0031
2.11 (1428)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0032
2.11 (1434)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0034
2.11 (1436)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0035
2.11 (1437)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0036
2.11 (1697)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0067
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0058
2.11 (1701)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0065
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0056
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0034

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2.11 (4181)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0023
2.11 (4182)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0026
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0019
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0064
2.15 (146)	Huston/Cole, John/Jan	RRR000317 / 0014
	Zolkover, Adrian	RRR000025 / 0001
2.15 (147)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0027
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0020
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0065
2.15 (1879)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0043
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0035
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0078
2.15 (3801)	Teer, Bill	RRR000191 / 0001
2.15 (3802)	Teer, Bill	RRR000191 / 0002
2.15 (4034)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0018
2.16 (755)	State of Nevada, Dept. of Administration Coulter, Krista	RRR000451 / 0001
3.1 (933)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0011
3.1 (1962)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0023
3.1.1 (1043)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0037
3.1.2 (2)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0030

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3.1.2 (2) (continued)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0005
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0023
	Nuclear Energy Institute – NEI Kraft, Steven	RRR000619 / 0008
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0068
3.1.2 (3)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0061
3.1.2 (604)	Huston, John	RRR000015 / 0002
3.1.2 (4083)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0027
3.1.3 (53)	Barnes, Kathryn	RRR000562 / 0002
	Cesena, Frank	RRR000018 / 0001
	Emmerick, Kevin	RRR000555 / 0010
	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0001
	Gillette, Karl/Joan	RRR000983 / 0001
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000038 / 0002
	McGoldrick, Suzanne	RRR000231 / 0006
	O'Brien, William	RRR000209 / 0001
	Ornstein, Herbert	RRR000010 / 0001
	Snow, Rick	RRR000049 / 0001
3.1.4 (69)	Anonymous	RRR000236 / 0002
	Nuclear Energy Institute Binzer, Chris	RRR000039 / 0002
		RRR000070 / 0002
		RRR000122 / 0002
	Boyd, Benedict	RRR000074 / 0002
	Nuclear Energy Institute – NEI Kraft, Steven	RRR000318 / 0002
		RRR000619 / 0002
	Manner, Jim	RRR001084 / 0001
	Esmeralda County Rannells, Ed	RRR000073 / 0001

Comment-Response Document Location	Commenter	Comment Document Comment Number
3.1.4 (69) (continued)	Nuclear Energy Institute Seidler, Paul	RRR000007 / 0002
	Coalition 21 Tanner, John	RRR000138 / 0001
	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0010
3.2 (11)	Colvin & Sons, LLC Colvin, Tom	RRR000665 / 0001
	Twin Springs Ranch Fallini, Anna	RRR000072 / 0004
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0003
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0006
3.2 (237)	Twin Springs Ranch Fallini, Joe	RRR000075 / 0003
3.2 (575)	Ward, Dick/Korla	RRR000028 / 0001
3.2 (1053)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0042
3.2 (1239)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0002
3.2 (1328)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0261
3.2 (1360)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0244
3.2 (1361)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0245
3.2 (1366)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0249
3.2 (1830)	Triple Aught Foundation Heizer, Michael	RRR000674 / 0002
3.2 (3387)	Garrett, Jo Anne	RRR000694 / 0003
3.2 (4144)	Twin Springs Ranch Fallini, Anna	RRR000072 / 0001

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3.2 (4215)	United States Environmental Protection Agency Miller, Anne	RRR000668 / 0004
3.2.1 (47)	Anonymous	RRR000586 / 0002
	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0005
	Twin Springs Ranch Fallini, Joe	RRR000710 / 0002
	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0002
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0004
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0001
	Giese, Mark	RRR000574 / 0001
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000006 / 0005
		RRR000056 / 0004
		RRR000069 / 0002
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0264
	Huston/Cole, John/Jan	RRR000317 / 0004
	LeFevre, Kathy	RRR000021 / 0002
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0022
	Omuhundro, Charlotte	RRR000175 / 0002
	City of Caliente Phillips, Kevin	RRR000641 / 0002
	Congress of the United States Reid, Harry	RRR000290 / 0008
		RRR000678 / 0007
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0038
3.2.1 (3141)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0017
3.2.1 (3142)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0018

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3.2.3 (59)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0010
3.2.3 (890)	City of Caliente Phillips, Kevin	RRR000641 / 0001
3.2.3 (1050)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0028
3.2.3 (1178)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0054
3.2.3 (3417)	U.S. Department of the Interior, Bureau of Land Management Palma, Juan	RRR001082 / 0005
3.2.4 (19)	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0002
3.2.4 (1009)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0011
3.2.4.1 (17)	Colvin & Sons, LLC Colvin, Tom	RRR000665 / 0003
3.2.4.1 (629)	Caliente BLM Field Office Clementsen, Ron	RRR000017 / 0001
3.2.4.1 (1047)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0038
3.2.4.1 (1052)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0029
3.2.4.1 (1750)	Western Shoshone Defense Project Bill, Larson	RRR000686 / 0003
3.2.4.2 (7)	Anonymous	RRR000586 / 0004
	Barnell, Todd	RRR000730 / 0009
	Bartholomew, Alice	RRR000529 / 0014
	Bonds, Julia	RRR000403 / 0016
	Castleberry, George	RRR000731 / 0009
	Covington, Cathy	RRR000492 / 0013
	Daggett, Becky	RRR000733 / 0009
	Giese, Mark	RRR000574 / 0003
	Grant, Patrick	RRR000741 / 0009
	Greenhaw, Rhonda	RRR000520 / 0014

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3.2.4.2 (7) (continued)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000006 / 0007
		RRR000038 / 0004
		RRR000056 / 0006
	Harden, Cory/Martha	RRR000404 / 0013
	Holzberg, Steve	RRR000491 / 0014
	Illegible	RRR000573 / 0009
	Irwin, Larry	RRR000478 / 0007
	Linda, Deb	RRR000577 / 0012
	Linda, Tom	RRR000732 / 0009
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0005
	Mareck, Katherine	RRR000571 / 0009
	Mullings, Diamond	RRR000769 / 0012
	Rouvier, Julia	RRR000570 / 0009
	Sanford, Warren	RRR000575 / 0009
	Scurlock, Rodger	RRR000764 / 0009
	Seely, Clover	RRR000913 / 0014
	Siegel, Larry	RRR000631 / 0016
	Solomon, Laurie	RRR000721 / 0005
		RRR000934 / 0005
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0016
	Zwicker, Marie Louise	RRR000549 / 0011
3.2.4.2 (8)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000056 / 0015
		RRR000069 / 0005
3.2.4.2 (1048)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0039
3.2.5 (166)	Cole, Jan	RRR000014 / 0001
<pre></pre>		RRR000292 / 0002
	Huston/Cole, John/Jan	RRR000317 / 0016
3.2.5 (167)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0006
	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0020

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3.2.5 (167) (continued)	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0018
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0123
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0013
3.2.5 (941)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0016
3.2.5 (2612)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0046
3.2.6 (94)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0010
	Cole, Jan	RRR000014 / 0003
	Twin Springs Ranch Fallini, Joe	RRR000710 / 0025
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0157
	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0007
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0030
	Ray, Dorothy	RRR000035 / 0005
3.2.7 (40)	LaVoie, Johnny	RRR000255 / 0001
	LeFevre, Kathy	RRR000021 / 0001
3.3.1 (169)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0212
	City of Caliente Moore, Ashley	RRR000118 / 0003
	Moore, Roanne	RRR000119 / 0003
	City of Caliente Phillips, Kevin	RRR000012 / 0005
		RRR000116 / 0005
		RRR000641 / 0014
3.3.1 (826)	City of Caliente Phillips, Kevin	RRR000641 / 0011

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3.3.2 (161)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0070
	Twin Springs Ranch Fallini, Joe	RRR000710 / 0001
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0061
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0046
	McInnis, May	RRR000201 / 0001
	City of Caliente Phillips, Kevin	RRR000641 / 0008
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0039
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0012
3.3.2 (1018)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0032
3.3.2 (1031)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0069
3.3.2 (1474)	Healing Ourselves and Mother Earth Hadder, John	RRR000737 / 0004
3.3.2 (2327)	Corporation of Newe Sogobia Wells, John	RRR000836 / 0017
3.3.2 (4133)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0008
3.3.3 (1954)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0048
3.3.3 (2063)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0047
3.3.3 (3189)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0023
3.3.3 (3984)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0053
3.3.3 (3985)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0054

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3.4 (24)	Esmeralda County, Nevada, Board of County Commissioners Boland, Nancy	RRR000395 / 0002
	D.C. Minerals, Inc. Fought, Dale	RRR000814 / 0001
	Kirby, William	RRR000235 / 0003
	Esmeralda County, Board of County Commissioners Kirby, William	RRR000666 / 0002
	O'Connor, Michael	RRR000077 / 0001
	Esmeralda County Rannells, Ed	RRR000073 / 0002
		RRR000107 / 0001
	Ridgway, Virginia	RRR000076 / 0001
3.4 (462)	Metallic Goldfield, Inc. Ward, Jeffrey	RRR000002 / 0001
3.4 (584)	Cameron, Jan	RRR000105 / 0003
3.4 (1966)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0024
3.4 (2085)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0035
3.4 (3589)	Californians for Safe, Clean, Efficient Nuclear Power Walker, Daniel	RRR000176 / 0003
3.4.1 (18)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000013 / 0007
		RRR000056 / 0011
		RRR000069 / 0004
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0013
3.4.1 (21)	Cole, Jan	RRR000292 / 0001
	Huston, Jon	RRR000298 / 0001
	Huston/Cole, John/Jan	RRR000317 / 0003
	Rossi, Joe	RRR000036 / 0001
	Thomas, Kristen	RRR000301 / 0001

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3.4.1 (22)	City of Caliente Acklin, Tom	RRR000115 / 0002
	City of Caliente Moore, Ashley	RRR000118 / 0004
	Moore, Roanne	RRR000119 / 0004
	City of Caliente Phillips, Kevin	RRR000012 / 0007
		RRR000116 / 0007
	Wadsworth, Gordon	RRR000113 / 0003
3.4.1 (23)	City of Caliente Acklin, Tom	RRR000115 / 0001
	Lea, Robert	RRR000345 / 0001
	City of Caliente Moore, Ashley	RRR000118 / 0002
	Moore, Roanne	RRR000119 / 0002
	City of Caliente Phillips, Kevin	RRR000012 / 0004
		RRR000116 / 0004
	Nuclear Energy Institute Seidler, Paul	RRR000278 / 0002
	Wadsworth, Gordon	RRR000113 / 0002
	Wadsworth, Michele	RRR000114 / 0001
	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0007
3.4.1 (34)	Twin Springs Ranch Fallini, Anna	RRR000072 / 0005
	Foremaster, Judd	RRR000253 / 0001
	Foremaster, Kelly	RRR000254 / 0001
	Nye County, Nuclear Waste Repository Project Office Lacy, Darrell	RRR000658 / 0003
	Long, Patricia	RRR000033 / 0001
	Ray, Dorothy	RRR000035 / 0002
	Sill, Marjorie	RRR000042 / 0003
	Ward, Dick/Korla	RRR000028 / 0003
3.4.1 (35)	Los Angeles County Museum of Art Govan, Michael	RRR000433 / 0001

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3.4.1 (35) (continued)	Triple Aught Foundation Heizer, Michael	RRR000674 / 0001
	The Menil Collection Helfenstein, Josef	RRR000683 / 0001
	Dia Art Foundation Weiss, Jeffrey	RRR000652 / 0001
3.4.1 (38)	City of Caliente Acklin, Tom	RRR000115 / 0003
	City of Caliente Moore, Ashley	RRR000118 / 0005
	Moore, Roanne	RRR000119 / 0005
	City of Caliente Phillips, Kevin	RRR000012 / 0008
		RRR000116 / 0008
	Wadsworth, Michele	RRR000114 / 0002
3.4.1 (602)	City of Caliente Acklin, Tom	RRR000115 / 0005
3.4.1 (1021)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0059
3.4.1 (1071)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0113
	City of Caliente Phillips, Kevin	RRR000641 / 0012
3.4.1 (1504)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0055
3.4.1 (3382)	Esmeralda County, Board of County Commissioners Kirby, William	RRR000666 / 0006
3.4.1 (3395)	City of Caliente Phillips, Kevin	RRR000012 / 0006
		RRR000116 / 0006
3.4.1 (3737)	Huston/Cole, John/Jan	RRR000317 / 0010
3.4.1 (3739)	Huston/Cole, John/Jan	RRR000317 / 0012
3.4.1 (4212)	Manner, Jim	RRR001084 / 0002
3.4.2 (42)	Alley, Charles	RRR000995 / 0003
	Anonymous	RRR000586 / 0003

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3.4.2 (42) (continued)	Barnell, Todd	RRR000730 / 0005
	Bartholomew, Alice	RRR000529 / 0007
	Bechtel, Dennis	RRR000981 / 0005
	Bernard, Larry	RRR000551 / 0006
		RRR000728 / 0006
	Bonds, Julia	RRR000403 / 0015
	Castleberry, George	RRR000731 / 0005
	Covington, Cathy	RRR000492 / 0006
	Daggett, Becky	RRR000733 / 0005
	Giese, Mark	RRR000574 / 0002
	Grant, Patrick	RRR000741 / 0005
	Greenhaw, Rhonda	RRR000520 / 0007
	HOME – Healing Ourselves and Mother Earth Hadder, John	RRR000046 / 0003
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000006 / 0006
		RRR000038 / 0003
		RRR000069 / 0003
	Harden, Cory/Martha	RRR000404 / 0006
	Haymaker, Annie	RRR000506 / 0004
	Holzberg, Steve	RRR000491 / 0007
	Illegible	RRR000573 / 0005
	Irwin, Larry	RRR000478 / 0006
	Linda, Deb	RRR000577 / 0008
	Linda, Tom	RRR000732 / 0005
	Mareck, Katherine	RRR000571 / 0005
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0014
	Las Vegas Indian Center Reed, Debra	RRR000283 / 0003
	Rouvier, Julia	RRR000570 / 0005
	Sanford, Warren	RRR000575 / 0005
	Scurlock, Rodger	RRR000764 / 0005
	Seely, Clover	RRR000913 / 0007
	Siegel, Larry	RRR000631 / 0009

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3.4.2 (42) (continued)	Nevada Nuclear Waste Task Force, Inc. Treichel, Judy	RRR000622 / 0007
	von Ranson, Jonathan	RRR000923 / 0002
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0002
3.4.2 (542)	Lightfoot, Jack	RRR000390 / 0002
3.4.2 (643)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000006 / 0009
3.4.2 (669)	City of Reno Cashell, Robert	RRR000314 / 0002
3.4.2 (2040)	City of Reno Cashell, Robert	RRR000680 / 0005
3.4.2 (2067)	City of Reno Cashell, Robert	RRR000680 / 0006
3.4.3 (1)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0001
	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0013
	Nuclear Energy Institute – NEI Kraft, Steven	RRR000619 / 0003
	Kuehnhackl, Krista	RRR000867 / 0004
	City of Caliente Phillips, Kevin	RRR000012 / 0003
		RRR000116 / 0003
	Californians for Safe, Clean, Efficient Nuclear Power Walker, Daniel	RRR000176 / 0006
	Nuclear Waste Strategy Coalition – NWSC Wright, David	RRR000117 / 0008
3.4.3 (20)	Barnes, Kathryn	RRR000562 / 0004
	Emmerick, Kevin	RRR000555 / 0007
	Huston, Jon	RRR000298 / 0002
	Shillinglaw, Fawn	RRR000688 / 0024
	The Toiyabe Chapter of the Sierra Club Strickland, Rose	RRR000745 / 0006
3.4.3 (354)	Kriesler, Leonard	RRR000285 / 0002
3.4.3 (605)	Huston, John	RRR000015 / 0003

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3.4.3 (914)	City of Caliente Phillips, Kevin	RRR000641 / 0009
3.4.3 (919)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0023
3.4.3 (1010)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0049
3.4.3 (1061)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0048
3.4.3 (1375)	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0017
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0012
3.4.3 (1502)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0053
3.4.3 (1876)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0096
3.4.3 (1912)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0038
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0031
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0073
3.4.3 (2402)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0032
3.4.3 (3171)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0056
3.4.4 (36)	Barnell, Todd	RRR000730 / 0006
	Bartholomew, Alice	RRR000529 / 0008
	Timbisha Shoshone Beaman, Ed	RRR000692 / 0007
	Bechtel, Dennis	RRR000981 / 0006
	Bernard, Larry	RRR000551 / 0007
		RRR000728 / 0007
	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0005
	Bonds, Julia	RRR000403 / 0009

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3.4.4 (36) (continued)	Castleberry, George	RRR000731 / 0006
	Covington, Cathy	RRR000492 / 0007
	Daggett, Becky	RRR000733 / 0006
	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0008
	Grant, Patrick	RRR000741 / 0006
	Greenhaw, Rhonda	RRR000520 / 0008
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000006 / 0008
		RRR000056 / 0008
	Harden, Cory/Martha	RRR000404 / 0007
	Haymaker, Annie	RRR000506 / 0005
	Holzberg, Steve	RRR000491 / 0008
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0250
	Illegible	RRR000573 / 0006
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0028
	Linda, Deb	RRR000577 / 0009
	Linda, Tom	RRR000732 / 0006
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0025
	Mareck, Katherine	RRR000571 / 0006
	Alliance for Nuclear Accountability Meyer, Alfred	RRR000726 / 0004
	Rouvier, Julia	RRR000570 / 0006
	Sanford, Warren	RRR000575 / 0006
	Scurlock, Rodger	RRR000764 / 0006
	Seely, Clover	RRR000913 / 0008
	Siegel, Larry	RRR000631 / 0010
	HOME – Healing Ourselves and Mother Earth Viereck, Jennifer	RRR000712 / 0012
	Zwicker, Marie Louise	RRR000549 / 0009
3.4.4 (273)	Bechtel, Dennis	RRR000305 / 0002

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3.4.4 (2059)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0033
3.4.5 (937)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0012
3.4.5 (939)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0014
3.4.5 (1014)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0053
3.4.5 (1983)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0031
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0024
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0069
3.4.5 (2054)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0030
3.4.5 (2055)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0031
3.4.6 (98)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0003
	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0028
	Esmeralda County, Board of County Commissioners Kirby, William	RRR000068 / 0002
		RRR000235 / 0004
		RRR000666 / 0003
	Nuclear Energy Institute – NEI Kraft, Steven	RRR000619 / 0007
3.4.6 (99)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0008
	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0022
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0004

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3.4.6 (99) (continued)	Esmeralda County, Board of County Commissioners Kirby, William	RRR000068 / 0003
		RRR000235 / 0006
		RRR000666 / 0005
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0008
3.4.6 (911)	City of Caliente Phillips, Kevin	RRR000641 / 0007
3.4.6 (1058)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0045
3.4.6 (1241)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0004
3.4.6 (1362)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0006
3.4.6 (1511)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0062
3.4.7 (78)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0114
3.4.7 (1051)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0041
3.4.7 (1075)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0117
3.4.7 (2565)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0025
3.4.7 (4074)	Alley, Charles	RRR000995 / 0015
3.6 (92)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0039
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0062
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0051
3.6 (93)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0006

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3.6 (93) (continued)	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0014
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0153
	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0014
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0042
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0009
3.6 (105)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0007
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0040
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0268
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0035
3.6 (107)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0043
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0028
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0023
3.6 (109)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0029
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0029
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0024
3.6 (112)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0023
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0151
3.6 (120)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0045

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3.6 (120) (continued)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0013
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0037
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0013
	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0013
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0032
	Californians for Safe, Clean, Efficient Nuclear Power Walker, Daniel	RRR000176 / 0009
	Corporation of Newe Sogobia Wells, John	RRR000836 / 0013
3.6 (124)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0033
	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0013
3.6 (129)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0028
	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0011
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0012
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0007
3.6 (132)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0066
	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0012
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0041
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0057
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0080

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3.6 (132) (continued)	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0036
3.6 (133)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0017
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0035
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0106
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0030
3.6 (177)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0211
	City of Caliente Phillips, Kevin	RRR000641 / 0019
3.6.2 (87)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0176
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0023
3.6.2 (88)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0072
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0087
	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0033
3.6.2 (90)	Alley, Charles	RRR000995 / 0005
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0198
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0040
3.6.2 (91)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0063
3.6.2 (102)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0061

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3.6.2 (106)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000013 / 0012
		RRR000056 / 0014
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0085
	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0011
3.6.2 (122)	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0015
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0054
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0010
3.6.2 (127)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0051
3.6.2 (130)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0009
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0032
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0051
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0021
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0027
3.6.2 (131)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0038
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0050
3.6.2 (1091)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0078
3.6.2 (3114)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0018
3.6.3 (85)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0035

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3.6.3 (85) (continued)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0022
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0072
3.6.3 (86)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0099
3.6.3 (96)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0008
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0031
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0073
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0026
3.6.3 (108)	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0016
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0011
3.6.3 (110)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0088
3.6.3 (467)	Inyo County, Board of Supervisors Bilyeu, Jim	RRR000396 / 0006
3.6.3 (1032)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0070
3.6.3 (1102)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0083
3.6.3 (1105)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0091
3.6.3 (1155)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0150

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3.6.4 (83)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0109
3.6.4 (95)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0007
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0224
3.6.4 (126)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0107
3.6.4 (1063)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0105
3.6.4 (1982)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0032
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0025
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0070
3.6.4 (2400)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0031
3.7 (1030)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0068
3.7 (1079)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0121
3.7 (1213)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0181
3.7 (4109)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0014
3.7.1 (116)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0071
	Twin Springs Ranch Fallini, Anna	RRR000072 / 0002
	Twin Springs Ranch Fallini, Joe	RRR000710 / 0008

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3.7.1 (116) (continued)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0003
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0001
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0062
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000056 / 0012
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0131
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0012
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0043
	Moore, Richard	RRR000943 / 0001
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0001
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0040
3.7.1 (117)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0011
	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0021
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0019
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000013 / 0010
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0135
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0050
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0014
3.7.1 (118)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0031
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0024

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3.7.1 (118) (continued)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0122
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0019
3.7.1 (428)	Congress of the United States Reid, Harry	RRR000290 / 0007
3.7.1 (566)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000013 / 0006
3.7.1 (801)	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000056 / 0010
3.7.1 (888)	Allen, John	RRR000034 / 0001
3.7.1 (940)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0015
3.7.1 (1027)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0065
3.7.1 (1028)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0066
3.7.1 (1083)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0129
3.7.1 (1123)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0163
3.7.1 (1127)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0166
3.7.1 (1136)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0136
3.7.1 (1153)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0041
3.7.1 (1179)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0055
3.7.1 (1200)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0169

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3.7.1 (1202)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0170
3.7.1 (1427)	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0011
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0006
3.7.1 (1487)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0066
3.7.1 (1594)	Emmerick, Kevin	RRR000555 / 0002
3.7.1 (1664)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0012
3.7.1 (1688)	Corporation of Newe Sogobia Wells, John	RRR000836 / 0008
3.7.1 (1845)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0005
3.7.1 (1952)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0019
3.7.1 (2101)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0028
3.7.1 (2103)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0026
3.7.1 (2300)	Cole, Jan	RRR000014 / 0002
3.7.1 (3052)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0024
3.7.1 (3106)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0010
3.7.1 (3113)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0017
3.7.1 (3152)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0040
3.7.1 (3193)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0046
3.7.1 (3486)	Ray, Dorothy	RRR000035 / 0003
3.7.1 (3679)	Esmeralda County, Board of County Commissioners Kirby, William	RRR000666 / 0009

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3.7.1 (3683)	Esmeralda County, Board of County Commissioners Kirby, William	RRR000666 / 0010
3.7.1 (4111)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0016
3.7.1 (4126)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0031
3.7.1 (4185)	Colvin & Sons, LLC Colvin, Tom	RRR000665 / 0004
3.7.1 (4225)	Esmeralda County, Nevada, Board of County Commissioners Boland, Nancy	RRR000395 / 0001
	Kirby, William	RRR000235 / 0002
3.7.2 (114)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0137
3.7.2 (360)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0014
3.7.2 (1088)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0125
3.7.2 (1330)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0262
3.7.2 (1565)	Emmerick, Kevin	RRR000555 / 0004
3.7.2 (1872)	State of Utah Chancellor, Denise	RRR000677 / 0019
3.7.2 (2531)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0040
3.7.2 (2754)	Shillinglaw, Fawn	RRR000688 / 0057
3.7.2 (2757)	Shillinglaw, Fawn	RRR000688 / 0054
3.7.2 (2759)	Shillinglaw, Fawn	RRR000688 / 0052
3.7.2 (3120)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0024
3.7.2 (3121)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0025
3.7.2 (3122)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0026

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3.7.2 (3123)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0027
3.7.2 (3159)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0029
3.7.3 (173)	Huston/Cole, John/Jan	RRR000317 / 0005
3.7.3 (1081)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0127
3.7.3 (1082)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0128
3.7.3 (1084)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0130
3.7.3 (1089)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0126
3.7.3 (1119)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0160
3.7.3 (1120)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0161
3.7.3 (1121)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0162
3.7.3 (1133)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0133
3.7.3 (1134)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0134
3.7.3 (1348)	Congress of the United States Reid, Harry	RRR000678 / 0008
3.7.3 (1470)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0063
3.7.3 (1717)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0092
3.7.3 (3521)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0059

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3.7.3 (4150)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0035
3.7.3 (4156)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0042
3.7.3 (4160)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0040
3.7.3 (4166)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0043
3.7.4.1 (115)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0141
3.7.4.1 (174)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0138
	Huston/Cole, John/Jan	RRR000317 / 0008
3.7.4.1 (824)	United States Environmental Protection Agency Miller, Anne	RRR000668 / 0002
3.7.4.1 (1140)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0139
3.7.4.1 (1211)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0179
3.7.4.1 (1349)	Congress of the United States Reid, Harry	RRR000678 / 0009
3.7.4.1 (1491)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0068
3.7.4.1 (1671)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0005
3.7.4.1 (3162)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0032
3.7.4.1 (3164)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0034
3.7.4.1 (3419)	U.S. Department of the Interior, Bureau of Land Management Palma, Juan	RRR001082 / 0003
3.7.4.1 (3664)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0002
3.7.4.1 (4148)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0047

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3.7.4.1 (4149)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0048
3.7.4.1 (4152)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0037
3.7.4.1 (4159)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0045
3.7.4.2 (140)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0032
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000013 / 0011
		RRR000056 / 0013
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0182
3.7.4.2 (154)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0003
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0183
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0035
3.7.4.2 (159)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0184
3.7.4.2 (1095)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0081
3.7.4.2 (1125)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0025
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0046
3.7.4.2 (1141)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0140
3.7.4.2 (1143)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0142
3.7.4.2 (1168)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0188

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3.7.4.2 (1170)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0190
3.7.4.2 (1181)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0057
3.7.4.2 (1216)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0185
3.7.4.2 (1217)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0186
3.7.4.2 (1218)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0187
3.7.4.2 (1443)	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0042
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0037
3.7.4.2 (1496)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0070
3.7.4.2 (1563)	Emmerick, Kevin	RRR000555 / 0001
3.7.4.2 (1869)	State of Utah Chancellor, Denise	RRR000677 / 0022
3.7.4.2 (2076)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0034
3.7.4.2 (2077)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0033
3.7.4.2 (2098)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0031
3.7.4.2 (2114)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0027
3.7.4.2 (2316)	Sollinger, Nancy	RRR000078 / 0001
3.7.4.2 (4147)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0046
3.7.4.2 (4153)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0038
3.7.4.2 (4154)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0039

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3.7.5 (148)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0024
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0145
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0019
	U.S. Department of the Interior, Bureau of Land Management Palma, Juan	RRR001082 / 0004
3.7.5 (158)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0036
3.7.5 (1122)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0026
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0045
3.7.5 (1131)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0132
3.7.5 (1144)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0143
3.7.5 (1145)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0144
3.7.5 (1147)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0146
3.7.5 (1171)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0191
3.7.5 (1194)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0193
3.7.5 (1197)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0196
3.7.5 (1198)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0197

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3.7.5 (1370)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0253
3.7.5 (1498)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0071
3.7.5 (1549)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0011
3.7.5 (1564)	Emmerick, Kevin	RRR000555 / 0003
3.7.5 (1643)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0016
3.7.5 (1644)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0015
3.7.5 (1645)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0014
3.7.5 (1999)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0040
3.7.5 (2000)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0038
3.7.5 (2066)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0039
3.7.5 (2100)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0029
3.7.5 (2136)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0021
3.7.5 (2137)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0020
3.7.5 (2156)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0019
3.7.5 (2157)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0018
3.7.5 (2158)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0017
3.7.5 (3103)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0034
3.7.5 (3167)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0037
3.7.5 (3168)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0038

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3.7.5 (3169)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0039
3.7.5 (3415)	U.S. Department of the Interior, Bureau of Land Management Palma, Juan	RRR001082 / 0001
3.7.5 (3946)	Moore, Richard	RRR000943 / 0003
3.7.6 (445)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0005
3.7.6 (446)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0007
3.7.6 (1182)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0058
3.7.6 (1183)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0059
3.7.6 (1497)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0009
3.7.6 (1551)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0013
3.7.6 (1567)	Emmerick, Kevin	RRR000555 / 0008
3.7.6 (2479)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0020
3.7.6 (3146)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0037
3.7.6 (3147)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0038
3.7.6 (3156)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0043
3.7.6 (3158)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0044
3.7.6 (3186)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0020
3.7.6 (3187)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0021
3.7.6 (3188)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0022
3.7.6 (3192)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0045
3.7.6 (3198)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0049

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3.7.6 (3640)	Esmeralda County, Board of County Commissioners Kirby, William	RRR000666 / 0008
3.7.6 (3666)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0009
3.7.6 (3803)	Teer, Bill	RRR000191 / 0003
3.7.6 (4026)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0015
3.7.6 (4028)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0016
3.7.6 (4037)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0056
3.7.6 (4146)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0054
	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0001
3.7.7 (48)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0006
	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0006
	Durham, Barbara	RRR000067 / 0003
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0257
	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0007
3.7.7 (63)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0074
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0065
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0200
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0042
3.7.7 (64)	Gillum, Rita	RRR000079 / 0001
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0199

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3.7.7 (66)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0260
	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0044
3.7.7 (79)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0043
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0124
	McGoldrick, Suzanne	RRR000231 / 0004
3.7.7 (80)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0056
	U.S. Department of the Interior, Bureau of Land Management Palma, Juan	RRR001082 / 0002
3.7.7 (81)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0013
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0009
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0015
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0004
3.7.7 (1150)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0147
3.7.7 (1159)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0154
3.7.7 (1191)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0202
3.7.7 (1193)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0204
3.7.7 (1386)	Congress of the United States Reid, Harry	RRR000678 / 0010
3.7.7 (1387)	Congress of the United States Reid, Harry	RRR000678 / 0011

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3.7.7 (1506)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0057
3.7.7 (1532)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0075
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0066
3.7.7 (2057)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0032
3.7.7 (2613)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0045
3.7.7 (2793)	Esmeralda County Rannells, Ed	RRR000073 / 0003
3.7.7 (3684)	Esmeralda County, Board of County Commissioners Kirby, William	RRR000666 / 0011
3.7.7 (3740)	Huston/Cole, John/Jan	RRR000317 / 0013
3.7.7 (4138)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0042
3.7.8 (210)	Sill, Marjorie	RRR000042 / 0004
3.7.8 (364)	Durham, Barbara	RRR000102 / 0001
3.7.8 (830)	Center for Disease Control and Prevention, Dept. of Health and Human Services Dannenberg, Andrew	RRR000452 / 0001
3.7.8 (831)	City of Caliente Phillips, Kevin	RRR000641 / 0013
3.7.8 (1110)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0034
3.7.8 (1222)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0228
3.7.8 (1301)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0213
3.7.8 (1304)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0214
3.7.8 (1327)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0007

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3.7.8 (1331)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0263
3.7.8 (1369)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0252
3.7.8 (1507)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0058
3.7.8 (1537)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0086
3.7.8 (1620)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0085
3.7.8 (1698)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0088
3.7.8 (1702)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0089
3.7.8 (1761)	NARUC – National Association of Regulatory Utility Commissioners Gray, Charles	RRR000525 / 0034
3.7.8 (1775)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0090
3.7.8 (1803)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0091
3.7.8 (1996)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0106
3.7.8 (2313)	Nuclear Energy Institute – NEI Kraft, Steven	RRR000619 / 0004
3.7.8 (2314)	Nuclear Energy Institute – NEI Kraft, Steven	RRR000619 / 0005
3.7.8 (2337)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0023
3.7.8 (2369)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0026
3.7.8 (2398)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0029

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3.7.8 (2399)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0030
3.7.8 (2415)	Twin Springs Ranch Fallini, Joe	RRR000075 / 0005
3.7.8 (2416)	Williams, Harry	RRR000103 / 0001
3.7.8 (2417)	Emmerick, Kevin	RRR000555 / 0005
3.7.8 (2418)	Emmerick, Kevin	RRR000555 / 0006
3.7.8 (3089)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0027
3.7.8 (3108)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0012
3.7.8 (3487)	Ray, Dorothy	RRR000035 / 0004
3.7.8 (3497)	Brown, Richard	RRR000024 / 0002
3.7.8 (3584)	McGoldrick, Suzanne	RRR000231 / 0005
3.7.8 (3649)	Lim, Kingman	RRR000373 / 0006
3.7.8 (4224)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0008
3.7.9 (834)	City of Caliente Phillips, Kevin	RRR000641 / 0016
3.7.9 (835)	City of Caliente Phillips, Kevin	RRR000641 / 0017
3.7.9 (836)	City of Caliente Phillips, Kevin	RRR000641 / 0018
3.7.9 (2135)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0022
3.7.9 (2532)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0041
3.7.9 (3045)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0041
3.7.10 (1093)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0033
3.7.10 (1162)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0156
3.7.10 (1176)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0052

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3.7.10 (1204)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0172
3.7.10 (1205)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0173
3.7.10 (1206)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0174
3.7.10 (1663)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0013
3.7.10 (2478)	Emmerick, Kevin	RRR000555 / 0009
3.7.10 (3116)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0020
3.7.11 (232)	Boyd, Benedict	RRR000074 / 0001
3.7.11 (1998)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0044
3.7.11 (2617)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0041
3.7.11 (2758)	Shillinglaw, Fawn	RRR000688 / 0053
3.7.12 (1499)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0050
3.7.12 (1508)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0059
3.7.13 (168)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0032
	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0010
3.7.13 (3143)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0019
3.7.13 (3154)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0042
3.7.13 (3982)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0052
3.7.14.1 (387)	Esteves, Pauline	RRR000066 / 0001
3.7.14.1 (951)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0019
3.7.14.1 (1490)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0005

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3.7.14.1 (1492)	Duckwater Shoshone Tribe Millett, Jerry	RRR000693 / 0006
3.7.14.1 (1892)	United States Department of the Interior Anspach, Allen	RRR000672 / 0001
3.7.14.1 (2567)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0011
3.7.14.1 (3104)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0035
3.7.14.1 (4036)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0020
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0018
3.7.14.1 (4120)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0029
3.7.14.1 (4151)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0036
3.7.14.2 (1583)	Timbisha Shoshone Kennedy, Joe	RRR000690 / 0034
		RRR000691 / 0070
3.7.14.2 (2489)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0039
	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0022
3.7.14.2 (2492)	Big Pine Paiute Tribe of the Owens Valley Moose, Virgil	RRR000675 / 0024
3.7.14.2 (2568)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0012
3.7.14.2 (2569)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0013
3.7.14.2 (2571)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0015
3.7.14.2 (2640)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000101 / 0001
3.7.14.2 (2670)	Esteves, Pauline	RRR000066 / 0002
3.7.14.2 (3520)	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0058
3.7.14.2 (3957)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0001

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3.7.14.2 (4032)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0017
3.7.14.2 (4081)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0026
3.7.14.2 (4123)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0030
3.8 (1353)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0239
3.8 (1354)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0240
3.8 (1355)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0241
3.8 (1356)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0238
3.8 (1357)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0242
3.8 (1359)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0243
3.8 (1651)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0041
3.8 (3986)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0055
3.8 (4226)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0272
3.8 (4227)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0273
3.11 (1042)	State of Nevada, Agency for Nuclear Projects Loux, Robert	RRR000663 / 0024
3.11 (1307)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0215

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3.11 (1310)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0217
3.11 (1311)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0218
3.11 (1312)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0219
3.11 (1314)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0220
3.11 (1315)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0221
3.11 (1316)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0222
3.11 (1318)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0223
3.11 (1321)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0225
3.11 (1323)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0226
3.11 (1334)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0011
3.11 (1523)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0084
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0074
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0054
3.11 (1525)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0082
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0072

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3.11 (1525) (continued)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0052
3.11 (1526)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0081
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0071
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0051
3.11 (1528)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0080
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0070
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0050
3.11 (1531)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0076
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0067
3.11 (1837)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0094
3.11 (1942)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0101
3.11 (1955)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0046
3.11 (1956)	Twin Springs Ranch Fallini, Joe	RRR000710 / 0045
3.11 (1979)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0102
3.11 (2614)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0044
3.11 (3196)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0048
3.11 (4155)	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0041
3.11 (4170)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0078
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0068

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3.11 (4170) (continued)	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0005
3.11 (4171)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0085
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0075
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0055
3.11 (4172)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0030
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0022
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0216
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0017
3.11 (4174)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0095
3.11 (4176)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0047
3.11 (4177)	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0021
	United States Nuclear Regulatory Commission Weber, Michael	RRR000524 / 0012
3.12 (139)	City of Caliente Acklin, Tom	RRR000115 / 0004
	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0033
	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0011
	Colvin & Sons, LLC Colvin, Tom	RRR000665 / 0002
	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0009
	Twin Springs Ranch Fallini, Joe	RRR000710 / 0049

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3.12 (139) (continued)	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0016
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0013
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0008
	State of Nevada, Agency for Nuclear Projects Halstead, Robert	RRR000013 / 0008
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0040
	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0032
	Timbisha Shoshone Kennedy, Joe	RRR000691 / 0009
	Nye County, Nuclear Waste Repository Project Office	RRR000658 / 0001
	Lacy, Darrell City of Caliente Larson, Keith	RRR000016 / 0001
	McInnis, May	RRR000249 / 0001
	City of Caliente Moore, Ashley	RRR000118 / 0006
	Moore, Roanne	RRR000119 / 0006
	Clark County, Nevada – Dept. of Comprehensive Planning Navis, Irene	RRR000681 / 0020
	U.S. Department of the Interior, Bureau of Land Management Palma, Juan	RRR001082 / 0006
	City of Caliente Phillips, Kevin	RRR000012 / 0009
	A	RRR000116 / 0009
		RRR000641 / 0006
	Sollinger, Nancy	RRR000078 / 0002
	Western Range Service Steninger, Al	RRR000020 / 0001
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0008

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3.12 (139) (continued)	Wadsworth, Gordon	RRR000113 / 0004
	Wadsworth, Michele	RRR000114 / 0004
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0003
3.12 (4186)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0069
	Twin Springs Ranch Fallini, Joe	RRR000710 / 0050
	N-6 State Grazing Board Filippini, Hank	RRR000687 / 0028
	N-4 State Grazing Board Flake, Merlin	RRR000621 / 0043
	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0056
	Nye County, Nuclear Waste Repository Project Office Lacy, Darrell	RRR000658 / 0007
	City of Caliente Larson, Keith	RRR000016 / 0002
	John Uhalde and Company Uhalde, Gracian	RRR000618 / 0038
	Wadsworth, Michele	RRR000114 / 0003
3.14 (2454)	Twin Springs Ranch Fallini, Anna	RRR000072 / 0003
3.14 (3832)	Zwicker, Marie Louise	RRR000549 / 0010
3.15 (152)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0060
	Congress of the United States Reid, Harry	RRR000678 / 0006
3.15 (833)	City of Caliente Phillips, Kevin	RRR000641 / 0015
3.15 (1060)	Lincoln County, Nevada, Board of County Commissioners Hornbeck, Ronda	RRR000617 / 0047
3.15 (1541)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0087

Repository SEIS, Nevada Rail Corridor SEIS, Rail Alignment EIS Cross Reference from Comments/Responses to Commenter(s) and Original Comments

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3.15 (1985)	Lander County, Board of Commissioners Chapin, Chuck	RRR000646 / 0029
	Mineral County, Board of Commissioners Fowler, Ed	RRR000682 / 0022
	Churchill County Commissioners Washburn, Gwen	RRR000523 / 0067
3.15 (1994)	Nye County, Board of County Commissioners Eastley, Joni	RRR000656 / 0105
3.15 (2315)	Nuclear Energy Institute – NEI Kraft, Steven	RRR000619 / 0006
3.15 (2451)	Eureka County Board of Commissioners Ithurralde, James	RRR000664 / 0020
3.15 (3199)	Consolidated Group of Tribes and Organizations Arnold, Richard	RRR000671 / 0050
3.16 (2653)	United States Department of Commerce Harm, Christopher	RRR000568 / 0001