

# LESSONS LEARNED

December 3, 2007; Issue No. 53

Fourth Quarter FY 2007

## Multiple, Complex EISs Support DOE Missions; What Will the New Year Bring?

Have you been very busy lately? You're not alone. The Department of Energy (DOE) NEPA Community – NEPA Compliance Officers, NEPA Document Managers, NEPA support contractors, and the Offices of NEPA Policy and Compliance and the Assistant General Counsel for Environment – as well as Program and Field Office managers, have been exceptionally busy with NEPA-related activities this fall, culminating in the issuance of four major environmental impact statements (EISs) and two environmental assessments (EAs) in October and four EISs and five EAs in November. While the workload has been demanding, these EAs and EISs provide a sound, analytical basis for good decisionmaking, enabling DOE to accomplish its missions. Several of these key EISs are featured in this issue of *LLQR* starting on page 8.

### More to Come

The job isn't over. The Draft EISs will lead to Final EISs. The Final EISs will lead to Records of Decision. There will be more Notices of Intent, scoping meetings, EISs, public hearings, and EAs in 2008. For a preview of upcoming DOE NEPA activities, visit the DOE NEPA website at [www.eh.doe.gov/nepa](http://www.eh.doe.gov/nepa), and examine the two tracking charts (updated approximately monthly) under "DOE Document Status and Schedules."



(continued on page 11)

## Consideration of Greenhouse Gas Emissions in DOE NEPA Documents Is Evolving

By: Eric Cohen, Office of NEPA Policy and Compliance

Over the past 20 years, the analysis of greenhouse gas emissions and global climate change issues in DOE NEPA documents has evolved. Further evolution is anticipated. Drivers for change include advances in the science of climate change; heightened public awareness and concern; advances in technologies relevant to mitigation; and, especially recently, litigation, proposed legislation, and potential regulation of greenhouse gases such as carbon dioxide (CO<sub>2</sub>), which has long been recognized as the most important anthropogenic greenhouse gas.

This review of past and current DOE practices is intended to help NEPA practitioners think about the dynamic area of climate change as it relates to their NEPA documents.

### Early DOE NEPA Documents

Long before terms such as "carbon footprint" became part of the nation's everyday vocabulary, DOE addressed greenhouse gas emissions and global climate change (e.g., "global warming") in its NEPA documents. In the late 1980s, for example, DOE's *Clean Coal Technology Program Final Programmatic Environmental Impact Statement* (DOE/EIS-0146) projected the incremental and cumulative emissions of CO<sub>2</sub> expected to result from commercialization of various clean coal technologies. This programmatic EIS also contained substantial discussions of associated global warming issues based on scientific understanding at that time.

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## Inside **LESSONS LEARNED**

Welcome to the 53<sup>rd</sup> quarterly report on lessons learned in the NEPA process. Many in the Department's NEPA Community were called on to give extraordinary time and resources to the preparation of key EISs issued recently and highlighted in this LLQR. We anticipate a busy 2008 as well. As always, we welcome your suggestions for further improvement.

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*Carol Borgstrom*

Director  
Office of NEPA Policy and Compliance

## Be Part of Lessons Learned

### We Welcome Your Contributions

We welcome suggestions, comments, and contributed drafts for the *Lessons Learned Quarterly Report*. We especially seek case studies illustrating successful NEPA practices. Draft articles for the next issue are requested by February 1, 2008. Contact Yarden Mansoor at [yarden.mansoor@hq.doe.gov](mailto:yarden.mansoor@hq.doe.gov) or 202-586-9326.

### Quarterly Questionnaires Due February 1, 2008

Lessons Learned Questionnaires for NEPA documents completed during the first quarter of fiscal year 2008 (October 1 through December 31, 2007) should be submitted by February 1, but preferably as soon as possible after document completion. The Questionnaire is available on the DOE NEPA website at [www.eh.doe.gov/nepa](http://www.eh.doe.gov/nepa) under Lessons Learned Quarterly Reports. For Questionnaire issues, contact Vivian Bowie at [vivian.bowie@hq.doe.gov](mailto:vivian.bowie@hq.doe.gov) or 202-586-1771.

### LLQR Online

Current and past issues of the *Lessons Learned Quarterly Report* are available on the DOE NEPA website at [www.eh.doe.gov/nepa](http://www.eh.doe.gov/nepa). Also on the website is a cumulative index of the *Lessons Learned Quarterly Report*. The index is printed in the September issue each year.

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## Pondering Irreversible Consequences to Rare Natural Phenomena

Although Yosemite National Park had been established in 1890, it was President Theodore Roosevelt's 1903 camping trip with naturalist John Muir that led to the addition of the Yosemite Valley and the Mariposa Grove of sequoias to the Park. Roosevelt's decision to preserve environmental values and recreation opportunities, instead of damming or developing the valley, was based on his recognition of the uniqueness of the Yosemite environment.

Almost 65 years later, just before NEPA was enacted, a short paper by the late resource economist Dr. John Krutilla laid out a theoretical framework for thinking systematically about such decisions.

A member of the DOE Office of NEPA Policy and Compliance attended a recent seminar commemorating the work of Dr. Krutilla on the 40<sup>th</sup> anniversary of his article, and was struck by its resonance with NEPA. See article on page 20.



When President Theodore Roosevelt (left) visited Yosemite National Park with John Muir, the Park consisted only of the highlands. (Photo: Library of Congress)



# OMB and OSTP Issue Risk Analysis Principles



The Office of Management and Budget (OMB) and the Office of Science and Technology Policy (OSTP) have issued a joint Memorandum on *Updated Principles for Risk Analysis* (September 19, 2007; [www.whitehouse.gov/omb/memoranda](http://www.whitehouse.gov/omb/memoranda) under 2007) that “reinforces generally-accepted principles for risk analysis related to environmental, health, and safety risks.” After considering comments on the *Proposed Risk Assessment Bulletin* (LLQR, March 2006, page 14), including those from a National Academy of Sciences (NAS) peer review committee (which found the proposed Bulletin to be “fundamentally flawed” and recommended it be withdrawn), OMB and OSTP decided not to issue the Bulletin and issued this Memorandum instead.



The 13-page Memorandum is based on principles developed by an interagency working group co-chaired by OMB and OSTP in 1995. Noting that the “1995 Principles” remain valid today, the Memorandum reinforces and updates those principles. The Memorandum is consistent with DOE guidance in *Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements* (“Green Book”) (December 2004) and may be of interest to DOE NEPA practitioners seeking to ensure that their risk analyses are consistent with the updated principles.



## Apply “Sliding-Scale” Approach

Although OMB and OSTP do not use the term “sliding-scale” in the Memorandum, they reaffirm the principle that the scope of a risk analysis should correspond to the nature and significance of the decision to be made. The Memorandum cites a 1997 Presidential Commission on Risk report, which states that the level of detail in a risk assessment “should be commensurate with the problem’s importance, expected health or environmental impact, expected economic or social impact, urgency, and level of controversy, as well as with the expected impact and cost of protective measures.” The Memorandum also cites NAS comments that “[r]isk assessment is not a monolithic process or a single method” and that “. . . risk assessments share some common principles, but their application varies widely among domains.”

## Use Best Available Data and Methodologies

OMB and OSTP state that “Agencies should employ the best reasonably obtainable scientific information to assess risks to health, safety, and the environment . . .” and “. . . analyses should be based upon the best available scientific methodologies . . .” In addition, “. . . characterizations of risks . . . should be both qualitative and quantitative, consistent with available data.”

## Build Credibility Through Transparency

Expanding upon one of the original 1995 principles – that risk assessments be communicated in a meaningful manner – OMB and OSTP refer to an NAS comment that including a concise summary or introductory section can improve the clarity of the analysis and help ensure that readers interpret it appropriately. This summary could disclose the objectives and scope of the risk assessment, the key findings of the analysis, and the key scientific limitations and uncertainties. The Memorandum notes that “Judgments used in developing a risk assessment, such as assumptions, defaults and uncertainties, should be stated explicitly. The rationale for these judgments and their influence on the risk assessment should be articulated.”

The Memorandum emphasizes the importance of acknowledging and consistently communicating the uncertainties of risk assessments, and quotes from NAS’ February 2007 *Analysis of Global Climate Change: Lessons Learned*: “The manner in which uncertainties are acknowledged and characterized will affect both the salience and credibility of the assessment.” The Memorandum further emphasizes that “a high degree of transparency with respect to data, assumptions, and methods will increase the credibility of the risk analysis, and will allow interested individuals . . . to understand better the technical basis of the analysis.”

The Memorandum cautions against presenting single estimates of risk because they can be misleading and may provide a false sense of precision. Instead, OMB and OSTP suggest that a range of plausible risk estimates be given and that, when possible, quantitative uncertainty analysis, sensitivity analysis, and a discussion of model uncertainty be included. These recommendations are consistent with guidance in the *Green Book* (page 19), which suggests using sensitivity analyses to identify the factors that most affect the impact estimates and to explain how uncertainty affects the analysis.

## Consider Responsible Opposing Views

The Memorandum also notes the importance of addressing “. . . the range of scientific and/or technical opinions” in developing risk assessments. “Results based on different effects and/or different studies should be presented,” the Memorandum states, “to convey how the choice of effect and/or study influences the analysis . . .” It further states: “When relying on data from one study over others, the agency should provide a clear rationale and/or scientific basis for its choice.” This guidance is consistent with recommendations in the *Green Book* to “[i]dentify any responsible opposing views regarding how to conduct impacts analysis or interpret conclusions.”



# Greenhouse Gases *(continued from page 1)*

DOE NEPA documents issued over the next decade, particularly those related to uses of fossil energy resources or involving proposals that would potentially produce or consume large quantities of energy, usually included estimates of greenhouse gas emissions when the emissions would be large. The estimates usually focused on CO<sub>2</sub> because anthropogenic sources rarely produced large amounts of other greenhouse gases such as methane, nitrous oxide, or halocarbons (a group of gases containing fluorine, chlorine, or bromine).

Estimating the potential impact of greenhouse gas emissions on climate change has been more difficult than estimating emissions. General DOE NEPA guidance (*Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements* (“*Green Book*”) (December 2004, page 20)) recommends: “In addition to identifying pollutants that would be released . . . , identify potential effects from these substances . . . . A quantified release rate should not be the endpoint in impact analysis.” However, there has been no generally recognized scientific basis to enable analysts to make definitive conclusions about the impacts of greenhouse gas emissions from specific proposals on global climate change (e.g., “X tons per year of CO<sub>2</sub> would result in an increase in global averaged temperature of Y degrees”).

## Comparisons to Global Emissions

To comply with the *Green Book* recommendation, DOE NEPA documents have compared greenhouse gas emissions from proposed actions to global emissions. For example, some documents contain statements such as: “. . . although CO<sub>2</sub> emissions from the project would be large, the quantities would be very small in comparison with global emissions.” Other documents avoid such qualitative judgments but contain relative comparisons, such as: “The proposed facilities would emit X tons of CO<sub>2</sub> per year, which is 0.003% of global emissions . . . .” Commentors have questioned DOE’s use of such global comparisons because they believe such comparisons trivialize greenhouse gas emissions and indicate that DOE would always conclude that greenhouse emissions are “small,” thus not warranting mitigation (*LLQR*, March 2007, page 9).

DOE NEPA documents for projects that would not generate large quantities of greenhouse gases have

addressed global climate change indirectly, as a matter of good environmental stewardship. Several EAs and EISs explored alternatives, mitigation measures, and best management practices that would conserve energy and reduce greenhouse gas emissions. Typically, these documents did not quantify potential emissions reductions or explicitly address global climate change. (A few documents, such as EAs for energy efficiency rulemakings, quantified and focused primarily on emissions reductions.)

## Intergovernmental Panel on Climate Change

Over time, the scientific community has expressed increasing certainty that humans are affecting the climate as more data and more reliable climate models have contributed to a better understanding of the earth’s climate system (e.g., assessments of the Intergovernmental Panel on Climate Change (IPCC), a United Nations science panel; see next page). With the growing recognition of the significance of this issue, public awareness and concern increased commensurately. In response to this shift along the “sliding-scale” of significance (*Green Book*, page 1)<sup>1</sup> DOE’s consideration of global climate change in its NEPA documents has increased.

After the IPCC issued an assessment report in 1995, the Council on Environmental Quality (CEQ), in October 1997, circulated draft guidance on consideration of global climate change in NEPA documents to Federal agencies for comment. The draft guidance, which was never finalized, proposed that Federal agencies consider in their NEPA documents two aspects of climate change: (1) potential impacts of Federal actions on climate change, and (2) potential impacts of climate change on Federal actions (e.g., feasibility of coastal projects in light of projected sea level rise).

In its comments on the draft guidance, DOE staff agreed with CEQ’s main premise, based on the IPCC’s conclusions, that global climate change was a “reasonably foreseeable” impact of greenhouse gas emissions in the context of NEPA. DOE staff also noted that “the NEPA process can be used to explore options to reduce net emissions of greenhouse gases through analyses of alternatives and mitigation measures.” (See *LLQR*, December 1997, page 12.)

*(continued on next page)*

<sup>1</sup> *The Green Book states: “The [sliding-scale approach] recognizes that agency proposals can be characterized as falling somewhere on a continuum with respect to environmental impacts. This approach implements CEQ’s instruction that in EISs agencies ‘focus on significant environmental issues and alternatives (40 CFR 1502.1) and discuss impacts ‘in proportion to their significance’ (40 CFR 1502.2(b)). (Note that under CEQ’s regulations and judicial rulings the degree to which environmental effects are likely to be controversial with respect to technical issues is a factor in determining significance . . . .)”*

# Intergovernmental Panel on Climate Change

The Administration welcomes the [fourth] Intergovernmental Panel on Climate Change report, which was developed through thousands of hours of research by leading U.S. and international scientists and informed by significant hours of research by leading U.S. investments in advancing climate change research. Climate change is a global challenge that requires global solutions.

– Secretary of Energy Samuel Bodman, February 2, 2007

The Intergovernmental Panel on Climate Change (IPCC) ([www.ipcc.ch](http://www.ipcc.ch)) was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme “in recognition of the issue of global warming.” Through the IPCC, climate experts from around the world synthesize the most recent climate science findings every 5–7 years and present their report to the world’s political leaders. The IPCC issued comprehensive assessments in 1990, 1995, and 2001; its fourth and most recent assessment report, consisting of contributions from three working groups, was issued in 2007. The IPCC reports describe an extensive peer review of their analyses and a high degree of consensus among the international panel of contributing scientists.

The IPCC assessment reports are widely regarded to have been highly influential. The fourth assessment report arguably has been the most influential because the report’s expression of a high level of confidence in several key findings apparently has convinced more people of the need to address climate change. In the United States, many people have since expressed a greater sense of urgency to address global warming. Tangible consequences include an increase in litigation, and calls for legislation, regulation, and mitigation.

## Key Findings of the Fourth Assessment Report (from Working Group I)

- Warming of the climate system is unequivocal.
- The probability that global warming has been caused by human activities is greater than 90 percent. This is an increase from the third assessment report, which gave this probability as greater than 66 percent.
- Most of the observed globally averaged temperature increase since the mid-20<sup>th</sup> century is *very likely* (greater than 90 percent chance of being correct) due to an increase in anthropogenic greenhouse gas (primarily CO<sub>2</sub>) concentrations.
- The primary source of the increased concentrations of atmospheric CO<sub>2</sub> since 1750 is fossil fuel use, with land use change providing another significant but smaller contribution.
- Further warming is inevitable. The long-term future climate change effects could be mitigated.

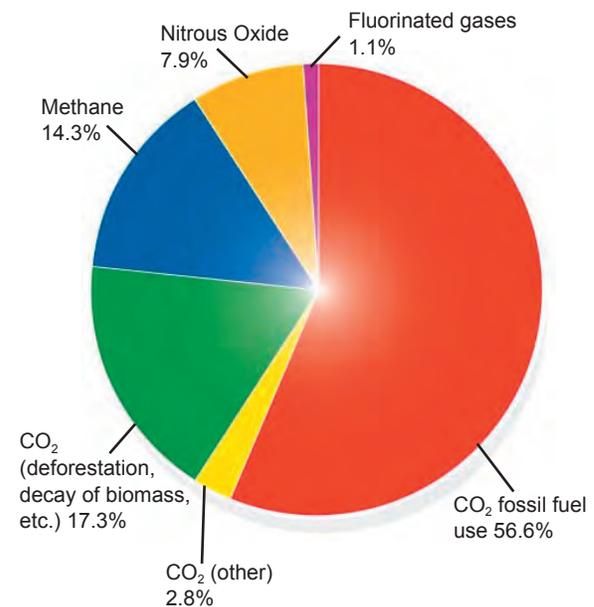
## Predicted Consequences of Global Warming (from Working Group II)

### North America

- Extended period of high fire risk and large increases in area burned.
- Increased intensity, duration, and number of heat waves.
- Western Mountains – decreased snowpack, winter flooding, reduced summer flows.
- Coastal Areas – increased stress on communities and habitat.

### Globally

- More frequent heat waves, droughts, fires, and coastal flooding.
- More severe hurricane activity and increases in frequency and intensity of severe precipitation.
- Spread of infectious diseases to new regions.
- Heart and respiratory ailments from higher concentrations of ground-level ozone.
- Rising sea levels, coastal area flooding.



Global Greenhouse Gas Emissions in 2004

Source: IPCC Working Group III

# Greenhouse Gases *(continued from previous page)*

## Recent DOE NEPA Practice

DOE is now responding to the most recent information on climate change, including IPCC's fourth assessment report, completed in 2007. Current DOE NEPA documents generally include:

- **Discussion of global climate change.** Where greenhouse gas emissions would be very small, NEPA documents provide only enough discussion to show why further analysis is not warranted. Where potential greenhouse gas emissions could be large, a separate discussion of global climate change may be provided. Such discussions typically cite key findings of relevant studies to address potential consequences of greenhouse gas emissions (e.g., IPCC assessment reports and other IPCC studies; DOE reports (e.g., Energy Information Administration<sup>2</sup> data); reports of the U.S. Climate Change Science Program; and studies by other authoritative bodies such as the U.S. Environmental Protection Agency (EPA) and National Research Council).
- **Quantification of greenhouse gas emissions.** Emissions are usually presented as annual rates.
- **Consideration of cumulative impacts.** Depending on the nature of the proposal and the amount of potential greenhouse gas emissions, cumulative impact analyses have included consideration of the following conceptual elements:
  - Combination with other emissions (e.g., "The proposed facility would add X tons per year of CO<sub>2</sub> (or "CO<sub>2</sub>-equivalent") to existing (or projected future) emissions of Y tons per year from fossil fuel combustion and Z tons from all other sources.").
  - Total emissions over the project lifetime (usually expressed as a quantity).
  - Potential to induce other actions. For research and development or other technology demonstrations, DOE EISs have provided estimates of potential greenhouse gas emissions from commercial deployment of the technology.
  - Life-cycle analyses, where appropriate. (See *LLQR*, March 2007, page 9, for a summary of a comparative life-cycle analysis for a coal-to-liquid project, the Gilberton Coal-to-Clean Fuels and Power Project (related article page 10). The "wells-to-wheels" analysis estimated that, without mitigation, use of coal-to-liquid technology would

result in substantially more CO<sub>2</sub> emissions than from production and use of petroleum fuels.)

- **Exploration of reasonable alternatives.** While all NEPA documents must consider the range of reasonable alternatives, DOE is paying closer attention to climate change issues at the project definition stage and in scoping recent documents.
- **Consideration of potential mitigation.** Where certain mitigation (e.g., carbon sequestration) is not currently feasible (several fossil energy proposals), recent NEPA documents have explored the potential for future mitigation.

Examples of analyses employing these concepts can be found in the recently-issued EISs for clean coal proposals (related article page 10), and other recent DOE NEPA documents, such as the EA for *Construction and Operation of a Proposed Cellulosic Ethanol Plant, Range Fuels, Inc., Treutlen County, Georgia* (DOE/EA-1597, October 2007).

## Trends/Issues to Be Resolved

The consideration of greenhouse gas emissions in NEPA documents could change significantly if pending legislative proposals (e.g., proposed caps on greenhouse gas emissions) were enacted or if greenhouse gas regulations were promulgated. Advances in climate change science also could affect NEPA analyses (e.g., if there were greater certainty in the ability to forecast specific regional impacts). Further, a number of questions regarding the appropriate scope of NEPA documents may be determined in the courts.

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*It is clear that public and judicial concern over climate change is heating up, and that DOE must not shrink from addressing the issue in a full and fair manner. We must meet the rising tide of expectations in this area by capturing the best available information and explaining what we do and don't know about the impacts of our proposed actions.*

— Bruce Diamond  
Assistant General Counsel for Environment

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<sup>2</sup> Energy Information Administration (EIA) greenhouse gas data can be found at [www.eia.doe.gov/environment.html](http://www.eia.doe.gov/environment.html). EIA issued its report on the nation's 2006 greenhouse gas emissions in late November 2007.

# Greenhouse Gases (continued from previous page)

A boom in global climate change litigation – more than two dozen cases currently pending in Federal and state courts – has accompanied the increased scientific evidence of global warming and a growing public perception of the nation’s failure to address the issue. The litigation addresses many issues related to global climate change (e.g., Clean Air Act issues, nuisance claims, standing issues), and there are a number of NEPA cases.

Among the issues in the NEPA cases are questions about (1) the applicability of NEPA to Federal agency actions that support overseas projects that emit greenhouse gases that may impact the domestic, U.S. environment,<sup>3</sup> and (2) the degree to which a NEPA document must consider secondary impacts, such as global warming impacts that might result from increased use of coal if a new rail line were approved to transport Powder River Basin coal to the Midwest.<sup>4</sup>

## Cumulative Impacts at Issue

In addition, the U.S. Court of Appeals for the Ninth Circuit recently found the National Highway Traffic Administration’s EA for corporate average fuel economy (CAFE) standards for light trucks to be inadequate in several respects, including the analysis of cumulative impacts. The court stated: “Any given rule setting a CAFE standard might have an ‘individually minor’ effect on the environment, but these rules are ‘collectively significant actions taking place over a period of time.’” The court also noted that “. . . the EA does not discuss the *actual* environmental effects resulting from those emissions . . .” and stated: “Petitioners presented evidence that continued increase in greenhouse gas emissions may change the climate in a sudden and non-linear way.” (For further information on this decision see *Litigation Updates*, page 24).

Non-NEPA cases are potentially relevant as well. Prominent among them is *Massachusetts v. EPA*, 127 S. Ct. 1438 (2007), a Clean Air Act case in which petitioners asked EPA to regulate motor vehicle emissions of greenhouse gases, including CO<sub>2</sub>. At issue was whether

EPA had the authority and obligation to regulate CO<sub>2</sub> emissions. The Supreme Court held that CO<sub>2</sub> is a pollutant subject to the Clean Air Act and that “EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to do so.”<sup>5</sup> Also of relevance, the Court determined that Massachusetts had standing to sue because it met the standard that requires a litigant to show that it has suffered a concrete and particularized injury, i.e., that climate change has damaged part of the State’s coastline and the State is vulnerable to further losses this century if climate change is not mitigated.<sup>6</sup> This finding – that States may have standing based on the potential for harm to the States’ territories – could encourage other potential litigants to file claims relating to greenhouse gases, including NEPA claims.

## Judging Significance of Impacts

Other issues to watch for include potential endangered species claims (e.g., threats to northern polar bears that theoretically could result from emissions in the south) and judgments about the significance of even small or moderate emissions of greenhouse gases.

In addition, EPA has addressed greenhouse gas emissions in its comments on a recent Forest Service Draft EIS (*Deer Creek Shaft and E Seam Methane Drainage Well Project, Gunnison County, Colorado*). EPA noted that the proposed action would vent to the atmosphere large quantities of methane, a greenhouse gas that is about 20 times more effective than CO<sub>2</sub> in trapping heat in the atmosphere. EPA recommended that the Final EIS identify the magnitude of the emissions and discuss alternatives to venting methane directly to the atmosphere, including describing the range of alternative technologies available for capturing the methane and the economic and environmental benefits of using a portion of the methane.

LLQR will continue to track and report on relevant litigation and other developments. For more information, contact Eric Cohen at [eric.cohen@hq.doe.gov](mailto:eric.cohen@hq.doe.gov). 

<sup>3</sup> See *Friends of Earth v. Mosbacher*, Civ. No. C02-4106, JSW, Plaintiffs’ Cross Motion for Summary Judgment and Opposition to Defendant’s Motion for Summary Judgment (filed N.D. Cal., Feb. 11, 2005).

<sup>4</sup> See *Mayo Foundation v. STB*, 472 F.3d 545, 555-56 (8<sup>th</sup> Cir. 2006). In this case, the Eighth Circuit held that the Surface Transportation Board’s (STB’s) EIS adequately analyzed air impacts even though the EIS explained that local impacts from certain air pollutants, such as greenhouse gases, are too speculative to analyze. This case preceded the Supreme Court’s *Massachusetts v. EPA* decision, which is discussed further below.

<sup>5</sup> *Massachusetts v. EPA*, 127 S. Ct. at 1462.

<sup>6</sup> *Massachusetts v. EPA*, 127 S. Ct. at 1458.

# Good Planning, Management (and a Lot of Hard Work) Enable Timely Issuance of Yucca Mountain Draft EISs

“Whew! We did it again!” said Dr. Jane Summerson, Office of Civilian Radioactive Waste Management. “Our preparation and review teams worked long days, including weekends and some holidays this summer and fall to prepare and review all 4,200 pages of these two documents, not once but multiple times, to ensure timely issuance of quality products.”

“Completing these large, complex documents on schedule took more than hard work,” noted Carol Borgstrom, Director, Office of NEPA Policy and Compliance, “it took careful planning and management.”

The two documents – a Draft Supplemental EIS for the proposed Yucca Mountain repository (Repository SEIS)<sup>1</sup> and a Draft Supplemental EIS and Draft EIS (a combined document) that evaluates construction and operation of a railroad in Nevada for shipments of spent nuclear fuel and high-level radioactive waste to the proposed repository (Nevada Rail Corridor SEIS/Rail Alignment EIS)<sup>2</sup> – were filed with the Environmental Protection Agency on October 5, 2007.

DOE plans to complete both documents by June 2008; their interim milestones are virtually the same. This poses several challenges: the need to ensure technical consistency, communicate the related scopes of the documents to the public, and coordinate the logistics of their timely preparation, review, and approval.

## Scope of the EISs

Since completion in 2002 of 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* (DOE/EIS-0250F) (Repository EIS), DOE has continued to develop the proposed repository design and associated operational plans. DOE’s current approach to managing commercial spent nuclear fuel would rely primarily on a single canister design for three functions: transportation, aging, and disposal (referred to as a “TAD” canister). TAD canisters would be used for storage at commercial sites and for transportation to the repository. Once sealed at the reactor sites, the canisters would not have to be reopened, minimizing the need for handling spent nuclear fuel and simplifying the repository

design, construction, and operation. At the repository, the TAD canisters would be placed into waste packages for geologic disposal. The Repository SEIS analyzes the potential environmental impacts of these design and operational plans.

In the Record of Decision for the Repository EIS (69 FR 18557; April 8, 2004), DOE decided to ship spent nuclear fuel and high-level waste to Yucca Mountain primarily by rail; DOE also selected the Caliente corridor from among several corridors considered in the Repository EIS in which to study possible rail alignments in the Rail Alignment EIS (*LLQR*, December 2006, page 1).

During public scoping for the Rail Alignment EIS, commentors suggested that other corridors be considered, among them the Mina route. DOE had eliminated the Mina route from detailed study in the Repository EIS because the route would cross the Walker River Paiute Reservation, and the Tribe had told DOE that it would not allow nuclear waste to be transported across the reservation. In May 2006, the Tribe informed DOE that it would allow DOE to study the Mina route in an EIS. In October 2006, DOE issued a Notice of Intent (71 FR 60484) to expand the scope of the Rail Alignment EIS to add the Mina corridor (*LLQR*, December 2006, page 1). The Draft Nevada Rail Corridor SEIS/Rail Alignment EIS identifies the Mina corridor as non-preferred because the Tribe has since withdrawn its support for the EIS process.

## Relationships among the EISs

The Repository EIS, Repository SEIS, and the Nevada Rail Corridor SEIS/Rail Alignment EIS are related in several respects. The Nevada Rail Corridor SEIS supplements the rail corridor analysis in the Repository EIS by analyzing the Mina corridor at a level of detail commensurate with that of the rail corridor analysis in the Repository EIS. This Draft SEIS concludes that the Mina corridor warrants further study in the Rail Alignment EIS. The Nevada Rail Corridor SEIS also updates relevant information about three other rail corridors analyzed in the Repository EIS, demonstrates that there are no significant new circumstances or information relevant to environmental concerns associated with these corridors, and concludes that further consideration is not warranted.

(continued on next page)

<sup>1</sup> *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 (DOE/EIS-0250F-S1D) (Repository SEIS).*

<sup>2</sup> *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-S2) (Nevada Rail Corridor SEIS); and 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 EIS).*

# Yucca Draft EISs *(continued from previous page)*

The Rail Alignment EIS tiers from the Repository EIS and the Nevada Rail Corridor SEIS, and analyzes specific alignments within the Caliente and Mina corridors.

The Repository SEIS analyzes national transportation impacts, and, to ensure that the full scope of repository impacts are considered, the Repository SEIS also analyzes the potential impacts from construction and operation of a railroad along specific alignments in either the Caliente or Mina corridor, as described in the Rail Alignment EIS. Conversely, the Rail Alignment EIS analyzes the potential impacts of constructing and operating the repository as a reasonably foreseeable future action in its cumulative impacts analysis.

To ensure consistency, the analyses in the Repository SEIS and the Nevada Rail Corridor SEIS/Rail Alignment EIS use the same inventory of nuclear waste and assume the same number of shipments. Consistent analytical approaches were used to evaluate the various resource areas.

### Integration to Ensure Consistency

The Office of Civilian Radioactive Waste Management recognized early on that close coordination between the document preparation teams would be essential to meet the challenges of preparing these two major NEPA documents on the same schedule. DOE decided to integrate many of the activities associated with the EISs.

Working together, the document preparation teams identified areas where data needs overlapped and coordinated data exchanges. For example, the Repository SEIS needed to include the cumulative impacts analysis prepared by the Rail team. EIS preparation team members attended the other team's meetings to ensure that the analyses would be consistent. "Style guides" for these documents, although not identical, also helped to ensure the analyses and presentation would be compatible (related article page 17).

### Review Team Planning and Coordination

The document preparation teams also coordinated the review and approval processes, staggering them so that DOE staff could participate in the reviews and comment resolution processes for both documents. This required an extraordinary level of effort and collaboration among preparers and reviewers, who remained continuously engaged throughout the summer and fall of 2007.

The teams developed a master schedule to engage cooperating agencies (for the Repository SEIS:

Nye County; for the Nevada Rail Corridor SEIS/Rail Alignment EIS: the Bureau of Land Management, Surface Transportation Board, and Air Force) as well as DOE Program Offices. Under this schedule, the preparation teams provided reviewers a finite time (typically one week) to read specific document sections. Timely comments from reviewers using an electronic commenting format enabled the preparation teams to sort the comments, determine which ones warranted group discussion the following week during a "line-by-line" review, and summarize the comments for the review team.

This process, used for both documents, was effective, but not perfect. Some reviewers wanted to see the comments of others sooner, and in a few cases questioned judgments regarding which comments warranted discussion. In addition, some reviewers had difficulty reproducing electronic comments. The preparation teams are considering how to improve the process for the final documents, such as reducing the number of review cycles by engaging Program Office management sooner.

### EIS Distribution and Public Hearings

DOE integrated the distribution and public hearing processes for these EISs. For example, DOE used a single letter and mailing package to distribute both documents to the public. In addition, one press release and one Notice of Availability (72 FR 58071; October 12, 2007) announced the issuance of these documents and eight public hearings in Nevada, California, and Washington, DC.

DOE combined the public hearings so that members of the public could comment on either or both documents at the same hearing. However, unlike the public scoping meetings, which used an "open-house format" (*LLQR*, June 2004, page 1), in response to public comments the public hearings also contained a formal session, at which members of the public could provide oral comments for the record in a group setting.

Six of the eight public hearings have been completed so far. After the public comment period ends January 10, 2008, DOE plans to respond to the comments, revise the documents as appropriate, and issue the Final EISs. Subsequently, in June 2008, DOE plans to submit to the Nuclear Regulatory Commission an application seeking authorization to construct the repository, in accordance with the Nuclear Waste Policy Act.

For further information, contact Dr. Summerson, NEPA Document Manager and NCO, at [jane\\_summerson@ymp.gov](mailto:jane_summerson@ymp.gov) or 702-794-1493. 

# Four EISs Issued for Clean Coal Projects

Although originally started at different times, four “clean coal” EISs were issued in a similar time frame, keeping the same DOE staff responsible for preparing and reviewing them extremely busy. Moreover, three of the EISs were prepared by the same contractor. Completing these documents was also challenging because they address complex technologies and areas of controversy, such as issues regarding carbon dioxide (CO<sub>2</sub>) emissions.

To help manage the process, the Office of Fossil Energy provided reviewers information about the Program’s priorities, which helped to expedite the highest priority documents and ultimately issue all of them.

## FutureGen

DOE issued the Final EIS for the FutureGen Project (DOE/EIS-0394) in November, a major milestone for the Fossil Energy program. DOE’s proposed action is to provide financial assistance to the FutureGen Alliance, Inc., DOE’s industrial partner, to plan, design, construct, and operate the FutureGen Project. DOE’s preferred alternative in the Final EIS is to provide financial assistance to implement the FutureGen Project at any of the four alternative sites: Mattoon and Tuscola, Illinois, and Jewett and Odessa, Texas.

Completing this EIS in 15 months was a significant accomplishment. The EIS addressed complex technical issues, including an assessment of the risks of geologic sequestration of CO<sub>2</sub>. The document also contained the equivalent of four EISs, one for each of the alternative host sites for the FutureGen Project (*LLQR*, September 2007, page 6).

“DOE issued the EIS in record time. Completing this massive EIS in such a short time is a testament to the teamwork by DOE, its contractors, the states and the Alliance,” said Michael J. Mudd, Chief Executive Officer for the Alliance.

The FutureGen Project, a Presidential initiative, would be the first commercial scale integration of a suite of advanced clean coal technologies. DOE expects that the Project would lay the groundwork for developing similar power plants worldwide, and provide breakthroughs that would greatly reduce long-term greenhouse gas emissions. As a research facility, the Project would produce 275 megawatts of electric power and hydrogen gas using coal gasification technology integrated with combined-cycle electricity generation.

A major feature of the proposed prototype facilities would be the capture and geologic sequestration of CO<sub>2</sub> emissions. In addition, the hydrogen gas may be used to produce electrical energy via advanced power generation systems, or for other purposes, such as an alternative source of transportation fuel. Fuels used in transportation account for one-third of the Nation’s greenhouse gas emissions and use of coal-derived hydrogen fuel could reduce these emissions.

DOE can issue a Record of Decision (ROD) no sooner than December 17, 2007. In its ROD, DOE would explain its decision on whether to fund the FutureGen Project and, if so, which of the alternative sites would be acceptable to host the Project. The Alliance would select a site from among those (if any) identified as acceptable by DOE. The Alliance then would conduct further site-specific site characterization and design work. DOE would use that information in preparing a Supplement Analysis to determine whether a supplemental EIS should be prepared to further examine site-specific impacts.

For further information, contact Mark McKoy, NEPA Document Manager, at [mark.mckoy@netl.doe.gov](mailto:mark.mckoy@netl.doe.gov) or 304-285-4426.

## Western Greenbrier Co-Production Demonstration Project

DOE issued the Final EIS for the Western Greenbrier Co-Production Demonstration Project (DOE/EIS-0361) in November and can issue a ROD no sooner than December 10, 2007. DOE’s proposed action and preferred alternative in the Final EIS is to provide cost-shared funding for this Clean Coal Power Initiative project near Rainelle, West Virginia. The proposed facilities would demonstrate an advanced atmospheric circulating fluidized-bed combustor design that would use locally-abundant waste coal as a fuel source to produce 98 megawatts of electric power and steam. In addition, “waste” ash from the combustion would be used to produce cement.

The EIS concludes that the proposal would have socioeconomic benefits to the local community. The EIS further concludes that capture and sequestration of CO<sub>2</sub> is not feasible for this proposal, in part because the technology to be demonstrated would not generate a concentrated stream of CO<sub>2</sub>.

For further information, contact Roy Spears, NEPA Document Manager, at [roy.spears@netl.doe.gov](mailto:roy.spears@netl.doe.gov) or 304-285-5460.

*(continued on next page)*

### Clean Coal EISs *(continued from previous page)*

#### Gilberton Coal-to-Clean Fuels and Power Project

DOE issued the Final EIS for the Gilberton Coal-to-Clean Fuels and Power Project (DOE/EIS-0357) in early November and can issue a ROD in early December 2007. The Final EIS analyzes a proposed Clean Coal Power Initiative project near Gilberton, Pennsylvania, which would demonstrate the integration of coal gasification and coal-to-liquids technologies, using locally abundant coal waste to produce electricity and liquid hydrocarbon fuel. DOE's proposed action and preferred alternative in the Final EIS is to provide cost-shared funding for the project.

The Final EIS identifies potential adverse environmental impacts from the proposed action as well as benefits, including the project's potential to promote economic development in the region, consume coal waste that has degraded the quality of local watersheds, and demonstrate technologies that could reduce U.S. dependence on foreign oil. Environmental organizations expressed opposition to deployment of coal-to-liquid technology due to a relatively high rate of CO<sub>2</sub> emissions. The EIS addresses the incremental and cumulative impacts on global climate change of CO<sub>2</sub> emissions, and considers the programmatic implications on climate change from the use of coal-to-liquid technology. (See *LLQR*, March 2007, page 9, and related article page 1.)

The EIS also considers potential geologic sequestration of the concentrated CO<sub>2</sub> stream that would be produced and concludes that sequestration is not feasible at this time because substantial further characterization work would be needed to establish suitable sequestration sites. The EIS notes that sequestration may become feasible during the project lifetime.

For further information contact Janice Bell, NEPA Document Manager, at [janice.bell@netl.doe.gov](mailto:janice.bell@netl.doe.gov) or 412-386-4512.

#### Mesaba Energy Project

DOE issued the Draft EIS for the Mesaba Energy Project (DOE/EIS-0382) in November. DOE's proposed action is to provide cost-shared funding for a proposed Clean Coal Power Initiative project on the Iron Range of northern Minnesota. The proposed project involves the construction and operation of integrated gasification combined cycle (IGCC) electric generating facilities. Existing IGCC facilities have achieved lower levels of criteria pollutant emissions than any other coal-fueled power plant technologies. The proposed IGCC facilities for the Mesaba Energy Project could be retrofitted to enable the capture of carbon dioxide; however, the Draft EIS concludes that carbon dioxide capture and sequestration is not feasible in the near-term until extensive field tests are conducted to fully characterize potential storage sites and the long-term storage of sequestered carbon has been demonstrated and verified. Although not part of DOE's proposed action, the EIS states that DOE also may provide a loan guarantee pursuant to the Energy Policy Act of 2005 to secure a portion of private sector financing for the project.

DOE is preparing the EIS in cooperation with the Minnesota Department of Commerce (MDOC). DOE is the lead Federal agency and MDOC is the lead state agency. MDOC plans to use the EIS to satisfy its environmental review obligations under the Minnesota Power Plant Siting Act, which requires preparation of a state-equivalent EIS for the proposed facility. The Army Corps of Engineers and the Department of Agriculture, Forest Service, are also participating as cooperating agencies in view of their jurisdiction and expertise. DOE and MDOC jointly have conducted two public hearings. The public comment period ends January 11, 2008.

For further information, contact Richard A. Hargis, Jr., NEPA Document Manager, at [richard.hargis@netl.doe.gov](mailto:richard.hargis@netl.doe.gov) or 412-386-6065. 

### What Will the New Year Bring? *(continued from page 1)*



One tracking chart – “U.S. Department of Energy Environmental Impact Statements and Environmental Assessments Status Chart” – lists all the EISs and EAs that the Department is preparing, with comments on past and anticipated activity. The other chart – “Schedules of Key Environmental Impact Statements in the Department of Energy” – shows that most of the 24 EISs considered there have milestones in the next 8 months.

Indeed, we anticipate the DOE NEPA Community will continue to be busy in 2008! 

# Federal, State, Tribal Agencies Collaborate in Programmatic EIS for Energy Corridor Designations

Applicants seeking rights-of-way on Federal land in the western United States for long-distance energy transport infrastructure often have faced a complicated administrative task. The complex pattern of Federally-controlled lands is administered by different land management agencies, each with its own set of rules and procedures for processing rights-of-way, and applicants often must satisfy different requirements for the same project.

Congress sought to remedy this situation by directing the Secretaries of Agriculture, Commerce, Defense, Energy, and the Interior to consult with each other to designate energy corridors in the 11 western states, incorporate the corridors into relevant land use plans, and establish procedures to expedite applications (Energy Policy Act of 2005, Section 368; *LLQR*, September 2005, page 3). The affected states are Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Congress further required that these agencies perform any environmental reviews that may be required to complete the designation of such corridors.

The co-lead agencies, DOE and the Bureau of Land Management (BLM) of the Department of the Interior, together with several cooperating and consulting agencies have issued a Draft Programmatic EIS (Draft PEIS), *Designation of Energy Corridors on Federal Land in the 11 Western States* (DOE/EIS-0386) ([www.eh.doe.gov/nepa/docs/deis/eis0386/index.html](http://www.eh.doe.gov/nepa/docs/deis/eis0386/index.html)).<sup>1</sup>

## Interactive Online Maps Display Corridor Locations

Under the proposed action (which is the preferred alternative), agencies would designate corridors on Federal land for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities. Each agency would amend its respective land use plans to include the designated corridors. The Draft PEIS also analyzes a no action alternative under which the agencies would continue to process rights-of-way according to existing procedures.

The Draft PEIS identifies a network of approximately 6,055 miles of proposed Federal energy corridors of which 84 percent are on BLM land and 14 percent on

Forest Service land. None of the proposed corridors would cross DOE land. These corridors would be designated for multimodal energy transmission and transportation, which could include oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities. The corridors would be 3,500 feet wide in most places to accommodate the collocation of all modes of transmission and transportation. Approximately 160 land use and resource management plans or equivalent plans would be amended if all of the corridors in the network were designated. An atlas of maps (Volume III of the Draft PEIS) is posted on the project website ([corridoreis.anl.gov](http://corridoreis.anl.gov)) in a geographic information system database that allows enlarging, merging, and overlaying of map data (software and instructions are provided).

## Draft PEIS States that Designation Is an Administrative Action

The Draft PEIS (Section 1.5.3) states that the proposed action, “designation of energy corridors and amendment of land use plans, would not have any direct impacts on the environment. Designation of an energy corridor is an administrative task that occurs when an action agency amends its land use plans . . . .” Further, designation does not “establish a precedent or create any legal right that would allow ground-disturbing activities within a designated energy corridor.” The Draft PEIS (Section 1.7) provides a discussion of “*generic* impacts of project construction and operation” and recognizes that “in the event that site-specific projects would be proposed in the future in areas located within designated corridors, such individual projects would be subject to appropriate environmental review and analysis.”

## Next Steps

A 90-day public comment period ends on February 14, 2008 (72 FR 64619; November 16, 2007). The agencies have announced a schedule of public hearings in the 11 western states in January, ending with a hearing in Washington, DC, on February 5, 2008 (72 FR 64591, November 16, 2007).

For additional information on this Draft PEIS process, contact LaVerne Kyriss, NEPA Document Manager, at [laverne.kyriss@hq.doe.gov](mailto:laverne.kyriss@hq.doe.gov) or 202-586-1056 or visit the Draft PEIS website provided above. 

<sup>1</sup> Cooperating agencies are Department of Agriculture, Forest Service; Department of Defense; Department of the Interior, Fish and Wildlife Service; Coeur d'Alene Tribe; California Energy Commission; California Public Utilities Commission; the state of Wyoming, and in Wyoming, Lincoln, Sweetwater, and Uinta Counties and Lincoln, Sweetwater, and Uinta Counties Conservation Districts. Consulting agencies are Department of Commerce and the Federal Energy Regulatory Commission.

# Preparing an EA? A FONSI Is Not a Foregone Conclusion

For efficiency, when DOE expects that a proposal is likely to have significant environmental impacts, DOE initiates an EIS directly – without first preparing an EA to confirm potential significance. When DOE decides to prepare an EA, therefore, it is usually expected to support a finding of no significant impact (FONSI). This strategy is based on recognizing significance in the same manner that Supreme Court Justice Potter Stewart recognized pornography: “I know it when I see it.”<sup>1</sup>

“It ain’t necessarily so,” though. DOE recently determined that two proposed actions with EAs in progress, both involving electric transmission lines, are major Federal actions that may have significant effects on the human environment. In both cases, stakeholder concerns about land use impacts led DOE to stop the EA process and initiate preparation of an EIS.

## Western Transmission Rebuild Project

The Western Area Power Administration (Western) began preparation of an EA for a proposal to rebuild and upgrade a 12-mile transmission line, a project that would include replacing an existing 69-kilovolt (kV) single-circuit line with a 138-kV double-circuit line, and constructing a new substation.

At public meetings in 2005 and 2006 on the alternatives of rebuilding in a new right-of-way or expanding the existing right-of-way, the public expressed concerns regarding impacts to the environment, human health and safety, and property values. They asked for wildlife surveys, recreation and visual assessments, and analyses of additional alternatives.

Following the 2006 public meeting, Western undertook additional surveys and analysis (e.g., viewshed analysis using photo simulations). Based on the comments received and subsequent analysis, Western issued a notice of intent to prepare an EIS (72 FR 45040; August 10, 2007) instead of completing the EA. The Forest Service will be a cooperating agency in EIS preparation. The draft EIS is planned for Spring 2008.

For more information on DOE/EIS-0400, *Granby Pumping Plant - Windy Gap Transmission Line Rebuild Project, Grand County, Colorado*, contact Rodney Jones, NEPA Document Manager, at [rjones@wapa.gov](mailto:rjones@wapa.gov) or 970-461-7371. Additional information is also available on the project website at [www.wapa.gov/transmission/infragranby.htm](http://www.wapa.gov/transmission/infragranby.htm).

<sup>1</sup>*Jacobellis v. Ohio*, 378 U.S. 184 (1964).

<sup>2</sup> See Question 13: *Use of Scoping Before Notice of Intent to Prepare EIS in 40 Most Asked Questions on CEQ’s National Environmental Policy Act Regulations (46 FR 18026; March 23, 1981) (available on the DOE NEPA website at [www.eh.doe.gov](http://www.eh.doe.gov), under NEPA Compliance Guide, Volume 1).*

## Montana Alberta Tie, Ltd., Project

In response to an application from the Montana Alberta Tie, Ltd. (MATL), for a Presidential permit to construct a 230-kV transmission line across the U.S.-Canada border, DOE’s Office of Electricity Delivery and Energy Reliability initially considered a scoped EA to be the appropriate level of review. Because MATL had also applied to the Montana Department of Environmental Quality (MDEQ) for a construction permit for the approximately 126 miles of line in the state, DOE cooperated with the state in preparing a single document, issued in March 2007, that served as both a DOE EA and an EIS under the Montana Environmental Policy Act.

Based on comments on the March 2007 EA that expressed concerns about potential impacts on land use and farming, DOE ultimately determined that an EIS is the proper level of NEPA review and issued a notice of intent to prepare an EIS on June 7, 2007 (72 FR 31569). MDEQ subsequently determined that it should prepare a supplement to its EIS and is a joint lead agency with DOE in EIS preparation. The Department of the Interior’s Bureau of Land Management is a cooperating agency. DOE is working with MDEQ on responses to comments received on the March 2007 document, and all comments and responses will be included in the DOE Draft EIS/MDEQ Draft Supplemental EIS, expected to be issued soon.

For more information on DOE/EIS-0399, *Montana Alberta Tie, Ltd., 230-kV Transmission Line*, contact Ellen Russell, NEPA Document Manager, at [ellen.russell@hq.doe.gov](mailto:ellen.russell@hq.doe.gov) or 202-586-9624. Additional information is also available on the project website at [www.oe.energy.gov/304.htm](http://www.oe.energy.gov/304.htm), under PP-305.

## Recommendation

Preparing an EIS after starting to prepare an EA does not happen frequently, but it can be done efficiently by planning ahead. If DOE is unsure of the significance of a proposal’s environmental impacts, DOE could conduct public scoping for the EA, stating this uncertainty when DOE announces the scoping process.

In this regard, Council on Environmental Quality guidance<sup>2</sup> cautions that EA scoping “cannot substitute for the normal scoping process after an NOI, unless the earlier public notice stated clearly that this possibility was under consideration, and the NOI expressly provides that written comments on the scope of alternatives and impacts will still be considered.” DOE’s normal scoping process after a notice of intent to prepare an EIS includes at least one public meeting (10 CFR 1021.311(d)). 

# CEQ Issues Collaboration Handbook to Help Manage Controversy in NEPA Processes



Collaboration improves the odds of a successful NEPA experience, according to Horst Greczmiel, Council on Environmental Quality (CEQ) Associate Director for NEPA Oversight, but collaboration – like life – doesn’t provide guarantees. To promote the cultivation of vision, trust, and communication between a lead agency and other governmental organizations (Federal, state, local, and tribal), affected and interested stakeholders, and the public at large, CEQ has issued *Collaboration in NEPA: a Handbook for NEPA Practitioners* (October 2007). (The June 2007 issue of *LLQR* focused extensively on collaboration in the NEPA process.)

This *Handbook* was developed by a CEQ-led Interagency Work Group, one of several NEPA guidance efforts to implement the recommendations of the September 2003 *NEPA Task Force Report to the Council on Environmental Quality: Modernizing NEPA Implementation*. In a recent presentation of the new *Handbook* to the Federal Agency NEPA contacts, Mr. Greczmiel emphasized that collaboration can help agencies to more fully realize Section 101 of NEPA, which directs Federal agencies to work in collaboration with state and local governments, and the CEQ NEPA regulations (40 CFR 1506.6), which direct agencies to make diligent efforts to involve interested parties.

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**Collaboration begins with an “attitude.”**

– Horst Greczmiel  
*Meeting of NEPA Contacts, October 2007*

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Mr. Greczmiel noted that successful collaboration requires the support of senior management to commit the necessary resources, and initial work from all participants to clarify expectations, identify statutory and regulatory tensions, and define desired outcomes. CEQ will explore these topics in a December 5, 2007, workshop on NEPA and Collaboration for agencies’ NEPA and environmental conflict resolution contacts. DOE NEPA Office staff will participate.

## Why Try Collaborating?

The *Handbook* notes that when engaged in collaboration with others, a lead agency retains its decisionmaking authority and responsibility throughout the EIS or EA process. “Collaboration does not turn the NEPA process into a process where an agency’s responsibility to make sound decisions is replaced by how many votes are cast for a particular option or alternative.” Rather, collaboration furthers the lead agency’s ability to make informed and timely decisions by enabling decisionmakers

to consider any consensus that may have been reached among interested and affected parties.

The *Handbook* describes the potential benefits of collaboration, including better information from diverse expertise, better interdisciplinary integration, and more durable intangible benefits: “Collaborative processes can build trust between people who will work together on other projects, lead to the formation of partnerships, and increase public confidence in government.”

The cover of the *Collaboration in NEPA: A Handbook for Practitioners*. It features a title box with the text "Collaboration in NEPA A Handbook for Practitioners" and a list of benefits under the heading "Benefits:". The list includes: Better Information, Fairer Process, Better Integration, Conflict Prevention, Improved Fact-Finding, Increased Social Capital, Easier Implementation, Enhanced Environmental Stewardship, and Reduced Litigation.

**Collaboration in NEPA**  
**A Handbook for Practitioners**

**Benefits:**

- Better Information
- Fairer Process
- Better Integration
- Conflict Prevention
- Improved Fact-Finding
- Increased Social Capital
- Easier Implementation
- Enhanced Environmental Stewardship
- Reduced Litigation

## When Is Collaboration Likely to Work Well?

Conditions under which collaborative approaches are likely to be successful are identified in the *Handbook*. “Collaborative approaches often work best when there is sufficient decision space among alternatives – room for parties to mold the solution that meets their needs. Similarly, parties have more incentive to collaborate if the ‘best’ outcome is truly unknown.”

The *Handbook* also states that “Collaboration is often an ideal process for parties that are likely to have a continuing relationship beyond the immediate issue in which they are involved. . . . The respect and trust established in one project often carries forward to other projects, increasing their chances of success.”

Conditions less suited to collaboration also are addressed, including lead agency resistance to collaboration, lack of resources, and limited staff experience. “Parties may also have strongly conflicting views on the meaning and significance of available data and information. If they cannot agree on the underlying factual information, they are much less likely to agree on substantive issues. Collaborative processes are also less likely to be successful when a high level of distrust exists among the parties.”

(continued on next page)

# Collaboration (continued from previous page)

## How Does Collaboration Go Beyond Other Public Interactions?



The *Handbook* distinguishes collaboration from more basic levels of potential engagement in the NEPA process:

- **Informing:** the lead agency informs interested parties of its NEPA review activities.
- **Consulting:** the agency keeps interested parties informed, solicits their input, and considers their concerns and suggestions during the NEPA process.
- **Involving:** the agency works more closely with interested parties and tries to address their concerns to the extent possible given the agency's legal and policy constraints.
- **Collaborating:** the agency and the other involved parties exchange information and work together toward agreement on issues at one or more steps in the NEPA process.

## How Can the *Handbook* Help You?

The *Handbook* identifies opportunities for working collaboratively at every stage of the NEPA process, such as joint fact finding during alternatives development, impact assessment, and mitigation identification. It also describes approaches to addressing challenges, such as the additional time and resources that may be required for collaboration, conflict among the participating parties, agency suspicion of new approaches to doing its NEPA business, and constraints under the Federal Advisory Committee Act. The *Handbook* provides case studies on successful use of collaborative techniques and tips on attitudes and behaviors that foster successful collaboration. Additional useful resources include sample memoranda of understanding and extensive references on general conflict resolution, collaboration and environmental conflict resolution, and public involvement.

The *Handbook* is available on the CEQ website ([www.nepa.gov](http://www.nepa.gov)) or send a request with subject "NEPA Modernization (Collaboration-NEPA)" to [hgregczmiel@ceq.eop.gov](mailto:hgregczmiel@ceq.eop.gov) or fax to 202-456-0753. The DOE NEPA Office provided copies to the Department's NEPA Compliance Officers for distribution to their NEPA staffs and contractors. 

## Interagency Work Groups Make Progress in Developing Additional NEPA Guidance

The DOE Office of NEPA Policy and Compliance continues to participate actively in the development and review of NEPA guidance prepared by the CEQ-led Interagency Work Groups and will report on progress in future issues of *LLQR*. For more information on the efforts of the Interagency Work Groups, see the CEQ website at [www.nepa.gov](http://www.nepa.gov).

### **Draft Programmatic Analysis Guidance**

The NEPA Office recently submitted DOE's comments on draft *NEPA Programmatic Guidance*, which CEQ had distributed for Federal agency review on September 28, 2007. This guidance is intended to assist NEPA practitioners in preparing programmatic documents that address broad, strategic, programmatic-level analyses from which future analyses may be tiered, if needed.

The draft guidance addresses the scope of various types of programmatic analyses and the appropriate level of detail of a programmatic document as compared to future project-specific NEPA documents. The guidance also addresses benefits (e.g., increased overall NEPA process efficiency) and challenges (e.g., public concerns about whether environmental issues deferred to future NEPA documents will be addressed, and agency concerns about their ability to take interim actions while a programmatic review is ongoing).

In its comments, DOE stated that the guidance would be useful to NEPA practitioners and recommended clarification of certain topics and exploration of others, such as mitigation and incorporating adaptive management principles in programmatic documents.

The Interagency Work Group is now considering the comments received, and next will issue draft guidance for public review. For more information on the *NEPA Programmatic Guidance*, contact Eric Cohen at [eric.cohen@hq.doe.gov](mailto:eric.cohen@hq.doe.gov) or 202-586-7684.

### **Coming Soon: Citizen's Guide to NEPA**

CEQ plans to issue *A Citizen's Guide to the National Environmental Policy Act – Having Your Voice Heard* soon, having considered public comments on the draft *Guide* (*LLQR*, March 2007, page 9, and September 2006, page 8). The *Guide* is intended to help citizens and organizations to understand and effectively participate in an agency's environmental review process under NEPA.

# EPA Revises Its NEPA Procedures



The Environmental Protection Agency (EPA) has amended its procedures for implementing the requirements of NEPA (40 CFR Part 6). In addition to consolidating and standardizing the Agency's general NEPA procedures, the final rulemaking clarifies EPA's categorical exclusion procedures; consolidates and amends existing categorical exclusions and adds new ones; and consolidates, amends, and adds extraordinary circumstances (some of which are similar to the "integral conditions" for the DOE categorical exclusions listed in 10 CFR 1021, Subpart D, Appendix B). In addition, EPA's NEPA procedures now apply generally to EPA programs, in contrast to the previous requirements, which contained provisions applicable to specific programs. The amended rule (72 FR 53652, September 19, 2007) became effective October 19, 2007.

## Points of Interest

- **Environmental Assessment:** EPA's NEPA rule (Section 6.205(e)) describes the necessary content of an EA, including the no action alternative. (DOE NEPA regulations also require consideration of the no action alternative (10 CFR 1021.321(c)), but are less specific than EPA in stating other requirements for an EA.)
- **Administrative Record:** EPA has prepared a publicly-available administrative record that includes, among other things, specific reasons for amended or new categorical exclusions and EIS listings and extraordinary circumstances (available in the 40 CFR Part 6 rulemaking docket at [www.regulations.gov](http://www.regulations.gov), by searching under Docket ID No. "EPA-HQ-OECA-2005-0062").
- **Applicant Process:** To allow EPA to meet its NEPA responsibilities for permits and assistance agreements

(for example, wastewater treatment construction grants, National Pollutant Discharge Elimination System permits, and certain research and development projects), Subpart C of the EPA rule requires an applicant to provide an environmental information document that provides sufficient information for EPA to use in preparing an EA or an EIS. EPA also analyzed the costs to applicants and the Federal government of the NEPA process for applicant actions (also available in the rulemaking docket).

## EPA's Special NEPA Status

The rulemaking preamble discusses EPA's unique NEPA status among Federal agencies:

- Statutes exempt EPA from applying NEPA procedures to all actions under the Clean Air Act and certain actions under the Clean Water Act.
- Courts have exempted EPA from following NEPA procedures for certain actions under five environmental statutes. The courts reasoned that EPA actions under these statutes are "functionally equivalent" to the analysis required under NEPA because they are undertaken with full consideration of environmental impacts and opportunities for public review.
- Nonetheless, EPA's established policy has been to voluntarily prepare EISs for certain exempt regulatory actions (63 FR 58045, October 29, 1998; *LLQR*, December 1998, page 11). The new EPA NEPA rule does not change that policy, and can "serve as a framework for the preparation of voluntary NEPA documents." 

## Want to Learn About Environmental Protection? Ask EPA!

"Environmental responsibility is everyone's responsibility," said EPA Administrator Stephen L. Johnson on November 1, 2007, when he kicked off the first session of EPA's initiative to disseminate information to the public – *Ask EPA*. In this weekly online forum, patterned after *Ask the White House* ([www.whitehouse.gov/ask](http://www.whitehouse.gov/ask)), interested individuals have the opportunity to ask the agency's senior officials questions on a range of environmental and human health issues. The live chat sessions last approximately one hour and focus on an announced topic – for example: Change A Light Campaign and America Recycles Day. Questions can be submitted up to two days in advance, as well as during the live discussion. To submit questions, request email alerts on upcoming hosts and topics, and view transcripts of previous sessions, visit the *Ask EPA* website at [www.epa.gov/askEPA](http://www.epa.gov/askEPA). 

### NEPA Questions for DOE? askNEPA!

The Office of NEPA Policy and Compliance receives many inquiries about the Department's NEPA program through [askNEPA@hq.doe.gov](mailto:askNEPA@hq.doe.gov). This mailbox was established 4 years ago to facilitate videoconference participation in a DOE NEPA Community Meeting. It continues to serve as a channel for incoming general NEPA questions, requests for copies of guidance (including *LLQR*), and other requests for which the sender does not know whom to contact. All messages sent to this mailbox are acknowledged as they are received, and then are forwarded to NEPA Office staff for prompt response.



# Power of an EIS Style Guide: It's More than Commas and Fonts

Too often the style and format of an EIS seem to be handled as afterthoughts – cosmetic improvements to be made by an editor after the substance of the text has been written. This approach is inefficient and risky. Effective communication of complex technical information is difficult to achieve when a document is not well-prepared from the beginning.

In contrast, establishing a style guide early in document preparation and applying it continuously as text is developed is a better way to prepare a document that is reader-friendly and conveys information accurately. This is the approach of the DOE and contractor teams preparing the Repository Supplemental EIS and the Nevada Rail Corridor Supplemental EIS/Rail Alignment EIS, two related NEPA reviews for a geologic repository at Yucca Mountain. (See article on page 8.)

Under the direction of a DOE NEPA Document Manager, the document preparation contractors for each Yucca Mountain EIS prepared an EIS-specific guide. The stated purpose of the *Format and Style Guide* for the Rail EIS (discussed in the examples that follow) is to “establish uniform document-preparation standards” to ensure a final product that is consistent in writing style and appearance (e.g., format and presentation, including tables and figures). Each *Guide* applies only to its particular EIS, not to other documents prepared to support the EIS, and is considered a “living document” that may evolve during EIS preparation.

## Reader-Friendly, Not Writer-Friendly

The Yucca Rail EIS *Format and Style Guide*, as its name suggests, specifies format for EIS text, multiple levels of headings, tables, and figures (for example, font name, size, and alignment), word processing and editing (for example, for capitalization and punctuation), and standard features (such as maps, headers and footers). But it does much more in addressing writing style and referencing.

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*The contents of the NEPA analyses should flow in an orderly manner from generalities to specifics, from familiar to new, and from premises through logical manipulations to conclusions.*

– Yucca Rail EIS Format and Style Guide

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Effective scientific or technical writing for an EIS is simple and direct, states the *Guide*. “Unnecessarily long words and complex inverted sentences work against clarity.” The readability goal for the NEPA analysis in the *Guide* is that it be understandable by an informed high-school graduate, and it describes approaches to acronyms and abbreviations; conciseness, consistency, and continuity; and word usage, symbols, and units of measurement.

The *Guide* emphasizes the importance of documenting sources used in the EIS and establishes procedures for consistent referencing. Whenever a reference is used, a copy is added to a Document Input Reference System, which includes a database of citations and identifies the information sources that become the administrative record for the EIS. “References provide traceability and defensibility of information and must be provided for all statements of fact.” If traceability and defensibility are not needed, there is no need for citing a reference, according to the *Guide*.”

Generally only documents with established status may be cited, advises the *Guide*, stating that draft documents cannot be used as references unless the cited draft document will be completed and approved before the EIS is published. The *Guide* also provides instructions for documenting nonprint sources of information, such as websites and telephone conversations, and obtaining permission to use copyrighted information. 

## Sage Advice on Writing an EIS

The “write first, edit later” mode can be problematic. In interpreting and rewording technical exposition, for example, an editor risks unintentional changes to meaning. Guidelines for writing clear, comprehensible, well-documented text can help. Consider these examples from the Yucca Rail EIS *Format and Style Guide*:

- ✓ Be concise – say as much as possible with as little as possible.
- ✓ Repetition is safer than changing the nomenclature, which can leave the reader wondering if the subject changed.
- ✓ A table should stand alone: that is, the title and body of a table should present enough information to enable understanding without referring to the text.
- ✓ A NEPA analysis is not a technical or scientific document in the usual sense. Rather, it is an explanation of technical or scientific topics meant for an audience that probably does not have a technical background.

# Transitions

## Retirement Will Rock for Carlsbad NCO Harold Johnson

After a 30-year NEPA career in the Federal government, Harold Johnson is retiring in early January from the Carlsbad Field Office, where he has served as the NEPA Compliance Officer (NCO) since 1995. He started his public service in 1977 as an attorney in the NEPA unit of the Interstate Commerce Commission and transferred to DOE in 1991.

Harold initially worked at Headquarters in the Department's Office of NEPA Policy and Compliance. He reviewed the Lawrence Livermore National Laboratory Site-wide EIS and several NEPA documents for the Hanford Site. A notable achievement was reviewing the EIS for the construction of five new high-level radioactive waste tanks at Hanford (*LLQR*, March 1996, page 1), which resulted in a decision to construct a new cross-site waste transfer line instead of any new tanks. Harold was engaged in preliminary discussions about the scope of the Waste Isolation Pilot Plant EIS in spring of 1995, when he moved to the Carlsbad Field Office and became the NEPA Document Manager for that EIS as well as the NCO.

To assist his successor (yet to be named) as Carlsbad NCO, Harold has assembled a NEPA training briefing that includes recommendations (next page) based on his years of experience in a small Field Office whose activities are important to many Programs and other Field Offices.



*Harold Johnson (front) with fellow NCOs at the NEPA 35 Conference.*

In retirement, Harold will return to his roots in Macon, Georgia, where he grew up, attended college, and earned his law degree. He plans to spend time on his favorite hobby – faceting and polishing rocks. His rock collection has grown considerably during his time in New Mexico, which will make his cross-country move challenging. Until January 3, 2008, Harold can be reached at [harold.johnson@wipp.ws](mailto:harold.johnson@wipp.ws) or 505-234-7349. After that date, friends may keep in touch with him at [bubbaji.harold@gmail.com](mailto:bubbaji.harold@gmail.com).

*In the DOE NEPA Office, Jeanie Loving, who has worked closely with Harold on Waste Isolation Pilot Plant issues, says, "Working with Harold for nearly a decade*

*has been a real joy, and I regret he has resisted my many attempts to talk him out of retiring! Beneath his easy-going manner is a bona fide NEPA expert and a highly competent professional. He has always made a very positive difference in any endeavor, with common sense and wit."*

*Carol Borgstrom, NEPA Office Director, adds, "Harold Johnson is one of those people who cannot be replaced, and I'm sure all of us who have had the good fortune to work with him will miss him a great deal." On behalf of the DOE NEPA Community, the NEPA Office wishes Harold success and fulfillment in his all his future endeavors.*

## New NEPA Compliance Officer

### Pantex Site Office: Jim Barrows

Jim Barrows has been designated as NCO for the National Nuclear Security Administration (NNSA), Pantex Site Office, where he has served as a Physical Scientist since June 2004. (Jeff Robbins is no longer the Acting NCO for Pantex Site Office, but continues to serve as NCO for the NNSA Service Center in Albuquerque.) Before joining the Pantex Site Office, Mr. Barrows spent 14 years as an Environmental Specialist with the Army Corps of Engineers in the Galveston District, where his responsibilities included oversight of natural resources management at the Addicks and Barker Reservoirs for flood control west of Houston, and acting as an Environmental Lead for NEPA documents for civil works projects involving navigation and flood control. Prior to working for the Corps, Mr. Barrows was employed by the U.S. Fish and Wildlife Service at Buffalo Lake National Wildlife Refuge in the Texas Panhandle. He can be reached at [jbarrows@pantex.doe.gov](mailto:jbarrows@pantex.doe.gov) or 806-477-7467. 

## *The Intangibles in the NEPA Process: Harold Johnson's Advice to a New NCO*



### **Acquire Pertinent Knowledge and Resources**

- Experience and knowledge are a must for project management and quality assurance. If you don't have it, get someone on your team who does.
- Know the basics of the analytical methods used in your NEPA reviews.
  - Helpful in managing and reviewing NEPA documents, e.g., spotting places where the approach is not what you expected.
  - Essential to explaining the results to nontechnical reviewers and answering questions about results.

### **Manage Contractor Support**

- Write a good detailed statement of work. This is essential. The contractor must know what is expected.
- Select a contractor based on several criteria – cost estimate, history of completing tasks within original cost and time estimate, approach to analysis and quality assurance, and key staff.
- Be able to answer contractor questions about what analytical approach to use and provide guidance on DOE policy issues that often arise in the NEPA process.
- Be trained as a Contracting Officer's Representative if at all possible.

### **Cultivate Strong Relationships**

- Attend periodic NEPA meetings. This is a good way to meet and cultivate strong working relationships with your document's reviewers and approvers and other NCOs and document managers.
- Strengthen your ability to communicate clearly. This is an asset that will save you time in the NEPA approval process.

### **Know the Big Picture – How Would Your Actions Affect Other Sites?**

- To help avoid headaches, communicate with others who will be affected by what you are doing – such as NCOs at other involved sites, NEPA document managers of documents being prepared concurrently, and Headquarters reviewers.
- Seek good sources of information about what is happening elsewhere – ask Headquarters personnel and read relevant newsletters.

### **Understand the Politics**

- Be able to explain your local politics to other sites and Headquarters, especially when they affect timing of another site's action or decision.
- Expect the unexpected due to politics (timing is often driven by political considerations – delays are common around elections and other important political events).

### **Cooperate to Obtain Headquarters Approval**

- To save everyone time, get agreement on an approach before implementing it, rather than arguing afterwards. Don't hesitate to call and ask for advice or discuss proposed strategy.
- Be cooperative over minor differences in opinion or wording. Save your arguments for important issues and times when reviewers want to make changes that are factually incorrect.
- Be open and honest. Build your trust factor to help speed the approval process.

# Reconsidering “Conservation Reconsidered” on the 40<sup>th</sup> Anniversary of John Krutilla’s Landmark Article

By: Yardena Mansoor, *Office of NEPA Policy and Compliance*

When I was an undergraduate economics major in the early 1970s, so many assigned readings introduced me to new ideas that I did not recognize which ones were so innovative as to be revolutionary. One such article was “Conservation Reconsidered” by John V. Krutilla (1922–2003), a 10-page paper in *American Economic Review* (September 1967). In contrast to accepted views of the time, Krutilla argued that pristine bodies of water, forests, and other natural resources have **economic** value, even when left wild and undisturbed. This insight became central to the discipline of resource economics and the current practice of impact analysis and public policy regarding environmental protection.

In October 2007, 40 years after this paper was published, Resources for the Future, an independent research organization in Washington, DC, hosted a seminar to explore the paper’s impact on current environmental policymaking. From 1955 to 1988, Dr. Krutilla had been a central figure at Resources for the Future, where he made public service contributions as an advisor to domestic and international organizations, including the National Academy of Sciences, Forest Service, Environmental Protection Agency, and Department of the Interior, as well as United Nations commissions and environmental organizations. The seminar speakers – all mentored or inspired by Dr. Krutilla – included university professors, governmental environmental managers, and senior researchers in nongovernmental organizations. (Krutilla’s 1967 article, audio-video of the seminar presentations, and slides are all available at [www.rff.org/rff/Events/ConservationReconsideredFirstWednesdaySeminar.cfm](http://www.rff.org/rff/Events/ConservationReconsideredFirstWednesdaySeminar.cfm).)

Although none of the speakers mentioned NEPA directly, Krutilla’s article addresses an important concern of the legislation enacted two years later: “On what basis,” he asked, “can we make decisions when we confront a choice entailing an action which will have an **irreversible adverse consequence** for rare phenomena of nature?” (p. 778, emphasis added). Below are quotations from Krutilla’s article juxtapositioned to what the various speakers said about it and my reflections.

*[The] central issue seems to be the problem of providing for the present and future the amenities associated with unspoiled natural environments, for which the market fails to make adequate provision. . . .*  
(p. 778)

Traditional economic theory relates market prices to the value of exhaustible resources (oil and minerals) and renewable resources (forests) used as inputs to the production of goods and services. In the 1960s, when cost-benefit analysis was a popular – and sometimes required – approach to justifying governmental decisions, valuing undeveloped unique, irreplaceable resources posed a major challenge. The Council on Environmental Quality (CEQ) regulations, for example, require an explicit acknowledgement in an EIS’s impacts analysis of “any irreversible or irretrievable commitments of resources . . .” (40 CFR 1502.16). Further, the CEQ regulations make clear (Section 1502.23, Cost-benefit analysis) that unquantified environmental impacts, values, and amenities need not be quantified for a cost-benefit analysis and should not be when there are important qualitative considerations.

*When the existence of a grand scenic wonder of a unique and fragile ecosystem is involved, its preservation and continued availability are a significant part of the real income of many individuals . . . .*  
(p. 779)

How, then, did Krutilla’s “Conservation Reconsidered” revolutionize the dialogue about certain types of environmental decisions? First, it expressed that consumers may prefer goods and services that are not represented by market choices. Many people may prefer the recreational and aesthetic amenities of natural environments, for example, but do not have a way of compensating landowners to preserve those environments. Second, it challenged the assumption that “consumption,” the goal of economic activity, necessarily involves “using something up.” Recreational and habitat values may be “consumed” without decreasing the amount remaining for future consumption.

*(continued on next page)*

## Reconsidering (continued from previous page)

*There are many persons who obtain satisfaction from mere knowledge that part of wilderness North America remains even though they would be appalled by the prospect of being exposed to it. . . . (p. 781)*

Krutilla's insight therefore changed the language of project evaluation; a resource once called "undeveloped" was now "preserved," shifting focus from unrealized potential to the positive value of its current condition. People consider it important to preserve historically significant artifacts ("Old Ironsides") and works of artistic and architectural genius, and many will contribute to such efforts even if they have no expectation of seeing these works. Similarly, he claimed, many people value the option of enjoying wilderness even if they have no specific plans to do so. Apart from organizations like The Nature Conservancy, which allows contributions to be allocated to purchasing relatively small tracts of land to ensure their preservation, there is no systematic market for conservation of large areas.

*We are coming to realize that consumption-saving behavior is motivated by a desire to leave one's heirs an estate as well as by the utility to be obtained from consumption . . . . (p. 784)*

"Conservation Reconsidered" also addresses the implications of technological progress and the decisions between consumption by current and future generations, and links these concepts to irreversibility and uncertainty. If society learns something of value regarding environmental resources but takes action that prevents attaining the benefits of those resources, then a step with potentially significant adverse irreversible consequences has been taken. Because scientific knowledge and its supporting technologies are likely to continue to grow over time, leaving future generations as well off as current generations means preserving the option of future generations benefiting from the amenities and resources of the natural environment.

*A policy of [preserving rare environments] would be consistent both with maintaining the greatest biological diversity for scientific research and educational purposes and with providing the widest choice for consumers of outdoor recreation. (p. 786)*

Dr. Krutilla was a leading proponent of managing public resources for multiple uses, for example national forest management for both timber and recreation. For the remaining rare or unique natural environments, which he estimated at a small fraction of one percent of the total relevant area, his article argues that the cost of preservation (i.e., foregone production) is likely not high enough to affect supply or costs to the manufacturing or agricultural sectors. Further, provision should be made for supporting esoteric tastes (wilderness camping) and not just popular ones (touring parks by car or snowmobile).

I was inspired by the Resources for the Future seminar honoring the anniversary of this pathbreaking work. It reminded me that although my colleagues in the DOE NEPA Office are largely scientists and engineers by training, economics also contributes to the dialogue about comparing alternatives. More significantly it emphasized that just as environmental *studies* are inherently interdisciplinary (as NEPA acknowledges), effective environmental *policymaking* also requires an interdisciplinary approach – one that incorporates the contributions of physical and social science, institutional behavior, and politics. 



# Litigation Updates

## DOE Prevails in Two NEPA Cases

### Coalition on West Valley Nuclear Wastes et al. v. DOE

The U.S. District Court for the Western District of New York granted DOE's motion for summary judgment, finding that DOE did not violate NEPA or a stipulation that settled a 1987 NEPA lawsuit regarding the West Valley Demonstration Project (WVDP) near Buffalo, New York. WVDP is located at a site that was operated as a commercial nuclear fuel reprocessing plant from 1966 to 1972. DOE and the State of New York, as joint lead agencies, had issued a draft EIS in 1996 for the management, decommissioning, and long-term stewardship of radioactive wastes at WVDP, but because they did not agree on the closure and long-term management of the site, no preferred alternative was identified and a final EIS was not issued.

Based on public comments on the draft EIS and discussions with a citizen's task force, the State, and the Nuclear Regulatory Commission, DOE decided to conduct the NEPA process for the remaining actions in two separate EISs:

- WVDP Waste Management EIS (DOE/EIS-0337, December 2003) and Record of Decision (ROD; 70 FR 35073; June 16, 2005), addressing facility decontamination and waste management.
- Decommissioning and/or Long-Term Stewardship at the WVDP and the Western New York Nuclear Service Center EIS (DOE/EIS-0226-R) (Notice of Intent, 68 FR 12044; March 13, 2003), currently being prepared under the joint lead of DOE and State of New York.

According to the 2001 Notice of Intent, this approach was developed "to facilitate decisions in a more tractable and timely fashion." In their complaint filed in August 2005, the plaintiffs alleged that DOE had improperly segmented the proposed action by not addressing these matters in a single EIS, and that the WVDP Waste Management EIS does not support its ROD's reference to the possible use of a waste-incident-to-reprocessing evaluation to determine that certain wastes at West Valley can be managed as low-level or mixed low-level radioactive waste.

#### Segmentation Claim

The plaintiffs' primary claim was that DOE had improperly segmented the environmental impact review of the WVDP actions by "rescoping" the EIS into the

waste management phase and the decommissioning/long-term stewardship phase. Quoting the opinion in *Town of Huntington v. Marsh*, 859 F.2d 1134, 1142 (2d Cir. 1988), they claimed that "segmentation is to be avoided in order to insure that interrelated projects, the overall effect of which is environmentally significant, not be fractionalized into smaller less significant actions."

The court evaluated this claim by referring to the Council on Environmental Quality NEPA Implementing Regulations [40 CFR 1508.25(a)]: "Connected actions . . . are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:

- (i) Automatically trigger other actions which may require environmental impact statements.
- (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.
- (iii) Are interdependent parts of a larger action and depend on the larger action for their justification."

In considering this claim, the court found that:

- (i) Short-term management and offsite disposal of waste from WVDP do not automatically trigger closure of the site.
- (ii) The Waste Management EIS and ROD cover activities for a 10-year period, while the decommissioning and closure issues involve actions that could last "for many decades"; the waste management phase is of sufficient length to address environmental matters of a broad scope; and its timing and geography are distinct from the timing and geography of the decommissioning/closure phase.
- (iii) The offsite disposal of low-level radioactive waste has utility independent of any later closure activities, as it will result in reduced radiological risk to workers and the public, and would need to be accomplished regardless of decisions on decommissioning and long-term management. The court also found that the waste management actions would not prejudice the range of alternatives to be considered in the Decommissioning and/or Long-Term Stewardship EIS.

The court, therefore, rejected the claim that DOE had violated NEPA.

(continued on next page)



## Breach of the 1987 Stipulation

The plaintiffs also claimed that DOE's revised strategy for environmental review of waste disposal, decontamination, and decommissioning breached the 1987 stipulation, under which DOE agreed to begin the closure [EIS] process no later than 1988 and continue the process without delay. Because the plaintiffs had not shown that "DOE's two-EIS approach was devised as a means of evading environmental impact review . . . or was otherwise undertaken arbitrarily or capriciously," the court found that it had "no basis to find that DOE's revised strategy has resulted in a breach of the contractual obligation to continue the NEPA process 'without undue delay and in an orderly fashion consistent with applicable law.'"

## Waste Incidental to Reprocessing

The WVDP Waste Management ROD states that the decision to ship low-level and mixed low-level radioactive wastes offsite includes wastes that DOE may determine in the future to be such wastes pursuant to a "waste incidental to reprocessing by evaluation process." The plaintiffs claimed that DOE lacks authority to reclassify waste as "incidental to reprocessing," but the court found this claim to be virtually identical to the claim rejected as "unripe" by the Ninth Circuit in *Natural Resources Defense Council v. DOE (LLQR, December 2004, page 16)*. [Case No.: 05-CV-0614-C]

*The plaintiffs have filed a notice of appeal.*

## Keep Yellowstone Nuclear Free et al. v. DOE

The U.S. District Court for the District of Idaho found for DOE in a lawsuit concerning the Advanced Test Reactor at Idaho National Laboratory. The plaintiffs had sued to enjoin operation of the Reactor because, they claimed, DOE failed to conduct NEPA review before deciding in 2004 to implement the "Life Extension Program" to gather information and improve critical safety components. The court found that while DOE originally expected the Reactor to continue operating as late as 2050, various evaluations raised the likelihood of a premature shutdown. The Life Extension Program was designed to avoid that premature shutdown and extend the life of the Reactor out to its originally-expected shutdown around 2040 to 2050. The plaintiffs argued that this action required analysis under NEPA.

NEPA requires a Federal agency to prepare an EIS for any major Federal action "significantly affecting the quality of the human environment." The Advanced Test Reactor was built before NEPA was enacted, so no EIS was required to be done at the time of its original construction. For such facilities, the courts have found that the agency need

not prepare an EIS to evaluate the environmental effects of mere continued operation of the facility. "However, if an ongoing project undergoes changes which themselves amount to 'major Federal actions,' the operating agency must prepare an EIS" (*Upper Snake River Chapter of Trout Unlimited v. Hodel, 921 F.2d 232, 234 (9th Cir. 1990)*). Under this principle, an EIS may be required where a revision or expansion of the original facilities is contemplated. An EIS may also be required if the original life-span of the project is extended.

The court found that DOE's Life Extension Program neither expands the current operation nor extends the originally-expected life span of the Reactor and observed that the plaintiffs had cited no cases holding that NEPA is triggered by repairs and upgrades needed to attain the full life expectancy of a facility, especially in the absence of evidence that the upgrades themselves affect the environment. The court granted DOE's motion for summary judgment. [Case No. CV-07-36-E-BLW]

*The plaintiffs have filed with the district court a motion to alter the court's judgment.*



## Other Agency NEPA Litigation

### Court Orders Fuel Economy EIS to Address Greenhouse Gases

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*The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct. Any given rule setting a CAFE standard might have an ‘individually minor’ effect on the environment, but these rules are ‘collectively significant actions taking place over a period of time.’*

– U.S. Court of Appeals for the Ninth Circuit

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The National Highway Traffic Safety Administration (NHTSA) is to promulgate revised corporate average fuel economy (CAFE) standards for light trucks and prepare an EIS on the potential environmental impacts of the proposed standards, under a November 15, 2007, opinion by the U.S. Court of Appeals for the Ninth Circuit. The decision arose from lawsuits by 11 states, the District of Columbia, the City of New York, Center for Biological Diversity, and three other public interest organizations (collectively petitioners) challenging NHTSA’s 2006 final rule for “Average Fuel Economy Standards for Light Trucks, Model Years 2008–2011” (71 FR 17566; April 6, 2006).

The court found the 2006 rule arbitrary and capricious and contrary to the Energy Policy and Conservation Act of 1975 (the law providing NHTSA authority to set CAFE standards) and an EA prepared during the rulemaking to be inadequate. This article summarizes the NEPA issues addressed in the court’s opinion. For details regarding the findings related to the Energy Policy and Conservation Act of 1975 see the full opinion, which is available on the court’s website [*Center for Biological Diversity et al. v. NHTSA*; Case No. 06-71891].

#### EA Is Inadequate

The court found that NHTSA’s EA for the 2006 rule failed to adequately evaluate cumulative impacts of greenhouse gas emissions. The standards for model years 2008–2011 only had the potential to decrease the growth rate of carbon emissions, not result in an actual decrease in total carbon emissions from light trucks, the court wrote. The EA quantifies expected carbon dioxide (CO<sub>2</sub>) emissions from light trucks, but the court concluded, the EA “does not evaluate the ‘incremental impact’ that these emissions will have on climate change or on the environment more generally in light of other past, present, and reasonably foreseeable actions such as other light truck and passenger automobile CAFE standards. The EA does not discuss the *actual* environmental effects resulting from those emissions or place those emissions in context of other CAFE rulemakings.”

The court also found that the EA did not evaluate a sufficient range of reasonable alternatives. The opinion stated that “NHTSA considered a very narrow range of alternatives,” all of which were derived from a cost-benefit analysis that the court found flawed for assigning zero value to the benefit of CO<sub>2</sub> emission reduction, among other reasons. NHTSA contended that its range of alternatives was appropriate because alternatives involving more stringent standards “would not satisfy the statutory requirement to establish standards . . . that are both technologically feasible and economically practicable.” The court determined, however, that it is within NHTSA’s discretion to “set higher standards if an EIS contained evidence that so warranted.” The court also determined that public comments on the draft EA had suggested specific alternatives to achieve higher CAFE standards.

#### EIS Is Required

The court considered evidence that CO<sub>2</sub> emissions *may have* a significant impact on the environment, including reports from the Intergovernmental Panel on Climate Change. (See page 5.) “Petitioners presented evidence that continued increase in greenhouse gas emissions may change the climate in a sudden and non-linear way. Without some analysis, it would be ‘impossible for NHTSA to know . . . whether a change in [greenhouse gas] emissions of 0.2% or 1% or 5% or 10% . . . will be a significant step toward averting the ‘tipping point’ and irreversible adverse climate change.”

“Petitioners have raised a substantial question as to whether the CAFE standards for light trucks . . . *may* cause significant degradation of some human environmental factor, particularly in light of the compelling scientific evidence concerning ‘positive feedback mechanisms’ in the atmosphere,” the court wrote. “NHTSA’s conclusion that a small reduction (0.2% compared to baseline) in the growth of carbon emissions would not have a significant impact on the environment was unaccompanied by any analysis or supporting data, either in the Final Rule or the EA. . . . NHTSA has not explained *why* its rule will not have a significant effect,” the court concluded. 

# BLM Discontinues Alaska EIS in Response to Public Concerns

Partly in response to the high level of public concern expressed during scoping, the Bureau of Land Management (BLM), Alaska State Office, has ended its EIS and related planning efforts for oil and gas leasing in the South portion of the National Petroleum Reserve–Alaska. “The BLM places great emphasis on public participation during land use planning and has listened carefully to the concerns of the people of Alaska’s North Slope,” stated Acting State Director Sharon K. Wilson in BLM’s notice announcing the discontinuation of planning activities (72 FR 52907; September 17, 2007).

The planning effort for approximately 9.2 million acres within the Reserve was initiated with a notice of intent to prepare an EIS, June 2005, and a scoping report in November 2005. Further development of a plan and EIS was then suspended to allow the North Slope Borough, a cooperating agency, to develop a “community-based” management alternative. The Borough conducted public meetings and submitted its report to the BLM in January 2007.

In its September 2007 *Federal Register* notice, BLM stated that the Borough’s report and BLM’s scoping efforts identified high levels of concern on the part of North Slope residents regarding the potential impacts of oil and gas activity on subsistence resources, especially the Western Arctic Caribou Herd, whose primary calving area is within the South planning area.

BLM also stated in the notice that its decision to discontinue its planning activities and EIS was also based on the limited resources and impracticality of energy development. BLM’s resource assessments indicate that oil reserves are limited in the South planning area and comprise approximately 2.1 percent of the undiscovered oil of the Reserve. Although the South area contains an estimated 27 percent of the Reserve’s undiscovered gas reserves, there is no transportation system to move the gas to market.

Further information may be obtained from Bob Schneider, BLM Alaska State Office, at 907-474-2216. 



*Public involvement in the NEPA process identified impacts to the caribou, a subsistence resource, as a significant environmental concern. (Photo: Forest Service)*

## Loan Guarantee Rule Issued for Innovative Clean Energy Projects

In support of the President’s Advanced Energy Initiative, DOE has issued final regulations for the loan guarantee program authorized by Title XVII of the Energy Policy Act of 2005 to support investment in clean energy projects that use innovative technologies. The regulations (10 CFR Part 609; 72 FR 60116; October 23, 2007) establish procedures for loan guarantees for projects that “avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies . . . .”

Under the regulations, environmental impact information is needed for both a pre-application and an application. In a pre-application, the applicant must include “an outline of the potential environmental impacts of the project and how these impacts will be mitigated.” An application must provide more detailed environmental information, including a “report containing an analysis of the potential environmental impacts of the project that will enable

DOE to assess whether the project will comply with all applicable environmental requirements, and that will enable DOE to undertake and complete any necessary reviews” under NEPA.

Also in October 2007, DOE invited 16 of the project sponsors who had submitted pre-applications in the fall of 2006, under DOE guidelines then in effect for the program, to submit full applications for loan guarantees. These projects include advanced technologies involving the uses of biomass, fossil energy, solar, industrial energy efficiency, electricity delivery and energy reliability, hydrogen, and alternative fuel vehicles.

The Department is preparing guidelines to aid applicants in submitting environmental information needed for DOE’s NEPA reviews. For more information, see the resources posted at [www.lgprogram.energy.gov](http://www.lgprogram.energy.gov). 

# Training Opportunities

NEPA-related courses are listed in the Lessons Learned Quarterly Report for information only, without endorsement. Cost and schedule information are subject to change; check with the course provider.

- Environmental Protection Agency  
Office of Federal Activities  
202-564-7164  
totten.arthur@epa.gov  
www.netionline.com  
**NEPA and Adaptive Management (FED 110)**  
Washington, DC: December 11-13  
No Fee
- American Law Institute - American Bar Association  
800-CLE-NEWS  
www.ali-aba.org  
**Environmental Impact Assessment (NEPA)**  
Washington, DC: December 12-14  
(Live and Webcast)  
Fee: \$1,095 (\$695 for full-time federal, state, and local government employees)  
**Environmental Law**  
Bethesda, MD: February 6-8  
(Live and Webcast)  
Fee: \$1,095 (\$100 on-line registration discount available)
- Colleague Consulting  
301-277-0255 (ext. 103)  
cmelekian@colleagueconsulting.com  
www.colleagueconsulting.com  
**Environmental Laws and Regulations, and NEPA**  
Amarillo, TX: February 4-6
- Continuing Legal Education (CLE)  
800-873-7130  
www.cle.com  
**NEPA**  
Denver, CO: December 13-14  
Fee: \$695 (GSA contract: \$595)  
Multiple registration discount available  
**NEPA SuperConference**  
San Francisco, CA: March 6-7  
Fee: \$795 (GSA contract: \$695)  
Multiple registration discount available  
Los Angeles, CA: March 17-18  
Fee: \$795 (GSA contract: \$695)  
Multiple registration discount available
- International Institute for Indigenous Resource Management  
303-733-0481  
www.iiirm.org  
**Workshop on Participating in the National Environmental Policy Act (NEPA) Process: From Scoping to the Record of Decision**  
Santa Ana Pueblo, NM: January 10-11  
Fee: \$450 (until 12/15/07)
- Natural Resources and Environmental Policy Program, Utah State University  
435-797-0922  
judy.kurtzman@usu.edu  
www.cnr.usu.edu/policy  
**NEPA Certificate Program**  
Conducted through Utah State University. Requires successful completion of four core and three elective courses offered by The Shipley Group (next page). Also requires completion of course exams and a final project.  
Fee: \$4,955 (includes tuition, course fees, and all materials)
- Nicholas School of the Environment and Earth Sciences, Duke University  
919-613-8082  
del@nicholas.duke.edu  
www.env.duke.edu/del/continuinged/courses.html  
**Socioeconomic Impact Analysis Under NEPA**  
Durham, NC: March 12-14  
Fee: \$750  
**The Law of NEPA**  
Durham, NC: April 30-May 2  
Fee: \$750  
**Certificate in the National Environmental Policy Act**  
Requires successful completion of one core and three elective Duke University NEPA short courses. Co-sponsored by the Council on Environmental Quality.  
Fee: Included in registration for constituent courses.

(continued on next page)

# Training Opportunities

(continued from previous page)

- SWCA Environmental Consultants  
800-828-7991  
training@swca.com  
[www.swca.com/jsps/training](http://www.swca.com/jsps/training)

## **Advanced Topics in NEPA: Project Management**

Phoenix, AZ: February 6-8  
Fee: \$695

## **Issues in Section 106: An Advanced Seminar**

Sacramento, CA: February 12-13  
Fee: \$695

## **Section 106 Compliance: An Introduction to Professional Practice Under Section 106 of the National Historic Preservation Act**

Phoenix, AZ: March 25-27  
Fee: \$795

- Tetra Tech, Inc.  
877-468-3872  
[www.tetrattechNEPA.com](http://www.tetrattechNEPA.com)

## **NEPA Boot Camp for Engineers**

Scottsdale, AZ: February 21-22  
Fee: \$1,295 (\$1,085 for American Society of Civil Engineers members)

- The Shipley Group  
888-270-2157  
shipley@shipleygroup.com  
[www.shipleygroup.com](http://www.shipleygroup.com)

## **Adaptive Management**

Salt Lake City/Park City, UT: December 10-11  
Fee: \$685 (GSA contract: \$595)

## **Clear Writing for NEPA Specialists**

Salt Lake City, UT: February 6-8  
Fee: \$845 (GSA contract: \$755)  
until 12/19/07

Phoenix, AZ: February 27-29

Fee: \$845 (GSA contract: \$755) until 1/9/08

## **Cultural and Natural Resource Management/Endangered Species Act Overview**

Beale AFB, CA: January 17-18  
Fee: \$685 (GSA contract: \$595)

## **How to Manage the NEPA Process and Write Effective NEPA Documents**

Los Angeles, CA: January 29–February 1  
Fee: \$1,045 (GSA contract: \$955)  
until 12/12/07

## **How to Manage the NEPA Process – Emphasis on Native American Issues**

Albuquerque, NM: February 11-13  
Fee: \$845 (GSA contract: \$755)  
until 12/19/07

## **NEPA Climate Change Analysis**

San Francisco, CA: February 28-29  
Fee: \$645 (GSA contract: \$555)  
until 12/19/07

## **NEPA Cumulative Effects Analysis and Documentation**

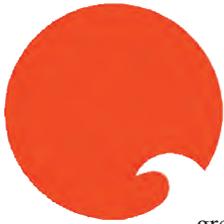
San Francisco, CA: February 26-27  
Fee: \$645 (GSA contract: \$555)  
until 12/19/07

## **Writing for Technical Specialists**

Salt Lake City/Park City, UT: December 12-14  
Fee: \$885 (GSA contract: \$795)

## Mark Your Calendars: Upcoming Conferences

### NAEP Conference to Highlight Climate Change



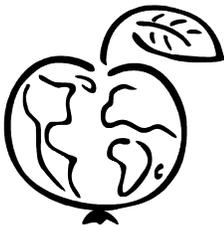
The National Association of Environmental Professionals (NAEP) will hold its 2008 annual conference jointly with the California Association of Environmental Professionals on March 25–28 in San Diego. This year's theme of "Changing Climates" reflects the growing awareness within the environmental professions of the potential for significant disruptions and impacts.

Due to the joint sponsorship of these two large environmental organizations, the scope will be greatly expanded from past NAEP conferences. Participants interested in NEPA, for example, may choose from two concurrent presentations for most sessions, including topics on NEPA and climate change, NEPA review for large-scale energy projects, case law and legislative updates, and improving document quality. Representatives from the Council on Environmental Quality (CEQ) will provide their annual NEPA update, and CEQ's Associate Director for NEPA Oversight will present a "Hot Topic" Luncheon on the "Underappreciated Provisions of the CEQ NEPA Regulations." The preliminary program brochure and registration form will soon be posted on the NAEP website at [www.naep.org](http://www.naep.org) under Annual Conferences.

### State of Environmental Justice in America 2008; Abstracts Due December 15



The U.S. Department of Energy is joining the National Small Town Alliance and the U.S. Department of Agriculture to sponsor the second annual conference on the State of Environmental Justice in America, to be held in Washington, DC, March 26–29, 2008. (See *LLQR*, June 2007, page 7, for more information on the first annual meeting.)



Abstracts for panel or individual presentations related to the current state of environmental justice are due by December 15, 2007. Topics include integration of environmental justice into Federal, State, and local agencies' policies and programs; community participation in environmental decisionmaking; and environmental justice aspects of land use planning, alternative energy production, facility siting, and climate change. DOE's contact for further information about this conference is Melinda Downing, Environmental Justice Program Manager, Office of Legacy Management, [melinda.downing@hq.doe.gov](mailto:melinda.downing@hq.doe.gov) or 202-586-7703. Inquiries, including requests for the complete list of abstract topics, also may be sent to [ejinamerica@hotmail.com](mailto:ejinamerica@hotmail.com).

### 2008 Federal Environmental Symposium



The Office of the Federal Environmental Executive has announced its 2008 annual Symposium. In order to reach more of the Federal community, this year's conference has been expanded to include a Symposium East to be held in Bethesda, Maryland, June 2–4, and an inaugural Symposium West to be held in Big Sky, Montana, June 17–19. This year's Symposium will focus on meeting the goals of Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* (*LLQR*, March 2007, page 13). Topics of potential interest to the DOE NEPA community include renewable energy, greenhouse gases, environmental management systems, pollution prevention, and green buildings. A formal Call for Papers will be made in early January 2008, and further information will be made available at [www.fedcenter.gov](http://www.fedcenter.gov). DOE's contact for further information is Beverly Whitehead, Office of Health, Safety and Security, at [beverly.whitehead@hq.doe.gov](mailto:beverly.whitehead@hq.doe.gov) or 202-586-6073.

# EAs and EISs Completed July 1 to September 30, 2007

## EAs

**Grand Junction Office/  
Office of Legacy Management**  
DOE/EA-1535 (7/6/07)  
*Uranium Leasing Program, Colorado*  
Cost: \$360,000  
Time: 26 months

**Y-12 Site Office/  
National Nuclear Security Administration**  
DOE/EA-1593 (9/6/07)  
*Y-12 Steam Plant Life Extension Project - Steam  
Plant Replacement Subproject, Oak Ridge,  
Tennessee*  
Cost: \$163,000  
Time: 6 months

## EIS

**Western Area Power Administration  
and Office of Electricity Delivery  
and Energy Reliability**  
DOE/EIS-0395 (72 FR 43271; 8/3/07)  
(EPA Rating: LO)  
*San Luis Rio Colorado Project,  
Yuma County, Arizona*  
Cost: The cost for this EIS was paid by the applicant;  
therefore, cost information does not apply to DOE.  
Time: 18 months

### ENVIRONMENTAL PROTECTION AGENCY (EPA) RATING DEFINITIONS

#### Environmental Impact of the Action

LO – Lack of Objections  
EC – Environmental Concerns  
EO – Environmental Objections  
EU – Environmentally Unsatisfactory

#### Adequacy of the EIS

Category 1 – Adequate  
Category 2 – Insufficient Information  
Category 3 – Inadequate

(For a full explanation of these definitions, see the EPA website  
at [www.epa.gov/compliance/nepa/comments/ratings.html](http://www.epa.gov/compliance/nepa/comments/ratings.html).)

## NEPA Document Cost and Time Facts

### EA Costs and Completion Times

- For this quarter, the median and average costs for the preparation of 2 EAs for which cost data were applicable was \$261,000.
- Cumulatively, for the 12 months that ended September 30, 2007, the median cost for the preparation of 14 EAs for which cost data were applicable was \$90,000; the average was \$168,000.
- For this quarter, the median and average completion time for 2 EAs was 16 months.
- Cumulatively, for the 12 months that ended September 30, 2007, the median completion time for 17 EAs was 14 months; the average was 22 months.

### EIS Costs and Completion Times

- There were no EISs completed during this quarter for which cost data were applicable.
- Cumulatively, for the 12 months that ended September 30, 2007, the median and average costs for the preparation of 2 EISs for which cost data were applicable was \$2,509,000.
- Cumulatively, for the 12 months that ended September 30, 2007, the median and average completion times for 3 EISs were 17 months.

# Recent EIS-Related Milestones (September 1 to November 30, 2007)

## Advance Notice of Intent

### Office of Environmental Management

DOE/EIS-0402

*Environmental Impact Statement for Remediation of Area IV of the Santa Susana Field Laboratory, Ventura County, California*

October 2007 (72 FR 58834, 10/17/07)

## Draft EISs

### Office of Civilian Radioactive Waste Management

DOE/EIS-0250-S1

*Supplement to 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*  
October 2007 (72 FR 58081, 10/12/07)

DOE/EIS-0250-S2 and DOE/EIS-0369

*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, Nye County, Nevada and Environmental Impact Statement for the Alignment, Construction, and Operation of a Rail Line to a Geologic Repository at Yucca Mountain, Nye County, Nevada [combined]*

October 2007 (72 FR 58081, 10/12/07)

### Office of Electricity Delivery

**and Energy Reliability** (co-lead, Bureau of Land Management, Department of the Interior)

DOE/EIS-0386

*Designation of Energy Corridors on Federal Land in 11 Western States*

November 2007 (72 FR 64619, 11/16/07)

### Office of Fossil Energy/

### National Energy Technology Laboratory

DOE/EIS-0382

*Mesaba Energy Project, Itasca County, Minnesota*

November 2007 (72 FR 63579, 11/9/07)

### Western Area Power Administration

DOE/EIS-0377

*Supplemental Big Stone II Power Plant and Transmission Project, Grant County, South Dakota and Big Stone County, Minnesota*

October 2007 (72 FR 60846, 10/26/07)

## Final EISs

### Bonneville Power Administration

### and Office of Electricity Delivery and Energy Reliability

DOE/EIS-0378

*Port Angeles - Juan de Fuca Transmission Project, Clallam County, Washington*

October 2007 (72 FR 58081, 10/12/07)

### Office of Fossil Energy

DOE/EIS-0357

*Gilberton Coal-to-Clean Fuels and Power Project, Gilberton, Pennsylvania*

November 2007 (72 FR 62229, 11/2/07)

### Office of Fossil Energy/

### National Energy Technology Laboratory

DOE/EIS-0361

*Western Greenbrier Co-Production Demonstration Project, Greenbrier County, West Virginia*

November 2007 (72 FR 63579, 11/9/07)

DOE/EIS-0394

*FutureGen Project*

November 2007 (72 FR 64619, 11/16/07)

### Western Area Power Administration

DOE/EIS-0389

*Trinity Public Utilities District Direct Interconnection Project, Trinity County, California*

November 2007 (72 FR 67723, 11/30/07)

## Record of Decision and Floodplain Statement of Findings

### Western Area Power Administration

### and Office of Electricity Delivery and Energy Reliability

DOE/EIS-0395

*San Luis Rio Colorado Project, Yuma County, Arizona*

October 2007 (72 FR 58074, 10/12/07)

## Amended Record of Decision

### National Nuclear Security Administration/

### Office of Fissile Materials Disposition

DOE/EIS-0229

*Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement*

September 2007 (72 FR 51807, 9/11/07)

(continued on next page)

# Recent EIS-Related Milestones *(continued from previous page)*

## Supplement Analyses

### Bonneville Power Administration

#### **Transmission System Vegetation Management Program Environmental Impact Statement** (DOE/EIS-0285)

DOE/EIS-0285-SA-340\*  
*Vegetation Management along the Bell - Boundary No. 3, 230 kV Double Circuit Transmission Line Corridor Right of Way from Mile 1 to Mile 98, Spokane, Stevens, and Pend Oreille Counties, Washington*  
(Decision: No further NEPA review required)  
April 2007

DOE/EIS-0285-SA-341\*  
*Vegetation Management along the Broadview - Garrison #1 and #2, 500 kV Double Circuit Transmission Line Corridor Right of Way from Mile 134 to Mile 225, Broadwater, Jefferson, and Powell Counties, Montana*  
(Decision: No further NEPA review required)  
April 2007

DOE/EIS-0285-SA-342\*  
*Vegetation Management along the Chief Joseph - Monroe No. 1 Transmission Line Corridor from Structures 64/5 to 80/1, Including a Segment of the Chief Joseph - Snohomish No. 3 and No. 4 from 64/5 to 80/1, Chelan and King Counties, Washington*  
(Decision: No further NEPA review required)  
July 2007

*\*Not previously reported in LLQR*

DOE/EIS-0285-SA-343\*  
*Fidalgo - Lopez Substation: Danger Tree Removal Project, Skagit and San Juan Counties, Washington*  
(Decision: No further NEPA review required)  
July 2007

DOE/EIS-0285-SA-344  
*Toledo - Wendson No. 1 Transmission Line Vegetation Management, Lincoln and Lane Counties, Oregon*  
(Decision: No further NEPA review required)  
September 2007

#### **Klondike III/Biglow Canyon Wind Integration Project Environmental Impact Statement** (DOE/EIS-0374)

DOE/EIS-0374-SA-01  
*Klondike III/Biglow Canyon Wind Integration Project, Oregon*  
(Decision: No further NEPA review required)  
September 2007

#### **National Nuclear Security Administration/ Office of Fissile Materials Disposition**

#### **Disposition of Surplus Highly Enriched Uranium Environmental Impact Statement** (DOE/EIS-0240)

DOE/EIS-0240-SA-01  
*Disposition of Surplus Highly Enriched Uranium, Washington, DC*  
(Decision: No further NEPA review required)  
October 2007

## What Worked and Didn't Work in the NEPA Process

To foster continuing improvement in the Department's NEPA Compliance Program, DOE Order 451.1B requires the Office of NEPA Policy and Compliance to solicit comments on lessons learned in the process of completing NEPA documents and distribute quarterly reports.

*The material presented here reflects the personal views of individual questionnaire respondents, which (appropriately) may be inconsistent. Unless indicated otherwise, views reported herein should not be interpreted as recommendations from the Office of NEPA Policy and Compliance.*

### Scoping

#### What Worked

- *Multiple alternatives.* The EA's consideration of multiple options for most outfall projects is expected to provide sufficient flexibility to act and still be bounded by analyses in the EA.
- *Previous experience.* Knowledge gained during the NEPA process of an earlier, similar EA was useful in applying to the review process of this EA.
- *Early planning.* The DOE management and operating contractor successfully conducted an intensive, up-front planning effort for the EA, which covered problem definition and development of proposed alternative actions. By the time the NEPA process was formally initiated, the scope had been well defined, and participants and responsibilities had been identified.

### Data Collection/Analysis

#### What Worked

- *Bounding scenarios.* The EA used an unlikely scenario to bound the potential traffic impacts for each alternative; however, because this scenario was highly unlikely, a more "realistic" scenario was also provided.

#### What Didn't Work

- *Incomplete baseline.* A more complete hydrologic baseline of the project areas would have facilitated the floodplain/wetland assessment for the EA.

### Schedule

#### Factors that Inhibited Timely Completion of Documents

- *Multiple decisionmakers.* Dealing with multiple decisionmakers for the many outfall projects under the scope of the EA slowed the alternative selection process. However, the NEPA process was not adversely impacted, and nothing would have been gained by splitting the scope into several EAs.

- *Identification of alternatives.* Identifying proposed and alternative actions for the EA's outfall projects took longer than originally anticipated.
- *Delayed review process.* Finalizing the EA proved to be problematic due to a protracted DOE review and approval process.
- *Changes to local guidance.* Revisions to the local Official Use Only guidance during EA completion required additional review and changes.
- *Hindering factors.* Extensive interaction with cooperating agencies, the programmatic nature of the document, and numerous public comments that needed to be addressed all contributed to making timely completion difficult.

### Teamwork

#### Factors that Facilitated Effective Teamwork

- *Frequent communication.* Frequent effective communication with the EA preparation contractor proved valuable in producing a quality EA.
- *Close communication.* Close communication among DOE, the NEPA contractor, and relevant project personnel facilitated preparation of the EA through completion of the document.
- *DOE and contractor staff co-located.* DOE and contractor staff worked in the same location, which facilitated communication.

#### Factors that Inhibited Effective Teamwork

- *Lack of follow through.* A DOE subject matter expert provided substantive comments on the draft EA, but elected not to review or provide comments during the approval process for the finding of no significant impact and final EA.

*(continued on next page)*

### What Worked and Didn't Work *(continued from previous page)*

#### Process

##### Successful Aspects of the Public Participation Process

- *Public interest.* DOE received several inquiries showing interest in the proposed draft EA; however, no comments were received during the public review process.
- *Uncontroversial topic.* The proposed action was not controversial, so state and public review of the EA could be limited to the minimum time period allowed.

##### Unsuccessful Aspects of the Public Participation Process

- *Local newsletter overlooked.* A local advisory group complained that the notice of availability for the draft EA was not given enough publicity because it was not published in the local Operations Office monthly newsletter. Although the notice was published in the newspaper, we learned that stakeholders rely more heavily on the local DOE newsletter for their NEPA information.
- *Demand for public meetings.* Some members of the public did not understand why DOE did not hold more meetings on the EA across the region and state.
- *Comment period not extended as long as public wanted.* Some members of the public wanted the EA comment period to be extended from 30 days to 120 days, and expressed disappointment that DOE extended the comment period to only 45 days.

#### Usefulness

##### Agency Planning and Decisionmaking: What Worked

- *Input from cooperating agency.* One of the cooperating agencies on the programmatic EA submitted over 300 comments on the first internal draft. Every one of the agency's comments was resolved.
- *Identification of mitigation measures.* Implementation of selected proposed and alternative actions for certain outfalls reviewed during the EA process could result in potential wetland losses. In instances where follow-up monitoring indicates the need for additional mitigative action, DOE would identify and implement the appropriate mitigation measures.

- *Combining alternatives.* Evaluating multiple outfalls as part of a single EA allowed for a holistic perspective that would not have otherwise been provided. As a result, the combining of multiple outfall flows for treatment in a common basin or discharge through a single outfall was determined to be environmentally and technically preferable to implementing best management practices on an individual outfall basis.

#### Enhancement/Protection of the Environment

- *Water quality.* The quality of state waters will be protected and in some instances enhanced.

#### Other Issues

- *Project delays.* Issues related to outfall ownership acceptance and funding may delay project implementation.

#### Effectiveness of the NEPA Process

For the purposes of this section, "effective" means that the NEPA process was rated 3, 4, or 5 on a scale from 0 to 5, with 0 meaning "not effective at all" and 5 meaning "highly effective" with respect to its influence on decisionmaking.

For the past quarter, in which 3 questionnaire responses were received for EAs, 3 out of 3 respondents rated the NEPA process as "effective."

- A respondent who rated the process as "5" stated that the EA process was useful in identifying DOE commitments.
- A respondent who rated the process as "5" stated that the scope of the EA encompassed multiple projects which allowed for an all-inclusive perspective and resulted in environmentally and technically preferable options.
- A respondent who rated the process as "5" stated that the NEPA process was instrumental in helping DOE to decide whether to extend DOE's leasing program.