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**6450-01-P**

**DEPARTMENT OF ENERGY**

**[Docket ID: DOE-HQ-2010-0002]**

**10 CFR part 1021**

**RIN 1990-AA34**

**National Environmental Policy Act Implementing Procedures**

**AGENCY:** Office of the General Counsel, U.S. Department of Energy.

**ACTION:** Final rule.

**SUMMARY:** The U.S. Department of Energy (DOE or the Department) is revising its National Environmental Policy Act (NEPA) Implementing Procedures, subparts B, C, and D. The majority of the changes are being made to the categorical exclusion provisions contained in the NEPA Implementing Procedures, subpart D, appendices A and B, with a small number of other changes within subparts B, C, and D. These revisions are intended to better align the Department's regulations, particularly its categorical exclusions, with DOE's current activities and recent experiences, and to update the provisions with respect to current technologies and regulatory requirements. DOE is establishing 20 new categorical exclusions and removing two categorical exclusion categories, one environmental assessment category, and three environmental impact statement categories. Other changes modify and clarify DOE's existing provisions.

**EFFECTIVE DATE:** These rule changes will become effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**FOR FURTHER INFORMATION CONTACT:** For information regarding DOE's NEPA implementation regulations or general information about DOE's NEPA procedures, contact Ms.

Carol Borgstrom, Director, Office of NEPA Policy and Compliance, at askNEPA@hq.doe.gov or 202-586-4600 or leave a message at 800-472-2756.

## **SUPPLEMENTARY INFORMATION:**

### **I. Background**

DOE promulgated its regulations entitled “National Environmental Policy Act Implementing Procedures” (10 CFR part 1021) on April 24, 1992 (57 FR 15122), and revised these regulations on July 9, 1996 (61 FR 36222), December 6, 1996 (61 FR 64603), and August 27, 2003 (68 FR 51429). The DOE NEPA regulations at 10 CFR part 1021 contain procedures that DOE shall use to comply with section 102(2) of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4332(2)) and the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR parts 1500-1508). DOE published a Notice of Proposed Rulemaking on January 3, 2011 (76 FR 214), to solicit public comments on its proposal to further revise these regulations by adding new categorical exclusions, revising existing categorical exclusions, and making certain other changes.

Publication of the Notice of Proposed Rulemaking began a 45-day public comment period, scheduled to end on February 17, 2011, which included a public hearing on February 4, 2011, at DOE headquarters in Washington, DC. On February 23, 2011, in response to a request from the National Wildlife Federation, on behalf of itself and 9 other organizations, for additional time to review the proposed rule and submit comments, DOE re-opened the comment period until March 7, 2011 (76 FR 9981).

DOE received comments from private citizens, trade associations, nongovernmental organizations, Federal agencies, and a tribal government agency. The transcript of the public hearing, a request to extend the comment period, and the 29 comment documents received by DOE, including two documents received after the close of the comment period, are available on

the DOE NEPA Website (<http://energy.gov/nepa>) and on the Regulations.gov website (<http://www.regulations.gov>) at docket ID: DOE-HQ-2010-0002.

DOE considered all comments received, including those comments on categorical exclusions for which DOE did not propose any changes. DOE's response to the comments is contained in section IV, Comments Received and DOE's Responses, below.

The revisions DOE is making are consistent with guidance issued by CEQ on establishing, applying, and revising categorical exclusions under NEPA (CEQ, "Final Guidance for Federal Departments and Agencies on Establishing, Applying, and Revising Categorical Exclusions Under the National Environmental Policy Act"; hereafter, CEQ Categorical Exclusion Guidance) (75 FR 75628; December 6, 2010). On December 29, 2009, DOE initiated its periodic review by publishing a Request for Information in the *Federal Register* (74 FR 68720) (<http://www.gpo.gov/fdsys/pkg/FR-2009-12-29/pdf/E9-30829.pdf>) that sought input from interested parties to help identify activities that should be considered for new or revised categorical exclusions. Moreover, DOE evaluated each of its existing categorical exclusions in preparing these revisions, and this rulemaking satisfies CEQ's recommendation for periodic review of an agency's categorical exclusions.

This document adopts the revisions proposed in the Notice of Proposed Rulemaking, with certain changes discussed below, and amends DOE's existing regulations at 10 CFR part 1021. In accordance with 40 CFR 1507.3, CEQ reviewed this final rule and concluded that the proposed amendment of DOE's NEPA implementing regulations is in conformance with NEPA and the CEQ regulations. The Secretary of Energy has approved this final rule for publication.

Within this document, "existing rule" refers to DOE's current NEPA implementing regulations (as last modified in 2003, before the revisions announced in this document);

“proposed rule” refers to changes identified in DOE’s Notice of Proposed Rulemaking published on January 3, 2011; and “new rule” or “final rule” refers to the changes identified in this document, which will become effective on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

## **II. Statement of Purpose**

The Department last revised the categorical exclusions in its NEPA implementing regulations in 1996. Since that time, the range of activities in which DOE is involved has changed and expanded. For example, in recent years, DOE has reviewed thousands of applications from private entities requesting financial support for projects to develop new or improved energy technologies, including for renewable energy sources. This experience highlighted the potential for new and revised categorical exclusions and helped DOE identify appropriate limits to include in these categorical exclusions to ensure that the activities described normally would not have the potential for significant environmental impact.

The purpose of this rulemaking is to revise certain provisions of DOE’s NEPA implementing regulations to better align DOE’s categorical exclusions with its current activities and its experience and to bring the provisions up-to-date with current technology, operational practices, and regulatory requirements. The changes will facilitate compliance with NEPA by providing for more efficient review of actions (for example, helping the Department meet the goals set forth in the Energy Policy Act of 2005), and allowing the Department to focus its resources on evaluating proposed actions that have the potential for significant environmental impacts. The changes will also increase transparency by providing the public more specific information as to the circumstances in which DOE is likely to invoke a categorical exclusion.

## **What kinds of changes is DOE making?**

DOE is amending 10 CFR part 1021, subparts B, C, and D. Most of the changes affect the categorical exclusion provisions at 10 CFR part 1021, subpart D, appendices A and B.

DOE is adding 20 new categorical exclusions. These categorical exclusions address stormwater runoff control; lead-based paint containment, removal, and disposal; drop-off, collection, and transfer facilities for recyclable material; determinations of excess real property; small-scale educational facilities; small-scale indoor research and development projects using nanoscale materials; research activities in aquatic environments; experimental wells for injection of small quantities of carbon dioxide; combined heat and power or cogeneration systems; small-scale renewable energy research and development and pilot projects; solar photovoltaic systems; solar thermal systems; wind turbines; ground source heat pumps; biomass power plants; methane gas recovery and utilization systems; alternative fuel vehicle fueling stations; electric vehicle charging stations; drop-in hydroelectric systems; and small-scale renewable energy research and development and pilot projects in aquatic environments. These new categorical exclusions include criteria (e.g., acreage, location, and height limitations), based on DOE and other agency experience and regulatory requirements, that limit the covered actions to those that normally would not have the potential to cause significant impacts. DOE is removing two categorical exclusion categories, one environmental assessment category, and three environmental impact statement categories.

DOE also is modifying many of the existing categorical exclusions. These revisions include substantive changes, changes to update regulatory or statutory references and requirements, and editorial changes. By “substantive” changes, DOE means a change that is

more than a clarifying or consistency change; this term includes changes that alter the scope or meaning of a provision or that result in the addition or deletion of a provision.

DOE is making several minor technical and organizational changes in the final rule, four of which were not identified at the time of the Notice of Proposed Rulemaking. First, after issuing the Notice of Proposed Rulemaking, DOE noted that 10 CFR 1021.215(d) includes an outdated reference to § 1021.312. In the DOE NEPA regulations promulgated in 1992, § 1021.312 addressed environmental impact statement implementation plans. In 1996, DOE removed this requirement, and the section number was reserved. Therefore, DOE is deleting the reference to § 1021.312 from § 1021.215. Second, in the Notice of Proposed Rulemaking, DOE proposed two changes to correct cross-references within § 1021.311. After further consideration, DOE is modifying the proposed change to § 1021.311(d) to improve clarity by deleting the introductory clause, rather than only correcting the cross-reference in that clause. (As described in the Notice of Proposed Rulemaking, DOE is also revising § 1021.311(f) (i.e., correcting one cross-reference).) Third, in the Notice of Proposed Rulemaking, DOE proposed to change the title for the group of categorical exclusions from B4.1 through B4.13. After further consideration, DOE is further modifying the title to “Categorical Exclusions Applicable to Electric Power and Transmission.” Fourth, a comment from Tri-Valley CAREs (at page 1) requested that DOE not remove the table of contents from its NEPA regulations (as proposed in the Notice of Proposed Rulemaking), explaining that the table of contents is “extremely useful.” In response, DOE is adding a single “Table of Contents: Appendices” to subpart D, just before appendix A. These changes have no regulatory effect.

### **III. Overview of Categorical Exclusions**

#### **What is a categorical exclusion?**

A categorical exclusion is a category (class) of actions that a Federal agency has determined normally do not, individually or cumulatively, have a significant impact on the human environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is required. See 40 CFR 1508.4. A categorical exclusion determination is made when an agency finds that a particular proposed action fits within a categorical exclusion and meets other applicable requirements, including the absence of extraordinary circumstances (i.e., circumstances in which a normally excluded action may have a significant environmental effect).

DOE establishes categorical exclusions pursuant to a rulemaking, such as this one, for defined classes of actions that the Department determines are supported by a record showing that they normally will not have significant environmental impacts, individually or cumulatively. This record is based on DOE's experience, the experience of other agencies, completed environmental reviews, professional and expert opinion, and scientific analyses. DOE also considers public comment received during the rulemaking, as detailed in section IV, Comments Received and DOE's Responses, below.

As CEQ states in its Categorical Exclusion Guidance, "Categorical exclusions are not exemptions or waivers of NEPA review; they are simply one type of NEPA review .... Once established, categorical exclusions provide an efficient tool to complete the NEPA environmental review process for proposals that normally do not require more resource-intensive EAs [environmental assessments] or EISs [environmental impact statements]. The use of categorical

exclusions can reduce paperwork and delay, so that EAs or EISs are targeted toward proposed actions that truly have the potential to cause significant environmental effects” (75 FR at 75631).

**How does DOE use a categorical exclusion in its decisionmaking?**

As part of its environmental review responsibilities under NEPA, a DOE NEPA Compliance Officer examines an individual proposed action to determine whether it qualifies for a categorical exclusion. DOE’s process is consistent with that described in CEQ’s Categorical Exclusion Guidance: “When determining whether to use a categorical exclusion for a proposed activity, a Federal agency must carefully review the description of the proposed action to ensure that it fits within the category of actions described in the categorical exclusion. Next, the agency must consider the specific circumstances associated with the proposed activity, to rule out any extraordinary circumstances that might give rise to significant environmental effects requiring further analysis and documentation” in an environmental assessment or environmental impact statement (75 FR at 75631).

DOE’s existing and new regulations ensure that the NEPA Compliance Officer follows the steps described by CEQ. Before DOE may apply a categorical exclusion to a particular proposed action, DOE must determine in accordance with 10 CFR 1021.410(b) that: (1) the proposed action fits within an established categorical exclusion as listed in appendix A or B to subpart D, (2) there are no extraordinary circumstances related to the proposal that may affect the significance of the environmental impacts of the proposed action, and (3) the proposal is not “connected” to other actions with potentially significant impacts and is not related to other actions with cumulatively significant impacts, and the proposed action is not precluded as an impermissible interim action pursuant to 40 CFR 1506.1 and 10 CFR 1021.211.

To fit within a categorical exclusion listed in appendix B, a proposed action also must satisfy certain conditions known as “integral elements” (appendix B, paragraphs (1) through (5)). Briefly, these conditions require that a categorical exclusion listed in appendix B not be applied to a proposed action with the potential to cause significant environmental impacts due to, for example, threatening a violation of applicable environmental, safety, and health requirements; requiring siting and construction, or major expansion, of a new waste storage, disposal, recovery, or treatment facility; disturbing hazardous substances such that there would be uncontrolled or unpermitted releases; having the potential to cause significant impacts on environmentally sensitive resources; or involving genetically engineered organisms, unless the proposed activity would be contained in a manner to prevent unauthorized release into the environment and conducted in accordance with applicable requirements.

The level of detail necessary to evaluate the potential for extraordinary circumstances and otherwise to determine whether a categorical exclusion is appropriate for a particular proposed action varies. For example, appendix A to subpart D lists categorical exclusions for several routine administrative actions, studies, and planning activities. A NEPA Compliance Officer normally can determine whether a categorical exclusion listed in appendix A is appropriate by reviewing a description of the proposed project. However, to determine whether a categorical exclusion from appendix B applies, in addition to the project description, a NEPA Compliance Officer also would consider information about a proposed project site and the result of reviews by other agencies (such as of historic properties or threatened and endangered species), as well as other related information.

#### **IV. Comments Received and DOE's Responses**

DOE has considered the comments on the proposed rulemaking received during the public comment period as well as all late comments. DOE has incorporated some revisions suggested in these comments into the final rule. The following discussion describes the comments received, provides DOE's response to the comments, and describes changes to the rule resulting from public comments and from DOE's further consideration of its proposal. DOE does not repeat discussion of topics in this final rule that have not changed relative to what was described in the Notice of Proposed Rulemaking. Thus, the Notice of Proposed Rulemaking may be consulted for further explanation regarding changes in the final rule.

DOE received no comments or only supportive comments on the following sections of the rule and is not making any changes beyond those discussed in the Notice of Proposed Rulemaking: in subpart C, sections 1021.322 and 1021.331; in subpart D, sections 1021.400; all of appendix A; in appendix B, paragraphs (1) through (2), and categorical exclusions B1.1, B1.2, B1.4, B1.6 through B1.8, B1.10, B1.12, B1.13, B1.15 through B1.17, B1.20 through B1.23, B1.27, B1.28, B1.30 through B1.32, B1.35, B1.36, B2.1, B2.2, B2.4 through B2.6, B3.2 through B3.5, B3.10, B3.13, B4.2, B4.3, B4.5, B4.8, B5.1, B5.2, B5.6, B5.7, B5.9 through B5.12, B5.14, B5.21 through B5.23, B6.2 through B6.10, B7.1, B7.2; in appendix C, C1 through C3, C5, C6, C9 through C11, C13, C14, C16; and in appendix D, D2 through D6, D8 through D12. In the final rule, therefore, these sections remain as discussed in the Notice of Proposed Rulemaking and are not discussed further. In addition, this final rule does not further discuss editorial changes described in the Notice of Proposed Rulemaking or in section II, Statement of Purpose, above.

## **A. General Comments on Proposed Amendments**

The U.S. Environmental Protection Agency stated that the “proposed changes will enhance the efficiency of DOE’s environmental review process while maintaining appropriate consideration of environmental effects pursuant to NEPA” and, accordingly, did not object to the proposed rulemaking.

In addition, several comments expressed support for the establishment of particular new categorical exclusions, especially for renewable energy technologies. DOE received comments expressing support for the following categorical exclusions as proposed: B1.7 (electronic equipment) from Edison Electric Institute (at page 2); B3.9 (projects to reduce emissions and waste generation) from Edison Electric Institute (at page 2) and National Wildlife Federation (at page 1); B3.16 (research activities in aquatic environments) from Biotechnology Industry Organization (at page 3) and Pacific Northwest National Laboratory, a DOE government research laboratory (at page 1); B5.13 (experimental wells for injection of small quantities of carbon dioxide) from Pacific Northwest National Laboratory (at page 1); B5.14 (combined heat and power or cogeneration systems) from Pacific Northwest National Laboratory (at page 1); B5.15 (small-scale renewable energy research and development and pilot projects) from Biotechnology Industry Organization (at page 3), Defenders of Wildlife (at page 2), and Pacific Northwest National Laboratory (at page 1); B5.16 (solar photovoltaic systems) from Pacific Northwest National Laboratory (at page 1); B5.17 (solar thermal systems) from Pacific Northwest National Laboratory (at page 1); B5.18 (wind turbines) from Granite Construction Company (at page 2) and Pacific Northwest National Laboratory (at page 1); B5.19 (ground source heat pumps) from Pacific Northwest National Laboratory (at page 1); B5.20 (biomass power plants) from Pacific Northwest National Laboratory (at page 1); B5.21 (methane gas

recovery and utilization systems) from Pacific Northwest National Laboratory (at page 1); B5.22 (alternative fuel vehicle fueling stations) from Pacific Northwest National Laboratory (at page 1); B5.23 (electric vehicle charging stations) from National Electrical Manufacturers Association (at page 1), National Wildlife Federation (at page 1), and Pacific Northwest National Laboratory (at page 1); B5.24 (drop-in hydroelectric systems) from Pacific Northwest National Laboratory (at page 1); and B5.25 (small-scale renewable energy research and development and pilot projects in aquatic environments) from Biotechnology Industry Organization (at page 3), Ocean Renewable Power Company (at page 1), and Pacific Northwest National Laboratory (at page 1). DOE received a comment from the Biotechnology Industry Organization (at pages 1 and 3) in support of the use of algal biomass for renewable energy production, stating that the existing regulatory framework was sufficient to protect human health and the environment. The comment supported the use of categorical exclusions for related small-scale and laboratory research and pilot projects. Finally, DOE received a comment from the Blue Ridge Environmental Defense League (at page 1) indicating general support for solar photovoltaic and solar thermal facilities and wind turbines, but cautioned that the public may see categorical exclusions as loopholes, which could undermine support for these technologies. DOE notes these comments. Section 1021.410 describes the process for applying a categorical exclusion.

Several comments expressed general objections to or concerns regarding DOE's proposed revision of its NEPA regulations. A comment from an anonymous individual (at pages 1-2) rejected all proposed changes, and a comment from the Blue Ridge Environmental Defense League (at page 1) opposed the addition of any categorical exclusions. DOE notes these comments. A comment from Jean Public (at page 1) listed wildlife, birds, reptiles, and mammals as environmental resources to be protected and stated that environmental assessments should

never be allowed or used. DOE responds that DOE's NEPA regulations provide for the consideration of potential impacts on environmentally sensitive resources, and the provisions relating to environmental assessments are consistent with NEPA and the requirements of the CEQ NEPA regulations. A comment from Joyce Dillard (at page 1) stated that public health and safety should be a consideration first and foremost; DOE notes that public health and safety are among the key considerations in all NEPA reviews, including the establishment and application of categorical exclusions.

DOE received a comment from the Chesapeake Bay Foundation (at page 2) asking that DOE provide "a clear explanation and evidential support," in accordance with the CEQ Categorical Exclusion Guidance, when proposing categorical exclusions. DOE establishes categorical exclusions based on Departmental experience, the experience of other agencies, completed environmental reviews, professional and expert opinion, and scientific analyses. For example, some of DOE's proposed categorical exclusions are supported by existing comparable categorical exclusions from other Federal agencies and their related experience. DOE prepared a Technical Support Document to provide analysis and identify reference documents supporting the revisions described in the Notice of Proposed Rulemaking. In preparation of this final rule, DOE updated and expanded the Technical Support Document. The Technical Support Document is available at <http://energy.gov/nepa/downloads/technical-support-document-supplement-department-energys-notice-final-rulemaking>.

A comment from the Biotechnology Industry Organization (at page 2) expressed support for science-based regulation that "focuses on reducing and eliminating actual risks to the natural and human environment" and applauded DOE's goals of removing barriers toward the adoption of innovative research on renewable energy.

A comment from the Kaibab Band of Paiute Indians (at page 1), citing the April 2010 Gulf oil spill, expressed opposition to the use of categorical exclusion determinations for experimental and research and development projects because of their unpredictability, and recommended that DOE analyze experimental or unproven techniques in environmental assessments or environmental impact statements. The comment recommends a similar approach for proven techniques employed in extreme situations. In response to this and other comments related to research and development activities, DOE reviewed its categorical exclusions and revised some of the listed actions and associated limits, such as described for categorical exclusions below. Limits on the size, scope, and other aspects (such as containment), combined with other criteria, restrict the application of categorical exclusions for research and development activities to projects that normally would not have a potential for significant environmental impacts. For proposed projects involving proven techniques in extreme situations, DOE would evaluate whether extraordinary circumstances are present such that application of a categorical exclusion is not appropriate.

DOE received a comment from Brian Musser (at page 2) regarding the regulation of coal combustion residue under Resource Conservation and Recovery Act Subtitle C. DOE considers this comment to be out of scope because it does not relate to the DOE NEPA regulations. However, DOE would consider potential impacts associated with coal combustion residue where relevant to NEPA review of a specific proposal.

#### **B. Comments on DOE's NEPA Process**

A comment from the Ocean Renewable Power Company (at pages 1-2), referring to a pilot project for which DOE provides funding and another agency has licensing authority, stated that the NEPA process involves duplicative and unnecessary reviews by multiple agencies,

which increases costs for both the agencies and the applicant and imposes delays that can jeopardize private financing. This comment does not propose specific changes to DOE's NEPA regulations, but suggests that coordination with other environmental review requirements could be improved. DOE's NEPA regulations state, in § 1021.341, that "DOE shall integrate the NEPA process and coordinate NEPA compliance with other environmental review requirements to the fullest extent possible." DOE appreciates the concern expressed by the comment and will continue to seek ways to improve coordination of environmental review requirements.

A comment from the Chesapeake Bay Foundation (at page 2) supported the recommendation in the CEQ Categorical Exclusion Guidance that an agency such as DOE develop a schedule for the periodic review of its categorical exclusions at least every 7 years. DOE also agrees with the recommendation for periodic review and considers this rulemaking to satisfy the CEQ recommendation for the near term. DOE intends to review its categorical exclusions periodically, consistent with CEQ guidance, to ensure that DOE's categorical exclusions "remain current and appropriate," as stated in the CEQ guidance.

## **C. Comments on Amendments to Subpart D**

### **1. Placement of categorical exclusions in appendix A vs. appendix B**

A comment from Pacific Northwest National Laboratory (at page 3) asked DOE to evaluate moving several categorical exclusions from appendix B, for which determinations are documented and made publicly available, to appendix A, for which determinations are not required to be documented. For example, the comment stated that requiring documentation for routine maintenance (categorical exclusion B1.3) that is performed many times daily is an inefficient use of resources and results in gaps in compliance. DOE decided not to move any categorical exclusion from appendix B to appendix A because such a change would reduce

transparency in the Department's NEPA compliance program. To address the potential inefficiency identified by the comment, DOE is adding a new paragraph (10 CFR 1021.410(f)) to the final rule that describes current practice to address proposed recurring activities to be undertaken during a specified time period, such as routine maintenance activities for a year, in a single categorical exclusion determination after considering the potential aggregated impacts.

Another comment from Sandy Beranich (at page 1) stated that many categorical exclusions in appendix A are for routine activities, and NEPA should not be required for routine activities. The comment stated that, if some level of scale is not provided to indicate when an appendix A review is triggered, then DOE should post such appendix A categorical exclusion determinations online to inform the public how DOE uses its resources. DOE responds that the application of categorical exclusions listed in appendix A normally is a simple matter that entails minimal cost. DOE has not found use of these categorical exclusions to be problematic and has not identified any need to establish a level of activity below which NEPA normally would not apply. Some DOE offices choose to post to the web their determinations for categorical exclusions listed in appendix A, but DOE does not require this practice.

A comment from Sandy Beranich (at page 3) stated that NEPA "is all about ground-disturbing actions – not routine activities." DOE disagrees that NEPA is limited to ground-disturbing activities (for example, activities could also have air or water impacts that would be appropriate for NEPA review), and is not making any change in response to this comment.

Another comment from Sandy Beranich (at page 3) provided an example of a proposed action, the components of which, in her opinion, fell within six different appendix A and appendix B categorical exclusions. DOE agrees that it is possible for a project to be covered by more than one categorical exclusion. Furthermore, as stated in DOE's NEPA regulations (10

CFR 1021.410(d)), a class of actions includes activities foreseeably necessary to proposals encompassed within the class of actions (such as associated transportation activities and award of implementing grants and contracts). Where an action might fit within multiple categorical exclusions, a NEPA Compliance Officer should use the categorical exclusion(s) that best fits the proposed action.

## **2. Previously disturbed or developed area**

DOE received comments (e.g., from Chesapeake Bay Foundation (at page 4), Defenders of Wildlife (at page 2), and National Wildlife Federation (at pages 1, 4-5)) on the use of the phrase “previously disturbed or developed,” which appears in several categorical exclusions. In the Notice of Proposed Rulemaking, DOE explained that the phrase referred to “land that has been changed such that the former state of the area and its functioning ecological processes have been altered.” Comments (e.g., from Defenders of Wildlife (at page 2), National Wildlife Federation (at page 5)) expressed concern that the phrase was too vague to provide a useful limit and suggested, for example, including in the condition a requirement for the existence of infrastructure; further clarification is necessary, comments said. A comment from Sandy Beranich (at page 3) pointed out that land disturbed or developed in the past could, if abandoned, have reverted to a natural state and, therefore, suggested that “previously disturbed or developed” should be bounded by a timeframe. Comments (e.g., from Defenders of Wildlife (at page 2) and National Wildlife Federation (at page 4)) also suggested that DOE mention the many brownfield, Superfund, and abandoned mine locations that have been identified through the Environmental Protection Agency’s Repowering America Program, in partnership with DOE. In response, DOE clarifies that the phrase “previously disturbed or developed” refers to land that has been changed such that its functioning ecological processes have been and remain altered by

human activity. The phrase encompasses areas that have been transformed from natural cover to non-native species or a managed state, including, but not limited to, utility and electric power transmission corridors and rights-of-way, and other areas where active utilities and currently used roads are readily available. This clarification applies to all uses of the phrase “previously disturbed or developed.” This clarification has been added to § 1021.410(g).

In addition, DOE notes that two definitions offered in a public comment may help readers understand the meaning of previously disturbed and developed. A comment from the Chesapeake Bay Foundation (at page 4) suggested that “previously disturbed” should refer to land that has largely been transformed from natural cover to a managed state and that has remained in that managed state (rather than reverted back to largely natural cover). The comment (at page 4) also suggested that “developed area” should refer to land that is largely covered by man-made land uses and activities (residential, commercial, institutional, industrial, and transportation).

A few comments (e.g., from the Chesapeake Bay Foundation (at page 4) and Defenders of Wildlife (at page 2)) pointed out that the interpretation of the phrase depends on the context, and that, in some contexts, there is a potential for significant impacts when a particular action is taken, even if it occurs in a disturbed area. Although DOE agrees with this possibility, the potential for such impacts would be unlikely and would constitute an “extraordinary circumstance,” where application of a categorical exclusion would be inappropriate. Before applying a categorical exclusion, a NEPA Compliance Officer will evaluate the context of the proposed action to determine whether it complies with the integral elements of the categorical exclusion (listed in appendix B, paragraphs (1) through (5)) and whether there are any associated extraordinary circumstances that would affect the significance of impacts.

### **3. Small or small-scale**

Several comments (e.g., DOI (at page 3), Ocean Renewable Energy Coalition (at page 2)) asserted that DOE's use of "small" and "small-scale" was too vague to adequately define the scope of classes of actions and asked DOE to more narrowly define or clarify its use of these terms. Comments (e.g., Chesapeake Bay Foundation (at page 5), Defenders of Wildlife (at page 4), Sandy Beranich (at page 2)) requested that DOE add a physical limitation such as acreage or a megawatt limitation or number of turbines (in categorical exclusion B5.18) to further define "small" or "small-scale." A comment from the Chesapeake Bay Foundation (at page 5) asked DOE to impose a 5-acre or smaller limit for small-scale educational facilities in categorical exclusion B3.14 and expressed concern regarding the potential size (footprint) of a facility for nanoscale research in categorical exclusion B3.15. A comment from the Chesapeake Bay Foundation (at page 3) noted that determining what is a small size is influenced by the location of a proposed action on the landscape. In response, DOE provides a general discussion of "small" and "small-scale" below and also discusses the use of these terms in the context of specific classes of actions (B1.26, B1.29, B3.14, B3.15, B5.18, B5.25, B6.1, C8 (distinguishing small scale and large scale)) later in this preamble.

In determining whether a particular proposed action qualifies for a categorical exclusion, DOE considers terms such as "small" and "small-scale" in the context of the particular proposal, including its proposed location. In assessing whether a proposed action is small, in addition to the actual magnitude of the proposal, DOE considers factors such as industry norms, the relationship of the proposed action to similar types of development in the vicinity of the proposed action, and expected outputs of emissions or waste. When considering the physical size of a proposed facility, for example, a DOE NEPA Compliance Officer would review the

surrounding land uses, the scale of the proposed facility relative to existing development, and the capacity of existing roads and other infrastructure to support the proposed action. This clarification has been added to § 1021.410(g).

DOE has reviewed the proposed categorical exclusions and classes of action on a case-by-case basis to further consider size or scale issues in response to comments received on the Notice of Proposed Rulemaking. Among other factors, DOE considered that these terms appear in its existing categorical exclusions and have been applied by NEPA Compliance Officers for more than 15 years. As a result of this review, DOE concludes that the terms “small” and “small-scale” remain appropriate for describing the types of activities contemplated by categorical exclusions. The provisions of the individual categorical exclusions using these terms, together with the integral elements at appendix B, paragraphs (1) through (5), the general restrictions on the application of categorical exclusions at 10 CFR 1021.410, and extraordinary circumstances, provide the necessary safeguards to ensure that categorical exclusions are not applied to activities that could result in significant environmental impacts. Therefore, DOE is retaining its proposed use of “small” and “small-scale” in its final rule.

#### **4. Would not have the potential to cause significant impacts**

DOE received comments (e.g., from Columbia Riverkeeper (at page 6), National Wildlife Federation (at page 3)) on its proposed use of the phrase “would not have the potential for significant impact” in both the integral element provision (at appendix B, paragraph (4)) of appendix B categorical exclusions and a number of specific categorical exclusions (categorical exclusions B1.11, B1.18, B1.24, B2.3, and B5.18). In response to these comments, DOE reviewed each use of the phrase in the Notice of Proposed Rulemaking. After further consideration, DOE is revising related text in several categorical exclusions. See discussion of

categorical exclusions B1.5, B1.11, B3.1, B3.8, and B4.6 below. DOE is continuing to use the phrase in other categorical exclusions and related text.

A comment from Tri-Valley CAREs (at pages 2-3) expressed concern that DOE was expanding the categorical exclusions “without providing an analysis of whether there was actually a potential for significant environmental impact.” A comment from Sandy Beranich (at page 1) stated that use of “significant” would leave the degree of impact open to interpretation, whereas, the use of “adversely affect” was clearer. DOE’s support for its categorical exclusions is provided in this preamble and in the Technical Support Document. For a description of how DOE creates and applies its categorical exclusions, please see Section III above.

To understand why DOE is changing some conditions in categorical exclusions that previously used the phrase “not adversely affect” or that required no change in a particular parameter, it is helpful to understand that it was never DOE’s intent or practice that identification of any adverse impact or change whatsoever – no matter how small – would disqualify the use of a categorical exclusion for a particular proposed project. Also, the changes are consistent with the purpose of categorical exclusions, which is to define a set of activities that normally pose no potential for significant environmental impacts, and with the CEQ NEPA regulations and its Categorical Exclusion Guidance.

One change DOE is making, for example, is in the integral elements applicable to all categorical exclusions in appendix B. The existing regulation states that a proposed action “must not adversely affect environmentally sensitive resources.” DOE is changing this to state that a proposed action must not “have the potential to cause significant impacts on environmentally sensitive resources.” This is consistent with the CEQ Categorical Exclusion Guidance, which states that an agency may define its extraordinary circumstances “so that a particular situation,

such as the presence of a protected resource, is not considered an extraordinary circumstance per se, but a factor to consider when determining if there are extraordinary circumstances, such as a significant impact to that resource.”

In the case of individual categorical exclusions, use of the term “significant” helps to highlight a type of potential impact that a NEPA Compliance Officer must consider when reviewing a particular proposed action. This is consistent with the CEQ Categorical Exclusion Guidance, which suggests that it may be useful for agencies to “identify additional extraordinary circumstances and consider the appropriate documentation when using certain categorical exclusions.”

## **5. Definition of “state”**

DOE uses the phrase “Federal, state, or local government” (and similar phrases) in 10 CFR part 1021. Unless otherwise specified, the term “state” refers broadly to any of the states that comprise the United States, any territory or possession of the United States (such as Puerto Rico, Guam, and American Samoa), and the District of Columbia. This definition is a clarification of, not a change in, DOE practice because DOE always has applied, and continues to apply, this meaning to the word “state” in 10 CFR part 1021.

## **6. Comments on Section 1021.410**

Comments (e.g., from Tri-Valley CAREs (at pages 2-4)) asked how DOE would meet the CEQ requirement that an agency’s categorical exclusion procedures “provide for extraordinary circumstances in which a normally [categorically] excluded action may have a significant environmental effect” (40 CFR 1508.4). DOE’s regulations require that, before a categorical exclusion may be applied to a proposed action, a determination must be made that there are no extraordinary circumstances related to a proposal that may affect the significance of the

proposal's environmental effects (10 CFR 1021.410(b)(2)). In the final rule, DOE describes extraordinary circumstances as "unique situations presented by specific proposals, including, but not limited to, scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternative uses of available resources" (10 CFR 1021.410(b)(2)). If DOE identifies an extraordinary circumstance that would result in a potentially significant impact, then it would not apply a categorical exclusion to that proposed action. Further, under DOE's NEPA regulations, before a categorical exclusion from appendix B of subpart D may be applied, DOE must determine that the proposed action satisfies all of the conditions known as "integral elements" (appendix B, paragraphs (1) through (5)). These conditions ensure that a categorical exclusion is not applied to any proposed action that would have the potential to cause significant environmental impacts due to, for example, a threatened violation of applicable environmental, safety, and health requirements, or by disturbing hazardous substances such that there would be uncontrolled or unpermitted releases. Together, DOE's extraordinary circumstances and integral elements provisions require the Department to consider whether there are conditions surrounding a proposal that may affect the significance of the proposal's environmental effects.

Another comment (from Columbia Riverkeeper (at page 5)) expressed concern that DOE's extraordinary circumstances are not consistent with CEQ guidance and asserted that DOE's examples of extraordinary circumstances set a "higher bar" than CEQ's examples. The comment suggested that, to be consistent with CEQ guidance, DOE's extraordinary circumstances be based on the "presence of an endangered or threatened species or a historic resource." DOE based its approach to extraordinary circumstances on the definitions of categorical exclusion and significance in the CEQ regulations. See 40 CFR 1508.4 and 1508.27. DOE finds its approach to

be consistent with the CEQ Categorical Exclusion Guidance, which states (II.C), “An extraordinary circumstance requires the agency to determine how to proceed with the NEPA review. For example, the presence of a factor, such as a threatened or endangered species or a historic resource, could be an extraordinary circumstance, which, depending on the structure of the agency’s NEPA implementing procedures, could either cause the agency to prepare an EA or an EIS, or cause the agency to consider whether the proposed action’s impacts on that factor require additional analysis in an EA or an EIS. In other situations, the extraordinary circumstance could be defined to include both the presence of the factor and the impact on that factor. Either way, agency NEPA implementing procedures should clearly describe the manner in which an agency applies extraordinary circumstances and the circumstances under which additional analysis in an EA or an EIS is warranted” (75 FR at 75633). Under DOE’s categorical exclusion process, therefore, it is an action’s potential for significant impacts, for example, on a sensitive resource, and not simply the presence of a sensitive resource, that is the basis for determining the need for an environmental assessment or environmental impact statement. It is the responsibility of the DOE NEPA Compliance Officer to consider this potential for significant impacts and to consult with other agencies as necessary when considering a proposed action. This is expressly addressed in an integral element at appendix B, paragraph (4).

DOE received a comment from Columbia Riverkeeper (at page 4) referring to CEQ’s guidance that agencies: consider cumulative effects; define physical, temporal, and environmental factors that would constrain the use of a categorical exclusion; and consider extraordinary circumstances. The comment cited the CEQ provisions, but did not recommend any particular change to DOE’s regulations. DOE considered each of the cited issues in formulating its rule, and the rule is consistent with the CEQ Categorical Exclusion Guidance.

Further, DOE consulted with CEQ throughout the rulemaking process in accordance with 40 CFR 1507.3.

DOE is codifying at 10 CFR 1021.410(e) its policy to document and post online appendix B categorical exclusion determinations. As stated in the Notice of Proposed Rulemaking, such postings will not include information that DOE would not disclose pursuant to the Freedom of Information Act (FOIA). A comment from Tri-Valley CAREs (at page 2) expressed concern that the public would be deprived of a right to challenge such withholdings under FOIA. Further, the comment asked DOE to explain the process by which the public can challenge potentially improper withholdings related to an online posting of a categorical exclusion determination. DOE is committed to openness, as is evidenced by its decision to post appendix B categorical exclusion determinations online. The procedures for requesting information related to a categorical exclusion determination are the same as for any other DOE document. If applicable, DOE will apply FOIA exemptions to a categorical exclusion determination – as it would with any document – to appropriately limit the release of particular types of information (e.g., classified or confidential business information). To the fullest extent possible, DOE will segregate information that is exempt from release under FOIA to allow public review of the remainder of the document. See 10 CFR 1021.340. For further information on FOIA processes at DOE, see DOE’s FOIA resources posted at <http://energy.gov/management/office-management/operational-management/freedom-information-act>, including a handbook on procedures for filing a request at <http://energy.gov/sites/prod/files/maprod/documents/Handbook.pdf>.

The addition of paragraphs (f) and (g) to 10 CFR 1021.410 is discussed in section IV. C.1–3, above.

## **7. Integral Elements**

### **Federally recognized Indian tribe**

In its Notice of Proposed Rulemaking, DOE proposed adding “Federally recognized Indian tribe” to its list of entities that designate property as historically, archeologically, or architecturally significant in appendix B, paragraph (4)(i). In addition, in the final rule, to be consistent with the Advisory Council on Historic Preservation implementing regulations (36 CFR part 800) for the National Historic Preservation Act, DOE has added “Native Hawaiian organization” to the list of entities that may designate such properties. The Advisory Council on Historic Preservation regulations provide consultative roles to both Indian tribes and Native Hawaiian organizations in the Section 106 process under the National Historic Preservation Act. The Advisory Council's regulations define a Native Hawaiian organization as “any organization which serves and represents the interests of Native Hawaiians; has as a primary and stated purpose the provision of services to Native Hawaiians; and has demonstrated expertise in aspects of historic preservation that are significant to Native Hawaiians”; and the regulations define Native Hawaiian as “any individual who is a descendent of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the State of Hawaii” (36 CFR 800.16(s)).

Further, DOE clarifies that use of “Federally recognized Indian tribe” in subpart D, appendix B of 10 CFR part 1021, is intended to include Indian and Alaska Native tribes that the Secretary of the Interior recognizes as eligible for programs and services provided by the United States to Indians because of their status as Indians. (25 U.S.C. 479a-1). Each year, the Bureau of Indian Affairs (BIA) publishes a list in the Federal Register of the recognized tribal entities. For purposes of appendix B to subpart D of 10 CFR part 1021, Federally recognized Indian tribes are

those entities included on the BIA list. (A link to the list and a supplement, current at the time of this final rule's publication, can be found on the BIA website at <http://www.bia.gov/DocumentLibrary/index.htm>.) DOE would refer to the most current BIA list when considering the integral element.

### **Environmentally sensitive resources**

DOE received comments (e.g., from the Chesapeake Bay Foundation (at page 3), the Ocean Renewable Energy Coalition (at page 5), and Pacific Northwest National Laboratory (at page 1)) suggesting further modifications or clarifications to the list of environmentally sensitive resources that are part of the integral elements applicable to appendix B categorical exclusions (appendix B, paragraph (4)). DOE does not intend the examples in B(4) to be an exhaustive list of environmentally sensitive resources, but agrees that additional examples would be helpful. DOE is adding the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act to B(4)(ii). In addition, DOE is correcting a typographical error in the reference to the Marine Mammal Protection Act in B(4)(ii). Another comment (from the Chesapeake Bay Foundation (at page 4)) asked DOE to expand its listing of environmentally sensitive resources to “recognize and protect ... resources of high local, state, or federal value and concern that may not enjoy, or may not yet have received, specific regulatory or statutory protection.” Specifically, the comment (at page 3) asserted that DOE's clarification of environmentally sensitive resources was too limited because it would not include “riparian stream buffers ... large forest or contiguous woodland assemblages, locally specified high value farmland ... ‘candidate’ state or federal threatened or endangered species or their habitat ... drinking water supply streams or reservoirs ... or ... headwater streams.” In response to the comment, DOE is adding “state-proposed endangered or threatened species or their habitat” to the description of environmentally

sensitive resources listed in integral element B(4)(ii), which already explicitly provides for consideration of “Federally-proposed or candidate species or their habitat.” DOE is not adding the other resources described in the comment because they are not generally resources that have been identified as needing protection through Executive Order, statute, or regulation by Federal, state, or local government, or a Federally recognized Indian tribe. However, DOE acknowledges that the resource examples contained in the comment may be considered as extraordinary circumstances in making an individual categorical exclusion determination.

Similarly, another comment (from Joyce Dillard (at page 1)) expressed general concern regarding destruction of wetlands and aquifers and salt water intrusion. DOE’s existing integral elements B(4)(iii) and (vi) provide for consideration of wetlands as well as special sources of water (including sole source aquifers) as environmentally sensitive resources. With respect to salt water intrusion, DOE would consider the potential for salt water intrusion, including whether it constitutes an extraordinary circumstance, before making a categorical exclusion determination. Also, see discussion of “would not have the potential to cause significant impacts” in section IV.C.4 of this preamble.

**Genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, and invasive species**

DOE received several comments (in reference to categorical exclusions B3.6, B3.8, B3.12, B3.15, B5.15, B5.20, and B5.25; e.g., from Center for Food Safety on behalf of itself and 3 other organizations (at pages 3-5) and National Wildlife Federation (at page 2)) regarding the use of genetically engineered organisms, noxious weeds, and invasive non-native species, such as non-native algae. These comments suggested that the development and use of such organisms could affect entire ecosystems. The comments expressed concern that these organisms could not be

contained and could escape into the environment and potentially cause a variety of environmental and human health impacts.

DOE received similar comments (e.g., from Center for Food Safety on behalf of itself and 3 other organizations (at pages 2 and 3)) regarding “synthetic biology,” suggesting that the impacts of developing and releasing genetically engineered organisms, using man-made DNA sequences, were largely unknown and that such organisms could interact with native species and adversely affect the environment and entire ecosystems.

In addition, a comment from Center for Food Safety on behalf of itself and 3 other organizations (at page 2) asserted that DOE has provided more than \$700 million in funding for synthetic biology research since 2006 and that this level of funding amounts to a programmatic research program that should be analyzed in an environmental impact statement. The comment also asserted that DOE is attempting to segment the potential environmental impacts of this research by seeking categorical “exemptions” from NEPA for individual research projects. As an initial matter, DOE disagrees with the comment's funding estimate. For example, almost all the funding is attributed to the Genomics Science Program and the Joint Genomics Institute, both of which are ongoing initiatives (begun in the 1980s and 1990s, respectively) that support research in several areas, only some of which can be referred to as synthetic biology. Moreover, DOE disagrees with the assertion that an amount of funding is sufficient to define a programmatic research program for which DOE should prepare an environmental impact statement. In determining whether an environmental impact statement is required or would be beneficial to its decisionmaking, DOE considers the nature of decisions to be made and the relationships among proposed actions and potential environmental impacts, among other factors. DOE has determined

that, at this time, its activities related to synthetic biology do not constitute a programmatic research program and do not require an environmental impact statement.

DOE received several comments regarding research into bioenergy technologies, either performed or funded by DOE. Some of the comments (e.g., from the Biotechnology Industry Organization (at page 3)) were supportive of this research and encouraged the use of categorical exclusions to remove barriers to the adoption of these technologies. Some comments (e.g., from Center for Food Safety on behalf of itself and 3 other organizations (at page 5), National Wildlife Federation (at pages 2 and 4)) expressed concern about bioenergy research and the harvest of biomass involving invasive and non-native species, including non-native and genetically engineered algal species, specifically citing categorical exclusions B3.6, B3.8, and B5.25. The comments suggested that intentional or inadvertent release of invasive or non-native species, especially in aquatic environments, could have unanticipated consequences, including threats to local ecosystems, and the National Wildlife Federation (at page 2) suggested that categorical exclusions were appropriate only for plant species that “successfully pass[ed] an established weed risk assessment.” Another comment (from the Biotechnology Industry Organization (at page 2)) requested that any regulations regarding biotechnology reflect the principles laid out in the Coordinated Framework for the Regulation of Biotechnology (51 FR 23302; June 26, 1986) and articulated by the White House Emerging Technologies Interagency Policy Coordination Committee.

To address these comments, DOE considered the addition of further restrictions to individual categorical exclusions, but opted instead to add a new integral element that will be applicable to all appendix B categorical exclusions. This integral element requires that, to fit the classes of actions in appendix B, a proposal must be one that would not “[i]nvolve genetically

engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release [that is, a release not subject to an experimental use permit issued by the Environmental Protection Agency (EPA), a permit or notification issued by the Department of Agriculture (USDA), or a granting of nonregulated status by the USDA] into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.” Examples of applicable guidelines and requirements include National Institutes of Health “Guidelines for Research Involving Recombinant DNA Molecules” ([http://oba.od.nih.gov/rdna/nih\\_guidelines\\_oba.html](http://oba.od.nih.gov/rdna/nih_guidelines_oba.html)); USDA “Noxious Weed Regulations” (7 CFR part 360) and regulations for the “Introduction of Organisms and Products Altered or Produced Through Genetic Engineering Which Are Plant Pests or Which There Is Reason to Believe Are Plant Pests” (7 CFR part 340); and EPA Reporting Requirements and Review Processes for Microorganisms (40 CFR part 725, particularly 40 CFR 725.200-470). These regulations impose appropriate containment and confinement measures to address the risk of inadvertent release of experimental organisms. In order to qualify for a categorical exclusion, a proposed action would have to prevent unauthorized releases into the environment, comply with all applicable requirements, and meet other conditions of the applicable categorical exclusion.

This new integral element obviates the need for the last sentence in categorical exclusion B3.8, as proposed, and that sentence is removed in the final rule. This integral element limits the activities that can receive a categorical exclusion determination to those that will not be released into the environment without proper authorization and will be conducted in accordance with applicable requirements, which include containment, confinement, or other requirements for

working with these organisms. The new integral element takes into account both the principles laid out in the Coordinated Framework for the Regulation of Biotechnology and by the White House Emerging Technologies Interagency Policy Coordination Committee.

A comment relating to categorical exclusion B3.8 (from the National Wildlife Federation (at page 2) and also from Center for Food Safety on behalf of itself and 3 other organizations (at page 4)) stated that USDA approval of a genetically engineered crop does not guarantee environmental safety. DOE believes that, in general, it is reasonable to consider compliance with applicable regulations as a factor in determining whether a proposed action would have the potential to cause significant environmental impacts. In the case of genetically engineered plants regulated by USDA, its regulations require the agency to perform independent NEPA analysis before the plants may be grown outdoors (7 CFR part 372). When grown for research purposes, USDA regulations further require that field trials of genetically engineered plants are conducted with sufficient confinement methods in place such that the plants will not persist in the environment or pose the risk for significant environmental impacts (7 CFR part 340).

DOE is generally limiting categorical exclusions involving the activities mentioned in the comments to small-scale, as opposed to commercial-scale, actions. In DOE's experience, small-scale research and development activities normally do not have the potential to cause significant environmental impacts (see section IV.C.3).

A few comments (e.g., Center for Food Safety on behalf of itself and 3 other organizations (at page 4)) suggested that genetically engineered crops grown for biofuels production might cause environmental impacts different from genetically engineered plants grown for other purposes, but the comments did not indicate what those differential impacts would be. DOE foresees no difference in environmental impacts from a small research plot of

genetically engineered plants grown for the purpose of food or fiber as compared to the impacts from the same plants grown for biomass.

Another comment from the National Wildlife Federation (at page 2) and the Center for Food Safety (on behalf of itself and 3 other organizations; at page 4) suggested that, once DOE provided funding to a researcher to perform work with non-genetically engineered organisms under a categorical exclusion, the researcher could switch to the use of a genetically engineered organism without incurring further NEPA review. Under the terms of DOE funding agreements, the scope of work is disclosed by the researcher, and fundamental changes such as those suggested in the comment would require further NEPA analysis.

## **8. Powerlines**

In the Notice of Proposed Rulemaking DOE proposed to change “electric powerlines” to “electric transmission lines” in several categorical exclusions to update technology-specific vocabulary. DOE received a general comment from Edison Electric Institute (at page 2) requesting that it further revise the proposed phrase to include distribution lines and related facilities to ensure that the relevant categorical exclusions are not limited to just transmission lines, but apply to energy delivery facilities more generally. Upon further consideration, DOE is using the term “powerlines” to be inclusive of both transmission and distribution lines (see categorical exclusions B1.3(m), B1.9, B4.7, B4.10, B4.12, B4.13, and class of actions C4).

## **9. Appendix B – Categorical Exclusions**

### **Categorical Exclusions Applicable to Facility Operations (B1)**

#### **B1.3 Routine maintenance**

DOE received comments (e.g., from Pacific Northwest National Laboratory (at page 3)) suggesting that categorical exclusion B1.3 covers minor types of activities that are of a

sufficiently small scale not to warrant the documentation required of an appendix B categorical exclusion and, therefore, such actions should be listed in appendix A. DOE is committed to increasing the transparency of its NEPA implementing regulations and practices, and DOE decided not to move this categorical exclusion from appendix B, for which a public document is prepared and posted on DOE's NEPA website (<http://energy.gov/nepa/doe-nepa-documents/categorical-exclusion-determinations>), to appendix A, for which no documentation is required. Further, the actions under categorical exclusion B1.3 include physical activities in contrast to the more administrative functions covered by categorical exclusions in appendix A. Thus, DOE is not making any changes based on these comments.

DOE also received a comment from Sandy Beranich (at page 1) regarding item (k) in categorical exclusion B1.3. The comment suggested DOE insert additional examples of erosion control and soil stabilization measures, specifically “gabions” and “grading.” The examples already provided in the proposed B1.3(k), reseeding and revegetation, were not meant to serve as an exhaustive list, and other measures could qualify for categorical exclusion under B1.3(k). Nonetheless, DOE is adding the two examples suggested in the comment because they will help illustrate the types of erosion control and soil stabilization measures that are encompassed by B1.3(k).

#### **B1.5 Existing steam plants and cooling water systems**

In its Notice of Proposed Rulemaking, DOE proposed modifying the second condition of this categorical exclusion from would not “adversely affect water withdrawals or the temperature of discharged water” to would not “have the potential to cause significant impacts on water withdrawals or the temperature of discharged water.” After further consideration, DOE is revising the language in this categorical exclusion to further specify the conditions. DOE is

changing these provisions to: “improvements would not: ... (2) have the potential to significantly alter water withdrawal rates; (3) exceed the permitted temperature of discharged water ....”

### **B1.11 Fencing**

After further consideration, DOE is modifying this categorical exclusion to better focus on the types of impacts to wildlife that might be caused by fencing. DOE is replacing “would not have the potential to cause significant impacts on wildlife populations or migration ...” with “would not have the potential to significantly impede wildlife population movement (including migration) ....” Also, see discussion of “would not have the potential to cause significant impacts” in section IV.C.4 of this preamble.

### **B1.14 Refueling of nuclear reactors**

DOE received a comment from Sandy Beranich (at page 2) asking which section of the DOE NEPA regulations addresses the disposition of spent nuclear fuel. Management and disposition of spent nuclear fuel would typically be the subject of the NEPA review for the facility (e.g., an environmental impact statement is required under class of action D4, for “siting, construction, operation, and decommissioning of power reactors, nuclear material production reactors, and test and research reactors”). The comment does not propose a change to this categorical exclusion, and DOE is retaining the proposed language in the final categorical exclusion.

### **B1.18 Water supply wells**

For DOE's response to comments on this categorical exclusion, see discussion of “would not have the potential to cause significant impacts” in section IV.C.4 of this preamble.

### **B1.19 Microwave, meteorological, and radio towers**

In its Notice of Proposed Rulemaking, DOE proposed adding “abandonment” to the list of activities included in this class of actions in order to encompass the complete life cycle of the towers addressed by the categorical exclusion. After further consideration, DOE acknowledges that abandonment could be misconstrued so as to absolve DOE of all responsibility for a tower, including for maintenance. This was not DOE’s intent. Thus, DOE is removing “abandonment” from the list of activities in this categorical exclusion (but is keeping “modification” and “removal”). For towers that are no longer used, DOE’s normal practice would be to remove the tower or transfer responsibility to another party.

As noted elsewhere in this preamble, DOE received public comments related to potential impacts on bird populations that could be associated with the use of categorical exclusions. Though none of the public comments was specific to categorical exclusion B1.19, DOE nonetheless considered the comments in the context of the activities addressed in this categorical exclusion and reviewed current information related to the potential impacts of relevant towers on bird populations. DOE concluded that its existing provisions, including for determining whether a proposal meets the integral elements of the categorical exclusion (particularly appendix B, paragraph (4)) and whether there are any associated extraordinary circumstances that would affect the significance of impacts, ensure appropriate consideration of proposed tower design (height, use of guy wires, lighting) and location. Therefore, DOE is not further revising categorical exclusion B1.19.

In addition, a comment from Edison Electric Institute (at page 2) asked DOE to add individual electric transmission towers and distribution poles to the scope of this categorical exclusion. Because electric transmission towers and distribution poles are already included in the

scope of DOE's existing B4 categorical exclusions, DOE is not making any changes to categorical exclusion B1.19 in response to this comment.

#### **B1.24 Property transfers**

A comment from Natural Resources Defense Council and Committee to Bridge the Gap (at page 2) expressed concern that the reference to contamination was being removed from the categorical exclusion. DOE's existing categorical exclusion is limited to property that is uncontaminated, which is defined to mean that there "would be no potential for release of substances at a level, or in a form, that would pose a threat to public health or the environment." A comment from Columbia Riverkeeper (at page 5) stated that this categorical exclusion is not warranted. DOE is not changing the scope of the categorical exclusion but is merely re-wording the categorical exclusion to incorporate the definition of "uncontaminated" in a different way. Thus, DOE is making no change to the categorical exclusion in response to this comment. A separate comment stated that a categorical exclusion for the transfer, lease, or disposition of contaminated property is not warranted. DOE agrees, and, as described above, the categorical exclusion is limited to property for which there would be no potential for release of substances at a level, or in a form, that would pose a threat to public health or the environment. Therefore, DOE is not making a change to the categorical exclusion based on this comment.

A comment from Columbia Riverkeeper (at page 6) stated that DOE's approach does not account for the environmental impacts of future operations after the transfer. DOE responds that the second limitation proposed for the categorical exclusion states that "under reasonably foreseeable uses ... the covered actions would not have the potential to cause a significant change in impacts from before the transfer ..." This limitation would require the NEPA Compliance Officer to consider the significance of potential environmental impacts of

reasonably foreseeable future uses (including during operations, as indicated by the comment) of the transferred property.

Several comments (e.g., from Columbia Riverkeeper (at page 6) and Natural Resources Defense Council/Committee to Bridge the Gap (at page 1)) questioned how DOE can assess whether an action is appropriately covered by this categorical exclusion without preparing an environmental assessment or environmental impact statement. The process DOE uses for making a categorical exclusion determination is described in this notice under section III, Overview of Categorical Exclusions, above.

A comment from Columbia Riverkeeper (at page 6) stated that there would be no pathway for public involvement or comment on DOE's review under categorical exclusion B1.24. DOE is increasing public involvement and comment opportunities with regard to categorical exclusion A7, transfers of personal property, by combining it into categorical exclusion B1.24. The result is that the scope of B1.24 includes both personal and real property, and since it is an appendix B categorical exclusion, it is subject to the online posting requirement of 10 CFR 1021.410(e). Under this new rule, DOE is codifying its policy to document and post online appendix B categorical exclusion determinations at 10 CFR 1021.410(e), consistent with the policy established by the Deputy Secretary of Energy's Memorandum to Departmental Elements on NEPA Process Transparency and Openness, October 2, 2009. This process provides an opportunity for public review of the categorical exclusion determination. In addition, see discussion of "would not have the potential to cause significant impacts" in section IV.C.4 of this preamble.

### **B1.25 Real property transfers for cultural protection, habitat preservation, and wildlife management**

A comment from Edison Electric Institute (at page 2) encouraged DOE to stipulate in the categorical exclusion that any permit holders and owners of facilities on land involved in the transfers must be given advance notice so they can protect their rights. This comment raises concerns unrelated to environmental review under NEPA, which is the scope of this regulation. For this reason, DOE is retaining the proposed language in the final categorical exclusion. Separately, DOE is adding the word “Real” to the title of this categorical exclusion to clarify that the scope of the categorical exclusion does not include personal property.

### **B1.26 Small water treatment facilities**

Although DOE did not propose to substantively change this categorical exclusion, a comment from the Chesapeake Bay Foundation (at page 4) disagreed with the existing categorical exclusion’s characterization that a “small” surface water or wastewater treatment facility is one with “a total capacity less than approximately 250,000 gallons per day,” and stated that an environmental assessment might be appropriate if the context of a facility so warrants. DOE’s experience over many years is that a water or wastewater treatment facility processing 250,000 gallons or less per day is of a size that normally would not have the potential for significant impacts. For further information, see discussion of “small” and “small-scale” in section IV.C.3 of this preamble. A NEPA Compliance Officer would consider location and context in determining whether a proposal meets the integral elements of the categorical exclusion (listed in appendix B, paragraph (4)) and whether there are any associated extraordinary circumstances that would affect the significance of impacts. In accordance with integral element B(1) of the DOE NEPA regulations, DOE would ensure that water treatment

facilities under this categorical exclusion would not threaten a violation of applicable statutory, regulatory, or permit requirements. For example, a wastewater treatment facility would comply with the National Pollutant Discharge Elimination System permit issued by the cognizant regulatory authority, which would ensure that pollutant loads are consistent with applicable water quality standards. For these reasons, DOE is retaining the proposed language in the final categorical exclusion.

### **B1.29 Disposal facilities for construction and demolition waste**

A comment from the Chesapeake Bay Foundation (at page 5) recommended that the existing limitation of less than approximately 10 acres be reduced to less than approximately 5 acres; the comment did not provide the basis or any support for this recommendation. DOE is retaining the existing limitation of less than 10 acres. The comment also referred to consideration of context and intensity, including the location, landscape setting, and other resources present, in determining whether a given project is “small.” DOE agrees. For further information, see discussion of “small” and “small-scale” in section IV.C.3 of this preamble. Under DOE’s NEPA regulations, a NEPA Compliance Officer would evaluate the considerations cited in determining whether a proposal meets the integral elements of the categorical exclusion (listed in appendix B, paragraphs (1) through (5)) and whether there are any associated extraordinary circumstances that would affect the significance of impacts. For these reasons, DOE is retaining the proposed language in the final categorical exclusion.

### **B1.33 Stormwater runoff control**

DOE received a comment from Joyce Dillard (at page 1) stating that stormwater control is another potential money maker for local policymakers and the danger is high. DOE notes this comment and is not making any changes to this categorical exclusion in response.

### **B1.34 Lead-based paint containment, removal, and disposal**

DOE is adding “containment, removal, and disposal” to the title of this categorical exclusion for clarification.

## **Categorical Exclusions Applicable to Safety and Health**

### **B2.3 Personal safety and health equipment**

For DOE's response to comments on this categorical exclusion, see discussion of “would not have the potential to cause significant impacts” in section IV.C.4 of this preamble.

## **Categorical Exclusions Applicable to Site Characterization, Monitoring and General Research (B3)**

### **B3.1 Site characterization and environmental monitoring**

After further consideration, DOE is clarifying the means by which to address potential impacts from ground disturbance. DOE is replacing the second sentence of the categorical exclusion (as proposed in the Notice of Proposed Rulemaking) with the following: “Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance.”

A comment from Sandy Beranich (at page 2) requested clarification of the size of certain projects covered by this categorical exclusion, saying that the difference between small and large-scale projects is subject to interpretation. DOE's discussion of “small” and “small-scale” appears in section IV.C.3 of this preamble.

In its Notice of Proposed Rulemaking, DOE included “abandonment” in the list of potential activities included in this categorical exclusion and in categorical exclusion B1.19 in order to encompass the complete life cycle of the characterization and monitoring devices in B3.1 and the towers in B1.19. As described with respect to B1.19, after further consideration,

DOE acknowledges that abandonment could be misconstrued so as to absolve DOE of all responsibility for such devices or facilities, including for maintenance. This was not DOE's intention. Therefore, DOE is removing "abandonment" (and adding "removal or otherwise proper closure (such as of a well)") in the text describing the life cycle of characterization and monitoring devices and facilities addressed by the categorical exclusion.

To simplify the categorical exclusion, DOE is changing "salt water and freshwater" to "aquatic environments." Aquatic, as used herein, may refer to salt water, freshwater, or areas with shifting delineation between the two; this is not a substantive change.

### **B3.6 Small-scale research and development, laboratory operations, and pilot projects**

Categorical exclusion B3.6 does not include demonstration actions, as stated in the Notice of Proposed Rulemaking. However, after reviewing public comments and further internal consideration, DOE is revising the text to state this condition more clearly. Separately, a comment (e.g., from Friends of the Earth and from Center for Food Safety on behalf of itself and 3 other organizations (at page 1)) stated that this categorical exclusion should be rejected, because its use could cause significant impacts; DOE has determined that this categorical exclusion, by its terms and in light of the integral element and extraordinary circumstances requirements, is appropriate and would not have the potential for significant impacts.

DOE received comments regarding the use of genetically engineered organisms, synthetic biology, noxious weeds, and non-native species, such as non-native algae in projects that may be categorically excluded under this section of the rule. For further information, see discussion of "Genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species" in section IV.C.7 of this preamble.

DOE received a comment from Center for Food Safety on behalf of itself and 3 other organizations (at page 3) that the difference between a pilot study and a demonstration action, which could require an environmental assessment or environmental impact statement, is unclear and suggested that this categorical exclusion could be applied to large-scale, open-pond projects involving genetically engineered algae or algae altered through synthetic biology without review of environmental risks. DOE disagrees. This categorical exclusion applies only to small-scale projects, such as those performed for proof of concept purposes. For further information, see discussion of “small” and “small-scale” in section IV.C.3 of this preamble. Further, before a categorical exclusion determination can be made, the proposed action undergoes review, for example, to determine whether it is consistent with the integral elements and the conditions of the particular categorical exclusion.

### **B3.7 New terrestrial infill exploratory and experimental wells**

DOE received a comment from Joyce Dillard (at page 1) regarding the risks associated with injection wells. Categorical exclusion B3.7 requires that the well be sited within an existing, characterized well field and requires that the site characterization has verified a low potential for seismicity. DOE has experience in the construction and operation of exploratory and experimental wells and, in DOE’s experience, these conditions are appropriate. Therefore, DOE is retaining the proposed language in the final categorical exclusion. (The issue is also relevant to categorical exclusions B5.3, B5.12, and B5.13.)

DOE intended this categorical exclusion to include both extraction and injection wells. After further consideration, DOE is adding “for either extraction or injection use” to clarify the scope of new terrestrial infill exploratory and experimental well activities under this categorical exclusion.

### **B3.8 Outdoor terrestrial ecological and environmental research**

After further consideration, DOE is clarifying the means by which to address potential impacts from ground disturbance. DOE is deleting the following words from the end of the first sentence of the categorical exclusion: “provided that such activities would not have the potential to cause significant impacts on the ecosystem” (as proposed in the Notice of Proposed Rulemaking). The following new second sentence is being inserted: “Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance.”

DOE is deleting the following sentence to avoid confusion: “These actions include, but are not limited to, small test plots for energy related biomass or biofuels research.” Although this categorical exclusion is appropriate for small biomass or biofuels research, it is only one example of a variety of research projects that could be included in the class of actions described by categorical exclusion B3.8. Another comment (from Friends of the Earth and from Center for Food Safety on behalf of itself and 3 other organizations (at page 1)) stated that this categorical exclusion should be rejected because its use could cause significant impacts; DOE has determined that this categorical exclusion, by its terms and in light of the integral element and extraordinary circumstances requirements, is appropriate and would not have the potential for significant impacts.

DOE received comments regarding the use of genetically engineered organisms, synthetic biology, noxious weeds, and non-native species, such as non-native algae in projects that may be categorically excluded under this section of the rule. For further information, see discussion of “Genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species” in section IV.C.7 of this preamble. DOE is deleting the last sentence

of the categorical exclusion (as proposed in the Notice of Proposed Rulemaking), because the use of genetically engineered organisms is now addressed by the new integral element.

### **B3.9 Projects to reduce emissions and waste**

DOE received a comment from Edison Electric Institute (at page 2) expressing concern that the list of fuels provided in this categorical exclusion did not encompass all fuels with the potential to reduce emissions and waste. It was DOE's intention that the list be illustrative, rather than exhaustive, so DOE is replacing the second and third sentences of the categorical exclusion with the following sentence: "For this category of actions, 'fuel' includes, but is not limited to, coal, oil, natural gas, hydrogen, syngas, and biomass; but 'fuel' does not include nuclear fuel."

### **B3.11 Outdoor tests and experiments on materials and equipment components**

DOE received a comment from Tri-Valley CAREs (at page 4) regarding the use of encapsulated source, special nuclear, or byproduct materials for nondestructive tests and experiments. The comment expressed concern that the encapsulation could be accidentally destroyed, releasing the contents into the environment. The comment also noted that the categorical exclusion did not limit the amount of encapsulated materials that could be used. DOE responds that capsules for source, special nuclear, and byproduct material are designed using technologies and materials to enable their safe transport and use. These capsules are tested to withstand extremes of temperature and pressure and to resist severe impacts, puncture, and vibration without allowing their contents to escape. Such encapsulation can readily withstand the types of handling that would occur during the nondestructive tests and experiments covered by the categorical exclusion. Performance requirements for such testing are based on factors such as the type and amount of radioactive material involved and intended use of the source. Therefore, there is minimal risk that encapsulated materials will be inadvertently released into the

environment. Because encapsulation addresses the risk of environmental release, DOE is not including a limit on the amount of encapsulated source, special nuclear, or byproduct material that could be used in the nondestructive tests and experiments covered by the categorical exclusion. Any such limit would be part of the design of a nondestructive test or experiment, which would include appropriate protocols to protect participants and the environment. DOE is retaining the proposed language and adding a reference to applicable standards to the categorical exclusion in the final rule.

### **B3.12 Microbiological and biomedical facilities**

Comments (e.g., from Friends of the Earth and Center for Food Safety on behalf of itself and 3 other organizations (at page 1)) stated that this categorical exclusion should be rejected, because its use could cause significant impacts; DOE has determined that this categorical exclusion, by its terms and in light of the integral element and extraordinary circumstances requirements, is appropriate and would not have the potential for significant impacts. DOE received comments from Center for Food Safety on behalf of itself and 3 other organizations (at page 4) raising concerns that the environmental release of genetically engineered organisms or synthetic organisms (including genetically engineered algae or synthetic biology) from a microbiological or biomedical facility (including facilities to house such organisms for the production of biofuels) could pose risks to local ecosystems, during both the operation and decommissioning of these facilities. In response, DOE points out that facilities covered by this categorical exclusion must be constructed and maintained in accordance with all applicable regulations, including provisions (e.g., the use of biological safety cabinets and chemical fume hoods) to ensure the containment of organisms that may pose environmental risks as well as the destruction of these organisms when they are no longer needed. Generally, these regulations and

practices have been effective in preventing unintended releases of research organisms and thereby prevented impacts to the environment from these organisms. Further, DOE received comments regarding the use of genetically engineered organisms, synthetic biology, noxious weeds, and non-native species, such as non-native algae in projects that may be categorically excluded under this section of the rule. For further information, see discussion of “Genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species” in section IV.C.7 of this preamble.

In addition, DOE is updating the reference to the manual on Biosafety in Microbiological and Biomedical Laboratories to the most current version.

#### **B3.14 Small-scale educational facilities**

A comment from the Chesapeake Bay Foundation (at page 5) stated that a specific small size limitation should be added for the facilities under the proposed categorical exclusion or the categorical exclusion should be eliminated from the rulemaking. The comment suggested that DOE consider including a limit of 5 acres or smaller, and be restricted to placement in a developed area. When considering the physical size and location of a proposed educational facility, a DOE NEPA Compliance Officer would review the surrounding land uses, the scale of the proposed facility relative to existing development, and the capacity of existing roads and other infrastructure. The NEPA Compliance Officer would have to determine that the size of the proposed facility, in the context of its location and surroundings, was sufficiently small that it would not have the potential to cause significant environmental impacts. Thus, DOE is not proposing any modifications to this categorical exclusion. For further information, see discussion of “small” and “small-scale” in section IV.C.3 of this preamble.

In addition, DOE received a comment from Joyce Dillard (at page 1) that states, rather than the Federal government, are responsible for education and its related facilities. DOE acknowledges this comment and notes that the categorical exclusion is intended to address small facilities that are generally educational in nature, such as visitor centers, small museums, libraries, and similar facilities. Such facilities may be part of a school or university. Therefore, DOE is retaining the proposed language in the final categorical exclusion.

### **B3.15 Small-scale indoor research and development projects using nanoscale materials**

A comment from Center for Food Safety on behalf of itself and 3 other organizations (at page 1) stated that this categorical exclusion should be rejected, because its use could cause significant impacts; DOE has determined that this categorical exclusion, by its terms and in light of the integral element and extraordinary circumstances requirements, is appropriate and would not have the potential for significant impacts. Additionally, DOE received comments (e.g., from Friends of the Earth (in attachment titled Nanotechnology, Climate and Energy), and Center for Food Safety on behalf of itself and 3 other organizations (at page 4)) expressing a wide range of environmental and human health concerns regarding a potential release of nanoscale materials into the environment or commercial-scale use of nanoscale materials. DOE reiterates that this categorical exclusion may be used only for facilities for indoor small-scale research activities and not involving the environmental release, or commercial-scale production, of nanoscale materials. For further information, see discussion of “small” and “small-scale” in section IV.C.3 of this preamble. Covered facilities employing nanoscale materials would be constructed and operated in accordance with applicable requirements to ensure worker safety and to prevent environmental releases. Therefore, DOE is retaining the proposed language in the final categorical exclusion, with one exception. DOE is changing “biohazardous materials” to

“hazardous materials,” in the final categorical exclusion. Hazardous materials is a broader category that includes biohazardous materials, and thus better reflects the range of materials that would need to be safely managed for this type of research and development work.

### **B3.16 Research activities in aquatic environments**

To simplify the categorical exclusion, DOE is changing “salt water and freshwater” to “aquatic.” Aquatic, as used herein, may refer to salt water, freshwater, or areas with shifting delineation between the two; this is not a substantive change. In addition, DOE is clarifying in the preamble that passive seismic techniques in item (c) refers to activities (e.g., use of seismometers) that do not involve the introduction of energy or vibration that would have the potential for significant environmental impacts.

A comment from Pacific Northwest National Laboratory (at page 2) suggested that many of the activities described in this categorical exclusion, such as sample collection, installation of environmental monitoring devices, and other ecological research, should be allowed within the boundary of a marine sanctuary or wildlife refuge, if conducted in a manner consistent with sanctuary goals and objectives. DOE agrees that, if the listed activities are authorized by the government agency responsible for the management of the sanctuary or refuge, or after consultation with such responsible agency when authorization is not applicable, then the activity may be categorically excluded under B3.16. Therefore, DOE is modifying categorical exclusion B3.16 (and B5.25) to now allow covered actions within, or having effects on, existing or proposed marine sanctuaries, wildlife refuges, or governmentally recognized areas of high biological sensitivity, if the action receives authorization from, or after consultation with, the responsible agency. The DOE NEPA Compliance Officer would take concerns from the responsible agency into account when considering whether to apply this categorical exclusion.

DOE also received a comment from DOI (at page 1) stating that it has initiated the process of reviewing and potentially revising or deleting some of its own categorical exclusions. DOE had relied on some of these DOI categorical exclusions, as well as categorical exclusions from the Department of the Navy and the National Oceanic and Atmospheric Administration, when developing this categorical exclusion. In response to the DOI comment, DOE is revising categorical exclusion B3.16 in the final rule to remove certain research activities adapted from DOI's categorical exclusions. The remaining activities are consistent with other Federal agencies' existing categorical exclusions, as well as activities included in other DOE categorical exclusions, such as flow measurements (see categorical exclusion B3.1).

DOE received a comment from DOI (at page 2) expressing concern that DOE would categorically exclude proposed actions located in unsurveyed areas of the seafloor under categorical exclusions B3.16 and B5.25. The comment suggested that DOE should perform an assessment of survey data within the area of potential effect or complete an assessment of potential seafloor impacts from the proposed activities before DOE makes a categorical exclusion determination. In response, DOE notes that a NEPA Compliance Officer, when considering a proposed action in an unsurveyed area, would gather additional information about the proposed project site needed to support a categorical exclusion determination under B3.16 and B5.25. It is the responsibility of the DOE NEPA Compliance Officer to consider the potential for significant impacts and to consult with other agencies as necessary when considering a proposed action.

DOE received comments regarding the use of genetically engineered organisms, synthetic biology, noxious weeds, and non-native species, such as non-native algae, in projects that may be categorically excluded under this section of the rule. For further information, see discussion of

“Genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species” in section IV.C.7 of this preamble.

DOE received a comment from National Wildlife Federation (at page 4) expressing strong support for “removing unnecessary barriers to the commercialization of deepwater offshore wind technology,” and stating that “[w]ith siting screens, research and demonstration projects in these technologies will not have significant impacts.” DOE does not currently have the experience to support expanding the categorical exclusion to include such projects, but this may change as DOE gains experience over time.

#### **Categorical Exclusions Applicable to Electrical Power and Transmission (B4)**

DOE is changing the title of this group of categorical exclusions to state that they are applicable to “electrical power and transmission,” rather than to “power resources,” as used in the existing regulations and the Notice of Proposed Rulemaking. This change better identifies the subject of this group of categorical exclusions.

##### **B4.1 Contracts, policies, and marketing and allocation plans for electric power**

In the Notice of Proposed Rulemaking, DOE proposed to clarify the scope of this categorical exclusion by stating that the contracts, policies, and marketing and allocation plans are “related to electric power acquisition or transmission.” After further consideration, DOE will not explicitly refer to transmission in this categorical exclusion; transmission activities are included in the contracts, policies, and marketing plans, or are covered primarily in other classes of actions, such as categorical exclusion B4.11.

#### **B4.4 Power marketing services and activities**

Upon further consideration, DOE is changing the example of “load shaping” to “load shaping and balancing.” Load balancing helps ensure system reliability by managing energy resources to be equal with load.

#### **B4.6 Additions and modifications to transmission facilities**

After further consideration, DOE will not adopt its proposal to apply this categorical exclusion to facilities that “would not have the potential to cause significant impacts beyond the previously disturbed or developed facility area” and instead this categorical exclusion will be limited to actions “within a previously disturbed or developed facility area.” DOE is making this change to conform the categorical exclusion to others that relate to proposed actions in a previously disturbed or developed area. In addition, after further consideration, DOE is making a clarifying improvement by moving the activity examples to a separate sentence. For further information, see discussion of “Previously disturbed or developed area” in section IV.C.2 of this preamble.

#### **B4.9 Multiple uses of transmission line rights-of-way**

A comment from Edison Electric Institute (at page 3) on this categorical exclusion, for granting or denying requests for multiple uses of a transmission facility’s rights-of-way, requested that DOE specify that multiple uses need to accommodate technical and other concerns that may be raised by the owners of the transmission facilities involved. This categorical exclusion is used by DOE entities, for example Power Marketing Administrations, in responding to a request regarding their own transmission facility rights-of-way, not those owned by other parties. Therefore, DOE is retaining the proposed language in the categorical exclusion in the final rule.

#### **B4.10 Removal of electric transmission facilities**

A comment from Edison Electric Institute (at page 3) expressed agreement with the proposed changes to the categorical exclusion, but requested that DOE stipulate that any permit holders and owners of facilities affected by the abandonment must be given advance notice so they can protect their rights. This comment raises concerns unrelated to environmental review under NEPA, which is the scope of this regulation. For this reason, DOE is retaining its proposed categorical exclusion as the final categorical exclusion.

DOE is changing the title of this categorical exclusion to more closely reflect the wording of the categorical exclusion.

#### **B4.11 Electric power substations and interconnection facilities**

DOE is simplifying the wording of this categorical exclusion. In the Notice of Proposed Rulemaking, DOE proposed that actions under this categorical exclusion be restricted to interconnecting new generation resources that meet two conditions – that the new generation resource would be eligible for a categorical exclusion and that it would be equal to or less than 50 average megawatts. DOE determined that these limitations on the generation resource were more limiting than necessary to ensure appropriate application of this categorical exclusion. The appropriate limit is that the generation resource not pose the potential for significant environmental impacts. This limit already is addressed in DOE’s existing NEPA regulations, which state, in part, that before applying a categorical exclusion, DOE must determine that the proposed action is not “connected” (40 CFR 1508.25(a)(1)) to other actions with potentially significant impacts (10 CFR 1021.410(b)(3)).

DOE received a comment from the Chesapeake Bay Foundation (at page 5) stating that “a categorical exclusion without any limitations or conditions on what can be fairly substantial

development is inappropriate” and that DOE should consider context and size to ensure that actions with significant impacts are not categorically excluded. In applying this categorical exclusion, a NEPA Compliance Officer considers context and size, along with other factors associated with potential for significant impacts, and DOE prepares an environmental assessment or environmental impact statement if a categorical exclusion determination is not appropriate.

#### **B4.12 Construction of powerlines**

DOE is simplifying the wording of this categorical exclusion with respect to activities not in previously disturbed or developed rights-of-way. Upon further consideration, DOE is removing the limitation on interconnection of new generation resources proposed for this categorical exclusion for the same reason described above for categorical exclusion B4.11.

#### **B4.13 Upgrading and rebuilding existing powerlines**

DOE is simplifying the wording of this categorical exclusion by removing the limitation on interconnection of new generation resources. The existing categorical exclusion B4.13 does not include a condition regarding interconnections, and DOE has determined that it is not necessary to add one. Also, any proposed upgrade or rebuild of existing powerlines would be subject to the same consideration regarding connected actions as described above for categorical exclusion B4.11.

### **Categorical Exclusions Applicable to Conservation, Fossil, and Renewable Energy**

#### **Activities (B5)**

##### **B5.3 Modification or abandonment of wells**

DOE received a comment from the Chesapeake Bay Foundation (at page 6) that well abandonment should be accompanied by revegetation and rehabilitation of the area. In response, DOE notes that abandonment of a well normally includes actions such as plugging, welding, or

crimping and backfilling to ensure safety and prevent contamination from entering the well. DOE's proposed language adds new conditions, including that this categorical exclusion could only apply if the well abandonment were to be conducted "consistent with best practices and DOE protocols," such as those to address revegetation and rehabilitation, among other issues. Therefore, DOE is retaining the proposed language in the categorical exclusion in the final rule. DOE notes, however, that revegetation and rehabilitation may not always be part of a proposed abandonment, where, for example, continued maintenance of cleared areas may be necessary because of ongoing operations near the abandoned well.

**B5.4 Repair or replacement of pipelines, B5.5 Short pipeline segments, and B5.8 Import or export natural gas, with new cogeneration powerplant**

A comment from an anonymous individual (at page 2) objected to the categorical exclusions for pipelines because "major pipelines blow up" and asserted that DOE has allowed major oil firms to fail to maintain pipelines and has failed to adequately punish these companies for oil spills. DOE's experience is that the types of pipeline projects addressed by these categorical exclusions do not pose significant risk of accident and, indeed, repair, replacement, and similar activities can reduce such risks. DOE is retaining the proposed language in the categorical exclusions in the final rule.

**B5.13 Experimental wells for the injection of small quantities of carbon dioxide**

A comment from Sandy Beranich (at page 2) expressed concern that the injection of carbon dioxide into experimental wells should be allowed only after completing an environmental assessment. The comment also inquired as to DOE experience with these wells and their potential impacts. DOE has identified, in the Technical Support Document, multiple environmental assessments and findings of no significant impact and the results of field projects

that demonstrate DOE experience with wells of a scale covered by this categorical exclusion. These environmental assessments and findings of no significant impact demonstrate that the operation of such wells normally does not result in significant environmental impacts.

To simplify the categorical exclusion, DOE is changing “salt water and freshwater” to “aquatic environments.” Aquatic, as used herein, may refer to salt water, freshwater, or areas with shifting delineation between the two; this is not a substantive change.

#### **B5.15, B5.16, B5.17, B5.18, and B5.25—Renewable energy**

Certain of DOE’s proposed categorical exclusions for small-scale renewable energy projects include a condition that a proposed project “would incorporate appropriate control technologies and best management practices.” DOE received a comment from Defenders of Wildlife (at pages 2-5) recommending that the control technologies and best management practices for five categorical exclusions (B5.15, B5.16, B5.17, B5.18, and B5.25) include pre-development surveys, mitigation measures, continued monitoring, and decommissioning/reclamation. In response, DOE notes that it normally would consider these and other practices during its NEPA review, including when determining whether to apply one of the categorical exclusions referenced by the comment.

The comment first recommended inclusion of pre-development surveys for endangered and threatened species and other sensitive resources. DOE already evaluates the likelihood of potential impacts to threatened and endangered species and sensitive ecological resources through the integral elements applicable to all appendix B categorical exclusions, as well as the consideration of extraordinary circumstances. Furthermore, predevelopment surveys may be required as part of compliance with other regulations (e.g., those pertaining to the Endangered

Species Act, Bald and Golden Eagle Protection Act) and would be considered by DOE in its decision whether to apply a categorical exclusion to a particular proposed action.

The second recommendation in the comment was to include mitigation measures to compensate for impacts to ecological resources. In response, compensating for impacts to biological resources is not required by NEPA for application of a categorical exclusion, and DOE declines to adopt such a requirement. However, DOE considers all mitigation measures and best management practices that are incorporated into a proposed action as part of its decision whether to apply any categorical exclusion. This approach is supported by the CEQ final guidance on the “Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact” (CEQ Mitigation and Monitoring Guidance) (76 FR 3843; January 14, 2011). In its guidance, CEQ noted that “[m]any Federal agencies rely on mitigation to reduce adverse environmental impacts as part of the planning process for a project, incorporating mitigation as integral components of a proposed project design before making a determination about the significance of the project’s environmental impacts. Such mitigation can lead to an environmentally preferred outcome and in some cases reduce the projected impacts of agency actions to below a threshold of significance. An example of mitigation measures that are typically included as part of the proposed action are agency standardized best management practices such as those developed to prevent storm water runoff or fugitive dust emissions at a construction site” (CEQ Mitigation and Monitoring Guidance).

The comment also recommended continued monitoring of environmental impacts resulting from categorically excluded actions. In response, ongoing monitoring is a part of many DOE programs, often in conjunction with an environmental management system, and private project proponents may include such monitoring (e.g., for compliance with environmental

protection requirements). However, when DOE is providing funding, its ability to require or oversee ongoing monitoring may be limited. In sum, DOE supports the objective of monitoring, but is not able to ensure that monitoring occurs in all circumstances.

The fourth recommendation in the comment was to include decommissioning/reclamation plans that restore impacted areas. DOE considers available information on decommissioning/reclamation plans as part of its decision whether to apply a categorical exclusion. Decommissioning and reclamation plans are not prerequisites for application of a categorical exclusion and, while they may be appropriate in some instances, DOE does not elect to require them in every situation.

DOE is not making any changes to categorical exclusions B5.15, B5.16, B5.17, B5.18, and B5.25 in response to the comments discussed above.

#### **B5.15 Small-scale renewable energy research and development and pilot projects**

A comment from DOI (at page 3) asked for clarification regarding whether actions covered under the proposed categorical exclusion included both research and development projects and pilot projects located in previously disturbed or developed areas. DOE is modifying the categorical exclusion to more clearly state that both types of projects must be located in a previously disturbed or developed area. Therefore, DOE is changing the first sentence to read: “Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area.” For further information, see discussion of “Previously disturbed or developed area” in section IV.C.2. of this preamble. Another comment requested that the term “small-scale” be defined. For further information, see discussion of “small” and “small-scale” in section IV.C.3 of this preamble.

DOE received comments regarding the use of genetically engineered organisms, synthetic biology, noxious weeds, and non-native species, such as non-native algae, in projects that may be categorically excluded under this section of the rules. For further information, see discussion of “Genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species” in section IV.C.7 of this preamble.

For discussion of additional comments on this categorical exclusion, see “B5.15, B5.16, B5.17, B5.18, and B5.25—Renewable energy” above in this preamble.

### **B5.16 Solar photovoltaic systems**

DOE received a comment from William Kirk Williams (at page 1) objecting to DOE’s proposed categorical exclusion for solar photovoltaic projects because of the potentially large amount of land involved, associated impacts on ecosystems, and the economic interests of local communities who might be restricted from existing economic uses of Federal lands. The comment said that such projects should not be built without preparation of an environmental impact statement to consider alternatives. DOE agrees that some solar projects are large and appropriately analyzed in an environmental assessment or environmental impact statement. However, DOE is not making any changes in response to this comment because the categorical exclusion could only be applied to projects “on a building or other structure” or on land “generally less than 10 acres within a previously disturbed or developed area.” At this scale, solar photovoltaic projects normally would not have the potential to cause significant impacts. For further information, see discussion of “Previously disturbed or developed area” in section IV.C.2 of this preamble.

Two comments (from Granite Construction Company (at pages 1-2) and Amonix (at pages 1-2)) asked DOE to increase the allowable footprint (acreage) for actions under this categorical

exclusion to 100 acres when the projects would be located on heavily developed land such as mine or quarry sites. However, DOE does not have an adequate record to support a conclusion that larger photovoltaic systems, including up to 100 acres, normally would not have the potential for significant environmental impacts. For all proposed projects, including those at the mine and quarry locations, DOE would need to consider numerous site-specific factors, including the current state of animal and plant systems, reclamation, and alternative uses (e.g., grazing). The scale of construction activities and the potential impacts for systems on 100 acres of land could be significantly different than those for a project located on 10 acres or less. DOE will continue to collect and review data and could revise or add a new categorical exclusion at a future time, if warranted. At a minimum, DOE would consider this during the next periodic review of its categorical exclusions.

A comment from William Kirk Williams (at page 1) also expressed concerns regarding negative impacts to species such as the sage grouse from activities under this categorical exclusion. Under integral element B(4)(ii), a provision applicable to all categorical exclusions in appendix B, DOE would not categorically exclude an action with the potential for significant impacts on threatened and endangered species, including Federal and state-listed and proposed species and otherwise Federally protected species.

For discussion of additional comments on this categorical exclusion, see “B5.15, B5.16, B5.17, B5.18, and B5.25—Renewable energy” above in this preamble.

#### **B5.17 Solar thermal systems**

For DOE's response to comments on this categorical exclusion, see discussion of “B5.15, B5.16, B5.17, B5.18, and B5.25 Renewable energy” above in this preamble.

## **B5.18 Wind turbines**

In response to comments, DOE is making three changes to the categorical exclusion. A comment from Pacific Northwest National Laboratory (at page 2) asked for exclusionary wording stating that wind turbines would not be located in an established marine sanctuary or wildlife refuge. In response to the comment, DOE is limiting the categorical exclusion to land activities by adding the following sentence to the end of the categorical exclusion: “Covered actions include only those related to wind turbines to be installed on land.” DOE also received a comment supporting the use of categorical exclusions for deepwater floating offshore wind energy projects. DOE does not currently have the experience to support expanding the categorical exclusion to include such projects, but this may change as DOE gains experience over time. Second, DOE received comments (e.g., from Defenders of Wildlife (at page 4), Sandy Beranich (at page 2)) expressing uncertainty or concern as to the scope or size of a proposed action to which this categorical exclusion may apply, asking whether this categorical exclusion could cover the establishment of a wind farm. In order to clarify that DOE intends the categorical exclusion to apply to proposals for a limited number of wind turbines, DOE is changing the first sentence of the categorical exclusion to refer to a small number of wind turbines (generally not more than 2), which is the number of turbines generally analyzed in the environmental assessments and findings of no significant impact identified in the Technical Support Document. Third, DOE identified distances for siting turbines from air safety and navigational devices in nautical miles in its Notice of Proposed Rulemaking. DOE is adding the conversion to miles to ensure the limitation is readily understood by both experts and the general public.

In addition, upon further consideration, DOE is clarifying the examples of significant impacts to persons, so that the examples now read “(such as from shadow flicker and other visual

effects, and noise).” DOE also is changing a condition that a proposed action “would not have the potential to cause significant impacts on bird or bat species” to “would not have the potential to cause significant impacts on bird or bat populations.” The appropriate context for considering potential impacts is the local populations of birds and bats (including those nesting or foraging in, or flying through, the vicinity of the proposed project site).

DOE also received several other comments in response to which DOE is not making changes to the categorical exclusion. As noted previously (section IV.C.4), DOE received comments on its proposed use of “would not have the potential for significant impact” in a number of its categorical exclusions, including B5.18. In the context of categorical exclusion B5.18, comments asserted that the phrase would be open to interpretation or was too vague. DOE is including the limitations “would not have the potential to cause significant impacts on bird or bat populations” and “would not have the potential to cause significant impacts to persons (such as from shadow flicker and other visual effects, and noise)” in categorical exclusion B5.18 to highlight the types of potential impacts that a NEPA Compliance Officer must consider when reviewing a proposed action specific to wind turbines. As explained in section IV.C.4, this is consistent with CEQ’s NEPA regulations and its Categorical Exclusion Guidance.

DOE received comments that expressed concern that the phrase “previously disturbed or developed area” was too vague and prone to interpretation. As indicated in its Notice of Proposed Rulemaking, DOE is limiting categorical exclusion B5.18 to actions located within previously disturbed or developed areas to avoid potential impacts to resources. For further information, see discussion of “Previously disturbed or developed area” in section IV.C.2 of this preamble.

DOE received a comment from William Kirk Williams (at page 1) that expressed concern over the scale of wind farms as too large and consuming too much land. Other comments (e.g., from DOI (at page 3), Defenders of Wildlife (at page 4), Sandy Beranich (at page 2)) suggested limiting this categorical exclusion to a single turbine or specifying the scale in terms of acres. DOE is changing the categorical exclusion to limit covered actions to those that involve only “a small number of (generally not more than 2) ...” This restriction, along with the condition that wind turbines must have a total height generally less than 200 feet and be sited within a previously disturbed or developed area, limits the potential scale of actions under this categorical exclusion to those that would not require large parcels of land. DOE has identified, in the Technical Support Document, multiple environmental assessments and findings of no significant impact that demonstrate DOE experience with wind turbine projects of the scale covered by this categorical exclusion. These environmental assessments and findings of no significant impact demonstrate that the construction of a small number of wind turbines normally does not result in large parcels of land being affected or significant environmental impacts. For further information, see discussion of “small” and “small-scale” in section IV.C.3 of this preamble.

Another comment (from National Wildlife Federation (at page 3)) suggested that DOE had not taken into consideration the “non-footprint” and potential cumulative impacts of wind turbines on bird, bat and wildlife behavior, migration pathways or habitat. A DOE NEPA Compliance Officer would consider potential direct, indirect, and cumulative impacts, as well as extraordinary circumstances when reviewing a proposed action and making a NEPA determination.

DOE received a comment from DOI (at page 3) asking for the basis for the limitation, as stated in the Notice of Proposed Rulemaking, that covered actions would be for commercially

available wind turbines “with a total height generally less than 200 feet.” This limitation is based on several considerations. DOE is choosing to limit this categorical exclusion to actions that are small-scale (i.e., a small number of small turbines). The “generally less than 200 feet” limitation is intended to avoid potential conflicts with airports and aviation navigation aids, and to avoid potential commercial and military air safety issues.

The nature of potential impacts related to turbine height on visual or biological resources for any proposed action will vary depending on the nature of the site. DOE is including other limitations in B5.18 (e.g., “would not have the potential to cause significant impacts on bird or bat populations”) that better address issues related to visual, biological, and other resources in order to highlight the types of potential impacts that a NEPA Compliance Officer must consider when reviewing a proposed action specific to wind turbines.

DOE also received a comment from Defenders of Wildlife (at page 4) focused on best management practices and monitoring measures associated with categorical exclusion B5.18. A comment from William Kirk Williams (at page 1) expressed concern that B5.18 lacks a mechanism for requiring that actions covered under this categorical exclusion would incorporate best management practices. Both of these comments were related to using best management practices to reduce impacts to birds and bats under categorical exclusion B5.18. DOE considers all mitigation measures and best management practices that are incorporated into a proposed action as part of its decision whether to apply any categorical exclusion. This approach is supported by the CEQ Mitigation and Monitoring Guidance. DOE supports the objective of better design and planning to limit impacts to birds and bats and has therefore included a limitation in B5.18 that covered actions would “incorporate appropriate control technologies and best management practices.” Whether or not such practices are included in the design of a wind

turbine proposed action would be evident at the time that a DOE NEPA Compliance Officer considers the specific details of a proposed action.

The comment from Defenders of Wildlife (at page 5) also recommended continued monitoring of environmental impacts resulting from categorically excluded actions. In response, ongoing monitoring is a part of many DOE programs, often in conjunction with an environmental management system, and private project proponents may include such monitoring (e.g., for compliance with environmental protection requirements). However, when DOE is providing funding, its ability to require or oversee ongoing monitoring may be limited, due to factors such as the terms of the financial award and the extent of Federal control over the lifetime of the project. In sum, DOE supports the objective of monitoring but is not able to ensure that monitoring occurs in all circumstances.

Several comments (e.g., from DOI (at page 3), William Kirk Williams (at page 1)) raised issues related to impacts to biological resources, namely on impacts to bird and bat species. A comment from DOI (at page 3) asked DOE to describe “how the determination [would be] made that a significant number of birds or bats would not be affected.” Because a determination of significance under NEPA depends on the context and intensity of an individual proposal, potential significance of the impacts from wind turbines on birds and bats is site-specific. At the time that a NEPA Compliance Officer considers applying this categorical exclusion to a proposed action, DOE would determine significance of impacts on birds and bats based on the specific site conditions of the proposed wind turbine(s).

A second comment (from William Kirk Williams (at page 1)) pointed out that wind turbines kill birds, and therefore, constitute a violation of the Migratory Bird Treaty Act. DOE agrees that impacts to birds are an important concern associated with this renewable technology,

and DOE is modifying the integral elements applicable to appendix B categorical exclusions by adding that a proposal must be in compliance with the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. As indicated in its Notice of Proposed Rulemaking, DOE is also including a limitation that the action not have the potential to cause significant impacts on bird or bat populations, so that a NEPA Compliance Officer must consider the impact on these populations specifically when reviewing a proposed action to determine whether it fits this categorical exclusion.

Another comment (from Sandy Beranich (at page 2)) requested that DOE include a requirement that a covered action under categorical exclusion B5.18 would require agreement from the U.S. Fish and Wildlife Service for the size and location. Under integral element B(4)(ii), applicable to all categorical exclusions in appendix B, DOE would not categorically exclude an action with the potential for significant impacts on threatened and endangered species, including Federal and state-listed and proposed species and otherwise Federally protected species. Further, DOE consults with other agencies, as required. While the U.S. Fish and Wildlife Service has some authority related to the protection of such species, it does not have statutory or regulatory authority for siting wind turbines generally. The authority for siting wind turbines typically rests with state and/or local governments that make decisions with regard to land use, zoning, or other natural resource uses. Thus, DOE is not making any changes to categorical exclusion B5.18 based on this comment.

A comment from National Wildlife Federation (at page 3) requested that DOE include a specific requirement that wind turbines must not be sited in migration corridors or pathways, habitat areas, or areas where birds concentrate, such as wetlands or lakes. As indicated in its Notice of Proposed Rulemaking, DOE is including a limitation that covered actions “would be in

accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area.” DOE clarifies that this could include, but is not limited to, State, local or other requirements regarding the protection of special or sensitive species, migration pathways, and habitats. Therefore, DOE is not making a change based on this comment.

Another comment from National Wildlife Federation (at page 3) suggested that DOE include a requirement that the actions covered be in accordance with a municipal, state, or Federal wind turbine siting guideline such as the U.S. Fish and Wildlife Service, Draft Land-Based Wind Energy Guidelines (April 2011). The U.S. Fish and Wildlife Service has since issued revised draft guidelines (July 2011) and continues related discussions with the interested public and other Federal agencies. DOE will continue following the development of these guidelines and considering how to most appropriately apply them to its activities. However, DOE does not find it appropriate to make conformance to the guidelines a condition of applying a categorical exclusion. The guidelines are still being developed, and the U.S. Fish and Wildlife Service does not consider them mandatory at this time. Thus, DOE is not making any changes to categorical exclusion B5.18 based on this comment.

For discussion of additional comments on this categorical exclusion, see “B5.15, B5.16, B5.17, B5.18, and B5.25—Renewable energy” above in this preamble.

#### **B5.19 Ground source heat pumps**

After further consideration, DOE is making two changes to the categorical exclusion. The first is to address the potential for a ground source heat pump system to allow cross-contamination between aquifers, during the construction or operation of the heat pump system. The second is to correct a typographical error; DOE intended to say “school or community center” rather than “school and community center.” Therefore, DOE is changing the first

sentence of the categorical exclusion to read: “The installation, modification, operation, and removal of commercially available small-scale ground source heat pumps to support operations in single facilities (such as a school or community center) or contiguous facilities (such as an office complex) (1) only where (a) major associated activities (such as drilling and discharge) are regulated, and (b) appropriate leakage and contaminant control measures would be in place (including for cross-contamination between aquifers) ....”

### **B5.20 Biomass power plants**

DOE received comments (e.g., from National Wildlife Federation (at page 4) and Center for Food Safety on behalf of itself and 3 other organizations (at page 5)) expressing concern about the impacts of biomass used in energy production. These concerns included impacts to wildlife habitat from the conversion of natural forests to monocultures for biomass production and the use of experimental biomass technologies employing genetically engineered organisms. DOE received a comment from Center for Food Safety on behalf of itself and 3 other organizations (at page 5) stating that biomass harvesting (or sourcing) could result in widespread forest destruction and soil degradation. Another comment (from National Wildlife Federation (at page 4)) suggested that biomass be certified by the Forest Stewardship Council or the Council for Sustainable Biomass Production to address the impact of biomass sourcing on forest stewardship and sustainability. Comments from Center for Food Safety on behalf of itself and 3 other organizations (at page 5) expressed concern about significant air pollution that could result from biomass combustion, when compared to other fuels. Another comment (from Friends of the Earth (at pages 1-2) and Center for Food Safety on behalf of itself and 3 other organizations (at page 1)) stated that this categorical exclusion should be rejected, because its use could cause

significant impacts; DOE has determined that this categorical exclusion is appropriate, in part, because of the requirement to consider extraordinary circumstances.

A DOE NEPA Compliance Officer would evaluate the size and output of proposed biomass power plants to determine whether the proposals meet the integral elements of the categorical exclusion (listed in appendix B, paragraph (4)) and whether there are any associated extraordinary circumstances that would affect the significance of impacts, including impacts to wildlife and habitat. In DOE's experience, the limitations on the size and energy output of covered biomass power plants ensure that any covered action would not consume quantities of biomass that could foreseeably impact soil quality or forest sustainability, nor would such small-scale projects result in the conversion of natural forests to monocultures of biomass crops. Therefore, DOE is not adding specific restrictions on biomass sourcing, although an applicant's use of biomass certified as sustainable could be considered by the NEPA Compliance Officer in determining whether a categorical exclusion is appropriate. Regarding pollution that could result from biomass combustion, the categorical exclusion requires that any covered biomass power plant not affect the air quality attainment status of the area, not have the potential to cause a significant increase in the quantity or rate of air emissions, and not have the potential to cause significant impacts to water resources. For these reasons, DOE is retaining the proposed language in the categorical exclusion in the final rule.

A comment from Center for Food Safety on behalf of itself and 3 other organizations (at page 5) expressed concern about potential impacts on global climate change, stating that burning biomass can emit almost 1.5 times as much global warming pollution per unit of energy as coal, and that harvesting and transporting biomass would add to greenhouse gas emissions. A comment from the Blue Ridge Environmental Defense League (at page 1) stated that biomass

energy source impacts are large, and that labeling such projects as “carbon neutral” is a mistaken concept without scientific basis. DOE considered these issues when developing the categorical exclusion. For example, DOE reviewed the Environmental Protection Agency’s Call for Information regarding greenhouse gas emissions from bioenergy and other biogenic sources (75 FR 4117; July 15, 2010), which noted that the issue is complex and requested comments on analytical approaches that would apply to biomass facilities. Partly because of these issues, the categorical exclusion explicitly limits covered actions to those that would not have the potential to cause a significant increase in the quantity or rate of air emissions. DOE intends that “emissions” includes greenhouse gas emissions. Further, the small-scale biomass plants under this categorical exclusion would have correspondingly small-scale greenhouse gas emissions, and would produce power that may offset energy that otherwise might have been produced by fossil energy facilities, resulting in a potential for net beneficial impacts on climate change. Impacts from harvesting fuel would be limited by the size of the facility (and thus the total fuel needs) and consideration of factors such as existing land use plans.

DOE received comments regarding the use of genetically engineered organisms, synthetic biology, noxious weeds, and non-native species, such as non-native algae, in projects that may be categorically excluded under this section of the rules. For further information, see discussion of “Genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species” in section IV.C.7 of this preamble.

#### **B5.21 Methane gas recovery and utilization system**

DOE received a comment from the Blue Ridge Environmental Defense League (at page 1) stating that methane gas recovery and utilization systems are either negative or associated with negative impacts. A DOE NEPA Compliance Officer would evaluate the size and output of

proposed methane gas systems to determine whether the proposals meet the integral elements of the categorical exclusion (listed in appendix B, paragraph (4)) and whether there are any associated extraordinary circumstances that would affect the significance of impacts, including impacts to wildlife and habitat. The categorical exclusion also requires that any covered methane gas system not have the potential to cause a significant increase in the quantity or rate of air emissions, be in accordance with applicable requirements, and incorporate appropriate control technologies and best management practices. Because these measures would address potential significant impacts from these facilities, DOE is retaining the proposed language in the final categorical exclusion.

#### **B5.24 Drop-in hydroelectric systems**

A comment from Pacific Northwest National Laboratory (at page 2) suggested that limiting this categorical exclusion to stream and river areas upgradient of “natural” fish barriers is unduly restrictive because it excludes, for example, a small-scale hydroelectric system in an irrigation canal that uses existing fish screens or in a river system above an existing dam. DOE agrees that it is the effectiveness of the fish barrier – not whether the barrier is natural or man-made – that is relevant to the potential environmental impacts. Two important indicators of future effectiveness of an existing fish barrier are whether it is planned for removal (as are man-made barriers in several river systems) and whether it is to be modified to facilitate fish moving upstream past the barrier. Thus, DOE is revising the categorical exclusion to remove the word “natural” and to include a condition that the system “be located up-gradient of an existing anadromous fish barrier that is not planned for removal and where fish passage retrofit is not planned....”

Another comment from Pacific Northwest National Laboratory (at page 2) asked DOE to restrict this categorical exclusion to activities that would “not have the potential to cause impacts to threatened or endangered species” or significant impacts to fish or wildlife. Before making a categorical exclusion determination, a NEPA Compliance Officer must assess whether the proposed action will have the potential to cause significant impacts to listed or proposed threatened and endangered species. See integral element B(4)(ii). Thus, potential significant impacts to threatened and endangered species and fish and wildlife will be considered. The comment seeks inclusion of a higher standard – any potential impact to threatened and endangered species – which is not the correct standard required under NEPA. However, in response DOE is adding a reference to the integral element listed at B(4)(ii), which requires consideration of the impacts on threatened and endangered species, including Federal and state-listed and proposed species and otherwise Federally protected species.

DOE also received a comment from the Blue Ridge Environmental Defense League (at page 1) expressing concern with the proposed categorical exclusion for drop-in hydroelectric systems. DOE has concluded that such systems meeting the requirements of the categorical exclusion (i.e., they would involve no storage or diversion of stream or river water, they would be located up-gradient of an existing anadromous fish barrier, and installation would be accomplished without use of heavy equipment and would involve no major construction or modification of stream or river channels) normally would not have the potential to cause significant impacts.

## **B5.25 Small-scale renewable energy research and development and pilot projects in aquatic environments**

To simplify the categorical exclusion, DOE is changing “salt water and freshwater” to “aquatic.” Aquatic, as used herein, may refer to salt water, freshwater, or areas with shifting delineation between the two; this is not a substantive change. A comment from Pacific Northwest National Laboratory (at page 2) asked that additional restrictions be added to the categorical exclusion to preclude the installation of a small-scale renewable energy research and development or pilot project device, if the installation of the device would require significant dredging or if the device itself could interfere with shipping navigation. Under integral element B(1) (appendix B, paragraph (1)) to 10 CFR part 1021, to fit within the classes of actions under appendix B categorical exclusions, the proposed action must be one that would not “threaten a violation of applicable, statutory, or permit requirements for environment, safety, and health.” Actions covered by this categorical exclusion would be subject to, and would often require permits under, Section 10 of the Rivers and Harbors Act, which regulates structures placed in “navigable waters of the United States,” and Section 404 of the Clean Water Act, which regulates the discharge of dredged or fill material into waters of the United States. These regulations and statutes are expected to address the comment; therefore, DOE is not making any changes based on this comment.

A comment from the Ocean Renewable Energy Coalition (at page 4) asked if a transmission line connecting the proposed generation device to the grid would be covered under this categorical exclusion. Any action subject to a NEPA determination, whether an environmental impact statement, environmental assessment, or categorical exclusion, must include all necessary components of that action. In this case, the inclusion of one or more

transmission lines connecting the generation device to the electrical grid as part of the proposed action would not prevent the application of the categorical exclusion, unless some aspect of the installation, character, or path of the line was inconsistent with one or more of the limitations described in the categorical exclusion or the integral elements, or if extraordinary circumstances were present.

Several comments (e.g., from DOI (at page 3) and the Ocean Renewable Energy Coalition (at page 4)) asked that the term “small-scale” be defined, and one comment (from the Ocean Renewable Energy Coalition (at page 4)) suggested that a power limit of 5 megawatts be added to the categorical exclusion. Whether a proposal is small-scale would be determined by the NEPA Compliance Officer based on the context and intensity of the proposed action, which would be determined by the site conditions and nature of the proposal. Such limitations are more meaningful than a megawatt limit, as there is not necessarily a direct correlation between generation capacity and potential environmental impacts for the various technologies that could be addressed under this categorical exclusion. For additional discussion on the term “small-scale,” see DOE’s discussion of “small” and “small-scale” that appears in section IV.C.3 of this preamble.

A comment from the Ocean Renewable Energy Coalition (at page 5) suggested that DOE provide guidance as to the meaning of “biologically sensitive.” Areas of high biological sensitivity are defined in the categorical exclusion to include “areas of known ecological importance, whale and marine mammal mating and calving/pupping areas, and fish and invertebrate spawning and nursery areas recognized as being limited or unique and vulnerable to perturbation; these areas can occur in bays, estuaries, near shore, and far offshore, and may vary seasonally.” Information regarding areas of high biological sensitivity is available from local,

state, and Federal regulatory and natural resource management agencies. It is not uncommon for a categorical exclusion determination to require some analysis to determine whether any extraordinary circumstances exist that would render the categorical inapplicable to a particular proposal. Determining the presence of conditions that would constitute an area of high biological sensitivity would be the responsibility of the DOE NEPA Compliance Officer, in consultation with the project proponent, and would necessarily occur before a categorical exclusion was granted.

A comment from Sandy Beranich (at page 2) noted that marine areas are too fragile for a variety of projects that could include the use of chemicals or invasive work and suggested that actions under this categorical exclusion warrant an environmental assessment level of analysis. Further, the comment requested that DOE limit the scale of projects under this categorical exclusion to allow only small projects in very specific areas. As indicated in its Notice of Proposed Rulemaking, DOE is limiting the scope and location of activities under this categorical exclusion to ensure that renewable energy research is conducted in a manner that would not have the potential to cause significant impacts.

DOE received a comment from the Ocean Renewable Energy Coalition (at page 5) noting that an offshore wave pilot project identified in a document cited in DOE's Technical Support Document for the Notice of Proposed Rulemaking was located in a marine sanctuary, yet was still deemed to have minimal impacts. In addition, a comment from Pacific Northwest National Laboratory (at page 2) suggested that many of the activities described in categorical exclusion B3.16 – a related categorical exclusion for activities in aquatic environments – should be allowed within the boundary of a marine sanctuary or wildlife refuge if conducted in a manner consistent with sanctuary goals and objectives. Therefore, DOE is modifying categorical exclusion B5.25

(and B3.16) to now allow covered actions within, or having effects on, existing or proposed marine sanctuaries, wildlife refuges, or governmentally recognized areas of high biological sensitivity, if the action receives authorization from, or after consultation with, the responsible agency. The DOE NEPA Compliance Officer would take concerns from the responsible agency into account when considering whether to apply this categorical exclusion. For further discussion, see discussion of categorical exclusion B3.16, above.

DOE received a comment from National Wildlife Federation (at page 4) expressing strong support for “removing unnecessary barriers to the commercialization of deepwater offshore wind technology,” and stating that “with siting screens, research and demonstration projects in these technologies will not have significant impacts.” DOE does not currently have the experience to support expanding the categorical exclusion to include such projects, but this may change as DOE gains experience over time and will be considered when DOE conducts its next periodic review of its categorical exclusions. Another comment (from Friends of the Earth (at page 2) and Center for Food Safety on behalf of itself and 3 other organizations (at page 1)) stated that this categorical exclusion should be rejected, because its use could cause significant impacts; DOE has determined that this categorical exclusion is appropriate, in part, because of the requirement to consider extraordinary circumstances.

DOE received a comment from DOI (at page 2) suggesting that it discuss or consider impacts related to decommissioning of authorized temporary structures or devices under categorical exclusion B5.25. The comment expressed concern regarding impacts from both planned decommissioning and unplanned “cessation of operation” or failure. DOE agrees that potential impacts associated with decommissioning and similar activities would be appropriate to consider when determining whether a particular proposed action qualifies for a categorical

exclusion. Another comment (from DOI (at page 3)) asked for clarification on what happens if a proposed action does not meet the conditions outlined in categorical exclusion B5.25. In response, if a condition is not met, then the DOE NEPA Compliance Officer would not apply this categorical exclusion and would prepare an environmental assessment or environmental impact statement, as appropriate. Another comment (from DOI (at page 3)) requested that DOE clarify the meaning of “the construction of permanent devices.” DOE also received a comment from DOI (at page 2) expressing concern that it would categorically exclude proposed actions located in unsurveyed areas of the seafloor under categorical exclusions B3.16 and B5.25. See explanation under categorical exclusion B3.16, above.

DOE received comments regarding the use of genetically engineered organisms, synthetic biology, noxious weeds, and non-native species, such as non-native algae, in projects that may be categorically excluded under this section of the rules. For further information, see discussion of “Genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species” in section IV.C.7 of this preamble.

For discussion of additional comments on this categorical exclusion, see “B5.15, B5.16, B5.17, B5.18, and B5.25—Renewable energy” above in this preamble.

## **Categorical Exclusions Applicable to Environmental Restoration and Waste Management**

### **Activities (B6)**

#### **B6.1 Cleanup actions**

DOE received a comment from Tri-Valley CAREs (at page 4) that questioned the basis for finding that the proposed increase in the cost limitation (from approximately \$5 million to approximately \$10 million) and the proposed removal of the time limitation (5 years) from this categorical exclusion will not result in potentially significant impacts to the environment. In

DOE's experience, in light of other limitations on the scope of this categorical exclusion and the integral elements, increasing the cost limit would not add greatly to the types of projects that would be covered by this categorical exclusion. The time for project implementation is indirectly affected by the cost limit; e.g., a container removal operation would be limited by its total cost even without an explicit time limit. Further, based on DOE's experience, the amount of time that a cleanup action requires is not a reliable indicator of its potential environmental impacts.

DOE received a comment from Sandy Beranich (at page 2) that acknowledged that cleanup costs have increased since the categorical exclusion was first established, but questioned whether a \$10 million cleanup could appropriately be considered "small-scale." The size of typical small-scale cleanup actions with which DOE has experience has not changed, nor have the environmental impacts resulting from these actions increased. However, the costs of completing these actions have increased due to inflation. Projects meeting the \$10 million limit, along with the other limitations on the scope of the categorical exclusion, normally would not have the potential for significant impacts. For further information, see discussion of "small" and "small-scale" in section IV.C.3 of this preamble.

After further consideration, to clarify the cost limitation by accounting for inflation over time, DOE is inserting "(in 2011 dollars)" after "10 million dollars."

## **10. Appendix C and Appendix D**

### **C7 Contracts, policies, and marketing and allocation plans for electric power**

After further consideration, DOE will not explicitly refer to transmission in this class of actions; transmission activities are included in the contracts, policies, and marketing plans, or are covered primarily in other classes of actions, such as the group of categorical exclusions under B4. In addition, to improve clarity, DOE is removing the previously proposed condition that the

new generation resource “would not be eligible for categorical exclusion under this part.” DOE normally would not prepare an environmental assessment when a categorical exclusion would apply. Therefore, the condition is unnecessary and potentially confusing.

#### **C8 Protection of cultural resources and fish and wildlife habitat**

DOE received a comment from Sandy Beranich (at page 2) asking what DOE means by “large-scale,” a term that distinguishes this environmental assessment category from categorical exclusion B1.20 for “small-scale” proposals of this type. DOE NEPA Compliance Officers use their professional expertise and judgment to determine whether a proposal meets a categorical exclusion for “small-scale” activities when no additional limitation is specified. A proposal that a NEPA Compliance Officer does not consider small-scale under such an evaluation would fit within this environmental assessment category. For further information, see discussion of “small” and “small-scale” in section IV.C.3 of this preamble. In addition, under the DOE NEPA regulations (10 CFR 1021.321), DOE may prepare an environmental assessment on any action at any time in order to assist agency planning and decisionmaking. DOE is retaining the proposed language in this class of action in the final rule.

#### **C12 Energy system demonstration actions**

DOE received a comment from the Chesapeake Bay Foundation (at page 6) that the scale of the project should be specified to clarify whether a project is covered in this “limited exclusion.” The comment is noted, but classes of actions in appendix C are not categorical exclusions; they are categories for which an environmental assessment is normally prepared to provide a basis for determining whether to prepare an environmental impact statement or issue a finding of no significant impact. DOE is retaining the proposed language in this class of actions in the final rule.

Upon further consideration, DOE is adding decommissioning to the list of actions. For proposed new facilities, DOE normally would address siting construction, operation, and decommissioning in the same review under NEPA.

In addition, DOE has determined that the final sentence of C12 is unnecessary and, thus, is deleting the sentence. This deletion does not change the meaning or scope of the paragraph.

#### **C15 Research and development incinerators and nonhazardous waste incinerators**

Upon further consideration, DOE is adding decommissioning to the list of actions. For proposed new facilities, DOE normally would address siting construction, operation, and decommissioning in the same review under NEPA.

#### **D1 [Reserved: Strategic systems]**

After further consideration, DOE is removing this class of actions because the term “strategic systems” is no longer in use and the referenced Order no longer defines it. The term previously referred to “a single, stand-alone effort within a program mission area that is a primary means to advance the Department's strategic goals.”

#### **D7 Contracts, policies, and marketing and allocation plans for electric power**

After further consideration, DOE will not explicitly refer to transmission in this class of actions; transmission activities are included in the contracts, policies, and marketing plans, or are covered primarily in other classes of actions, such as the group of categorical exclusions under B4.

### **V. Procedural Requirements**

#### **Review under Executive Order 12866**

Today’s final rule has been determined not to be a significant regulatory action under Executive Order 12866, “Regulatory Planning and Review,” 58 FR 51735 (October 4, 1993).

Accordingly, this action was not subject to review under that Executive Order by the Office of Information and Regulatory Affairs of the Office of Management and Budget (OMB).

### **Review under National Environmental Policy Act**

In this rule, DOE establishes, modifies, and clarifies procedures for considering the environmental effects of DOE actions within DOE's decisionmaking process, thereby enhancing compliance with the letter and spirit of NEPA. The Council on Environmental Quality regulations do not direct agencies to prepare a NEPA analysis or document before establishing Agency procedures that supplement the CEQ regulations for implementing NEPA. Agencies are required to adopt NEPA procedures that establish specific criteria for, and identification of, three classes of actions: those that normally require preparation of an environmental impact statement; those that normally require preparation of an environmental assessment; and those that are categorically excluded from further NEPA review (40 CFR 1507.3(b)). Categorical exclusions are one part of those agency procedures, and therefore establishing categorical exclusions does not require preparation of a NEPA analysis or document. Agency NEPA procedures are procedural guidance to assist agencies in the fulfillment of agency responsibilities under NEPA, but are not the agency's final determination of what level of NEPA analysis is required for a particular proposed action. The requirements for establishing agency NEPA procedures are set forth at 40 CFR 1505.1 and 1507.3. The determination that establishing categorical exclusions does not require NEPA analysis and documentation has been upheld in *Heartwood, Inc. v. U.S. Forest Service*, 73 F. Supp. 2d 962, 972-73 (S.D. Ill. 1999), *aff'd*, 230 F.3d 947, 954-55 (7th Cir. 2000).

## **Review under Regulatory Flexibility Act**

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires preparation of an initial regulatory flexibility analysis for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, “Proper Consideration of Small Entities in Agency Rulemaking” (67 FR 53461; August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process (68 FR 7990). DOE has made its procedures and policies available on the Office of the General Counsel’s website: <http://energy.gov/gc> under GC Guidance/Opinions, Rulemaking Policy.

DOE reviewed today’s final rule under the provisions of the Regulatory Flexibility Act and the procedures and policies published on February 19, 2003. This final rule revises DOE’s categorical exclusions, and makes certain other changes, that will help reduce the cost and time associated with completing the environmental review for certain proposed actions.

In the Notice of Proposed Rulemaking, DOE tentatively certified that this rule would not have a significant economic impact on a substantial number of small entities and did not prepare a regulatory flexibility analysis for this rulemaking. DOE received no comments on the certification, and the factual basis for DOE’s certification is unchanged. Thus, DOE maintains its certification that this rule would not have a significant economic impact on a substantial number of small entities. DOE transmitted the certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the Small Business Administration pursuant to 5 U.S.C. 605(b).

### **Review under Paperwork Reduction Act**

This rulemaking will impose no new information or record-keeping requirements. Accordingly, OMB clearance is not required under the Paperwork Reduction Act (44 U.S.C. 3501 et seq.).

### **Review under Unfunded Mandates Reform Act of 1995**

The Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) generally requires Federal agencies to examine closely the impacts of regulatory actions on state, local, and tribal governments. Subsection 101(5) of title I of that law defines a Federal intergovernmental mandate to include any regulation that would impose upon state, local, or tribal governments an enforceable duty, except a condition of Federal assistance or a duty arising from participating in a voluntary Federal program. Title II of that law requires each Federal agency to assess the effects of Federal regulatory actions on state, local, and tribal governments, in the aggregate, or to the private sector, other than to the extent such actions merely incorporate requirements specifically set forth in a statute. Section 202 of that title requires a Federal agency to perform a detailed assessment of the anticipated costs and benefits of any rule that includes a Federal mandate which may result in costs to state, local, or tribal governments, or to the private sector, of \$100 million or more in any one year (adjusted annually for inflation). Section 204 of that title requires each agency that proposes a rule containing a significant Federal intergovernmental mandate to develop an effective process for obtaining meaningful and timely input from elected officers of state, local, and tribal governments.

This rule would amend DOE's existing regulations governing compliance with NEPA to better align DOE's regulations, particularly its categorical exclusions, with its current activities and recent experiences, and update the provisions with respect to current technologies and

regulatory requirements. This rule would not result in the expenditure by state, local, and tribal governments in the aggregate, or by the private sector, of \$100 million or more in any one year. Accordingly, no assessment or analysis is required under the Unfunded Mandates Reform Act of 1995.

#### **Review under Treasury and General Government Appropriations Act, 1999**

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105-277) requires Federal agencies to issue a Family Policymaking Assessment for any proposed rule that may affect family well being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

#### **Review under Executive Order 13132**

Executive Order 13132, “Federalism” (64 FR 43255; August 4, 1999), imposes certain requirements on agencies formulating and implementing policies or regulations that preempt state law or that have federalism implications. Agencies are required to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the states and carefully assess the necessity for such actions. DOE has examined this rule and has determined that it would not preempt state law and would not have a substantial direct effect on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. No further action is required by Executive Order 13132.

#### **Review under Executive Order 12988**

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, “Civil Justice Reform” (61 FR 4729;

February 7, 1996), imposes on Executive agencies the general duty to adhere to the following requirements: (1) eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; and (3) provide a clear legal standard for affected conduct rather than a general standard and promote simplification and burden reduction. With regard to the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or if it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, the rule meets the relevant standards of Executive Order 12988.

### **Review under Treasury and General Government Appropriations Act, 2001**

The Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB.

OMB's guidelines were published at 67 FR 8452 (February 22, 2002), and DOE's guidelines were published at 67 FR 62446 (October 7, 2002). DOE has reviewed this rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

### **Review under Executive Order 13211**

Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355; May 22, 2001), requires Federal agencies to prepare and submit to OMB a Statement of Energy Effects for any proposed significant energy action. A “significant energy action” is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1)(i) is a significant regulatory action under Executive Order 12866, or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits for energy supply, distribution, and use. This rule would not have a significant adverse effect on the supply, distribution, or use of energy, and is therefore not a significant energy action. Accordingly, DOE has not prepared a Statement of Energy Effects.

### **Review under Executive Order 12630**

DOE has determined pursuant to Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights” (53 FR 8859; March 18, 1988), that this rule would not result in any takings which might require compensation under the Fifth Amendment to the United States Constitution.

### **Congressional Notification**

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of this rule prior to its effective date. The report will state that it has been determined that the rule is not a “major rule” as defined by 5 U.S.C. 804(2).

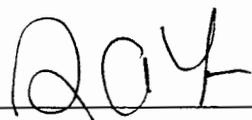
### **Approval of the Office of the Secretary**

The Secretary of Energy has approved publication of today’s final rule.

### **List of Subjects in 10 CFR part 1021**

Environmental impact statements.

Issued in Washington, DC, September 27, 2011.

  
\_\_\_\_\_

Sean A. Lev  
Acting General Counsel

For the reasons stated in the Preamble, DOE amends part 1021 of chapter X of title 10 of the Code of Federal Regulations as set forth below:

PART 1021—NATIONAL ENVIRONMENTAL POLICY ACT IMPLEMENTING PROCEDURES

1. The authority citation for part 1021 continues to read as follows:

**Authority:** 42 U.S.C. 7101 et seq.; 42 U.S.C. 4321 et seq.; 50 U.S.C. 2401 et seq.

2. Section 1021.215 is amended by revising the fourth sentence in paragraph (d) to read as follows:

§ 1021.215 Applicant process.

\* \* \* \* \*

(d) \* \* \* The contractor shall provide a disclosure statement in accordance with 40 CFR 1506.5(c). \* \* \*

3. Section 1021.311 is amended by revising the first sentence in paragraph (d) and revising paragraph (f) to read as follows:

§ 1021.311 Notice of intent and scoping.

\* \* \* \* \*

(d) DOE shall hold at least one public scoping meeting as part of the public scoping process for a DOE EIS. \* \* \*

\* \* \* \* \*

(f) A public scoping process is optional for DOE supplemental EISs (40 CFR 1502.9(c)(4)). If DOE initiates a public scoping process for a supplemental EIS, the provisions of paragraphs (a) through (e) of this section shall apply.

4. Section 1021.322 is amended by revising the last sentence of paragraph (f) to read as follows:

§ 1021.322 Findings of no significant impact.

\* \* \* \* \*

(f) \* \* \* A revised FONSI is subject to all provisions of this section.

5. Section 1021.331 is amended by revising the first sentence in paragraph (b) to read as follows:

§ 1021.331 Mitigation action plans.

\* \* \* \* \*

(b) In certain circumstances, as specified in § 1021.322(b)(1), DOE shall also prepare a Mitigation Action Plan for commitments to mitigations that are essential to render the impacts of the proposed action not significant.

\* \* \* \* \*

6. Subpart D is revised to read as follows:

Subpart D—Typical Classes of Actions

Sec.

1021.400 Level of NEPA review.

1021.410 Application of categorical exclusions (classes of actions that normally do not require EAs or EISs).

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Appendix A to Subpart D of Part 1021—Categorical Exclusions Applicable to General Agency Actions

Appendix B to Subpart D of Part 1021—Categorical Exclusions Applicable to Specific Agency Actions

Appendix C to Subpart D of Part 1021—Classes of Actions that Normally Require EAs But Not Necessarily EISs

Appendix D to Subpart D of Part 1021—Classes of Actions that Normally Require EISs

§ 1021.400 Level of NEPA review.

(a) This subpart identifies DOE actions that normally:

- (1) Do not require preparation of either an EIS or an EA (are categorically excluded from preparation of either document) (appendices A and B to this subpart D);
- (2) Require preparation of an EA, but not necessarily an EIS (appendix C to this subpart D); or
- (3) Require preparation of an EIS (appendix D to this subpart D).

(b) Any completed, valid NEPA review does not have to be repeated, and no completed NEPA documents need to be redone by reasons of these regulations, except as provided in § 1021.314.

(c) If a DOE proposal is encompassed within a class of actions listed in the appendices to this subpart D, DOE shall proceed with the level of NEPA review indicated for that class of actions, unless there are extraordinary circumstances related to the specific proposal that may affect the significance of the environmental effects of the proposal.

(d) If a DOE proposal is not encompassed within the classes of actions listed in the appendices to this subpart D, or if there are extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal, DOE shall either:

- (1) Prepare an EA and, on the basis of that EA, determine whether to prepare an EIS or a FONSI; or
- (2) Prepare an EIS and ROD.

§ 1021.410 Application of categorical exclusions (classes of actions that normally do not require EAs or EISs).

- (a) The actions listed in appendices A and B to this subpart D are classes of actions that DOE has determined do not individually or cumulatively have a significant effect on the human environment (categorical exclusions).
- (b) To find that a proposal is categorically excluded, DOE shall determine the following:
  - (1) The proposal fits within a class of actions that is listed in appendix A or B to this subpart D;
  - (2) There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal. Extraordinary circumstances are unique situations presented by specific proposals, including, but not limited to, scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternative uses of available resources; and
  - (3) The proposal has not been segmented to meet the definition of a categorical exclusion. Segmentation can occur when a proposal is broken down into small parts in order to avoid the appearance of significance of the total action. The scope of a proposal must include the consideration of connected and cumulative actions, that is, the proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but

cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or § 1021.211 of this part concerning limitations on actions during EIS preparation.

- (c) All categorical exclusions may be applied by any organizational element of DOE. The sectional divisions in appendix B to this subpart D are solely for purposes of organization of that appendix and are not intended to be limiting.
- (d) A class of actions includes activities foreseeably necessary to proposals encompassed within the class of actions (such as award of implementing grants and contracts, site preparation, purchase and installation of equipment, and associated transportation activities).
- (e) Categorical exclusion determinations for actions listed in appendix B shall be documented and made available to the public by posting online, generally within two weeks of the determination, unless additional time is needed in order to review and protect classified information, “confidential business information,” or other information that DOE would not disclose pursuant to the Freedom of Information Act (FOIA) (5 U.S.C. 552). Posted categorical exclusion determinations shall not disclose classified information, “confidential business information,” or other information that DOE would not disclose pursuant to FOIA. (See also 10 CFR 1021.340.)
- (f) Proposed recurring activities to be undertaken during a specified time period, such as routine maintenance activities for a year, may be addressed in a single categorical exclusion determination after considering the potential aggregated impacts.
- (g) The following clarifications are provided to assist in the appropriate application of categorical exclusions that employ the terms or phrases:

(1) “Previously disturbed or developed” refers to land that has been changed such that its functioning ecological processes have been and remain altered by human activity. The phrase encompasses areas that have been transformed from natural cover to non-native species or a managed state, including, but not limited to, utility and electric power transmission corridors and rights-of-way, and other areas where active utilities and currently used roads are readily available.

(2) DOE considers terms such as “small” and “small-scale” in the context of the particular proposal, including its proposed location. In assessing whether a proposed action is small, in addition to the actual magnitude of the proposal, DOE considers factors such as industry norms, the relationship of the proposed action to similar types of development in the vicinity of the proposed action, and expected outputs of emissions or waste. When considering the physical size of a proposed facility, for example, DOE would review the surrounding land uses, the scale of the proposed facility relative to existing development, and the capacity of existing roads and other infrastructure to support the proposed action.

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B2.6 Recovery of radioactive sealed sources

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B3.4 Transport packaging tests for radioactive or hazardous material

B3.5 Tank car tests

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B3.7 New terrestrial infill exploratory and experimental wells

B3.8 Outdoor terrestrial ecological and environmental research

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**B6. Categorical Exclusions Applicable to Environmental Restoration and Waste Management Activities**

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- B6.5 Facilities for characterizing and sorting packaged waste and overpacking waste
- B6.6 Modification of facilities for storing, packaging, and repacking waste
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**B7. Categorical Exclusions Applicable to International Activities**

- B7.1 Emergency measures under the International Energy Program
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**Appendix C to Subpart D of Part 1021 – Classes of Actions that Normally Require EAs But Not Necessarily EISs**

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- C2 [Reserved]
- C3 Electric power marketing rate changes, not within normal operating limits
- C4 Upgrading, rebuilding, or construction of powerlines
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- C6 Erosion control program
- C7 Contracts, policies, and marketing and allocation plans for electric power
- C8 Protection of cultural resources and fish and wildlife habitat
- C9 Wetlands demonstration projects
- C10 [Reserved]
- C11 Particle acceleration facilities
- C12 Energy system demonstration actions
- C13 Import or export natural gas involving minor new construction

- C14 Water treatment facilities
- C15 Research and development incinerators and nonhazardous waste incinerators
- C16 Large waste packaging and storage facilities

**Appendix D to Subpart D of Part 1021 – Classes of Actions that Normally Require EISs**

- D1 [Reserved]
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- D3 Uranium enrichment facilities
- D4 Reactors
- D5 [Reserved]
- D6 [Reserved]
- D7 Contracts, policies, and marketing and allocation plans for electric power
- D8 Import or export of natural gas involving major new facilities
- D9 Import or export of natural gas involving major operational change
- D10 Treatment, storage, and disposal facilities for high-level waste and spent nuclear fuel
- D11 Waste disposal facilities for transuranic waste
- D12 Incinerators

**APPENDIX A TO SUBPART D OF PART 1021—CATEGORICAL EXCLUSIONS**

**APPLICABLE TO GENERAL AGENCY ACTIONS**

**A1 Routine DOE business actions**

Routine actions necessary to support the normal conduct of DOE business limited to administrative, financial, and personnel actions.

**A2 Clarifying or administrative contract actions**

Contract interpretations, amendments, and modifications that are clarifying or administrative in nature.

**A3 Certain actions by Office of Hearings and Appeals**

Adjustments, exceptions, exemptions, appeals and stays, modifications, or rescissions of orders issued by the Office of Hearings and Appeals.

**A4 Interpretations and rulings for existing regulations**

Interpretations and rulings with respect to existing regulations, or modifications or rescissions of such interpretations and rulings.

**A5 Interpretive rulemakings with no change in environmental effect**

Rulemakings interpreting or amending an existing rule or regulation that does not change the environmental effect of the rule or regulation being amended.

**A6 Procedural rulemakings**

Rulemakings that are strictly procedural, including, but not limited to, rulemaking (under 48 CFR chapter 9) establishing procedures for technical and pricing proposals and establishing contract clauses and contracting practices for the purchase of goods and services, and rulemaking (under 10 CFR part 600) establishing application and review procedures for, and administration, audit, and closeout of, grants and cooperative agreements.

**A7 [Reserved]**

**A8 Awards of certain contracts**

Awards of contracts for technical support services, management and operation of a government-owned facility, and personal services.

**A9 Information gathering, analysis, and dissemination**

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

**A10 Reports and recommendations on non-DOE legislation**

Reports and recommendations on legislation or rulemaking that are not proposed by DOE.

**A11 Technical advice and assistance to organizations**

Technical advice and planning assistance to international, national, state, and local organizations.

**A12 Emergency preparedness planning**

Emergency preparedness planning activities, including, but not limited to, the designation of onsite evacuation routes.

**A13 Procedural Documents**

Administrative, organizational, or procedural Policies, Orders, Notices, Manuals, and Guides.

**A14 Approval of technical exchange arrangements**

Approval of technical exchange arrangements for information, data, or personnel with other countries or international organizations (including, but not limited to, assistance in identifying and analyzing another country's energy resources, needs and options).

**A15 International agreements for energy research and development**

Approval of DOE participation in international “umbrella” agreements for cooperation in energy research and development activities that would not commit the U.S. to any specific projects or activities.

APPENDIX B TO SUBPART D OF PART 1021—CATEGORICAL EXCLUSIONS

APPLICABLE TO SPECIFIC AGENCY ACTIONS

B. Conditions that Are Integral Elements of the Classes of Actions in Appendix B

The classes of actions listed below include the following conditions as integral elements of the classes of actions. To fit within the classes of actions listed below, a proposal must be one that would not:

- (1) Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders;
- (2) Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities;
- (3) Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases;
- (4) Have the potential to cause significant impacts on environmentally sensitive resources. An environmentally sensitive resource is typically a resource that has been identified as needing protection through Executive Order, statute, or regulation by Federal, state, or local government, or a Federally recognized Indian tribe. An action may be categorically excluded if, although sensitive resources are present, the action would not have the potential to cause significant impacts on those resources (such as construction of a building with its foundation well above a sole-source aquifer or upland surface soil removal on a site that has wetlands). Environmentally sensitive resources include, but are not limited to:
  - (i) Property (such as sites, buildings, structures, and objects) of historic, archeological, or architectural significance designated by a Federal, state, or local government, Federally recognized Indian tribe, or Native Hawaiian organization, or property determined to be eligible for listing on the National Register of Historic Places;
  - (ii) Federally-listed threatened or endangered species or their habitat (including critical habitat) or Federally-proposed or candidate species or their habitat (Endangered

- Species Act); state-listed or state-proposed endangered or threatened species or their habitat; Federally-protected marine mammals and Essential Fish Habitat (Marine Mammal Protection Act; Magnuson-Stevens Fishery Conservation and Management Act); and otherwise Federally-protected species (such as the Bald and Golden Eagle Protection Act or the Migratory Bird Treaty Act);
- (iii) Floodplains and wetlands (as defined in 10 CFR 1022.4, “Compliance with Floodplain and Wetland Environmental Review Requirements: Definitions,” or its successor);
  - (iv) Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national monuments, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, scenic areas (such as National Scenic and Historic Trails or National Scenic Areas), and marine sanctuaries;
  - (v) Prime or unique farmland, or other farmland of statewide or local importance, as defined at 7 CFR 658.2(a), “Farmland Protection Policy Act: Definitions,” or its successor;
  - (vi) Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); and
  - (vii) Tundra, coral reefs, or rain forests; or
- (5) Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of

the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

## **B1. Categorical Exclusions Applicable to Facility Operation**

### *B1.1 Changing rates and prices*

Changing rates for services or prices for products marketed by parts of DOE other than Power Marketing Administrations, and approval of rate or price changes for non-DOE entities, that are consistent with the change in the implicit price deflator for the Gross Domestic Product published by the Department of Commerce, during the period since the last rate or price change.

### *B1.2 Training exercises and simulations*

Training exercises and simulations (including, but not limited to, firing-range training, small-scale and short-duration force-on-force exercises, emergency response training, fire fighter and rescue training, and decontamination and spill cleanup training) conducted under appropriately controlled conditions and in accordance with applicable requirements.

### *B1.3 Routine maintenance*

Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are

required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

- (a) Repair or replacement of facility equipment, such as lathes, mills, pumps, and presses;
- (b) Door and window repair or replacement;
- (c) Wall, ceiling, or floor repair or replacement;
- (d) Reroofing;
- (e) Plumbing, electrical utility, lighting, and telephone service repair or replacement;
- (f) Routine replacement of high-efficiency particulate air filters;
- (g) Inspection and/or treatment of currently installed utility poles;
- (h) Repair of road embankments;
- (i) Repair or replacement of fire protection sprinkler systems;
- (j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing, and scraping and grading of unpaved surfaces;

- (k) Erosion control and soil stabilization measures (such as reseeding, gabions, grading, and revegetation);
- (l) Surveillance and maintenance of surplus facilities in accordance with DOE Order 435.1, "Radioactive Waste Management," or its successor;
- (m) Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed powerlines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions) or its successor;
- (n) Routine testing and calibration of facility components, subsystems, or portable equipment (such as control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes);
- (o) Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), and removal of contaminated intact equipment and other material (not including spent nuclear fuel or special nuclear material in nuclear reactors); and
- (p) Removal of debris.

*B1.4 Air conditioning systems for existing equipment*

Installation or modification of air conditioning systems required for temperature control for operation of existing equipment.

*B1.5 Existing steam plants and cooling water systems*

Minor improvements to existing steam plants and cooling water systems (including, but not limited to, modifications of existing cooling towers and ponds), provided that the improvements would not: (1) create new sources of water or involve new receiving waters; (2) have the potential to significantly alter water withdrawal rates; (3) exceed the permitted temperature of discharged water; or (4) increase introductions of, or involve new introductions of, hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products.

*B1.6 Tanks and equipment to control runoff and spills*

Installation or modification of retention tanks or small (normally under one acre) basins and associated piping and pumps for existing operations to control runoff or spills (such as under 40 CFR part 112). Modifications include, but are not limited to, installing liners or covers. (See also B1.33 of this appendix.)

*B1.7 Electronic equipment*

Acquisition, installation, operation, modification, and removal of electricity transmission control and monitoring devices for grid demand and response, communication systems, data processing equipment, and similar electronic equipment.

*B1.8 Screened water intake and outflow structures*

Modifications to screened water intake and outflow structures such that intake velocities and volumes and water effluent quality and volumes are consistent with existing permit limits.

*B1.9 Airway safety markings and painting*

Placement of airway safety markings on, painting of, and repair and in-kind replacement of lighting on powerlines and antenna structures, wind turbines, and similar structures in

accordance with applicable requirements (such as Federal Aviation Administration standards).

*B1.10 Onsite storage of activated material*

Routine, onsite storage at an existing facility of activated equipment and material (including, but not limited to, lead) used at that facility, to allow reuse after decay of radioisotopes with short half-lives.

*B1.11 Fencing*

Installation of fencing, including, but not limited to border marking, that would not have the potential to significantly impede wildlife population movement (including migration) or surface water flow.

*B1.12 Detonation or burning of explosives or propellants after testing*

Outdoor detonation or burning of explosives or propellants that failed (duds), were damaged (such as by fracturing), or were otherwise not consumed in testing. Outdoor detonation or burning would be in areas designated and routinely used for those purposes under existing applicable permits issued by Federal, state, and local authorities (such as a permit for a RCRA miscellaneous unit (40 CFR part 264, subpart X)).

*B1.13 Pathways, short access roads, and rail lines*

Construction, acquisition, and relocation, consistent with applicable right-of-way conditions and approved land use or transportation improvement plans, of pedestrian walkways and trails, bicycle paths, small outdoor fitness areas, and short access roads and rail lines (such as branch and spur lines).

*B1.14 Refueling of nuclear reactors*

Refueling of operating nuclear reactors, during which operations may be suspended and then resumed.

#### *B1.15 Support buildings*

Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities, such as activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.4, B6.5, B6.6, and B6.10 of this appendix.

#### *B1.16 Asbestos removal*

Removal of asbestos-containing materials from buildings in accordance with applicable requirements (such as 40 CFR part 61, “National Emission Standards for Hazardous Air Pollutants”; 40 CFR part 763, “Asbestos”; 29 CFR part 1910, subpart I, “Personal Protective Equipment”; and 29 CFR part 1926, “Safety and Health Regulations for Construction”; and appropriate state and local requirements, including certification of removal contractors and technicians).

*B1.17 Polychlorinated biphenyl removal*

Removal of polychlorinated biphenyl (PCB)-containing items (including, but not limited to, transformers and capacitors), PCB-containing oils flushed from transformers, PCB-flushing solutions, and PCB-containing spill materials from buildings or other aboveground locations in accordance with applicable requirements (such as 40 CFR part 761).

*B1.18 Water supply wells*

Siting, construction, and operation of additional water supply wells (or replacement wells) within an existing well field, or modification of an existing water supply well to restore production, provided that there would be no drawdown other than in the immediate vicinity of the pumping well, and the covered actions would not have the potential to cause significant long-term decline of the water table, and would not have the potential to cause significant degradation of the aquifer from the new or replacement well.

*B1.19 Microwave, meteorological, and radio towers*

Siting, construction, modification, operation, and removal of microwave, radio communication, and meteorological towers and associated facilities, provided that the towers and associated facilities would not be in a governmentally designated scenic area (see B(4)(iv) of this appendix) unless otherwise authorized by the appropriate governmental entity.

*B1.20 Protection of cultural resources, fish and wildlife habitat*

Small-scale activities undertaken to protect cultural resources (such as fencing, labeling, and flagging) or to protect, restore, or improve fish and wildlife habitat, fish passage facilities (such as fish ladders and minor diversion channels), or fisheries. Such activities

would be conducted in accordance with an existing natural or cultural resource plan, if any.

*B1.21 Noise abatement*

Noise abatement measures (including, but not limited to, construction of noise barriers and installation of noise control materials).

*B1.22 Relocation of buildings*

Relocation of buildings (including, but not limited to, trailers and prefabricated buildings) to an already developed area (where active utilities and currently used roads are readily accessible).

*B1.23 Demolition and disposal of buildings*

Demolition and subsequent disposal of buildings, equipment, and support structures (including, but not limited to, smoke stacks and parking lot surfaces), provided that there would be no potential for release of substances at a level, or in a form, that could pose a threat to public health or the environment.

*B1.24 Property transfers*

Transfer, lease, disposition, or acquisition of interests in personal property (including, but not limited to, equipment and materials) or real property (including, but not limited to, permanent structures and land), provided that under reasonably foreseeable uses (1) there would be no potential for release of substances at a level, or in a form, that could pose a threat to public health or the environment and (2) the covered actions would not have the potential to cause a significant change in impacts from before the transfer, lease, disposition, or acquisition of interests.

*B1.25 Real property transfers for cultural resources protection, habitat preservation, and wildlife management*

Transfer, lease, disposition, or acquisition of interests in land and associated buildings for cultural resources protection, habitat preservation, or fish and wildlife management, provided that there would be no potential for release of substances at a level, or in a form, that could pose a threat to public health or the environment.

*B1.26 Small water treatment facilities*

Siting, construction, expansion, modification, replacement, operation, and decommissioning of small (total capacity less than approximately 250,000 gallons per day) wastewater and surface water treatment facilities whose liquid discharges are externally regulated, and small potable water and sewage treatment facilities.

*B1.27 Disconnection of utilities*

Activities that are required for the disconnection of utility services (including, but not limited to, water, steam, telecommunications, and electrical power) after it has been determined that the continued operation of these systems is not needed for safety.

*B1.28 Placing a facility in an environmentally safe condition*

Minor activities that are required to place a facility in an environmentally safe condition where there is no proposed use for the facility. These activities would include, but are not limited to, reducing surface contamination, and removing materials, equipment or waste (such as final defueling of a reactor, where there are adequate existing facilities for the treatment, storage, or disposal of the materials, equipment or waste). These activities would not include conditioning, treatment, or processing of spent nuclear fuel, high-level waste, or special nuclear materials.

### *B1.29 Disposal facilities for construction and demolition waste*

Siting, construction, expansion, modification, operation, and decommissioning of small (less than approximately 10 acres) solid waste disposal facilities for construction and demolition waste, in accordance with applicable requirements (such as 40 CFR part 257, “Criteria for Classification of Solid Waste Disposal Facilities and Practices,” and 40 CFR part 61, “National Emission Standards for Hazardous Air Pollutants”) that would not release substances at a level, or in a form, that could pose a threat to public health or the environment.

### *B1.30 Transfer actions*

Transfer actions, in which the predominant activity is transportation, provided that (1) the receipt and storage capacity and management capability for the amount and type of materials, equipment, or waste to be moved already exists at the receiving site and (2) all necessary facilities and operations at the receiving site are already permitted, licensed, or approved, as appropriate. Such transfers are not regularly scheduled as part of ongoing routine operations.

### *B1.31 Installation or relocation of machinery and equipment*

Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the

footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

*B1.32 Traffic flow adjustments*

Traffic flow adjustments to existing roads (including, but not limited to, stop sign or traffic light installation, adjusting direction of traffic flow, and adding turning lanes), and road adjustments (including, but not limited to, widening and realignment) that are within an existing right-of-way and consistent with approved land use or transportation improvement plans.

*B1.33 Stormwater runoff control*

Design, construction, and operation of control practices to reduce stormwater runoff and maintain natural hydrology. Activities include, but are not limited to, those that reduce impervious surfaces (such as vegetative practices and use of porous pavements), best management practices (such as silt fences, straw wattles, and fiber rolls), and use of green infrastructure or other low impact development practices (such as cisterns and green roofs).

*B1.34 Lead-based paint containment, removal, and disposal*

Containment, removal, and disposal of lead-based paint in accordance with applicable requirements (such as provisions relating to the certification of removal contractors and technicians at 40 CFR part 745, “Lead-Based Paint Poisoning Prevention In Certain Residential Structures”).

*B1.35 Drop-off, collection, and transfer facilities for recyclable materials*

Siting, construction, modification, and operation of recycling or compostable material drop-off, collection, and transfer stations on or contiguous to a previously disturbed or

developed area and in an area where such a facility would be consistent with existing zoning requirements. The stations would have appropriate facilities and procedures established in accordance with applicable requirements for the handling of recyclable or compostable materials and household hazardous waste (such as paint and pesticides). Except as specified above, the collection of hazardous waste for disposal and the processing of recyclable or compostable materials are not included in this class of actions.

#### *B1.36 Determinations of excess real property*

Determinations that real property is excess to the needs of DOE and, in the case of acquired real property, the subsequent reporting of such determinations to the General Services Administration or, in the case of lands withdrawn or otherwise reserved from the public domain, the subsequent filing of a notice of intent to relinquish with the Bureau of Land Management, Department of the Interior. Covered actions would not include disposal of real property.

### **B2. Categorical Exclusions Applicable to Safety and Health**

#### *B2.1 Workplace enhancements*

Modifications within or contiguous to an existing structure, in a previously disturbed or developed area, to enhance workplace habitability (including, but not limited to, installation or improvements to lighting, radiation shielding, or heating/ventilating/air conditioning and its instrumentation, and noise reduction).

#### *B2.2 Building and equipment instrumentation*

Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and

protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment).

### *B2.3 Personnel safety and health equipment*

Installation of, or improvements to, equipment for personnel safety and health (including, but not limited to, eye washes, safety showers, radiation monitoring devices, fumehoods, and associated collection and exhaust systems), provided that the covered actions would not have the potential to cause a significant increase in emissions.

### *B2.4 Equipment qualification*

Activities undertaken to (1) qualify equipment for use or improve systems reliability or (2) augment information on safety-related system components. These activities include, but are not limited to, transportation container qualification testing, crane and lift-gear certification or recertification testing, high efficiency particulate air filter testing and certification, stress tests (such as “burn-in” testing of electrical components and leak testing), and calibration of sensors or diagnostic equipment.

### *B2.5 Facility safety and environmental improvements*

Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of

aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR part 265, “Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities” and 40 CFR part 280, “Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks”). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel).

#### *B2.6 Recovery of radioactive sealed sources*

Recovery of radioactive sealed sources and sealed source-containing devices from domestic or foreign locations provided that (1) the recovered items are transported and stored in compliant containers, and (2) the receiving site has sufficient existing storage capacity and all required licenses, permits, and approvals.

### **B3. Categorical Exclusions Applicable to Site Characterization, Monitoring, and General Research**

#### *B3.1 Site characterization and environmental monitoring*

Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and

RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to:

- (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing;
- (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools);
- (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells;
- (d) Aquifer and underground reservoir response testing;
- (e) Installation and operation of ambient air monitoring equipment;
- (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes);
- (g) Sampling and characterization of water effluents, air emissions, or solid waste streams;
- (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources);
- (i) Sampling of flora or fauna; and
- (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

### *B3.2 Aviation activities*

Aviation activities for survey, monitoring, or security purposes that comply with Federal Aviation Administration regulations.

### *B3.3 Research related to conservation of fish, wildlife, and cultural resources*

Field and laboratory research, inventory, and information collection activities that are directly related to the conservation of fish and wildlife resources or to the protection of cultural resources, provided that such activities would not have the potential to cause significant impacts on fish and wildlife habitat or populations or to cultural resources.

### *B3.4 Transport packaging tests for radioactive or hazardous material*

Drop, puncture, water-immersion, thermal, and fire tests of transport packaging for radioactive or hazardous materials to certify that designs meet the applicable requirements (such as 49 CFR 173.411 and 173.412 and 10 CFR 71.73).

### *B3.5 Tank car tests*

Tank car tests under 49 CFR part 179 (including, but not limited to, tests of safety relief devices, pressure regulators, and thermal protection systems).

### *B3.6 Small-scale research and development, laboratory operations, and pilot projects*

Siting, construction, modification, operation, and decommissioning of facilities for small-scale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are

demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

### *B3.7 New terrestrial infill exploratory and experimental wells*

Siting, construction, and operation of new terrestrial infill exploratory and experimental (test) wells, for either extraction or injection use, in a locally characterized geological formation in a field that contains existing operating wells, properly abandoned wells, or unminable coal seams containing natural gas, provided that the site characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers, and the actions are otherwise consistent with applicable best practices and DOE protocols, including those that protect against uncontrolled releases of harmful materials. Such wells may include those for brine, carbon dioxide, coalbed methane, gas hydrate, geothermal, natural gas, and oil. Uses for carbon sequestration wells include, but are not limited to, the study of saline formations, enhanced oil recovery, and enhanced coalbed methane extraction.

### *B3.8 Outdoor terrestrial ecological and environmental research*

Outdoor terrestrial ecological and environmental research in a small area (generally less than 5 acres), including, but not limited to, siting, construction, and operation of a small-scale laboratory building or renovation of a room in an existing building for associated analysis. Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance.

### *B3.9 Projects to reduce emissions and waste generation*

Projects to reduce emissions and waste generation at existing fossil or alternative fuel combustion or utilization facilities, provided that these projects would not have the potential to cause a significant increase in the quantity or rate of air emissions. For this category of actions, “fuel” includes, but is not limited to, coal, oil, natural gas, hydrogen, syngas, and biomass; but “fuel” does not include nuclear fuel. Covered actions include, but are not limited to:

- (a) Test treatment of the throughput product (solid, liquid, or gas) generated at an existing and fully operational fuel combustion or utilization facility;
- (b) Addition or replacement of equipment for reduction or control of sulfur dioxide, oxides of nitrogen, or other regulated substances that requires only minor modification to the existing structures at an existing fuel combustion or utilization facility, for which the existing use remains essentially unchanged;
- (c) Addition or replacement of equipment for reduction or control of sulfur dioxide, oxides of nitrogen, or other regulated substances that involves no permanent change in the quantity or quality of fuel burned or used and involves no permanent change in the capacity factor of the fuel combustion or utilization facility; and
- (d) Addition or modification of equipment for capture and control of carbon dioxide or other regulated substances, provided that adequate infrastructure is in place to manage such substances.

### *B3.10 Particle accelerators*

Siting, construction, modification, operation, and decommissioning of particle accelerators, including electron beam accelerators, with primary beam energy less than approximately 100 million electron volts (MeV) and average beam power less than

approximately 250 kilowatts (kW), and associated beamlines, storage rings, colliders, and detectors, for research and medical purposes (such as proton therapy), and isotope production, within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible), or internal modification of any accelerator facility regardless of energy, that does not increase primary beam energy or current. In cases where the beam energy exceeds 100 MeV, the average beam power must be less than 250 kW, so as not to exceed an average current of 2.5 milliamperes (mA).

#### *B3.11 Outdoor tests and experiments on materials and equipment components*

Outdoor tests and experiments for the development, quality assurance, or reliability of materials and equipment (including, but not limited to, weapon system components) under controlled conditions. Covered actions include, but are not limited to, burn tests (such as tests of electric cable fire resistance or the combustion characteristics of fuels), impact tests (such as pneumatic ejector tests using earthen embankments or concrete slabs designated and routinely used for that purpose), or drop, puncture, water-immersion, or thermal tests. Covered actions would not involve source, special nuclear, or byproduct materials, except encapsulated sources manufactured to applicable standards that contain source, special nuclear, or byproduct materials may be used for nondestructive actions such as detector/sensor development and testing and first responder field training.

#### *B3.12 Microbiological and biomedical facilities*

Siting, construction, modification, operation, and decommissioning of microbiological and biomedical diagnostic, treatment and research facilities (excluding Biosafety Level-3 and Biosafety Level-4), in accordance with applicable requirements and best practices (such as Biosafety in Microbiological and Biomedical Laboratories, 5th Edition, Dec. 2009, U.S.

Department of Health and Human Services) including, but not limited to, laboratories, treatment areas, offices, and storage areas, within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Operation may include the purchase, installation, and operation of biomedical equipment (such as commercially available cyclotrons that are used to generate radioisotopes and radiopharmaceuticals, and commercially available biomedical imaging and spectroscopy instrumentation).

#### *B3.13 Magnetic fusion experiments*

Performing magnetic fusion experiments that do not use tritium as fuel, within existing facilities (including, but not limited to, necessary modifications).

#### *B3.14 Small-scale educational facilities*

Siting, construction, modification, operation, and decommissioning of small-scale educational facilities (including, but not limited to, conventional teaching laboratories, libraries, classroom facilities, auditoriums, museums, visitor centers, exhibits, and associated offices) within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Operation may include, but is not limited to, purchase, installation, and operation of equipment (such as audio/visual and laboratory equipment) commensurate with the educational purpose of the facility.

#### *B3.15 Small-scale indoor research and development projects using nanoscale materials*

Siting, construction, modification, operation, and decommissioning of facilities for indoor small-scale research and development projects and small-scale pilot projects using nanoscale materials in accordance with applicable requirements (such as engineering,

worker safety, procedural, and administrative regulations) necessary to ensure the containment of any hazardous materials. Construction and modification activities would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible).

### *B3.16 Research activities in aquatic environments*

Small-scale, temporary surveying, site characterization, and research activities in aquatic environments, limited to:

- (a) Acquisition of rights-of-way, easements, and temporary use permits;
- (b) Installation, operation, and removal of passive scientific measurement devices, including, but not limited to, antennae, tide gauges, flow testing equipment for existing wells, weighted hydrophones, salinity measurement devices, and water quality measurement devices;
- (c) Natural resource inventories, data and sample collection, environmental monitoring, and basic and applied research, excluding (1) large-scale vibratory coring techniques and (2) seismic activities other than passive techniques; and
- (d) Surveying and mapping.

These activities would be conducted in accordance with, where applicable, an approved spill prevention, control, and response plan and would incorporate appropriate control technologies and best management practices. None of the activities listed above would occur within the boundary of an established marine sanctuary or wildlife refuge, a governmentally proposed marine sanctuary or wildlife refuge, or a governmentally recognized area of high biological sensitivity, unless authorized by the agency responsible for such refuge, sanctuary, or area (or after consultation with the responsible agency, if no

authorization is required). If the proposed activities would occur outside such refuge, sanctuary, or area and if the activities would have the potential to cause impacts within such refuge, sanctuary, or area, then the responsible agency shall be consulted in order to determine whether authorization is required and whether such activities would have the potential to cause significant impacts on such refuge, sanctuary, or area. Areas of high biological sensitivity include, but are not limited to, areas of known ecological importance, whale and marine mammal mating and calving/pupping areas, and fish and invertebrate spawning and nursery areas recognized as being limited or unique and vulnerable to perturbation; these areas can occur in bays, estuaries, near shore, and far offshore, and may vary seasonally. No permanent facilities or devices would be constructed or installed. Covered actions do not include drilling of resource exploration or extraction wells.

#### **B4. Categorical Exclusions Applicable to Electrical Power and Transmission**

##### *B4.1 Contracts, policies, and marketing and allocation plans for electric power*

Establishment and implementation of contracts, policies, and marketing and allocation plans related to electric power acquisition that involve only the use of the existing transmission system and existing generation resources operating within their normal operating limits.

##### *B4.2 Export of electric energy*

Export of electric energy as provided by Section 202(e) of the Federal Power Act over existing transmission systems or using transmission system changes that are themselves categorically excluded.

##### *B4.3 Electric power marketing rate changes*

Rate changes for electric power, power transmission, and other products or services provided by a Power Marketing Administration that are based on a change in revenue requirements if the operations of generation projects would remain within normal operating limits.

*B4.4 Power marketing services and activities*

Power marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits.

*B4.5 Temporary adjustments to river operations*

Temporary adjustments to river operations to accommodate day-to-day river fluctuations, power demand changes, fish and wildlife conservation program requirements, and other external events, provided that the adjustments would occur within the existing operating constraints of the particular hydrosystem operation.

*B4.6 Additions and modifications to transmission facilities*

Additions or modifications to electric power transmission facilities within a previously disturbed or developed facility area. Covered activities include, but are not limited to, switchyard rock grounding upgrades, secondary containment projects, paving projects, seismic upgrading, tower modifications, load shaping projects (such as the installation and use of flywheels and battery arrays), changing insulators, and replacement of poles, circuit breakers, conductors, transformers, and crossarms.

*B4.7 Fiber optic cable*

Adding fiber optic cables to transmission facilities or burying fiber optic cable in existing powerline or pipeline rights-of-way. Covered actions may include associated vaults and pulling and tensioning sites outside of rights-of-way in nearby previously disturbed or developed areas.

*B4.8 Electricity transmission agreements*

New electricity transmission agreements, and modifications to existing transmission arrangements, to use a transmission facility of one system to transfer power of and for another system, provided that no new generation projects would be involved and no physical changes in the transmission system would be made beyond the previously disturbed or developed facility area.

*B4.9 Multiple use of powerline rights-of-way*

Granting or denying requests for multiple uses of a transmission facility's rights-of-way (including, but not limited to, grazing permits and crossing agreements for electric lines, water lines, natural gas pipelines, communications cables, roads, and drainage culverts).

*B4.10 Removal of electric transmission facilities*

Deactivation, dismantling, and removal of electric transmission facilities (including, but not limited to, electric powerlines, substations, and switching stations) and abandonment and restoration of rights-of-way (including, but not limited to, associated access roads).

*B4.11 Electric power substations and interconnection facilities*

Construction or modification of electric power substations or interconnection facilities (including, but not limited to, switching stations and support facilities).

*B4.12 Construction of powerlines*

Construction of electric powerlines approximately 10 miles in length or less, or approximately 20 miles in length or less within previously disturbed or developed powerline or pipeline rights-of-way.

*B4.13 Upgrading and rebuilding existing powerlines*

Upgrading or rebuilding approximately 20 miles in length or less of existing electric powerlines, which may involve minor relocations of small segments of the powerlines.

**B5. Categorical Exclusions Applicable to Conservation, Fossil, and Renewable Energy Activities**

*B5.1 Actions to conserve energy or water*

- (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research

and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area.

Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix.

- (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

### *B5.2 Modifications to pumps and piping*

Modifications to existing pump and piping configurations (including, but not limited to, manifolds, metering systems, and other instrumentation on such configurations conveying materials such as air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water). Covered modifications would not have the potential to cause significant changes to design process flow rates or permitted air emissions.

### *B5.3 Modification or abandonment of wells*

Modification (but not expansion) or plugging and abandonment of wells, provided that site characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers, and the actions are otherwise consistent with best practices and

DOE protocols, including those that protect against uncontrolled releases of harmful materials. Such wells may include, but are not limited to, storage and injection wells for brine, carbon dioxide, coalbed methane, gas hydrate, geothermal, natural gas, and oil. Covered modifications would not be part of site closure.

#### *B5.4 Repair or replacement of pipelines*

Repair, replacement, upgrading, rebuilding, or minor relocation of pipelines within existing rights-of-way, provided that the actions are in accordance with applicable requirements (such as Army Corps of Engineers permits under section 404 of the Clean Water Act). Pipelines may convey materials including, but not limited to, air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water.

#### *B5.5 Short pipeline segments*

Construction and subsequent operation of short (generally less than 20 miles in length) pipeline segments conveying materials (such as air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water) between existing source facilities and existing receiving facilities (such as facilities for use, reuse, transportation, storage, and refining), provided that the pipeline segments are within previously disturbed or developed rights-of-way.

#### *B5.6 Oil spill cleanup*

Removal of oil and contaminated materials recovered in oil spill cleanup operations and disposal of these materials in accordance with applicable requirements (such as the National Oil and Hazardous Substances Pollution Contingency Plan).

#### *B5.7 Import or export natural gas, with operational changes*

Approvals or disapprovals of new authorizations or amendments of existing authorizations to import or export natural gas under section 3 of the Natural Gas Act that involve minor operational changes (such as changes in natural gas throughput, transportation, and storage operations) but not new construction.

*B5.8 Import or export natural gas, with new cogeneration powerplant*

Approvals or disapprovals of new authorizations or amendments of existing authorizations to import or export natural gas under section 3 of the Natural Gas Act that involve new cogeneration powerplants (as defined in the Powerplant and Industrial Fuel Use Act of 1978, as amended) within or contiguous to an existing industrial complex and requiring generally less than 10 miles of new natural gas pipeline or 20 miles within previously disturbed or developed rights-of-way.

*B5.9 Temporary exemptions for electric powerplants*

Grants or denials of temporary exemptions under the Powerplant and Industrial Fuel Use Act of 1978, as amended, for electric powerplants.

*B5.10 Certain permanent exemptions for existing electric powerplants*

For existing electric powerplants, grants or denials of permanent exemptions under the Powerplant and Industrial Fuel Use Act of 1978, as amended, other than exemptions under section 312(c) relating to cogeneration and section 312(b) relating to certain state or local requirements.

*B5.11 Permanent exemptions allowing mixed natural gas and petroleum*

For new electric powerplants, grants or denials of permanent exemptions from the prohibitions of Title II of the Powerplant and Industrial Fuel Use Act of 1978, as amended, to permit the use of certain fuel mixtures containing natural gas or petroleum.

### *B5.12 Workover of existing wells*

Workover (operations to restore production, such as deepening, plugging back, pulling and resetting lines, and squeeze cementing) of existing wells (including, but not limited to, activities associated with brine, carbon dioxide, coalbed methane, gas hydrate, geothermal, natural gas, and oil) to restore functionality, provided that workover operations are restricted to the existing wellpad and do not involve any new site preparation or earthwork that would have the potential to cause significant impacts on nearby habitat; that site characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers; and the actions are otherwise consistent with best practices and DOE protocols, including those that protect against uncontrolled releases of harmful materials.

### *B5.13 Experimental wells for injection of small quantities of carbon dioxide*

Siting, construction, operation, plugging, and abandonment of experimental wells for the injection of small quantities of carbon dioxide (and other incidentally co-captured gases) in locally characterized, geologically secure storage formations at or near existing carbon dioxide sources to determine the suitability of the formations for large-scale sequestration, provided that (1) the characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers; (2) the wells are otherwise in accordance with applicable requirements, best practices, and DOE protocols, including those that protect against uncontrolled releases of harmful materials; and (3) the wells and associated drilling activities are sufficiently remote so that they would not have the potential to cause significant impacts related to noise and other vibrations. Wells may be used for enhanced oil or natural gas recovery or for secure storage of carbon dioxide in

saline formations or other secure formations. Over the duration of a project, the wells would be used to inject, in aggregate, less than 500,000 tons of carbon dioxide into the geologic formation. Covered actions exclude activities in aquatic environments. (See B3.16 of this appendix for activities in aquatic environments.)

*B5.14 Combined heat and power or cogeneration systems*

Conversion to, replacement of, or modification of combined heat and power or cogeneration systems (the sequential or simultaneous production of multiple forms of energy, such as thermal and electrical energy, in a single integrated system) at existing facilities, provided that the conversion, replacement, or modification would not have the potential to cause a significant increase in the quantity or rate of air emissions and would not have the potential to cause significant impacts to water resources.

*B5.15 Small-scale renewable energy research and development and pilot projects*

Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

*B5.16 Solar photovoltaic systems*

The installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure (such as rooftop, parking lot or facility, and mounted to signage, lighting, gates, or fences), or if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land

use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

*B5.17 Solar thermal systems*

The installation, modification, operation, and removal of commercially available small-scale solar thermal systems (including, but not limited to, solar hot water systems) located on or contiguous to a building, and if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

*B5.18 Wind turbines*

The installation, modification, operation, and removal of a small number (generally not more than 2) of commercially available wind turbines, with a total height generally less than 200 feet (measured from the ground to the maximum height of blade rotation) that (1) are located within a previously disturbed or developed area; (2) are located more than 10 nautical miles (about 11.5 miles) from an airport or aviation navigation aid; (3) are located more than 1.5 nautical miles (about 1.7 miles) from National Weather Service or Federal Aviation Administration Doppler weather radar; (4) would not have the potential to cause significant impacts on bird or bat populations; and (5) are sited or designed such that the project would not have the potential to cause significant impacts to persons (such as from shadow flicker and other visual effects, and noise). Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and

best management practices. Covered actions include only those related to wind turbines to be installed on land.

#### *B5.19 Ground source heat pumps*

The installation, modification, operation, and removal of commercially available small-scale ground source heat pumps to support operations in single facilities (such as a school or community center) or contiguous facilities (such as an office complex) (1) only where (a) major associated activities (such as drilling and discharge) are regulated, and (b) appropriate leakage and contaminant control measures would be in place (including for cross-contamination between aquifers); (2) that would not have the potential to cause significant changes in subsurface temperature; and (3) would be located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

#### *B5.20 Biomass power plants*

The installation, modification, operation, and removal of small-scale biomass power plants (generally less than 10 megawatts), using commercially available technology (1) intended primarily to support operations in single facilities (such as a school and community center) or contiguous facilities (such as an office complex); (2) that would not affect the air quality attainment status of the area and would not have the potential to cause a significant increase in the quantity or rate of air emissions and would not have the potential to cause significant impacts to water resources; and (3) would be located within a previously disturbed or developed area. Covered actions would be in accordance with applicable

requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

*B5.21 Methane gas recovery and utilization systems*

The installation, modification, operation, and removal of commercially available methane gas recovery and utilization systems installed within a previously disturbed or developed area on or contiguous to an existing landfill or wastewater treatment plant that would not have the potential to cause a significant increase in the quantity or rate of air emissions.

Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

*B5.22 Alternative fuel vehicle fueling stations*

The installation, modification, operation, and removal of alternative fuel vehicle fueling stations (such as for compressed natural gas, hydrogen, ethanol and other commercially available biofuels) on the site of a current or former fueling station, or within a previously disturbed or developed area within the boundaries of a facility managed by the owners of a vehicle fleet. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

*B5.23 Electric vehicle charging stations*

The installation, modification, operation, and removal of electric vehicle charging stations, using commercially available technology, within a previously disturbed or developed area. Covered actions are limited to areas where access and parking are in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed

project area and would incorporate appropriate control technologies and best management practices.

#### *B5.24 Drop-in hydroelectric systems*

The installation, modification, operation, and removal of commercially available small-scale, drop-in, run-of-the-river hydroelectric systems that would (1) involve no water storage or water diversion from the stream or river channel where the system is installed and (2) not have the potential to cause significant impacts on water quality, temperature, flow, or volume. Covered systems would be located up-gradient of an existing anadromous fish barrier that is not planned for removal and where fish passage retrofit is not planned and where there would not be the potential for significant impacts to threatened or endangered species or other species of concern (as identified in B(4)(ii) of this appendix). Covered actions would involve no major construction or modification of stream or river channels, and the hydroelectric systems would be placed and secured in the channel without the use of heavy equipment. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

#### *B5.25 Small-scale renewable energy research and development and pilot projects in aquatic environments*

Small-scale renewable energy research and development projects and small-scale pilot projects located in aquatic environments. Activities would be in accordance with, where applicable, an approved spill prevention, control, and response plan, and would incorporate appropriate control technologies and best management practices. Covered

actions would not occur (1) within areas of hazardous natural bottom conditions or (2) within the boundary of an established marine sanctuary or wildlife refuge, a governmentally proposed marine sanctuary or wildlife refuge, or a governmentally recognized area of high biological sensitivity, unless authorized by the agency responsible for such refuge, sanctuary, or area (or after consultation with the responsible agency, if no authorization is required). If the proposed activities would occur outside such refuge, sanctuary, or area and if the activities would have the potential to cause impacts within such refuge, sanctuary, or area, then the responsible agency shall be consulted in order to determine whether authorization is required and whether such activities would have the potential to cause significant impacts on such refuge, sanctuary, or area. Areas of high biological sensitivity include, but are not limited to, areas of known ecological importance, whale and marine mammal mating and calving/pupping areas, and fish and invertebrate spawning and nursery areas recognized as being limited or unique and vulnerable to perturbation; these areas can occur in bays, estuaries, near shore, and far offshore, and may vary seasonally. No permanent facilities or devices would be constructed or installed. Covered actions do not include drilling of resource exploration or extraction wells, use of large-scale vibratory coring techniques, or seismic activities other than passive techniques.

## **B6. Categorical Exclusions Applicable to Environmental Restoration and Waste**

### **Management Activities**

#### *B6.1 Cleanup actions*

Small-scale, short-term cleanup actions, under RCRA, Atomic Energy Act, or other authorities, less than approximately 10 million dollars in cost (in 2011 dollars), to reduce

risk to human health or the environment from the release or threat of release of a hazardous substance other than high-level radioactive waste and spent nuclear fuel, including treatment (such as incineration, encapsulation, physical or chemical separation, and compaction), recovery, storage, or disposal of wastes at existing facilities currently handling the type of waste involved in the action. These actions include, but are not limited to:

- (a) Excavation or consolidation of contaminated soils or materials from drainage channels, retention basins, ponds, and spill areas that are not receiving contaminated surface water or wastewater, if surface water or groundwater would not collect and if such actions would reduce the spread of, or direct contact with, the contamination;
- (b) Removal of bulk containers (such as drums and barrels) that contain or may contain hazardous substances, pollutants, contaminants, CERCLA-excluded petroleum or natural gas products, or hazardous wastes (designated in 40 CFR part 261 or applicable state requirements), if such actions would reduce the likelihood of spillage, leakage, fire, explosion, or exposure to humans, animals, or the food chain;
- (c) Removal of an underground storage tank including its associated piping and underlying containment systems in accordance with applicable requirements (such as RCRA, subtitle I; 40 CFR part 265, subpart J; and 40 CFR part 280, subparts F and G) if such action would reduce the likelihood of spillage, leakage, or the spread of, or direct contact with, contamination;
- (d) Repair or replacement of leaking containers;
- (e) Capping or other containment of contaminated soils or sludges if the capping or containment would not unduly limit future groundwater remediation and if needed to reduce migration of hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products into soil, groundwater, surface water, or air;

- (f) Drainage or closing of man-made surface impoundments if needed to maintain the integrity of the structures;
- (g) Confinement or perimeter protection using dikes, trenches, ditches, or diversions, or installing underground barriers, if needed to reduce the spread of, or direct contact with, the contamination;
- (h) Stabilization, but not expansion, of berms, dikes, impoundments, or caps if needed to maintain integrity of the structures;
- (i) Drainage controls (such as run-off or run-on diversion) if needed to reduce offsite migration of hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum or natural gas products or to prevent precipitation or run-off from other sources from entering the release area from other areas;
- (j) Segregation of wastes that may react with one another or form a mixture that could result in adverse environmental impacts;
- (k) Use of chemicals and other materials to neutralize the pH of wastes;
- (l) Use of chemicals and other materials to retard the spread of the release or to mitigate its effects if the use of such chemicals would reduce the spread of, or direct contact with, the contamination;
- (m) Installation and operation of gas ventilation systems in soil to remove methane or petroleum vapors without any toxic or radioactive co-contaminants if appropriate filtration or gas treatment is in place;
- (n) Installation of fences, warning signs, or other security or site control precautions if humans or animals have access to the release; and
- (o) Provision of an alternative water supply that would not create new water sources if necessary immediately to reduce exposure to contaminated household or industrial use water and

continuing until such time as local authorities can satisfy the need for a permanent remedy.

*B6.2 Waste collection, treatment, stabilization, and containment facilities*

The siting, construction, and operation of temporary (generally less than 2 years) pilot-scale waste collection and treatment facilities, and pilot-scale (generally less than 1 acre) waste stabilization and containment facilities (including siting, construction, and operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis), provided that the action (1) supports remedial investigations/feasibility studies under CERCLA, or similar studies under RCRA (such as RCRA facility investigations/corrective measure studies) or other authorities and (2) would not unduly limit the choice of reasonable remedial alternatives (such as by permanently altering substantial site area or by committing large amounts of funds relative to the scope of the remedial alternatives).

*B6.3 Improvements to environmental control systems*

Improvements to environmental monitoring and control systems of an existing building or structure (such as changes to scrubbers in air quality control systems or ion-exchange devices and other filtration processes in water treatment systems), provided that during subsequent operations (1) any substance collected by the environmental control systems would be recycled, released, or disposed of within existing permitted facilities and (2) there are applicable statutory or regulatory requirements or permit conditions for disposal, release, or recycling of any hazardous substance or CERCLA-excluded petroleum or natural gas products that are collected or released in increased quantity or that were not previously collected or released.

*B6.4 Facilities for storing packaged hazardous waste for 90 days or less*

Siting, construction, modification, expansion, operation, and decommissioning of an onsite facility for storing packaged hazardous waste (as designated in 40 CFR part 261) for 90 days or less or for longer periods as provided in 40 CFR 262.34(d), (e), or (f) (such as accumulation or satellite areas).

*B6.5 Facilities for characterizing and sorting packaged waste and overpacking waste*

Siting, construction, modification, expansion, operation, and decommissioning of an onsite facility for characterizing and sorting previously packaged waste or for overpacking waste, other than high-level radioactive waste, provided that operations do not involve unpacking waste. These actions do not include waste storage (covered under B6.4, B6.6, B6.10 of this appendix, and C16 of appendix C) or the handling of spent nuclear fuel.

*B6.6 Modification of facilities for storing, packaging, and repacking waste*

Modification (excluding increases in capacity) of an existing structure used for storing, packaging, or repacking waste other than high-level radioactive waste or spent nuclear fuel, to handle the same class of waste as currently handled at that structure.

*B6.7 [Reserved]*

*B6.8 Modifications for waste minimization and reuse of materials*

Minor operational changes at an existing facility to minimize waste generation and for reuse of materials. These changes include, but are not limited to, adding filtration and recycle piping to allow reuse of machining oil, setting up a sorting area to improve process efficiency, and segregating two waste streams previously mingled and assigning new identification codes to the two resulting wastes.

*B6.9 Measures to reduce migration of contaminated groundwater*

Small-scale temporary measures to reduce migration of contaminated groundwater, including the siting, construction, operation, and decommissioning of necessary facilities. These measures include, but are not limited to, pumping, treating, storing, and reinjecting water, by mobile units or facilities that are built and then removed at the end of the action.

*B6.10 Upgraded or replacement waste storage facilities*

Siting, construction, modification, expansion, operation, and decommissioning of a small upgraded or replacement facility (less than approximately 50,000 square feet in area) within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible) for storage of waste that is already at the site at the time the storage capacity is to be provided. These actions do not include the storage of high-level radioactive waste, spent nuclear fuel or any waste that requires special precautions to prevent nuclear criticality. (See also B6.4, B6.5, B6.6 of this appendix, and C16 of appendix C.)

**B7. Categorical Exclusions Applicable to International Activities**

*B7.1 Emergency measures under the International Energy Program*

Planning and implementation of emergency measures pursuant to the International Energy Program.

*B7.2 Import and export of special nuclear or isotopic materials*

Approval of import or export of small quantities of special nuclear materials or isotopic materials in accordance with applicable requirements (such as the Nuclear Non-Proliferation Act of 1978 and the “Procedures Established Pursuant to the Nuclear Non-Proliferation Act of 1978” (43 FR 25326, June 9, 1978)).

APPENDIX C TO SUBPART D OF PART 1021—CLASSES OF ACTIONS THAT  
NORMALLY REQUIRE EAS BUT NOT NECESSARILY EISs

**C1 [Reserved]**

**C2 [Reserved]**

**C3 Electric power marketing rate changes, not within normal operating limits**

Rate changes for electric power, power transmission, and other products or services provided by Power Marketing Administrations that are based on changes in revenue requirements if the operations of generation projects would not remain within normal operating limits.

**C4 Upgrading, rebuilding, or construction of powerlines**

Upgrading or rebuilding more than approximately 20 miles in length of existing powerlines; or construction of powerlines (1) more than approximately 10 miles in length outside previously disturbed or developed powerline or pipeline rights-of-way or (2) more than approximately 20 miles in length within previously disturbed or developed powerline or pipeline rights-of-way.

**C5 Vegetation management program**

Implementation of a Power Marketing Administration system-wide vegetation management program.

**C6 Erosion control program**

Implementation of a Power Marketing Administration system-wide erosion control program.

**C7 Contracts, policies, and marketing and allocation plans for electric power**

Establishment and implementation of contracts, policies, and marketing and allocation plans related to electric power acquisition that involve (1) the interconnection of, or acquisition of power from, new generation resources that are equal to or less than 50 average megawatts; (2) changes in the normal operating limits of generation resources equal to or less than 50 average megawatts; or (3) service to discrete new loads of less than 10 average megawatts over a 12-month period.

**C8 Protection of cultural resources and fish and wildlife habitat**

Large-scale activities undertaken to protect cultural resources (such as fencing, labeling, and flagging) or to protect, restore, or improve fish and wildlife habitat, fish passage facilities (such as fish ladders and minor diversion channels), or fisheries.

**C9 Wetlands demonstration projects**

Field demonstration projects for wetlands mitigation, creation, and restoration.

**C10 [Reserved]**

**C11 Particle acceleration facilities**

Siting, construction or modification, operation, and decommissioning of low- or medium-energy (when the primary beam energy exceeds approximately 100 million electron volts and the average beam power exceeds approximately 250 kilowatts or where the average current exceeds 2.5 milliamperes) particle acceleration facilities, including electron beam acceleration facilities, and associated beamlines, storage rings, colliders, and detectors for research and medical purposes, within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible).

**C12 Energy system demonstration actions**

Siting, construction, operation, and decommissioning of energy system demonstration actions (including, but not limited to, wind resource, hydropower, geothermal, fossil fuel, biomass, and solar energy, but excluding nuclear). For purposes of this category, “demonstration actions” means actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

**C13 Import or export natural gas involving minor new construction**

Approvals or disapprovals of authorizations to import or export natural gas under section 3 of the Natural Gas Act involving minor new construction (such as adding new connections, looping, or compression to an existing natural gas or liquefied natural gas pipeline, or converting an existing oil pipeline to a natural gas pipeline using the same right-of-way).

**C14 Water treatment facilities**

Siting, construction (or expansion), operation, and decommissioning of wastewater, surface water, potable water, and sewage treatment facilities with a total capacity greater than approximately 250,000 gallons per day, and of lower capacity wastewater and surface water treatment facilities whose liquid discharges are not subject to external regulation.

**C15 Research and development incinerators and nonhazardous waste incinerators**

Siting, construction (or expansion), operation, and decommissioning of research and development incinerators for any type of waste and of any other incinerators that would treat nonhazardous solid waste (as designated in 40 CFR 261.4(b)).

**C16 Large waste packaging and storage facilities**

Siting, construction, modification to increase capacity, operation, and decommissioning of packaging and unpacking facilities (such as characterization operations) and large storage

facilities (greater than approximately 50,000 square feet in area) for waste, except high-level radioactive waste, generated onsite or resulting from activities connected to site operations. These actions do not include storage, packaging, or unpacking of spent nuclear fuel. (See also B6.4, B6.5, B6.6, and B6.10 of appendix B.)

APPENDIX D TO SUBPART D OF PART 1021—CLASSES OF ACTIONS THAT  
NORMALLY REQUIRE EISs

**D1 [Reserved]**

**D2 Nuclear fuel reprocessing facilities**

Siting, construction, operation, and decommissioning of nuclear fuel reprocessing facilities.

**D3 Uranium enrichment facilities**

Siting, construction, operation, and decommissioning of uranium enrichment facilities.

**D4 Reactors**

Siting, construction, operation, and decommissioning of power reactors, nuclear material production reactors, and test and research reactors.

**D5 [Reserved]**

**D6 [Reserved]**

**D7 Contracts, policies, and marketing and allocation plans for electric power**

Establishment and implementation of contracts, policies, and marketing and allocation plans related to electric power acquisition that involve (1) the interconnection of, or acquisition of power from, new generation resources greater than 50 average megawatts; (2) changes in the normal operating limits of generation resources greater than 50 average

megawatts; or (3) service to discrete new loads of 10 average megawatts or more over a 12-month period.

**D8 Import or export of natural gas involving major new facilities**

Approvals or disapprovals of authorizations to import or export natural gas under section 3 of the Natural Gas Act involving construction of major new natural gas pipelines or related facilities (such as liquefied natural gas terminals and regasification or storage facilities) or significant expansions and modifications of existing pipelines or related facilities.

**D9 Import or export of natural gas involving major operational change**

Approvals or disapprovals of authorizations to import or export natural gas under section 3 of the Natural Gas Act involving major operational changes (such as a major increase in the quantity of liquefied natural gas imported or exported).

**D10 Treatment, storage, and disposal facilities for high-level waste and spent nuclear fuel**

Siting, construction, operation, and decommissioning of major treatment, storage, and disposal facilities for high-level waste and spent nuclear fuel, including geologic repositories, but not including onsite replacement or upgrades of storage facilities for spent nuclear fuel at DOE sites where such replacement or upgrade would not result in increased storage capacity.

**D11 Waste disposal facilities for transuranic waste**

Siting, construction or expansion, and operation of disposal facilities for transuranic (TRU) waste and TRU mixed waste (TRU waste also containing hazardous waste as designated in 40 CFR part 261).

**D12 Incinerators**

Siting, construction, and operation of incinerators, other than research and development incinerators or incinerators for nonhazardous solid waste (as designated in 40 CFR 261.4(b)).