

Attachment 6A

Explanatory Notes for Department of Energy's Report November 5, 2010

Summary

The Department of Energy report addresses 155 projects and activities receiving funds from Division A of the American Recovery and Reinvestment Act (ARRA). Some of those ARRA projects consist of subprojects that have independent utility and are therefore subject to individual NEPA reviews. Of the 155 projects and activities, 10 are reported as not requiring NEPA review because 9 involve Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) actions and 1 is a ministerial action that does not trigger NEPA review requirements.

As of September 30, DOE had completed more than 8,100 NEPA reviews for projects and activities receiving ARRA funding, an increase of more than 800 since the previous report. Of the completed reviews, more than 8,000 are categorical exclusion (CE) determinations, 84 are environmental assessments (EAs), and 21 are environmental impact statements (EISs). Projects and activities include energy efficiency and renewable energy grants, actions to accelerate environmental cleanup at DOE sites, grants for advanced battery manufacturing, and many other research, development, demonstration, and deployment activities for obligations totaling more than \$33 billion under ARRA, an increase of more than \$3.5 billion. Another 72 NEPA reviews are underway as of September 30, including 53 EAs and 19 EISs.

DOE will identify additional NEPA actions in future reports. These will be associated with activities such as the ongoing review of applications for loan guarantees for energy projects, additional transmission line projects proposed by the Power Marketing Administrations, and state proposals to use grant funds for renewable energy projects.

The notes below supplement information contained in the reporting spreadsheet. Row numbers identified below refer to those on page 2 of the reporting spreadsheet.

Pending NEPA Reviews

Of 72 NEPA reviews that are pending, 36 are included in the report for the first time. Of the 64 NEPA reviews reported as pending in the previous report, 24 were completed, 2 were rescoped and qualified for CE determinations, and DOE's involvement in 2 projects was cancelled. Thus, NEPA reviews for 36 projects were pending in the previous report and remain pending in this report (26 EAs and 10 EISs). A pending EA could result in a decision to prepare an EIS.

Following is the status, by appropriations account, of the 36 NEPA reviews reported as pending in more than one report (i.e., does not include NEPA actions initiated during the last quarter):

- Energy Efficiency and Renewable Energy (EERE) – 13 EAs and 1 EIS are in preparation.
 - DOE issued 3 draft EAs for public review for projects under Modify Integrated Biorefinery Solicitation Program for Pilot and Demonstration Scale Biorefineries (row 1).
 - The record of decision for 1 EIS is pending for a commercial-scale biorefinery project; DOE issued the final EIS during the reporting period (row 2).
 - DOE is reviewing 1 existing EA against the scope of the National Wind Technology Center Upgrades project to determine whether further NEPA review is required (row 14).
 - 2 EAs are in preparation for Combined Heat and Power projects (row 23). DOE issued 2 draft EAs for public review; the schedule for 1 of these EAs was extended to accommodate consideration of historic preservation issues.
 - 1 EA is in preparation for a project under the Energy Efficiency and Conservation Block Grant program (row 27).
 - 4 EAs are in preparation for projects under the State Energy Program; 1 of these was issued as a draft for public review (row 29). 1 EA identified as pending on the previous report was cancelled at the request of the applicant.
 - DOE issued 1 draft EA for public review for an Advanced Battery and Hybrid Components Manufacturing project (row 35).
 - 1 EA is in preparation for a Wind Energy Consortia Between Institutions of Higher Learning and Industry project (row 42).

- Title 17 - Innovative Technology Loan Guarantee Program - Recovery Act – 8 EAs and 3 EISs are in preparation (row 44); their schedules are aligned with application review. The Bureau of Land Management (BLM) is the lead agency and DOE is a cooperating agency for the 3 EISs. BLM issued a final EIS for the BrightSource proposal during the past quarter and issued draft EISs for the Solar Millennium Blythe and Desert Sunlight proposals. DOE adopted the BrightSource EIS after the close of the reporting period.

- Defense Environmental Cleanup – DOE completed public review of 1 draft EA and is preparing a revised draft that will be issued for further public review (row 53).

- Electricity Delivery and Energy Reliability – 2 EAs are in preparation for Smart Grid Regional and Energy Storage Demonstration projects; another 2 EAs are pending site selection by the applicant (row 66).

- Fossil Energy R&D – DOE has re-scoped the FutureGen project (now referred to as FutureGen 2.0) under Carbon Capture and Storage and is developing a NEPA strategy for the newly defined project (row 73). DOE continues to report this as a pending EIS and will revise, if needed, after the NEPA strategy is developed. In addition, there are 3 EISs in development. DOE is preparing the draft of 1 EIS for an Industrial Carbon Capture and Storage project (row 74). DOE completed public scoping for 1 EIS pending under

Expand and Extend Clean Coal Power Initiative Round III (row 75). For the second EIS under Clean Coal Power Initiative Round III, DOE is working with the California Energy Commission on the draft EIS; the schedule is coordinated with the California Environmental Quality Act process.

- Borrowing Authority: Western Area Power Administration – 1 EIS is in preparation (row 80).

Appropriations Data

Changes in Treasury Appropriation Fund Symbol (TAFS) allocations (reported as Total ARRA Appropriations in column D of page 1 of the reporting form) relative to the previous report reflect the transfer of funds from various DOE offices to the central Departmental Administration account to pay for corporate-wide management and oversight of ARRA implementation, as authorized by law. DOE notified Congress of all such transfers. In addition, Congress rescinded \$1.5 billion from the Title 17 - Innovative Technology Loan Guarantee Program - Recovery Act.

On page 1, column D, of the reporting spreadsheet, the Borrowing Authority accounts for Bonneville Power Administration and Western Area Power Administration reflect Borrowing Authority and not appropriated dollars. Also, the Isotope Production and Distribution Fund did not receive a separate appropriation under ARRA. Rather these funds were appropriated to the Science account and \$14,617,000 has been paid to the Isotope Production and Distribution Fund.

Obligations Data

Obligations as of September 30, 2010, included on page 1 of the reporting spreadsheet for 14 DOE Recovery Act accounts total \$33,030,440,969, an increase of \$ 3,522,173,425 over the last quarter. This is less than the \$33,210,207,991 reported in the DOE Financial and Activity Report to the Office of Management and Budget (OMB) as of September 30. The difference of \$179,767,022 is accounted for, in part, by the inclusion in the report to OMB of \$122,267,638 in reimbursable Recovery Act work for others. Because this work is not paid for by DOE with Division A ARRA funds, it is not included in this report. The difference also includes \$57,499,384 obligated under the Departmental Administration account, including funds transferred to the Energy Information Administration, which are used to administer projects receiving ARRA funding and are therefore not included in this report.

Obligations for the Advanced Technology Vehicles Manufacturing Loan Program - Recovery Act account are almost \$780,000 lower as of September 30, 2010, than reported on June 30, 2010, due to a change in obligations for contractor support.

NEPA Not Applicable, Including CERCLA Projects

Information on 10 of DOE's Recovery Act projects is not reported on page 2 because NEPA reviews are not required. This includes the following 9 CERCLA projects referred to in the "NEPA Not Applicable" column on page 1 of the report:

Defense Environmental Cleanup

Hanford River Corridor Soil and Groundwater Recovery Act Project (WA)

INL Buried Waste Recovery Act Project (ID)¹

Mound Operable Unit 1 Recovery Act Project (OH)

Oak Ridge Defense Y-12 D&D Recovery Act Project (TN)

Oak Ridge Defense ORNL D&D Recovery Act Project (TN)

SPRU Recovery Act Project (NY)

Non-Defense Environmental Cleanup

Oak Ridge Non-Defense Recovery Act Project (TN)

Stanford Linear Accelerator Center Recovery Act Project (CA)

Uranium Enrichment D&D Fund

Oak Ridge UE D&D Funded Recovery Act Project (TN)

The remaining project listed under "NEPA Not Applicable" is an Energy Efficiency and Renewable Energy project (EE Appliance Rebate Programs) for which DOE has no agency discretion for decisionmaking; and therefore, there is no requirement for a NEPA analysis.

Projects Involving CERCLA and NEPA

Ten projects involve both NEPA review and work being performed under CERCLA. These projects are not included in the "NEPA Not Applicable" column on page 1. The status of NEPA compliance is reported on page 2. The projects are listed below.

Defense Environmental Cleanup

INL D&D Recovery Act Project (ID) (row 47)

Hanford River Corridor D&D Recovery Act Project (WA) (row 52)

Hanford Central Plateau D&D Recovery Act Project (WA) (row 53)

Hanford Central Plateau Soil and Groundwater Recovery Act Project (WA) (row 54)

SRS D&D P & R Areas Recovery Act Project (SC) (row 56)

SRS D&D M & D Areas Recovery Act Project (SC) (row 57)

SRS D&D, Soil & Groundwater Activities Site-wide Recovery Act Project (SC) (row 58)

Non-Defense Environmental Cleanup

BNL Recovery Act Project (NY) (row 130)

¹ Project re-named; formerly referred to as the INL Soil and Groundwater Recovery Act Project.

Uranium Enrichment D&D Fund
Paducah Recovery Act Project (KY) (row 138)
Portsmouth Recovery Act Project (OH) (row 139)

NEPA Actions Applicable to Multiple Projects

For Energy Efficiency and Renewable Energy, Recovery Act, 1 EA reported under Advanced Battery and Hybrid Components Manufacturing (row 35) also is applicable to a grant awarded under the State Energy Program (row 29).

For the 3 Environmental Management accounts (Defense Environmental Cleanup, Recovery Act; Non-Defense Environmental Cleanup, Recovery Act; and Uranium Enrichment Decontamination and Decommissioning Fund, Recovery Act), 2 EISs of national scope are applicable to multiple projects involving waste disposal. These are the Waste Management Programmatic EIS and the Waste Isolation Pilot Plant Supplemental EIS. To avoid over-reporting the number of completed EISs, these 2 EISs are reported on page 2 only for the Defense Environmental Cleanup/WIPP Recovery Act Project (row 61).

The 2008 Los Alamos National Laboratory (LANL) Site-Wide EIS is relevant to four Recovery Act projects. The first record of decision (ROD) (issued 9/26/2008) for that EIS covers the Defense Environmental Cleanup/LANL Defense Soil and Groundwater Recovery Act Project (row 63) and the Isotope Production and Distribution Fund/Enhanced Utilization of Isotope facilities: Isotope Production Facility (row 142). The second ROD (issued 7/20/2009) for the LANL Site-Wide EIS covers a portion of the Recovery Act work for the Defense Environmental Cleanup/LANL Defense D&D Recovery Act Project (row 62) and the Non-Defense Environmental Cleanup/LANL Non-Defense Recovery Act Project (row 132). The LANL Site-Wide EIS is reported on page 2 for only the LANL Defense D&D Recovery Act Project to avoid over-counting the number of NEPA actions (row 62).

Three Science projects at Brookhaven National Laboratory in New York (PHENIX Silicon Vertex and PHENIX Forward Vertex equipment purchases, and enhanced accelerator improvement projects (AIP) funding at BNL) are addressed in the same EA (rows 107-109). That EA is reported only once on page 2 of the spreadsheet (row 107).

Additional Notes Regarding Spreadsheet Organization

The number of ARRA Funded Projects/Activities is much lower than the number of NEPA actions. First, some DOE Recovery Act projects involve distributing funds to multiple applicants, with distinct NEPA compliance requirements for each application. Second, some DOE Recovery Act projects include multiple activities, with distinct NEPA compliance requirements for each activity. Third, implementation of some DOE Recovery Act projects relies on more than one NEPA action (e.g., programmatic and tiered site-specific EISs).

Separate spreadsheet entries delineate activities within a project that differ by NEPA compliance strategy. We have indented the Project/Activity Description for each row after the initial row to identify the activities that are grouped by particular NEPA actions (i.e., CE, EA, and EIS).

The “Date NEPA is Done” is the date a CE determination or finding of no significant impact (FONSI) was signed or the date a ROD was published in the *Federal Register*. Should new information arise or the proposed action change, DOE will determine whether additional NEPA review is required.

Regarding whether all Federal environmental reviews and documents are complete, a blank cell indicates that DOE is continuing to confirm the answer. Information will be updated in future reports.

Project-Specific Notes:

EERE/Energy Efficiency and Conservation Block Grant Program (row 27) – The 2,190 grant applications (state, territory, city, county, and tribal governments) include multiple activities, many of which are independently justified and not connected actions.

EERE/State Energy Program (row 29) – The 56 grant applications (50 states, District of Columbia, American Samoa, Guam, Northern Marianas, Puerto Rico, and the Virgin Islands) include multiple activities, many of which are independently justified and not connected actions.

EERE/Wind Energy Consortia Between Institutions of Higher Learning and Industry (row 42) – One EA was withdrawn because the ARRA funds all were used for planning and similar activities that qualified for CE determinations.

Title 17/Credit Subsidy Program Section 1705 (row 44) – The Bureau of Land Management is the lead agency for preparation of an EIS for BrightSource. (DOE was a cooperating agency and adopted the EIS after the close of the reporting period.) Two pending EISs (for Nextlight Palomos (formerly labeled Aqua Caliente) and Solar Millennium) were withdrawn from the report as the projects are no longer under review by DOE in connection with an ARRA-funded loan guarantee.

Defense Environmental Cleanup/Idaho National Laboratory (INL) D&D Recovery Act Project (row 47) – The scope of this project was changed to accelerate decontamination and decommissioning (D&D) activities at INL. Hence, the project title was changed to INL D&D Recovery Act Project, from INL Recovery Act Project as used in reports prior to that for the quarter ending June 30, 2010. As a result of this scope change, the two EISs listed for this project in some previous reports are no longer relevant to the ARRA project and are indicated as withdrawn in this report. The completed CE determination and EA are related to the planned D&D.

Defense Environmental Cleanup/Hanford Central Plateau D&D Recovery Act Project (row 53) – An EA was withdrawn; the work will be performed pursuant to CERCLA.

Fossil Energy R&D/Carbon Capture and Storage (row 73) – See the discussion of the change from FutureGen to FutureGen 2.0 under Pending NEPA Reviews.

Fossil Energy R&D/Industrial CCS Applications (row 74) – An EA was withdrawn because the applicant cancelled the proposed project.

Science/ARM Climate Research Facility Initiative (row 92) – One pending EA was withdrawn from the report. DOE was reviewing whether the scope of work fit within an existing EA. DOE determined instead to make new CE determinations for the ARRA activities.

Examples of Benefits of NEPA Review of Department of Energy (DOE) ARRA Projects

Examples Included in Prior Reports

Energy Efficiency and Conservation Block Grant Program

Energy Efficiency and Renewable Energy, Recovery Act (row 27)

Level of NEPA action: CE (for many proposed actions)

Brief project description: Grant program to states, territories, local governments, and Indian tribes to improve energy efficiency and reduce energy use and fossil fuel emissions in their communities.

Value added by the NEPA process: DOE uses the NEPA process to work with grant applicants to better define proposed projects and to enhance and protect resources through actions such as improving awareness and treatment of historic structures, and verifying plans to properly recycle or dispose of wastes.

Advanced Vehicle Battery and Hybrid Components Manufacturing (Midland, Michigan)

Energy Efficiency and Renewable Energy, Recovery Act (row 35)

Level of NEPA action: EA

Brief project description: Grant program to accelerate the development and production of electric drive vehicle systems to substantially reduce petroleum consumption in the United States.

Value added by the NEPA process: The NEPA process increased the project team's awareness of issues related to preexisting dioxin-contaminated soil, including the potential for impacts in the vicinity of the project site. The applicant incorporated measures to minimize the risk of exposure to dioxin-contaminated soils during construction, including notifying the affected facilities (including a day care) of the construction activities and potential exposures, more rigorous management and monitoring of fugitive dust when direct fugitive dust emissions would impact nearby facilities, providing for temporary relocation during days of exposure, scheduling around day care operation, and providing temporary enhanced air filtration during construction.

Advanced Vehicle Battery and Hybrid Components Manufacturing (Bristol, Tennessee, and Columbus, Georgia)

Energy Efficiency and Renewable Energy, Recovery Act (row 35)

Level of NEPA action: EA

Brief project description: Grant program to accelerate the development and production of electric drive vehicle systems to substantially reduce petroleum consumption in the United States.

Value added by the NEPA process: Public comment led to increased discussion in the final EA of previous heavy metal and solvent contamination issues, and possible contamination due to a previous facility fire. This information served to better inform the public and decisionmakers, and confirmed the lack of significant impacts related to these issues.

Advanced Vehicle Battery and Hybrid Components Manufacturing (Sanborn, New York)

Energy Efficiency and Renewable Energy, Recovery Act (row 35)

Level of NEPA action: EA

Brief project description: Grant program to accelerate the development and production of electric drive vehicle systems to substantially reduce petroleum consumption in the United States.

Value added by the NEPA process: In response to agency comment, the project will use landscaping techniques, including replacement vegetation native to the area and free of invasive plant species, to reduce the need for water to maintain landscapes and to benefit native plant communities and wildlife.

Credit Subsidy Program Section 1705: Abengoa Solar

Title 17 - Innovative Technology Loan Guarantee Program - Recovery Act (row 44)

Level of NEPA action: EA

Brief project description: Loan Guarantee to Abengoa Solar, Inc., for construction and start up of a concentrated solar thermal electric power project.

Value added by the NEPA process: The NEPA process began early allowing the loan guarantee applicant to fully consider site and transmission line route selection, prepare surveys and analyses, and coordinate with environmental stakeholders. The NEPA process ensured that no sensitive environmental resources would be adversely impacted by the project, thus protecting the environment and addressing the cultural resource concerns of affected American Indian Tribes. In response to a request from the Tohono O’odham Nation during tribal consultation, DOE staff participated in a meeting with the Four Southern Tribes to explain the Abengoa project and expected future renewable energy projects in the area. This allowed Tribes to express their concerns and helped shape future NEPA analyses for renewable energy projects in southwestern Arizona.

Credit Subsidy Program Section 1705: U.S. Geothermal

Title 17 - Innovative Technology Loan Guarantee Program - Recovery Act (row 44)

Level of NEPA action: EA

Brief project description: DOE loan guarantee for construction and startup of the proposed Neal Hot Springs Geothermal Facility in Vale, Oregon.

Value added by the NEPA process: The NEPA process helped to identify and address potential seismic issues associated with geothermal well operation. This occurred early in the process and allowed for efficient inclusion of practicable environmental control measures to ensure that the project was not a potential source of seismic activity.

Credit Subsidy Program Section 1705: Beacon

Title 17 - Innovative Technology Loan Guarantee Program - Recovery Act (row 44)

Level of NEPA action: EA

Brief project description: DOE loan guarantee for construction and operation of a flywheel-based frequency regulation facility at an undeveloped seven-acre site in Stephentown, New York. A frequency regulation facility assists in maintaining the grid's equilibrium by storing energy when supply exceeds demand and releasing energy back onto the grid when demand exceeds supply.

Value added by the NEPA process: The NEPA staff was in continuous communication with the applicant, which contributed to the forward movement of the project through the loan guarantee process. The NEPA process provided a forum in which to document and explain the benefit of the project to the public and decisionmakers, specifically, the greenhouse gas savings that could be achieved by using the proposed flywheel-based frequency regulation technology, versus using fossil fuels-based frequency regulation technology.

ANL Recovery Act Project: Building 310 Decontamination and Decommissioning (D&D)

Defense Environmental Cleanup, Recovery Act (row 46)

Level of NEPA action: EA

Brief project description: Demolition of a research reactor facility at Argonne National Laboratory (ANL) will be followed by capping the affected area to protect human health and the environment from risks associated with unneeded and deteriorating structures that contain radioactively-contaminated material. This work involves Building 330 at ANL.

Value added by the NEPA process: The EA process was a useful tool for integrating project planning and environmental concerns. The scoping phase of the process brought operational and environmental expertise together and facilitated development of demolition and transportation approaches to better protect workers and the public.

Idaho National Laboratory (INL) Transuranic (TRU) Waste Recovery Act Project

Defense Environmental Cleanup, Recovery Act (row 48)

Level of NEPA action: EA

Brief project description: Accelerate disposition of remote-handled TRU (radioactive) waste.

Value added by the NEPA process: Information received from external technical experts during the comment period on the draft EA facilitated the selection of a transportation route that minimized the risk of potential impacts to cultural and biological resources.

Oak Ridge Defense TRU Waste Recovery Act Project

Defense Environmental Cleanup, Recovery Act (row 50)

Level of NEPA action: EIS

Brief project description: Accelerate work at the Transuranic Waste Processing Center.

Value added by the NEPA process: Mitigation measures were implemented for a small wetland that was identified during the NEPA review. Early consideration of environmental information (during the review of proposals for the project pursuant to DOE's NEPA regulations) helped DOE avoid costly analysis of alternatives that may not have been viable. The NEPA process facilitated communication with other agencies regarding the alternatives and their associated impacts. It also provided an educational tool for the public, showing that various alternatives were considered and that DOE was moving forward with the alternative that would least impact the environment in the short-term and improve the environment in the long-term.

Office of River Protection (ORP) Recovery Act Project

Defense Environmental Cleanup, Recovery Act (row 51)

Level of NEPA action: CE

Brief project description: Laboratory 222-S Upgrades and Life Extension Projects.

Value added by the NEPA process: The CE required preparation of cultural and biological reviews prior to any action. The biological review identified appropriate time windows for conducting certain activities to reduce impacts to nesting wildlife.

ORP Recovery Act Project

Defense Environmental Cleanup, Recovery Act (row 51)

Level of NEPA action: EA

Brief project description: Upgrade and extend the service life of the 242-A Evaporator, a system for concentrating and reducing the volume of radioactive liquid waste.

Value added by the NEPA process: The NEPA process helped better define the project scope and schedule, which improved the ability to plan the actual execution of the project. The project contractor's involvement in the NEPA process helped them understand responsibilities under site biological and cultural resource protection programs.

Hanford Central Plateau D&D Recovery Act Project

Defense Environmental Cleanup, Recovery Act (row 53)

Level of NEPA action: EA

Brief project description: Removal of excess facilities and infrastructure within the Fitzner/Eberhardt Arid Lands Ecology Reserve at the Hanford Site.

Value added by the NEPA process: The NEPA process identified the need for additional tribal interactions and controls to limit ecological and cultural impacts, which led to a Memorandum of Agreement between DOE and the State Historic Preservation Office. The NEPA process provided a clear understanding of the environmental setting and of tribal and community values that helped build support for the proposal. Specifically, the EA provided an opportunity for stakeholders, in particular Tribal Nations, to participate in the identification of sensitive cultural resources resulting in the consolidation of numerous communication towers into two, thereby reducing the visual impact to a traditional cultural property.

SRS D&D, Soil & Groundwater Activities Site-wide Recovery Act Project

Defense Environmental Cleanup, Recovery Act (row 58)

Level of NEPA action: EA

Brief project description: Accelerate disposition of depleted uranium (scope addressed within this EA; ARRA project also includes other work addressed in other NEPA actions).

Value added by the NEPA process: This NEPA process was designed to look more comprehensively and farther into the future with respect to planning than had previously been done at the Savannah River Site (SRS). This EA analyzed the waste streams of both low-level and mixed low-level radioactive wastes, for both the then-current and anticipated scope of work, and all potential government and commercial waste facility destinations. This resulted in solutions that were much more cost- and time-efficient, and limited the expected transportation impacts over the long term in the surrounding communities. This comprehensive approach was achieved due to input received during agency and public scoping.

WIPP Recovery Act Project

Defense Environmental Cleanup, Recovery Act (row 61)

Level of NEPA action: EA

Brief project description: Widen 3.6 miles of access road to improve safety at the Waste Isolation Pilot Plant (WIPP).

Value added by the NEPA process: The NEPA process identified environmental impacts for which a Mitigation Action Plan was developed. Mitigation actions include exclusion zones around raptor nests and activity timing restrictions for the benefit of sensitive status species (Lesser Prairie-Chicken), a dust abatement plan, relocating a livestock watering unit, and conditions related to noxious weeds.

BPA Borrowing Authority: McNary-John Day Transmission Line

Borrowing Authority: Bonneville Power Administration (row 79)

Level of NEPA action: EIS

Brief project description: Build and operate a new 500-kilovolt transmission line along the Columbia River in Oregon and Washington.

Value added by the NEPA process: The NEPA process helped refine the transmission line route to avoid conflicts with people's lives. The route refinement would not have been apparent without public participation in the NEPA review. The process facilitated public understanding of the project and identified appropriate mitigation measures relative to cultural sites, sensitive plants, wildlife, wetlands, and land use.

National Synchrotron Light Source II

Science, Recovery Act (row 82)

Level of NEPA action: EA

Brief project description: Construction of a light source facility at Brookhaven National Laboratory to deliver x-rays with unprecedented intensity and brightness to research solutions for important energy challenges.

Value added by the NEPA process: The NEPA process identified and facilitated avoiding a potential construction delay and adverse impacts to a sensitive species. During the EA scoping process, DOE learned that a state mining permit would be required to acquire sand from outside the immediate project area, which would delay the start of construction. Input to the design process identified a sufficient volume of sand from the immediate project area, and the delay was avoided. The NEPA process also identified the potential for project storm water discharge to affect recharge basins considered designated habitat for the tiger salamander, a state threatened species, and existing groundwater contamination plumes. This triggered changes to the project design to adjust discharge location points and maintain flows to ensure salamander habitat remains suitable.

Nanoscale Science Research Centers: Molecular Foundry

Science, Recovery Act (row 85)

Level of NEPA action: EA

Brief project description: Capital equipment funds to optimize existing and procure novel equipment in order to ensure the availability of state-of-the-art capabilities.

Value added by the NEPA process: Analysis of the proposed facility at the Lawrence Berkeley National Laboratory influenced design, construction, and operation decisions and identified mitigation measures to avoid impacts to the Alameda whipsnake, a species listed as threatened under the Endangered Species Act. As a result, DOE sited the facility outside of critical habitat, restricted construction activities to daylight hours, disposed of soils in a manner to reduce the potential for encountering and injuring whipsnakes, and implemented landscape design and maintenance during and after construction so as to reduce potential impacts to the whipsnakes.

Fundamental Neutron Physics Beamline MIE at SNS full funding (ORNL)

Science, Recovery Act (row 106)

Level of NEPA action: EIS

Brief project description: Accelerate the schedule for HVAC and utilities installation to support this beamline for studying the fundamental properties of the neutron at the Spallation Neutron Source (SNS) at Oak Ridge National Laboratory (ORNL).

Value added by the NEPA process: In evaluating the then-proposed SNS in the late 1990s, the EIS identified potential adverse impacts to a creek; this resulted in a change in the location of an effluent discharge point to reduce the potential for adverse impacts.

Moab Recovery Act Project

Non-Defense Environmental Cleanup, Recovery Act (row 133)

Level of NEPA action: EIS

Brief project description: Accelerate relocation of 16 million tons of mill tailings and debris from a former, commercial uranium ore processing operation adjacent to the Colorado River and Arches National Park, to an engineered disposal cell 30 miles away.

Value added by the NEPA process: Ore processing near Moab, Utah, left radioactive tailings and debris in an unlined and uncovered pile spanning approximately 130 acres, and resulted in the contamination of soils, groundwater, and ponds with ammonia, copper, manganese, sulfate, and uranium. Contaminants have been detected in the Colorado River, mostly due to groundwater discharge. The decisionmaking associated with the disposition of the site was long and, at times, contentious. The NEPA process facilitated receiving input from agencies (including 12 cooperating agencies) and the public that resulted in a decision to remediate contaminated groundwater and dispose of the tailings off-site. This will benefit four fish species listed as endangered under the Endangered Species Act, and will remove a potential human health risk from the banks of the Colorado River.

West Valley Recovery Act Project

Non-Defense Environmental Cleanup, Recovery Act (row 134)

Level of NEPA action: EIS

Brief project description: Western New York Nuclear Service Center decontamination and decommissioning, and disposition of radioactive wastes.

Value added by the NEPA process: A collaborative process was integrated into the NEPA process, enabling the five involved Federal and state agencies to identify ways to best address technical issues. This led to development of a new alternative in which decommissioning would be completed in two phases. Substantial removal actions would be completed in the first phase, thus reducing contamination sources in the near term while performing additional site characterization and scientific studies to support decisionmaking for the remaining (second phase) facilities and areas.

New Examples of Benefits of NEPA Review

Advanced Vehicle Battery and Hybrid Components Manufacturing (Detroit, Michigan)

Energy Efficiency and Renewable Energy, Recovery Act (row 35)

Level of NEPA action: EA

Brief project description: Grant program to accelerate the development and production of electric drive vehicle systems to substantially reduce petroleum consumption in the United States.

Value added by the NEPA process: The project initially proposed by the applicant (A123 Systems) involved construction of more than 2 million square feet of manufacturing space on multiple undeveloped sites. Environmental implications identified during the EA scoping process led to an iterative process between the applicant and DOE staff to reshape the proposal into one that involved retooling and retrofitting existing manufacturing facilities, with only minor new construction on a previously disturbed site. Potential environmental impacts were greatly reduced through this process.

Credit Subsidy Program Section 1705: First Wind

Title 17 – Innovative Technology Loan Guarantee Program – Recovery Act (row 44)

Level of NEPA action: EA

Brief project description: Loan Guarantee to Kahuku Wind Power, LLC, for construction of the Kahuku Wind Power Facility in Kahuku, Oahu, Hawaii.

Value added by the NEPA process: The NEPA process provided assurances to the decisionmakers that the project would be able to comply with applicable environmental regulations and thus proceed as planned to construction, operation, and eventual pay back of the loan.

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