

## **Attachment 6A**

### **Explanatory Notes for the Department of Energy (DOE) Report August 1, 2011**

#### **Summary**

The Department of Energy divided funds from Division A of the American Recovery and Reinvestment Act (ARRA) among 155 project codes. This report describes the status of NEPA review for projects and activities associated with these project codes. Some of these ARRA project codes consist of multiple projects and activities that have independent utility and are therefore subject to individual NEPA reviews. Of the 155 project codes, 10 are reported as not requiring NEPA review because 9 environmental cleanup projects involve solely Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) actions and 1 appliance rebate program was deemed a ministerial action that did not trigger NEPA review requirements.

As of June 30, DOE had completed more than 9,700 NEPA reviews for projects and activities receiving ARRA funding, an increase of more than 500 since the previous report. Of the completed reviews, more than 9,600 are categorical exclusion (CE) determinations, 115 are environmental assessments (EAs), and 26 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 \$34 billion under ARRA. Another 51 NEPA reviews are underway as of June 30, including 34 EAs and 17 EISs.

During the last quarter, DOE completed 9 EAs that resulted in findings of no significant impact (FONSI) and issued records of decision (RODs) for 2 EISs, 5 projects were withdrawn from ARRA funding (cancelled or other funding will be used), and the location for 1 proposed project (pending EA) was changed and a CE determination completed for the revised proposal. NEPA reviews for 50 projects were pending in the previous report and remain pending in this report (33 EAs and 17 EISs). One additional pending review is reported for the first time.

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**

Following is the status, by appropriations account, of the 51 NEPA reviews reported as pending in more than 1 report (i.e., does not include 1 pending NEPA action initiated during the last quarter):

- Energy Efficiency and Renewable Energy (EERE) – 12 EAs reported as pending in more than 1 report. All the NEPA reviews are expected to be completed in time to facilitate use of the Recovery Act funds and those funds remain available after the end of the FY 2011.

- 3 EAs are in preparation for Community Renewable Energy Development projects (row 10). DOE issued a FONSI for 1 of these after the close of the reporting period. The other 2 EAs have been identified as pending in 4 reports. Environmental impact data are being reviewed prior to issuing 1 draft EA for a wind project in Colorado. The applicant is considering changes to a proposed renewable energy plan for Forest County, WI; DOE will review these changes to determine how best to complete NEPA review.
  - 1 EA is in preparation for a Combined Heat and Power project (row 23) proposed for Seattle, WA. The EA has been identified as pending in 6 reports. Draft EA issued in June 2010; schedule for the final EA accommodates consideration of historic preservation issues.
  - 6 EAs are in preparation for projects under the State Energy Program (row 29). DOE issued a FONSI for 1 of these after the close of the reporting period. DOE is preparing a final EA for a wind energy project in Illinois that has been identified as pending in 5 reports; the draft EA was issued in February 2011, and the U.S. Fish and Wildlife Service completed the biological opinion during this reporting period. DOE is preparing 4 draft EAs: a solar project in Illinois (pending in 4 reports), a solar project in Pennsylvania (pending in 2 reports), a biomass project in Wisconsin (pending in 2 reports), and an energy recovery project in Wisconsin (pending in 2 reports).
  - 2 EAs are in preparation for Advanced Battery and Hybrid Components Manufacturing projects (row 35). DOE issued 1 draft supplemental EA (pending in 2 reports) and accepted public comments during the reporting period for a proposed manufacturing facility in Maryland to produce electric motor components and assemble electric drive units for vehicles; DOE now is evaluating new information from the applicant. For the other EA (pending in 3 reports), DOE received additional information from the applicant during the reporting period and is preparing a draft for a proposed project to manufacture components for electric vehicles in Indiana.
- Title 17 - Innovative Technology Loan Guarantee Program - Recovery Act – 13 EAs and 7 EISs reported as pending in more than 1 report (row 44). To qualify for this loan guarantee program authorized and funded by ARRA, projects must begin construction by September 30, 2011. NEPA review is closely coordinated with other aspects of the decisionmaking process to ensure that schedule goals are met. DOE is preparing, as the lead agency, 1 final EIS for the Topaz solar project in California (pending in 3 reports). DOE adopted 1 EIS (pending in 5 reports) for which the Bureau of Land Management (BLM) was the lead agency; this was for the Desert Sunlight solar project in California. After the close of the reporting period, DOE issued a ROD for 1 EIS for which BLM was the lead agency. BLM is the lead agency and DOE is a cooperating agency for the other 4 pending EISs. BLM has issued RODs for 2 of these 4 EISs (Solar Millennium Blythe in California (pending in 5 reports) and Genesis Solar in California (pending in 4 reports)), and those are the subject of litigation. DOE had not issued a ROD for either of these EISs as of June 30, 2011; DOE is a party to the litigation related to the Solar Millennium Blythe project. BLM issued 1 of the other EISs (Solar Reserve – Rice in California; pending in 4 reports) as final during the reporting period, and the schedule for 1 EIS

(Daggett Ridge in California; pending in 5 reports) is allowing for consideration of concerns raised by the Department of Defense regarding potential radar interference. DOE issued FONSI for 3 of the 13 pending EAs after the close of the reporting period. DOE issued 2 of the EAs (First Solar – AV Solar Ranch in California (pending in 4 reports) and SunPower CA Valley Solar Ranch in California (pending in 2 reports)) as draft during the reporting period. DOE is preparing 2 draft EAs (ORMAT – Nevada (pending in 2 reports) and Taylor Biomass (pending in 2 reports)). Work on the remaining 6 EAs is on hold.

- Defense Environmental Cleanup – 1 EA reported as pending in 7 reports. In response to public comments on a draft EA issued in 2010, DOE is revising the draft EA for this proposed project at the Hanford site in Washington State and expects to issue the revised draft for public comment during the next reporting period (row 53). The EA is expected to be completed in time to facilitate use of the Recovery Act funds and those funds remain available after the end of the FY 2011.
- Electricity Delivery and Energy Reliability – 3 EAs reported as pending in 6 reports for Smart Grid Regional and Energy Storage Projects. DOE issued a draft EA and is discussing wetland issues with the U.S. Army Corps of Engineers for a project in Texas, and site identification is underway for the projects in New York and California to be analyzed in 2 of the EAs (row 66). The 3 pending EAs are expected to be completed in time to use the Recovery Act funds and those funds remain available after the end of the FY.
- Fossil Energy R&D – 4 EAs and 6 EISs reported as pending in more than 1 report. DOE issued a notice of intent (NOI) for an EIS (pending in 9 reports) for the proposed FutureGen 2.0 commercial-scale, oxy-combustion power plant and carbon dioxide storage network in Illinois under Carbon Capture and Storage (row 73). Under Industrial Carbon Capture and Storage (ICCS) (row 74), 2 EISs and 4 EAs are identified as pending in more than 1 report. DOE issued an NOI for an EIS (pending in 3 reports) for a co-generation project proposed in Louisiana and is collecting environmental data for an EIS (pending in 6 reports) for a gasification project proposed in Mississippi. After the close of the reporting period, DOE issued a FONSI for 1 of the EAs and, based on the scope change for another project, cancelled 1 EA and made a CE determination. The scope of the other 2 EAs (pending in 4 reports) is under review. Under the Expand and Extend Clean Coal Power Initiative Round III (row 75), DOE is preparing 3 EISs. DOE expects to complete the EIS (pending in 4 reports) for 1 project in Texas during the next reporting period. DOE is continuing work on a final EIS (pending in 6 reports) for a proposed project in West Virginia. DOE is preparing 1 draft EIS (pending in 7 reports) for a gasification project in California, and the schedule is coordinated with the California Environmental Quality Act process. The pending EAs and EISs are expected to be completed in time to use the Recovery Act funds. Those funds are available after the end of the FY 2011.
- Borrowing Authority: Bonneville Power Administration – 3 EISs reported as pending in 4 reports (row 79). DOE issued 1 final EIS after close of the reporting period for a

proposed transmission line project in both Oregon and Washington. DOE is preparing a draft of each of the other 2 EISs for electricity transmission projects: one in Oregon and one in Washington. The 2 remaining pending EISs are expected to be completed in time to use the Recovery Act funds which are available after the end of the FY 2011.

- Borrowing Authority: Western Area Power Administration – 1 EIS reported as pending in 4 reports. During the reporting period, DOE completed scoping for this proposed transmission project that would run from Wyoming to Nevada (row 80). The EIS is expected to be completed in time to facilitate use of the Recovery Act funds. The Recovery Act funds are available after the end of the FY 2011.

### **Appropriations Data**

Appropriations data are unchanged from the report for the quarter ending March 31, 2011.

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 June 30, 2011, included on page 1 of the reporting spreadsheet for 14 DOE Recovery Act accounts total \$34,076,484,239, an increase of \$502,220,307 over the last quarter. This is less than the \$34,310,989,929 reported in the DOE Financial and Activity Report to the Office of Management and Budget (OMB) as of June 30. The difference of \$234,505,690 is accounted for, in part, by the inclusion in the report to OMB of \$126,049,592 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 \$108,355,729 obligated under the Departmental Administration account, including funds transferred to the Energy Information Administration, and \$100,369 in a Title 17 – Innovative Technology Guarantee Loan Financing Account. These funds are used to administer projects receiving ARRA funding and are therefore not included in this report.

The obligations values are reduced for some accounts by less than 1 percent. This reflects minor adjustments as individual awards are completed or cancelled.

### **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)<sup>1</sup>  
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; 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)

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**

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

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 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 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.

Project-Specific Notes:

EERE/Commercial Scale Biorefinery Projects (row 2) – The previously reported EIS for the Abengoa biorefinery project was withdrawn from the report because ARRA funds will not be used for the project.

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. 1 EA was withdrawn from the report; ARRA funds are not proposed for use on the project.

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. Beginning with this report, CE determinations for pre-application funding are combined with the other CE determinations for this program (i.e., two rows were merged to provide a single row for all CE determinations for the State Energy Program). 4 EAs were withdrawn; ARRA funds are not proposed for use on the projects.

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

Title 17/Credit Subsidy Program Section 1705 (row 44) – Three EISs (for Nextlight Palomos [formerly labeled Aqua Caliente], Solar Millennium, and Tessera Solar - Imperial Valley), 3 EAs (SoloPower, Suniva Artisun, and Bishop Hill Wind), and 2 CEs (Cymbet and Transform Holdings) 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) –FutureGen is a new project referred to as FutureGen 2.0.

Fossil Energy R&D/Industrial CCS Applications (row 74) – An EA was withdrawn from the report 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 fits within an existing EA. DOE determined instead to make new CE determinations for the ARRA activities.

Uranium Enrichment Decontamination and Decommissioning Fund/Portsmouth Recovery Act Project (row 139) – Two CE determinations were withdrawn from the report because DOE no longer proposes to use ARRA funds for the disposal of low-enriched uranium cylinders.

## **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: NEPA analysis was conducted for construction of a vehicle battery and hybrid components manufacturing facility, sited in Midland, Michigan.

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.

**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: DOE proposed to issue a grant for the development and production of electric drive vehicle systems in Detroit, Michigan.

Value added by the NEPA process: The project initially involved construction of more than 2 million square feet of manufacturing space on multiple undeveloped sites. Environmental implications identified during the NEPA 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: 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: An EA was used to consider a 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 DOE to identify and address potential low level induced seismicity associated with enhanced geothermal systems where injection is used to improve reservoir permeability and sustainability. The identification of these issues occurred early in the process, which 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 used the NEPA process for the loan guarantee for construction and operation of a flywheel-based frequency regulation facility at an undeveloped seven acre site in Stephentown, New York.

Value added by the NEPA process: This EA provided a forum to document and explain the benefits of the project to the public and decision makers, specifically, the greenhouse gas savings that could be achieved by using the proposed flywheel-based frequency regulation technology as opposed to the fossil fuels-based frequency regulation technology.

### **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.

### **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: An EA was also used by DOE to integrate project planning and environmental concerns for demolition of Building 330, which housed the former Chicago Pile-5 research reactor at Argonne National Laboratory in Illinois. 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: In accelerating clean-up work at the Transuranic Waste Processing Center located within the Oak Ridge Reservation in Oak Ridge, TN, DOE implemented mitigation measures for a small wetland that was identified during the NEPA review. Early consideration of environmental information during the review of proposals for the project 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: DOE used the EA process to take a more comprehensive look into future planning at the Savannah River Site in South Carolina. The Environmental Assessment analyzed the waste streams of both low-level and mixed low-level radioactive wastes, for the past, 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 Bonneville Power Administration used the EIS process for the construction and operation of a new 500-kilovolt transmission line along the Columbia River in Oregon and Washington. The NEPA process helped refine the transmission line route to avoid conflicts with local community and private property land use. 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: 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. This triggered changes to the project design to adjust discharge location points and maintain flows to ensure the area continues to be suitable salamander habitat.

### **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: A DOE EA analyzed the then-proposed molecular foundry, a nanoscience research facility at the Lawrence Berkeley National Laboratory in Berkeley, California. The DOE Environmental Assessment influenced the 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 of the NEPA process, 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.

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