U.S. Nuclear Regulatory Commission Monthly Status Report Activities Related to the Yucca Mountain Licensing Action Report for May 2016

Background

On August 13, 2013, a panel of the U.S. Court of Appeals for the District of Columbia Circuit issued its decision in the case *In re Aiken County* directing the U.S. Nuclear Regulatory Commission (NRC) to "promptly continue with the legally mandated licensing process" for the U.S. Department of Energy's (DOE's) application to construct a geologic repository for high-level waste at Yucca Mountain, NV. The NRC promptly began taking steps to comply with the court's direction following the issuance of the decision. On November 18, 2013, the Commission approved a memorandum and order, which set a course of action for the Yucca Mountain licensing process that is consistent with the Appeals Court decision and with the resources available. The Commission also issued a related staff requirements memorandum (SRM) on November 18, 2013. The Commission provides further direction to the staff as needed.

Accomplishments and Ongoing Work

The NRC staff in the Office of Nuclear Material Safety and Safeguards, with the support of the Center for Nuclear Waste Regulatory Analyses, prepared and issued Volumes 2, 3, 4, and 5 of the safety evaluation report (SER) over the course of a year, completing the last volumes in January 2015. All of these documents are available on the NRC's website at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1949/. The NRC also distributed the documents to the participants in the adjudicatory proceeding and other interested stakeholders. Completion of the SER cost approximately \$8,365,000.

On February 3, 2015, the Commission directed the staff to develop an environmental impact statement (EIS) supplement and undertake certain SER "wrap-up" activities, including records retention and the development of lessons-learned reports. The Commission also approved a path forward for making Licensing Support Network (LSN) documents publicly available. The Commission's SRM ("Staff Requirements – COMSECY-14-0041 – Yucca Mountain Project Activities") is available on the NRC's website at http://pbadupws.nrc.gov/docs/ML1503/ML15034A086.pdf.

On August 13, 2015, the staff published its draft NUREG-2184, "Supplement to the U.S. Department of Energy's Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada." The NRC received comments on the draft supplement at the public meetings, by mail, and through the regulations.gov website. Summaries, transcripts, and other materials from the five public meetings held to receive comments on the draft document are available at http://www.nrc.gov/waste/hlw-disposal/key-documents.html#er. On May 5, 2016, the staff published the final supplement, which includes an appendix containing summaries of the public comments and staff responses to the comments. The final supplement is available at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr2184/.

Also in May 2016, the staff continued its work on the report of lessons learned from the licensing process. The staff expects to complete this report in June 2016.

Progress continued in May on the project to place the LSN document collection into a publicly accessible library in the Agencywide Documents Access and Management System (ADAMS). The indexing process that makes documents searchable has been completed for more than ninety-five percent of the 3.692 million participant documents loaded into the system.

Schedule and Cost for Activities Directed in SRM of February 3, 2015

The Commission approved the staff's schedule and revised cost estimate for completing the EIS supplement that the staff has determined is needed for the review of DOE's application under the National Environmental Policy Act and the Nuclear Waste Policy Act. The staff had estimated that it would take a period of 12-15 months at an approximate cost of \$2 million to complete the EIS supplement (see Table 1 below).

The staff completed wrap-up work related to records retention in April 2015, including the archiving of documents used in preparing the SER. The staff is working to complete the lessons-learned report, as noted above. The staff had estimated that these activities would cost approximately \$100,000.

The Commission also directed that following the close of the public comment period for the draft EIS supplement and upon verification that sufficient funding is available, the LSN document collection be loaded into a publicly accessible ADAMS library with enhanced search capability. It is estimated that this task can be completed by the end of fiscal year 2016 at a cost of approximately \$1.1 million.

The total estimate to complete the work directed in the February 3, 2015, SRM (EIS supplement, SER wrap-up activities, and loading LSN documents) is approximately \$3.2 million.

Nuclear Waste Fund Expenditures

During the month of May, the NRC expended \$96,246 of Nuclear Waste Fund (NWF) funds on its actions in direct response to the court's decision. Cumulative expenditures since the August 13, 2013, U.S. Court of Appeals decision are \$11,929,306. The August 13, 2013, balance of \$13,549,315 of unexpended NWF funding, less the \$11,929,306, results in a remaining unexpended balance of \$1,620,009. Total unobligated NWF funds remaining as of May 31, 2016, are \$1,117,870. The following table provides further details regarding the NRC's expenditure of NWF funds since August 13, 2013.

| Table 1 Status of NRC NWF Funds since the August 13, 2013, Court Decision | | | |
|---|------------------|---------------------|----------------------------|
| Yucca Mountain Licensing Activities | Cost Estimate | May Expenditures | Cumulative Expenditures |
| Completion of the SER | \$8,310,000 | \$0 | \$8,364,877 |
| Loading of Licensing Support Network documents into a nonpublic ADAMS library | \$350,000 | \$0 | \$277,670 |
| Loading of Licensing Support Network documents into a public ADAMS library | \$1,100,000 | \$45,334 | \$910,778 |
| Development of the EIS supplement | \$2,000,000 | \$49,288 | \$1,542,191 |
| SER wrap-up activities | \$100,000 | \$141 | \$43,706 |
| Program planning and support | \$825,000 | \$1,483 | \$447,260 |
| Response to the August 30, 2013, Commission order | | \$0 | \$137,518 |
| Federal court litigation* | | \$0 | \$154,903 |
| Support and advice in NRC proceedings | | \$0 | \$35,535 |
| Subtotal, other support costs chargeable to NWF funds | | \$1,483 | \$775,216 |
| Adjustments to close out contracts funded by previous NWF appropriations | | \$0 | \$14,868 |
| Total | \$12,685,000 | \$96,246 | \$11,929,306 |

^{*}Includes a \$59,000 expenditure in May 2014 for the agency's agreement to settle the Equal Access to Justice Act claim of one of the *Aiken County* petitioners. On October 23, 2014, the Court of Appeals for the District of Columbia Circuit denied the motion from other parties requesting reimbursement for attorneys' fees.

The unexpended NWF balance of \$1,620,009 includes \$291,902 of previously appropriated NWF funds that remain unexpended but obligated on contracts with the Center for Nuclear Waste Regulatory Analyses.

Figure 1 on page 4 shows the cumulative projected and actual expenditures. Projected expenditures include cost estimates shown in Table 1. The actual cumulative expenditures reflect costs through May 31, 2016, as given in Table 1.

Nuclear Waste Fund Tracking \$14 Millions Original Projection Revised Projection \$12 Actual \$10 **Cumulative Expenditures** \$8 \$6 \$4 \$2 3/1/2015 711/2014 11/12014

Figure 1. Nuclear Waste Fund Tracking

Stakeholder Communications and Interactions

On May 5, 2016, the NRC staff made the final supplement to the Yucca Mountain Environmental Impact Statement publicly available and e-mailed a link to the document to the participants in the suspended adjudicatory proceeding and to other interested stakeholders. Also on May 5, the NRC issued a press release about the publication of the final supplement.

On May 13, 2016, a notice was published in the *Federal Register* announcing the issuance of this document. The *Federal Register* notice is available at https://www.regulations.gov/#!documentDetail;D=NRC-2015-0051-0152.