U.S. Nuclear Regulatory Commission Monthly Status Report Activities Related to the Yucca Mountain Licensing Action Report for April 2015

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 \$8,311,000.

In December 2014, the staff provided the Commission with its assessment of available remaining funding from the Nuclear Waste Fund. The assessment (COMSECY-14-0041, "Yucca Mountain Project Activities" dated December 24, 2014), which includes a description of proposed work, is available on the NRC's website at http://pbadupws.nrc.gov/docs/ML1506/ML1506/ML15062A495.html. On February 3, 2015, the Commission responded to the COMSECY by approving the staff's recommendations 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.

The staff is continuing its work on the EIS supplement and on the SER wrap-up activities. The staff announced its intention to develop the supplement in the *Federal Register* on March 12, 2015. The *Federal Register* notice is available at 80 FR 13029, and can be accessed at http://www.gpo.gov/fdsys/pkg/FR-2015-03-12/pdf/2015-05578.pdf. In developing the supplement, which will be limited to addressing certain topics related to groundwater impacts from the proposed repository, the staff will consider a technical report developed by DOE and available through the NRC's website at http://pbadupws.nrc.gov/docs/ML1430/ML14303A393.pdf.

Concerning wrap-up activities, the staff completed its records retention project in April and is continuing work on a lessons-learned report.

Schedule and Cost for Remaining Activities

The Commission has 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 estimates that it will take a period of 12-15 months at an approximate cost of \$2 million to complete the EIS supplement (see Table 1 below).

The Commission has approved the staff's recommendation to proceed with SER "wrap-up" activities. The specific activities are document retention and management, including the archiving of documents used in preparing the SER, and the development of lessons-learned reports about aspects of the licensing process. The staff estimates that it can complete these activities in approximately 1-2 months at a cost of approximately \$100,000.

The Commission has also directed that the LSN document collection be loaded into a publicly accessible library in the Agencywide Documents Access and Management System (ADAMS) with enhanced search capability. It is estimated that this task can be completed in 6-8 months at a cost of approximately \$1.1 million. This activity would not begin until the fall of 2015, after verification that sufficient funding is available.

As described above, the estimate for work remaining (EIS supplement, SER wrap-up activities, and loading LSN documents) is approximately \$3.2 million.

Nuclear Waste Fund Expenditures

During the month of April, the NRC expended \$25,444 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 \$9,503,490. The August 13, 2013, balance of \$13,549,315 of unexpended NWF funding, less the \$9,503,490, results in a remaining unexpended balance of \$4,045,825. Total unobligated NWF funds remaining as of April 30, 2015, are \$2,925,736. 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	April Expenditures	Cumulative Expenditures
Completion of the safety evaluation report	\$8,310,000	\$0	\$8,311,157
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	\$0	\$0
Development of the EIS supplement	\$2,000,000	\$13,514	\$90,230
SER wrap-up activities	\$100,000	\$11,564	\$18,842
Program planning and support	\$825,000	\$344	\$438,693
Response to the August 30, 2013, Commission order		\$0	\$137,518
Federal court litigation*		\$22	\$154,903
Support and advice in NRC proceedings		\$0	\$35,535
Subtotal, other support costs chargeable to NWF funds		\$366	\$766,649
Adjustments to close out contracts funded by previous NWF appropriations		\$0	\$38,942
Total	\$12,685,000	\$25,444	\$9,503,490

^{*}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 fund balance of \$4,045,825 includes \$239,199 of previously appropriated NWF funds that remain unexpended but obligated on contracts with the Center for Nuclear Waste Regulatory Analyses.

The staff has estimated the expenses necessary to complete the SER and related activities directed by the Commission. 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 April 30, 2015, as given in Table 1.

Figure 1. Nuclear Waste Fund Tracking

Stakeholder Communications and Interactions

During the week of April 13, 2015, the staff attended the American Nuclear Society's biennial International High-Level Radioactive Waste Management Conference in Charleston, South Carolina. On April 16, 2015 the NRC staff participated on a panel and gave a presentation about the staff's review of the Yucca Mountain repository license application and the conclusions of the SER.

On April 23, 2015, the National Transportation Stakeholders Forum hosted a webinar on the NRC's Yucca Mountain SER. The NRC staff provided a high-level overview of the SER and the NRC's plans to develop an EIS supplement.