

**U.S. Nuclear Regulatory Commission Monthly Status Report  
Activities Related to the Yucca Mountain Licensing Action  
Report for June 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 \$8,328,000.

In December 2014, the staff provided the Commission with its assessment of available remaining funding from the Nuclear Waste Fund (NWF). 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/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>.

ENCLOSURE

On June 10–11, the NRC staff visited selected locations in the Yucca Mountain area to support the staff's analysis in the EIS supplement of specific impacts on groundwater downstream from the proposed repository site. The staff also visited the repository site at Yucca Mountain, including the portals to the underground Exploratory Studies Facility and the ridge crest. The field visit served to enhance the NRC staff's understanding of the processes that can affect the groundwater and surface discharges of groundwater to be discussed in the supplement.

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 Activities Directed in SRM of February 3, 2015**

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 records 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 estimated that these activities would require approximately 1–2 months of work, at a cost of approximately \$100,000. As noted above, the records retention task was completed in April 2015. The remaining "wrap-up" activities will proceed in parallel with completion of the EIS supplement and LSN tasks.

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.

The 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 June, the NRC expended \$135,755 of 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 \$9,761,757. The August 13, 2013, balance of \$13,549,315 of unexpended NWF funding, less the \$9,761,757, results in a remaining unexpended balance of \$3,787,558. Total unobligated NWF funds remaining as of June 30, 2015, are \$2,789,929. The following table provides further details regarding the NRC's expenditure of NWF funds since August 13, 2013.

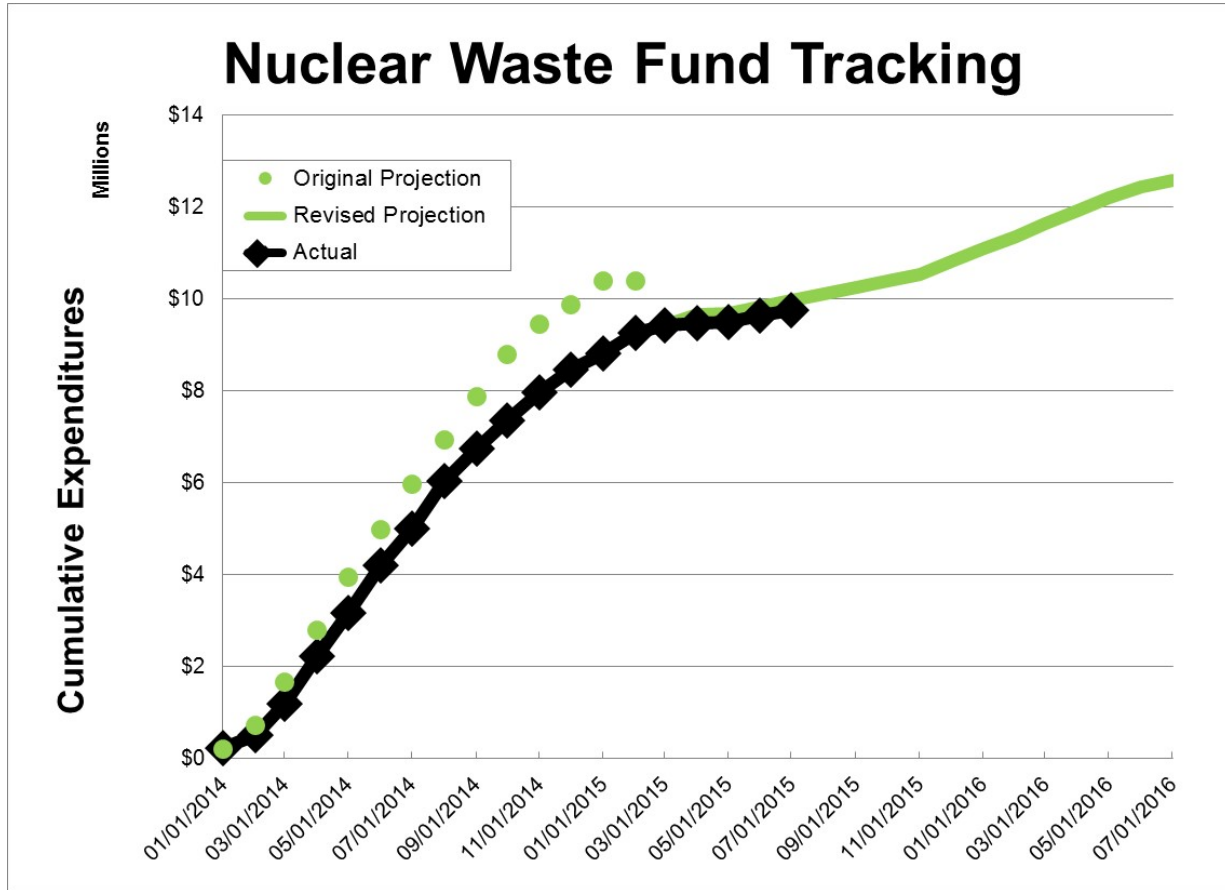
<b>Table 1 Status of NRC NWF Funds since the August 13, 2013, Court Decision</b>			
<b>Yucca Mountain Licensing Activities</b>	<b>Cost Estimate</b>	<b>June Expenditures</b>	<b>Cumulative Expenditures</b>
Completion of the safety evaluation report	\$8,310,000	\$0	\$8,327,671
Loading of Licensing Support 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	\$127,185	\$307,166
SER wrap-up activities	\$100,000	\$8,287	\$42,919
Program planning and support	\$825,000	\$283	\$439,433
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		\$283	\$767,389
Adjustments to close out contracts funded by previous NWF appropriations		\$0	\$38,942
<b>Total</b>	<b>\$12,685,000</b>	<b>\$135,755</b>	<b>\$9,761,757</b>

\*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 \$3,787,558 includes \$239,199 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 June 30, 2015, as given in Table 1.

Figure 1. Nuclear Waste Fund Tracking



#### Stakeholder Communications and Interactions

No stakeholder communications or interactions occurred during June 2015 as the staff continues to develop the EIS supplement.