

## SAFETY EVALUATION REPORT

DOCKET NO.: 70-143  
LICENSE NO.: SNM-124  
LICENSEE: Nuclear Fuel Services, Inc. – Erwin, Tennessee  
SUBJECT: REQUEST TO AMEND MATERIALS LICENSE SNM-124,  
DECOMMISSIONING FUNDING PLAN, WITH UPDATED  
DECOMMISSIONING COST ESTIMATE

### 1.0 BACKGROUND

Nuclear facilities licensed under Title 10 of the *Code of Federal Regulations* (10 CFR), Part 70, are required to provide adequate financial assurance for decommissioning, decontamination, and reclamation pursuant to 10 CFR 70.25, “Financial assurance and recordkeeping for decommissioning.” Nuclear Fuel Services, Inc. (NFS or the licensee) is the holder of Materials License SNM-124. Pursuant to 10 CFR 70.25(e)(2), NFS is required to submit the decommissioning funding plan (DFP) and financial assurance every three years for the U.S. Nuclear Regulatory Commission (NRC) review and approval to account for changes in costs and the extent of contamination.

By letter dated November 30, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML21343A049), NFS submitted its 2021 decommissioning cost estimate (DCE) for its facility in Erwin, Tennessee, as required by 10 CFR 70.25(e).

The NRC staff uses NUREG-1757, Volume 3, Revision 1, “Consolidated Decommissioning Guidance Financial Assurance, Recordkeeping, and Timeliness,” and “Interim Staff Guidance on Decommissioning Funding Plans for Materials Licensees,” dated June 2019 (ADAMS Accession Number ML19079A314), as guidance to evaluate the decommissioning funding plans submitted by 10 CFR Part 70 licensees.

### 2.0 REGULATORY REQUIREMENTS

NFS remains responsible for the current status and future decommissioning of the licensed site and facility; will continue to abide by all commitments and representations previously made to NRC; and will continue to abide by all constraints, conditions, requirements, representations, and commitments identified in the license. Additionally, as required by 10 CFR 70.25(e), NFS must continue to submit an updated cost estimate for decommissioning for NRC’s review at intervals not to exceed 3 years. After resolution of any NRC comments on the estimate, NFS must submit signed originals of the financial instruments reflecting an amount sufficient to cover the approved cost estimate. NFS remains liable for any decommissioning costs not covered by the financial instruments referenced above.

### 3.0 STAFF EVALUATION

The 2021 DCE submitted by NFS updates its 2018 DCE submittal, as transmitted by letter dated November 30, 2018 (ADAMS Accession Number ML18341A244), which was reviewed and

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approved by the NRC on June 24, 2019 (ADAMS Accession Number ML19172A122).

In its submittal dated November 30, 2021, NFS proposed a DCE of \$351 million which is a decrease of approximately \$43 million over its previous cost estimate (i.e., 2018 DCE) of \$394 million due to a 50% reduction in disposal costs.

The staff found the updated DCE acceptable as it meets the regulatory requirements of 10 CFR 70.25(e). Specifically, NFS submitted a detailed cost estimate for decommissioning which: (1) reflects the cost of an independent contractor to perform decommissioning activities; (2) is primarily based on unrestricted use; (3) includes an adequate contingency factor; and (4) identifies and provides justification for key assumptions.

Further, the following has been updated since the last DCE:

- Spills of radioactive material

The licensee has stated in the subject DFP, "No spills of radioactive material producing additional residual radioactivity in on-site subsurface material have been documented."

- Waste inventory increases

The licensee has stated in the subject DFP, "Waste inventory is less than 1% different than the 2018 waste inventory cost estimate."

- Waste disposal costs increases

The licensee has stated in the subject DFP, "Waste disposal costs have decreased by 50% since the 2018 decommissioning cost estimate. This represents a 12% decrease in the total decommissioning cost estimate." The licensee further stated, "A new contract with WCS [waste control specialists] decreased transportation and waste disposal costs for D&D [decontamination and decommissioning] wastes, with a much lower rate for soil, compared to previous disposal site contracts. Waste disposal costs at NNSS [Nevada National Security Site] increased significantly. WCS will now be the preferred disposal site, with NNSS used only for classified disposal."

- Facility modifications

The licensee has stated in the subject DFP, "The North Site decommissioning has completed. 8-234 wet-cell soil excavation has completed. B-111 decommissioning is partially completed."

- Changes in authorized possession limits

The licensee has stated in the subject DFP, "There have been no changes in authorized possession limits."

- Actual remediation costs that exceed the previous cost estimate

The licensee has stated in the subject DFP, "There are no remediation costs that exceed the previous cost estimate."

- On-site disposal

The licensee has stated in the subject DFP, "There has been no onsite disposal."

- Use of a settling pond

The licensee has stated in the subject DFP, "There is no use of a settling pond."

- Inventory

On page 11 of the subject DFP, the licensee described its plan for moving inventory offsite, including a government contract and additional costs which are the responsibility of the licensee. The licensee included its costs in the DFP.

#### 4.0 ENVIRONMENTAL REVIEW

This action involves a change to financial surety requirements. Pursuant to 10 CFR 51.22(c)(10), this is a category of action that does not have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required for the proposed action.

#### 5.0 CONCLUSION

Based on a review of the updated DCE submittal dated November 30, 2021, the NRC staff finds that the DCE is based on reasonable and documented assumptions, and that it reasonably estimates the cost, at this time, to decommission the facility. Accordingly, the staff concludes that the 2021 DCE of \$351,349,000 submitted by NFS satisfies the requirements of 10 CFR 70.25(e) and is consistent with NUREG-1757, Volume 3, Revision 1, and is acceptable. Therefore, the NRC staff concludes that there is reasonable assurance that the 2021 DCE will continue to provide adequate protection of public health, safety, safeguards, security, and the protection of the environment.

NFS shall appropriately revise its financial assurance mechanisms and Certification of Financial Assurance and submit them for NRC review within 30 days from the staff's approval date of the 2021 DCE. The licensee remains liable for any costs not covered by the financial instruments.

#### 6.0 PRINCIPAL CONTRIBUTORS

K. Kline, NMSS  
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