

## **SAFETY EVALUATION REPORT**

DOCKET: 70-1113

LICENSE: SNM-1097

LICENSEE: Global Nuclear Fuel-Americas, LLC

SUBJECT: 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 Section 70.25, "Financial assurance and recordkeeping for decommissioning." Global Nuclear Fuel-Americas, LLC (GNF-A or the licensee) is a holder of Special Nuclear Material License, SNM-1097. Pursuant to 10 CFR 70.25(e)(2), GNF-A is required to submit a decommissioning cost estimate (DCE) and financial assurance at least every 3 years for the U.S. Nuclear Regulatory Commission (NRC) to review and approve.

The licensee submitted an updated DCE (Agencywide Documents Access and Management System (ADAMS) No. ML19274C651) dated October 1, 2019, as required by 10 CFR 70.25(e)(2).

The NRC utilizes NUREG-1757, Vol. 3, Rev. 1, "Consolidated Decommissioning Guidance Financial Assurance, Recordkeeping, and Timeliness," as guidance to evaluate the DCEs submitted by 10 CFR 70 licensees.

### **2.0 REGULATORY REQUIREMENTS**

The licensee 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 the NRC, and will continue to abide by all constraints, conditions, requirements, representations, and commitments identified in the license. As required by 10 CFR 70.25(e)(2), GNF-A must continue to submit an updated cost estimate for decommissioning for the NRC's review at intervals not to exceed 3 years. After resolution of any NRC comments on the estimate, GNF-A will submit, as necessary, revised financial instruments reflecting an amount sufficient to cover the approved cost estimate. The licensee remains liable for any decommissioning costs not covered by the financial instrument referenced above.

### **3.0 STAFF EVALUATION**

The decommission funding plan (DFP) was submitted by letter dated October 1, 2019. The DCE, included in the DFP, documents the total cost of decommissioning as \$272,077,104, including a 25 percent contingency factor of \$54,415,421.

The licensee previously submitted a DCE dated September 8, 2016 (ADAMS Accession No. ML16252A211), which was approved on March 7, 2017 (ADAMS Accession No. ML17061A080). During the review the staff discussed GNF-A's plans for the disposition of

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inventory during decommissioning. The licensee stated that all inventory would be processed and taken off site prior to decommissioning, or the owner of the inventory would be responsible for removing any inventory prior to decommissioning.

The NRC accepted the 2019 DCE for a detailed technical review on November 18, 2019. Upon review of the revised DCE, the NRC staff found the DCE acceptable as it meets the regulatory requirements of 10 CFR 70.25(e). Specifically, the GNF-A submittal: (1) reflects the cost of an independent contractor to perform decommissioning activities, (2) is based on unrestricted use, (3) includes an adequate contingency factor, and (4) identifies and provides justification for key assumptions.

Further, the October 2, 2019, submittal addresses the following:

1. Spills of radioactive material:

The 2019 DCE describes three areas on the site where uranium and associated constituents have been identified in soil and groundwater and how the costs for remediating these areas are included in the DCE (pages 4.5 - 4.6).

2. Waste inventory increases:

The 2019 DCE states waste volumes are reviewed and updated every 3 years as necessary (page 7.1). Table 6.8 of the 2019 DFP reflects increases in waste volumes since GNF-A's 2016 DFP and associated increases in decommissioning costs (page 6.10).

3. Waste disposal cost increases:

The 2019 DCE states changes in waste categories, waste disposal options, and waste disposal rates are reviewed and updated every 3 years as necessary (page 7.1). For example, Table 6.8 of the 2019 DFP includes updates to the waste burial cost per cubic foot since GNF-A's 2016 DFP (page 6.10).

4. Facility modifications:

The 2019 DCE states that the status of any ongoing or planned facility modifications is reviewed and updated annually as necessary (page 7.1).

5. Changes in authorized possession limits:

The licensee's authorized possession limits have not changed relative to GNF-A's DFP submitted on September 7, 2016 (page 8.19); therefore, there are no associated effects on the DCE.

6. Actual remediation costs that exceed the previous cost estimate:

The 2019 DCE states the cost estimate is updated to reflect completed decommissioning activities annually as necessary, and the 2019 submittal did not include any updates based on remediation costs incurred (page 7.1).

7. Onsite disposal:

The 2019 DCE describes the process for handling and disposing of waste offsite. Therefore, no onsite disposal costs are included in the DCE (pages 2.4 – 2.6).

8. Use of a settling pond:

The DCE does not explicitly mention use of a settling pond. The 2019 DCE does state that effluent from the radioactive waste treatment system and laundry water are included in the combined process wastewater treatment system “for final precipitate settling and pH adjustment prior to discharge in accordance with permit requirements (page 2.5).” The DCE also describes the remediation of a “final process lagoon area (page 2.5).”

#### 4.0 CONCLUSION

Based on the review of the October 2, 2019, DCE submittal, the NRC finds the submitted DCE is based on reasonable and documented assumptions, and that it reasonably estimates the cost, at this time, to decommission the facility. Accordingly, the NRC considers GNF-A’s 2019 DCE satisfies the requirements of 10 CFR 70.25(e) and is generally consistent with NUREG-1757, Volume 3, Rev. 1. Therefore, the NRC concludes that GNF-A’s 2019 DCE of \$272,077,104 is acceptable. The licensee shall, as necessary, revise its financial assurance mechanisms and Certification of Financial Assurance and submit these for the NRC review. The licensee has indicated it will provide this in an upcoming guarantee submittal.

The NRC concludes there is reasonable assurance the proposed 2019 DCE would continue to provide adequate protection of public health, safety, safeguards, security, and the protection of the environment. Therefore, the NRC finds the proposed update is acceptable and meets the regulatory requirements to provide financial assurance, as set forth in 10 CFR 70.25(e). The licensee remains liable for any costs not covered by the financial instrument(s).

Principal Contributors: Trent Wertz, NMSS/REFS  
Matt Bartlett, NMSS/DFM