

## 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 Paragraph 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) review and approval.

GNF-A submitted an updated DCE (Agencywide Documents Access and Management System [ADAMS] No. ML16252A210) dated September 7, 2016, 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

GNF-A 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. GNF-A 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 September 7, 2016 (ADAMS Accession Number ML16252A210). The DCE included in the DFP, documents the total cost of decommissioning as \$249,445,000, including a 25 percent contingency factor of \$49,889,000.

GNF-A previously submitted a DCE dated April 26, 2013 (ADAMS Accession No. ML131160307) which was approved on September 11, 2013 (ADAMS Accession No. ML13252A395). The DCE was updated at an interval that did not exceed 3 years. Therefore, the NRC concludes the triennial update to the DCE is timely.

The NRC accepted the DCE for a detailed technical review on October 17, 2016. The NRC requested additional information (RAI) on December 6, 2016, (ADAMS Accession No. ML16341D700). GNF-A responded to the RAI on December 21, 2016 (ADAMS Accession No. ML16356A219). The NRC and GNF-A had conference calls on January 13, 2017 and February 2, 2017. GNF-A supplemented their response on February 17, 2017 (ADAMS Accession No. ML17048A218). Upon review of the revised DCE, the NRC found the DCE acceptable as it meets the regulatory requirements of 10 CFR 70.25(e). Specifically, GNF-A submitted a detailed cost estimate for decommissioning within 3 years of its last approved estimate and the new 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 September 7, 2016, submittal addresses the following:

1. Spills of radioactive material:

The 2016 DCE describes 3 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 2016 DCE states waste volumes are reviewed and updated every 3 years as necessary (page 7.1). Table 6.8 of the 2016 DFP reflects increases in waste volumes since GNF-A's 2013 DFP and associated increases in decommissioning costs (page 6.10).

3. Waste disposal costs increases:

The 2016 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 2016 DFP includes updates to the waste burial cost per cubic foot since GNF-A's 2013 DFP (page 6.10).

4. Facility modifications:

The 2016 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:

GNF-A's authorized possession limits have not changed relative to GNF-A's DFP submitted on April 26, 2013 (page 8.19); therefore, there are no associated effects on the DCE.

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

The 2016 DCE states the cost estimate is updated to reflect completed decommissioning activities annually *as necessary*, and the 2016 submittal did not include any updates based on remediation costs incurred (page 7.1).

7. Onsite disposal:

The 2016 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 2016 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 ENVIRONMENTAL REVIEW

Approval of the DCE is subject to the categorical exclusion provided in 10 CFR 51.22(c)(19). The NRC has previously found, as stated in 10 CFR 51.22(a), that this is a category of action that does not individually or cumulatively have a significant effect on the human environment. Therefore, in accordance with 10 CFR 51.22(b), neither an Environmental Assessment nor an Environmental Impact Statement is required for the proposed action.

#### 5.0 CONCLUSION

Based on the review of the September 7, 2016, DCE submittal and the licensee’s responses to the NRC’s RAIs, 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 2016 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 2016 DCE of \$249,445,000 is acceptable. GNF-A shall, as necessary, revise its financial assurance mechanisms and Certification of Financial Assurance and submit these for the NRC review. GNF-A has indicated it will provide this in an upcoming guarantee submittal.

The NRC concludes there is reasonable assurance the proposed 2016 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).

#### 6.0 PRINCIPAL CONTRIBUTORS

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