

**SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION**

**RELATED TO DECOMMISSIONING FINANCIAL ASSURANCE**

**LICENSE NO. TR-1**

**GE HITACHI NUCLEAR ENERGY AMERICAS, LLC**

**GE TEST REACTOR**

**DOCKET NO. 50-70**

**1.0 INTRODUCTION**

By letter dated March 6, 2020 (Agencywide Documents Access and Management System (ADAMS) Package Accession No. ML20066J980), as supplemented by letter dated June 16, 2020 (ADAMS Package Accession No. ML20168A850), GE Hitachi Nuclear Energy Americas, LLC (GEH, the licensee) provided a revised site-specific decommissioning cost estimate and decommissioning funding plan, in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.75, "Reporting and recordkeeping for decommissioning planning," for the Vallecitos Nuclear Center GE Test Reactor (GETR) License No. TR-1. The decommissioning cost estimate was updated in 2019 and lowered based on revised estimates primarily for waste inventory and disposal costs. In its March 6, 2020 submittal, GEH requested U.S. Nuclear Regulatory Commission (NRC) approval to lower the financial assurance surety bond amount for the GETR consistent with this lowered estimate.

In this safety evaluation, the NRC staff reviews whether the proposed lowering of the financial assurance surety bond will continue to maintain decommissioning financial assurance for the GETR.

**2.0 ANALYSIS**

The decommissioning financial assurance regulations state in 10 CFR 50.75(d) that non-power reactor licenses must provide a cost estimate for decommissioning the facility, indicate which method or methods described in 10 CFR 50.75(e) will be used to provide funds for decommissioning, and provide a description of the means of adjusting the cost estimate and associated funding level periodically over the life of the facility. The methods described in 10 CFR 50.75(e) include a surety method, which may be in the form of a surety bond.

The guidance in NUREG-1757, Volume 3, Revision 1, "Consolidated Decommissioning Guidance: Financial Assurance, Recordkeeping, and Timeliness," dated February 2012 (ADAMS Accession No. ML12048A683), provides, in part, criteria for an acceptable surety bond submission.

In its March 6, 2020 submittal, GEH identified supporting documentation consistent with the guidance in NUREG-1757, Volume 3, related to the reliance on surety bonds to satisfy the decommissioning financial assurance regulations in 10 CFR 50.75. This documentation included duplicate original copies of:

- The GETR surety bond;

Enclosure

- The broker/agent's power of attorney authorizing the broker/agent to issue bonds; and
- The standby trust agreement and all supporting documentation (ADAMS Package Accession No. ML18096A036).

Pursuant to the guidance in NUREG-1757, Volume 3, the NRC staff reviewed the GEH submittal and found that the submittal, which reflects reliance on a surety bond to cover the GETR decommissioning financial assurance requirements, met the following acceptance criteria:

- The submittal included supporting documentation (as described above).
- North American Specialty Insurance Company, Washington International Insurance Company, and Westport Insurance Corporation, the companies issuing the surety bonds, are listed in the most recent edition of the U.S. Department of the Treasury's Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies."
- The surety bonds are payable to a standby trust fund that meets all applicable NRC requirements.
- The broker/agent's power of attorney authorizes the broker or agent to issue bonds on behalf of the issuing company.
- The surety bonds are in amounts that are at least as great as the licensee's cost estimates for decommissioning the reactor facilities.
- No credit is taken for earnings on any financial assurance mechanism (e.g., a surety bond) that does not set aside actual funds as prepayment for site control and maintenance activities.

Fundamental to the NRC's acceptance of a surety bond as a method to provide decommissioning financial assurance is that the licensee has secured financial surety at least equal in amount to a reasonable cost estimate for decommissioning the facility and that provisions have been made to vary the amount of financial surety as necessary to cover changing decommissioning costs with time. Upon its review of the bonds issued for the reactor facilities, the NRC staff found that adequate surety is in place to provide reasonable assurance that funds will be available when needed for facility decommissioning and that provisions are in place to adjust the surety amount, as necessary to adjust for changes in decommissioning costs, provided that the individual penal sum does not increase by more than 20 percent in any one year. Additionally, no decrease in the penal sum may take place without the written permission of the NRC.

According to GEH's submittal, in 2019, an independent third-party engineering firm experienced in preparing decommissioning cost estimates and completing decommissioning-related services for the nuclear industry reviewed and updated the current GETR decommissioning cost estimate, originally developed in 1991, resulting in a decrease in the estimate from approximately \$23.01 million to approximately \$20.7 million. While the amount of the surety bond currently remains approximately \$23.01 million, GEH requested NRC approval to lower the surety bond amount to the new decommissioning cost estimate amount. On June 3, 2020 (ADAMS Accession No. ML20133J964), the NRC staff issued a request for supplemental information related to how GEH factored the residual contamination outside of the GETR reactor building into the revised decommissioning cost estimate. The June 16, 2020 GEH response to this request provided the necessary information for the staff to evaluate the revised decommissioning cost estimate. Based on the information provided, the NRC staff found the new decommissioning cost estimate of approximately \$20.7 million to be reasonable and

derived in accordance with the guidance in Reg Guide 1.159, Revision 2, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors," dated October 2011 (ADAMS Accession No. ML112160012), for the estimation of decommissioning costs for reactors. Accordingly, the staff concludes that lowering the surety bond to the revised decommissioning cost estimate amount will not negatively impact decommissioning financial assurance for the GETR.

### **3.0 CONCLUSION**

The NRC staff reviewed GEH's method of providing decommissioning financial assurance for the GETR according to the regulations in 10 CFR 50.75 and the guidance in NUREG-1757, Volume 3, and determined that this method continues to conform to these regulations and guidance. The NRC staff also reviewed the revised decommissioning cost estimate for the GETR according to the guidance in Regulatory Guide 1.159 and determined that it is reasonable. Since GEH's method of providing decommissioning financial assurance continues to be acceptable and since the updated estimate of decommissioning costs is reasonable, the NRC staff approves GEH's request to lower the current GETR surety bond amount from approximately \$23.01 million to approximately \$20.7 million.