

From: Geoffrey Wertz
Sent: Wednesday, November 1, 2023 9:11 AM
To: CARLOS1.MARTINEZ@GE.com
Cc: Smyly, Jeffrey (GE Power Portfolio); David Heckman; Jack Parrott; Andrew Miller; Kelly Sullivan; Linh Tran; Michael Balazik; Josh Borrromeo
Subject: GE-HITACHI NUCLEAR ENERGY AMERICAS, LLC – REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR A POSSESSION-ONLY LICENSE FOR THE GE HITACHI NUCLEAR TEST REACTOR

Mr. Carlos Martinez, Site Manager
GE Hitachi Nuclear Energy
Vallecitos Nuclear Center
6705 Vallecitos Road
Sunol, CA 94586

SUBJECT: GE-HITACHI NUCLEAR ENERGY AMERICAS, LLC – REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR A POSSESSION-ONLY LICENSE FOR THE GE-HITACHI NUCLEAR TEST REACTOR (EPID L-2023-LLA-0139)

Dear Mr. Martinez:

By letter dated October 6, 2023 (Agencywide Documents Access and Management System Accession No. ML23279A110), GE-Hitachi Nuclear Energy Americas, LLC (GEH) submitted a license amendment request (LAR) to modify Facility Operating License No. R-33 for the Nuclear Test Reactor (NTR) to a possession-only license in support of the GEH's decision to permanently cease operation of the NTR.

The U.S. Nuclear Regulatory Commission (NRC) staff identified additional information needed to continue its review of the LAR, as described in the enclosed request for additional information (RAI). As discussed in a teleconference on October 26, 2023, the licensee is requested to provide a response to the RAI or a written request for additional time to respond, including the proposed response date and a brief explanation of the reason, within 45 days from the date of this letter. Following receipt of the complete response to the RAI, the NRC staff will continue its review.

The response to the RAI must be submitted in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.4, "Written communications," and pursuant to 10 CFR 50.30(b), "Oath or affirmation," be executed in a signed original document under oath or affirmation. Information included in the response that GEH considers sensitive or proprietary, and seek to have withheld from public disclosure, must be marked in accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding." Any information related to safeguards should be submitted in accordance with 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements."

Based on the response date provided above, the NRC staff expects to complete its review and make a final determination on the LAR by February 29, 2024. This date could change due to several factors including a need for further requests for additional information, unanticipated changes to the scope of the review, unsolicited supplements, and others. If the forecasted date changes, the NRC staff will notify GEH in writing of the new date and an explanation of the

reason for the change. In the case that the NRC staff requires additional information beyond that provided in the response to this RAI, the NRC staff will request that information by separate correspondence.

If you have any questions regarding the NRC staff's review or if you intend to request additional time to respond, please contact me at (301) 415-0893 or by electronic mail at geoffery.wertz@nrc.gov.

Sincerely,

Geoffery A. Wertz, Project Manager
Non-Power Production and Utilization Facility
Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Docket No. 50-073
License No. R-33

Enclosure:
As stated

cc: GovDelivery Subscribers

OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST FOR ADDITIONAL INFORMATION

REGARDING AMENDMENT TO FACILITY OPERATING LICENSE NO. R-33

GE-HITACHI NUCLEAR ENERGY AMERICAS, LLC

NUCLEAR TEST REACTOR

DOCKET NO. 50-073

The U.S. Nuclear Regulatory Commission (NRC, the Commission) staff is continuing its review of the GE-Hitachi Nuclear Energy Americas, LLC (GEH, the licensee) license amendment request (LAR), provided by letter dated October 6, 2023 (Agencywide Documents Access and Management System Accession No. ML23279A110), to modify Facility Operating License No. R-33 and its supporting technical specifications to a possession-only license (POL) in support of the licensee's decision to permanently cease operation of the Nuclear Test Reactor (NTR). These requests for additional information have been developed based on the following requirements and guidance applicable to the LAR:

- The regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 70, "Domestic Licensing of Special Nuclear Material," provide requirements for the licensing of receipt, possession, and use of special nuclear material (SNM).
- The regulations in 10 CFR 50.82, "Termination of license," provide requirements for license termination.
- NUREG-1537 Part 1, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors, Format and Content," issued February 1996 (ML042430055).
- NUREG-1537 Part 2, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors, Standard Review Plan and Acceptance Criteria," issued February 1996 (ML042430048).

Based on its review, the NRC staff requires the following additional information to continue its review of the LAR.

1. The regulations in 10 CFR Part 70 provide requirements for the licensing of possession of SNM.

To reflect the permanent cessation of NTR operations, the NRC staff provides the following suggested POL conditions (*italicized text below*).

- 2.B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses GE-Hitachi Nuclear Energy Americas, LLC:*

(1) Pursuant to Section 104c of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess the reactor at the designated location in Alameda County, California, in accordance with the procedures and limitations described in the application and set forth in this license.

(2) Pursuant to the Act and 10 CFR Part 70, to possess, but not separate:

a. up to 4 kilograms of contained uranium-235 of an enrichment of 20 percent or greater in the isotope uranium-235, in the form of in-core reactor fuel; and

b. such special nuclear material as may have been produced by the operation of the reactor.

(3) Pursuant to the Act and 10 CFR Part 30, to possess:

a. up to 0.2-curie radium-beryllium sealed startup source, and up to 0.03 curies of byproduct materials, in the form of sealed sources, for instrument calibration and source checks; and

b. but not to separate, such byproduct material as may have been produced by the operation of the reactor.

C. This license shall be deemed to contain and is subject to the conditions specified in 10 CFR Parts 20, 30, 50, 51, 55, 70, and 73 of the Commission's regulations; is subject to all applicable provisions of the Act, and to the rules, regulations, and orders of the Commission now, or hereafter in effect, and to the additional conditions specified below:

(1) Maximum Power Level

The licensee is not authorized to operate the reactor at any power level.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised by Amendment No. 26, are hereby incorporated in their entirety in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

Provide confirmation of acceptability and/or suggested edits to these proposed license conditions.

2. The regulations in 10 CFR 50.82(b)(6)(i) state that the NRC will terminate a non-power reactor license if, in part, it determines that the decommissioning of the facility has been performed in accordance with the approved decommissioning plan (DP).

The guidance in NUREG-1537, Part 1, Section 17.2.1 states that possession-only LARs should discuss the activities to be accomplished and their schedule while the POL is in effect.

It is not clear to the NRC staff what types of activities GEH may plan to conduct following the issuance of a POL, but prior to the NRC approval of an NTR DP. Additionally, it is not clear how GEH plans to control activities before DP approval to make sure that no activities are

conducted ahead of DP approval that should only be conducted in accordance with an approved DP.

- 2.1. Describe the types of activities that are decommissioning-related or that are done to prepare for decommissioning (e.g., facility characterization activities) that GEH may plan to conduct prior to NRC approval of an NTR DP.
- 2.2. Describe how GEH plans to control activities before the NTR DP approval to make sure that only appropriate activities are conducted. Describe NTR staff responsibility for controlling decommissioning related activities.

Hearing Identifier: NRR_DRMA
Email Number: 2300

Mail Envelope Properties (SA1PR09MB7725DAF2A4BB67EB2155F5F296A7A)

Subject: GE-HITACHI NUCLEAR ENERGY AMERICAS, LLC – REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR A POSSESSION-ONLY LICENSE FOR THE GE HITACHI NUCLEAR TEST REACTOR

Sent Date: 11/1/2023 9:11:01 AM
Received Date: 11/1/2023 9:10:00 AM
From: Geoffrey Wertz

Created By: Geoffrey.Wertz@nrc.gov

Recipients:

"Smyly, Jeffrey (GE Power Portfolio)" <Jeffrey.Smyly@ge.com>
Tracking Status: None
"David Heckman" <david.heckman@s2serm.com>
Tracking Status: None
"Jack Parrott" <Jack.Parrott@nrc.gov>
Tracking Status: None
"Andrew Miller" <Andrew.Miller@nrc.gov>
Tracking Status: None
"Kelly Sullivan" <Kelly.Sullivan@nrc.gov>
Tracking Status: None
"Linh Tran" <Linh.Tran@nrc.gov>
Tracking Status: None
"Michael Balazik" <Michael.Balazik@nrc.gov>
Tracking Status: None
"Josh Borromeo" <Joshua.Borromeo@nrc.gov>
Tracking Status: None
"CARLOS1.MARTINEZ@GE.com" <CARLOS1.MARTINEZ@GE.com>
Tracking Status: None

Post Office: SA1PR09MB7725.namprd09.prod.outlook.com

Files	Size	Date & Time
MESSAGE	8564	11/1/2023 9:10:00 AM

Options

Priority: Normal
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date: