



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 26, 2021

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

SUBJECT: GE-HITACHI NUCLEAR ENERGY AMERICAS LLC – REGULATORY AUDIT
RE: THE REACTOR DESCRIPTION, RADIATION PROTECTION, AND
ACCIDENT ANALYSIS IN THE OPERATING LICENSE APPLICATION
(EPID L-2020-RNW-0038)

Dear Mr. Feyrer:

By letter dated November 19, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21053A071), GE-Hitachi Nuclear Energy Americas LLC applied for renewal of Facility Operating License No. R-33 for the Nuclear Test Reactor in accordance with the requirements contained in Title 10 of the *Code of Federal Regulations* Part 50, "Domestic Licensing of Production and Utilization Facilities.". The requested licensing action would renew the facility operating license for a period of 20 years.

The U.S. Nuclear Regulatory Commission (NRC) staff will conduct a virtual regulatory audit in two sessions beginning on July 28, 2021, and continue, as necessary, on August 4, 2021, to gain a better understanding of the application and any proposed changes to the facility. This audit on the reactor description, radiation protection program, and accident analyses may include review of documentation, and discussions with facility personnel and management. The audit plan in Enclosure 1 provides additional details of the objective and scope of the audit. To facilitate an efficient audit, please provide ready access to the necessary documentation identified in the audit topics as part of Enclosure 2 (ADAMS Accession No. ML21197A137).

Following completion of this audit, the NRC staff will provide an audit summary. The summary will include a description of any information identified during the audit that will need to be docketed to supplement the application and allow the NRC staff to continue its review.

M. Feyrer

- 2 -

If you have any questions, please contact me at (301) 415-3724, or by electronic mail at Duane.Hardesty@nrc.gov.

Sincerely,

/RA/

Duane A. Hardesty, Senior 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

Enclosures:
As stated

cc: See next page

GE-Hitachi Nuclear Energy Americas LLC

Docket No. 50-073

cc:

Jeffrey Smyly, Manager
Regulatory Compliance
GE Hitachi Nuclear Energy
Vallecitos Nuclear Center
6705 Vallecitos Road
Sunol, CA 94586

Thomas McConnell, Manager
Nuclear Test Reactor
GE Hitachi Nuclear Energy
Vallecitos Nuclear Center
6705 Vallecitos Road
Sunol, CA 94586

Scott Murray, Manager
Facility Licensing
GE Hitachi Nuclear Energy
3901 Castle Hayne Road
Wilmington, NC 28401

David Heckman,
Vallecitos Reg Affairs & Licensing Lead
GE Hitachi Nuclear Energy
Vallecitos Nuclear Center
6705 Vallecitos Road
Sunol, CA 94586

Commissioner
California Energy Commission
1516 Ninth Street, MS-34
Sacramento, CA 95814

California Department of Health
ATTN: Chief
Radiologic Health Branch
P.O. Box 997414, MS 7610
Sacramento, CA 95899-7414

Test, Research and Training
Reactor Newsletter
Attention: Ms. Amber Johnson
Dept of Materials Science and Engineering
University of Maryland
4418 Stadium Drive
College Park, MD 20742-2115

OFFICE OF NUCLEAR REACTOR REGULATION
REGULATORY AUDIT PLAN
REGARDING RENEWAL OF
FACILITY OPERATING LICENSE NO. R-33
GE-HITACHI NUCLEAR ENERGY AMERICAS LLC
NUCLEAR TEST REACTOR
DOCKET NO. 50-073

Background

The U.S. Nuclear Regulatory Commission (NRC) staff is continuing its review of the GE-Hitachi Nuclear Energy Americas LLC, Nuclear Test Reactor (NTR) license renewal application (LRA), dated November 19, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21053A071). This regulatory audit is intended to assist the NRC staff in its review of the LRA.

Regulatory Bases for the Audit

The purpose of this audit is to determine if the licensee's proposed LRA to renew the operating license for 20 years continues to meet all the applicable regulatory requirements of Title 10 of the *Code of Federal Regulations* and addresses applicable guidance provided in NUREG-1537, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors," Part 1, "Format and Content," and Part 2, "Standard Review Plan and Acceptance Criteria," (ADAMS Accession Nos.: ML042430055 and ML042430048, respectively).

Regulatory Scope for the Audit

The NRC staff will review the NTR final safety analysis report (FSAR), technical specification (TS) requirements, and supporting reference documentation related to reactor description and accident analysis and review processes and procedures that help to ensure safe operation of the NTR facility. This audit will provide information necessary to complete the NRC staff's evaluation of the LRA in these areas. In addition, the regulatory audit may identify additional information that will be required to be docketed to support the basis of the licensing decision and will allow NRC staff to more efficiently gain insights on the license renewal and power increase.

Information Needed for the Audit

NTR staff should be prepared to support the NRC staff by having the current and proposed FSAR, and TSs available on the document portal. Any relevant Operating Procedures should also be readily available to the NRC staff, upon request. Additionally, the licensee should be prepared to provide supporting documents and reports, calculations, and computer code verification to support the analysis documented in the FSAR, bases for TSs, or rationale for any required plans and procedures.

Audit Team

The NRC staff performing this audit will be:

- Duane Hardesty (Audit Leader and Project Manager)
- Diana Woodyatt (Technical Reviewer)
- Richard Clement (Technical Reviewer)
- Zachary Gran (Technical Reviewer)
- Adam Rau (Technical Reviewer)
- William Richards (Technical Reviewer)

Audit Team Logistics

The audit will initially be held on July 28, 2021, and August 4, 2021, for discussion on the NTR reactor description, radiation protection program, and accident analysis. The audit may be extended, as needed, until the NRC staff has an adequate understanding of the issues to be addressed to facilitate the continued review of the LRA. Audit activities may be conducted as teleconference or video conference supported activities as appropriate and efficient to the gathering of information by the NRC staff. The audit period may be reduced or extended, dependent on the progress in addressing audit questions. Additional audit activities may be planned, as necessary, to support the understanding of information necessary to complete the review of the LRA. It is expected that more interaction will be needed to identify information requests to support continued review of the LRA.

Deliverables

At the completion of the regulatory audit the NRC staff will prepare a regulatory audit summary, which will be issued within 90 days after the audit concludes. The regulatory audit summary will include the documents reviewed, the audit activities, and any requests for additional information that were discussed or that will be issued based on the audit, as applicable.

Audit Topics and Questions:

The topics and questions for discussion during the regulatory audit are primarily based on the regulatory audit topics (ADAMS Accession No. ML21197A137).

Proposed Audit Schedule (Eastern Daylight Time)

Wednesday, July 28, 2021

1:00 PM	Entrance meeting and introductions
1:15 PM	Audit discussions
2:00 PM	Break
2:15 PM	Resume Audit
3:15 PM	Summary of meeting
3:30 PM	End audit for the day

Wednesday, August 4, 2021

1:00 PM	Resume Audit
2:15 PM	NRC Staff Caucus
2:30 PM	Exit Meeting
3:00 PM	Conclude Audit