

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-073; NRC-2022-0173]

GE-Hitachi Nuclear Energy Americas, LLC

GE-Hitachi Nuclear Test Reactor

AGENCY: Nuclear Regulatory Commission.

ACTION: License renewal; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) has issued a renewal of Facility Operating License No. R-33, held by GE-Hitachi Nuclear Energy Americas, LLC (GEH, the licensee), for the continued operation of the Nuclear Test Reactor (NTR, the reactor) for an additional 20 years from the date of issuance. The reactor is located on the Vallecitos Nuclear Center site in Sunol, Alameda County, California. In connection with the renewed license, the licensee is authorized to operate the reactor at a maximum licensed power level of 100 kilowatts-thermal (kWt).

DATE: Renewed Facility Operating License No. R-33 was issued on June 29, 2023, and is effective as of the date of issuance.

ADDRESSES: Please refer to Docket ID **NRC-2022-0173** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2022-0173**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email: Stacy.Schumann@nrc.gov. For technical questions, contact the individual listed in the "For Further Information Contact" section of this document.

- **NRC's Agencywide Documents Access and Management System**

(ADAMS): You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by email to PDR.Resource@nrc.gov. For the convenience of the reader, the ADAMS accession numbers are provided in a table in the "Availability of Documents" section of this document.

- **NRC's PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Duane Hardesty, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-3724; email: Duane.Hardesty@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Discussion

The NRC has issued a renewal for Facility Operating License No. R-33, held by GEH, which authorizes continued operation of the NTR. The NTR is a heterogeneous, highly enriched-uranium, graphite-moderated and -reflected, light-water cooled, thermal reactor. The renewed license authorizes the licensee to operate the NTR at a steady-state thermal power level up to a maximum of 100 kWt. Renewed Facility Operating License No. R-33 will expire 20 years from its date of issuance.

The renewed facility operating license complies with the standards and

requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission’s rules and regulations set forth in chapter I of title 10 of the *Code of Federal Regulations*. The Commission has made appropriate findings as required by the Act and the Commission’s regulations and sets forth those findings in the renewed facility operating license. The agency afforded an opportunity to request a hearing in the Notice of Opportunity to Request a Hearing published in the *Federal Register* on January 10, 2023 (88 FR 1433). No requests for a hearing were received.

The NRC staff prepared the safety evaluation report (SER)—Renewal of the Facility Operating License for the GE-Hitachi Nuclear Test Reactor, License No. R-33, Docket No. 50-073, which concluded that the licensee can continue to operate the facility without endangering the health and safety of the public. The NRC staff also prepared an environmental assessment and finding of no significant impact regarding the renewal of the facility operating license, published in the *Federal Register* on March 22, 2023 (88 FR 17274), with a minor correction published on June 1, 2023 (88 FR 35933), which concluded that renewal of the facility operating license will not have a significant effect on the quality of the human environment.

II. Availability of Documents

Documents related to this action, including the license renewal application and other supporting documentation, and the SER prepared by the NRC staff for the license renewal, are available to interested persons as indicated.

Document Description	ADAMS Accession No.
GE Hitachi Nuclear Energy, “Nuclear Test Reactor License Renewal (R-33),” dated November 19, 2020	ML21053A071
GE Hitachi Nuclear Energy, “General Electric Nuclear Test Reactor Safety Analysis Report,” NEDO 32740, Rev 3, chapters 1 through 8, dated November 19, 2020	ML20325A205

Document Description	ADAMS Accession No.
GE Hitachi Nuclear Energy, "General Electric Nuclear Test Reactor Safety Analysis Report," NEDO 32740, Rev 3, chapters 9 through 16, dated November 19, 2020	ML20325A206
GE Hitachi Nuclear Energy, "Vallecitos Nuclear Center Environmental Report 2020," dated July 2020	ML20325A195
GE Hitachi Nuclear Energy, "GEH Supplemental Information Supporting GE Nuclear Test Reactor License Renewal Audit – Audit Questions and Responses," dated September 22, 2021	ML21265A246 (Package)
GE Hitachi Nuclear Energy, "GE Nuclear Test Reactor Safety Analysis Report and Technical Specifications," dated March 24, 2023	ML23086C023 (Package)
GE Hitachi Nuclear Energy, "Vallecitos Nuclear Center Reactor Facilities Radiological Emergency Plan," Revision 1, dated June 9, 2021	ML23086C063
GE Hitachi Nuclear Energy, "Requalification Program for the General Electric Nuclear Test Reactor (NTR)," dated June 21, 2021	ML21172A185
GE Hitachi Nuclear Energy, "GEH Supplemental Information Supporting GE Nuclear Test Reactor License Renewal Audit – Audit Questions and Responses," dated January 27, 2023	ML23027A209 (Package)
GE Hitachi Nuclear Energy, email response to U.S. Nuclear Regulatory Commission email request to acknowledge the NRC staff proposed changes to the renewed facility operating license, dated April 21, 2023	ML23111A233
GE Hitachi Nuclear Energy, email response to U.S. Nuclear Regulatory Commission email request to acknowledge the NRC staff proposed changes to the renewed facility operating license and technical specifications, dated June 15, 2023	ML23166B147

Document Description	ADAMS Accession No.
U.S. Nuclear Regulatory Commission, "Safety Evaluation Report–Renewal of the Facility Operating License for the GE-Hitachi Nuclear Test Reactor, License No. R-33, Docket No. 50-073," dated June 2023	ML23128A353

Dated: July 5, 2023.

For the Nuclear Regulatory Commission.

/RA/

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