Enclosure: Amendment No. 27 to Renewed Facility Operating License No. R-33

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

NORTHSTAR VALLECITOS, LLC

DOCKET NO. 50-73

RENEWED FACILITY OPERATING LICENSE FOR THE NUCLEAR TEST REACTOR

License No. R-33
Amendment No. 27

1. The U.S. Nuclear Regulatory Commission ("the Commission" or "NRC") has found that:

   A. The application for amendment by NorthStar Vallecitos, LLC* dated September 1, 2023, as supplemented on September 5, 2023, October 19, 2023, November 1, 2023, January 22, 2024, and March 15, 2024, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended ("the Act"), and the Commission's rules and regulations as set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) Chapter I;

   B. Construction of the Nuclear Test Reactor ("the facility," "the reactor," or "NTR") was completed in substantial conformity with Construction Permit No. CPRR-19 dated October 24, 1957, the provisions of the Act, and the rules and regulations of the Commission;

   C. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   D. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   E. The licensee is technically and financially qualified to engage in the activities authorized by this license in accordance with the rules and regulations of the Commission;

   F. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;

   G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

   H. The issuance of this license is in accordance with 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," of the Commission's regulations and all applicable requirements have been satisfied; and

*This License was transferred from GE-Hitachi Nuclear Energy Americas, LLC to NorthStar Vallecitos, LLC in accordance with the Order for this Amendment.

I. The receipt, possession, and use of byproduct and special nuclear materials as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material."

2. Accordingly, Facility Operating License No. R-33 is hereby amended in its entirety to read as follows:

A. This license applies to the NTR, which is owned by NorthStar Vallecitos, LLC and located at its Vallecitos Nuclear Center in Alameda County, California, and described in the application for license renewal dated November 19, 2020, as supplemented.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses NorthStar Vallecitos, 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. 27, are hereby incorporated in their entirety in the license. The licensee shall maintain the facility in accordance with the Technical Specifications.

(3) Physical Security Plan

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54, "Conditions of licenses," paragraph (p). The approved physical security plan, entitled "VNC Site Physical Security Plan," dated April 4, 2022, consists of documents withheld from public disclosure pursuant to 10 CFR 73.21, "Protection of Safeguards Information: Performance requirements."

(4) NorthStar Vallecitos, LLC, as stated in the application dated September 1, 2023, as supplemented on September 5, 2023, October 19, 2023, November 1, 2023, January 22, 2024, and March 15, 2024, will abide by all commitments and representations previously made by GE-Hitachi Nuclear Energy Americas, LLC with respect to the license. These include, but are not limited to, maintaining decommissioning records, implementing decontamination activities, and eventually decommissioning the facility.

(5) The Manager of the Vallecitos Nuclear Center, the Vice-President, Reactor Facility Safety and Security of NorthStar Vallecitos, LLC, and the Manager of NorthStar Vallecitos, LLC, shall be US citizens. These individuals shall have the responsibility and exclusive authority to ensure and shall ensure, that the business and activities of NorthStar Vallecitos, LLC, with respect to this license, are at all times conducted in a manner consistent with the protection of the public health and safety and the common defense and security.

(6) The commitments/representations made in the NorthStar Vallecitos, LLC application dated September 1, 2023, as supplemented on September 5, 2023, October 19, 2023, November 1, 2023, January 22, 2024, and March 15, 2024, regarding reporting relationships and authority over safety and security issues and compliance with NRC requirements shall be adhered to and not be modified without the prior written consent from the Director, Office of Nuclear Reactor Regulation, or designee.

(7) NorthStar Vallecitos, LLC shall cause to be transmitted to the Director, Office of Nuclear Reactor Regulation within 30 days of filing with the U.S. Securities Exchange Commission (SEC), any schedule 13D or 13G filed pursuant to the Securities Exchange Act of 1934 that discloses beneficial ownership of a registered class of any of its publicly traded parent companies' stock.

(8) NorthStar Vallecitos, LLC must comply with 10 CFR 50.75(h)(1) with respect to the Nuclear Decommissioning Fund and may only make withdrawals from the Nuclear Decommissioning Fund consistent with 10 CFR 50.75(h)(1) and 10 CFR 50.82(a)(8)(i).

(9) Until NorthStar Vallecitos, LLC has completed the final radiation survey and demonstrated that residual radioactivity has been reduced to a level that permits termination of this license, NorthStar Vallecitos, LLC must annually submit to the NRC, by March 31, a decommissioning financial assurance status report consistent with 10 CFR 50.82(a)(8)(v) and must comply with 10 CFR 50.82(a)(8)(vi).

D. The license is effective as of the date of its issuance and until the Commission notifies the licensee in writing that the license is terminated.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Andrea D. Veil, Director
Office of Nuclear Reactor Regulation

Attachment:
Appendix A, Technical Specifications

Date of Issuance: June 29, 2023