

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

August 16, 2024

Ms. Suzanne Karkour Vice President, New Power Plant and Product Licensing GE-Hitachi Nuclear Energy Americas, LLC 145 King St. E. Toronto, ON M5C 2Y7

SUBJECT: FINAL SAFETY EVALUATION FOR GE-HITACHI LICENSING TOPICAL REPORT NEDO-33926/NEDC-33926P, REVISION 2, "BWRX-300 STEEL-PLATE COMPOSITE CONTAINMENT VESSEL AND REACTOR BUILDING STRUCTURAL DESIGN" (DOCKET NO. 99900003)

Dear Ms. Karkour:

By letter dated May 4, 2023, GE-Hitachi Nuclear Energy Americas, LLC (GEH), submitted Licensing Topical Report (LTR) NEDO-33926, "BWRX-300 Steel-Plate Composite Containment Vessel and Reactor Building Structural Design," Revision 0 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23124A405), to the U.S. Nuclear Regulatory Commission (NRC) staff for review and approval in support of a future licensing application for the GEH small modular reactor (SMR) under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," or Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." The NRC accepted this LTR for review on August 9, 2023 (ML23219A022). Subsequently, during the staff review, GEH submitted Revision 1, by letter dated August 18, 2023 (ML23230B212), and then on April 18, 2024 (ML24110A131), GEH submitted Revision 2 of the LTR.

The NRC staff has found GEH LTR NEDC-33926, Revision 2, to be acceptable for referencing in licensing applications for the GEH SMR design to the extent specified in the enclosed final safety evaluation (SE) that defines the basis for acceptance.

In accordance with the guidance provided on the NRC's LTR Web site

(http://www.nrc.gov/about-nrc/regulatory/licensing/topical-reports.html), the NRC requests that GEH publish an accepted version of this LTR within three months of receipt of this letter. The accepted version shall incorporate this letter and the enclosed SE after the title page. Also, it must contain in its appendices historical review information, such as requests for additional information, accepted responses, and clearly identify any changes from LTR NEDC-33926, Revision 2, which is the version approved in the SE. The accepted version shall include an "-A" (designated accepted) following the report identification symbol.

If the NRC's criteria or regulations change so that its conclusion in this letter (that the LTR is acceptable) is invalidated, GEH and/or an applicant referencing the LTR will be expected to revise and resubmit its respective documentation or submit justification for the continued applicability of the LTR without revision of the respective documentation.

If you have any questions or comments concerning this matter, I can be reached via e-mail at Jordan.Glisan@nrc.gov

Sincerely,

Signed by Glisan, Jordan on 08/16/24

Jordan D. Glisan, Project Manager Licensing and Regulatory Infrastructure Branch Division of New and Renewed Licenses Office of Nuclear Reactor Regulation

Docket No.: 99900003

Enclosure: Safety Evaluation, Public Safety Evaluation, Proprietary

cc: GEH BWRX-300 GovDelivery ListServ

S. Karkour

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DISTRIBUTION (w/o/ safety evaluation):

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ADAMS Accession Nos.: PKG: ML24220A014 LTR: ML24220A016 SE: (Public) ML24220A017 SE: (Non-Public) ML24220A018 *via e-concurrence **NRR-106** NRR/DNRL/NLIB: NRR/DNRL/NLIB: NRR/DEX/ESEB TR **RES: SLA** OFFICE ΡM LA JPires JGlisan SGreen GThomas NAME 08/07/2024 08/07/2024 08/09/2024 08/6/2024

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