

Enclosures 1 and 2 Contain Sensitive Proprietary Information

August 29, 2007

Mr. Robert E. Brown
Senior Vice President, Regulatory Affairs
GE-Hitachi Nuclear Energy Americas LLC
3901 Castle Hayne Rd MC A-45
Wilmington NC 28401

SUBJECT: REISSUANCE OF SAFETY EVALUATION REGARDING THE APPLICATION OF
THE GE-HITACHI NUCLEAR ENERGY AMERICAS LLC (GEH) LICENSING
TOPICAL REPORT "TRACG APPLICATION FOR ESBWR STABILITY
ANALYSIS," NEDE-33083P, SUPPLEMENT 1

Dear Mr. Brown:

By letter dated April 18, 2002, GEH requested a pre-application review of the economic simplified boiling water reactor (ESBWR) advanced passive reactor design. On December 22, 2004, GEH submitted licensing topical report (TR) "TRACG Application for ESBWR Stability Analysis," NEDE-33083P, Supplement 1, for staff review as part of the pre-application review. Subsequently, on August 24, 2005, GEH submitted the ESBWR design certification application.

By letter dated May 23, 2006, the Nuclear Regulatory Commission (NRC) staff issued a safety evaluation (SE) regarding the application for ESBWR Stability Analysis. The letter requested that you review the SE for proprietary information. By letter dated June 23, 2006, from David H. Hinds, GEH identified this information line by line pursuant to the criteria of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 2.390. The proprietary information contained in the SE (Enclosure 1) and associated Technical Evaluation report (TER) (Enclosure 2) is indicated by brackets, red font and underlined text. We have prepared a non-proprietary version of the SE (Enclosure 3) and TER (Enclosure 4) that do not contain proprietary information. The staff made a few minor editorial changes after the first issuance that were based on GEH's comments on factual accuracy—these minor changes did not impact the conclusions.

The enclosed SE is limited to the application of TRACG to ESBWR stability analysis. The staff concludes that TRACG, including the application methodology, is an acceptable evaluation model for ESBWR stability analysis. The staff finds "TRACG Application for ESBWR Stability Analysis," NEDE-33083P, Supplement 1, acceptable for referencing during the ESBWR design certification review to the extent specified and under the limitations delineated in the licensing TR and in the associated NRC SE. The SE, which is enclosed, defines the basis for acceptance of the licensing TR.

The staff requests that GEH publish the revised version of the TR listed above within 3 months of receipt of this letter. The accepted version of NEDE-33083P, Supplement 1, shall incorporate this letter and the enclosed SE and all requests for additional information and their

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responses between the title page and the abstract, and add an "-A" (designating accepted) following the report identification number (i.e., NEDE-33083P-A, Supplement 1).

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

The subject TR and supporting documentation has been reviewed by the Advisory Committee on Reactor Safeguards, which has agreed with the staff recommendation for approval by their letter of April 21, 2006.

If you have any further questions regarding this review, please contact Amy E. Cubbage (301-415-2875).

Sincerely,

/RA/

David B. Matthews, Director
Division of New Reactor Licensing
Office of New Reactors

Docket No. 52-010

Enclosures: 1. Safety Evaluation (Proprietary)
 2. Technical Evaluation Report (Proprietary)
 3. Safety Evaluation (Non-Proprietary)
 4. Technical Evaluation Report (Non-Proprietary)

cc: See next page (w/o Enclosures 1 and 2)

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