



HITACHI

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Supplement 9

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Subject: Revised Response to RAI 3.9-75 S01, Related to ESBWR Design Certification Application DCD Section 3.9

The purpose of this letter is to submit the GE Hitachi Nuclear Energy (GEH) revised response to the U.S. Nuclear Regulatory Commission (NRC) Request for Additional Information (RAI) received from the NRC via Reference 2 (RAI 3.9-75 S01). The GEH response was submitted via Reference 1.

Enclosure 1 contains the GEH revised response to NRC RAI 3.9-75 S01 that was received from the NRC on May 15, 2007 via EMail (Reference 1). The original RAI was submitted via Reference 4 and the GEH response was submitted via Reference 3.

If you have any questions or require additional information, please contact me.

Sincerely,

Richard E. Kingston
Vice President, ESBWR Licensing

DOCS
NRO

Enclosure 1

MFN 06-464, Supplement 9

Response to NRC Request for

Additional Information EMail

Related to ESBWR Design Certification Application

Mechanical Systems and Components

RAI Numbers 3.9-75 S01 Revised

For historical purposes, the original text of RAI 3.9-75 and the GE responses are included. The attachments (if any) are not included from the original response to avoid confusion.

NRC RAI 3.9-75

The use of the terms prototype and non-prototype in DCD Tier 2, Section 3.9.9.1 and GE Report MFN 06-012, NEDE-33259P are contradictory. Using Regulatory Guide 1.20, Revision 2, May 1976, revise DCD Tier 2, Section 3.9.9.1, including the information on startup testing that will be provided to the NRC

GEH Response

The term "prototype" in NEDE-33259P applies only to the shroud/chimney and SLC structures. The ESBWR as a whole is classified as Non-Prototype Category II. DCD Tier 2, Subsection 3.9.9.1 commits to providing information on startup testing to the NRC at the time of COL application. Subsection 3.9.9.1 will be modified at that time.

DCD Impact

No DCD changes will be made in response to this RAI.

No changes to the subject LTR will be made in response to this RAI.

NRC RAI 3.9-75 S01

RAI 3.9-75 S01 Comment on response to RAI 3.9-75:

The response of the applicant is acceptable because the use of terms has been made clear and a schedule for providing startup information at the time of COL application has been identified. RAI 3.9-75 is a COL action item. However, classification of the ESBWR, as a whole as Non-Prototype Category II, will not be considered until responses to all the open items are received

GEH Original Response

The applicant agrees with the Staff position. GE is completing work to support the Non-Prototype Category II classification.

DCD Original Impact

No DCD changes will be made in response to this RAI.

GEH Revised Response

NRC Regulatory Guide 1.20, Rev. 2 requires detailed information on a comprehensive vibration assessment program for reactor internals during startup testing. The information requested includes descriptions of an analytical program, and an extensive measurement and inspection program. The required information for the ESBWR was provided in Licensing Topical Report (LTR) Reactor Internals Flow Induced Vibration Program, NEDE-33259P revision 1 dated December 2007. With the submittal of the revised LTR and changes to DCD Tier 2 subsections, as noted below, GEH is providing information to support closure of open items associated with classifying ESBWR as a Non-Prototype Category II plant.

DCD Revised Impact

DCD Tier 2, Subsections 3.9.2.3, 3.9.2.6, 3L.1, 3L.5.3, 3L.5.5.1.3 and 3L.5.5.1.4 were revised in DCD rev 5 in response to this RAI.

LTR Impact

LTR General Electric Company, "ESBWR Reactor Internals Flow Induced Vibration Program", NEDE-33259P, Class III (Proprietary), and NEDO-33259, Class I (Non-proprietary), were revised to revision 1, December 2007.