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MFN 06-263 Supplement 1

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Subject: **Response to NRC Request for Additional Information Letter
No. 24 Related to ESBWR Design Certification Application -
Technical Specifications - RAI Number 16.0-1 S01**

Enclosure 1 contains the subject supplemental RAI response resulting from a March 27, 2007 e-mail (Reference 1) from the NRC. GE's response to the original RAI was provided in the Reference 2 letter.

If you have any questions or require additional information regarding the information provided here, please contact me.

Sincerely,

Richard E. Kingston
Vice President, ESBWR Licensing

References:

1. E-mail from Lawrence Rossbach to Kathy Sedney, *Comments on various Chapter 16 RAI responses*, March 27, 2007 (ADAMS accession number ML070871162)
2. MFN 06-263, Letter from David H. Hinds to U.S. Nuclear Regulatory Commission, *Response to NRC Request for Additional Information Letter No. 24 Related to ESBWR Design Certification Application - Technical Specifications for Limiting Conditions for Operation - RAI Number 16.0-1*, August 8, 2006 (ADAMS accession number ML062360275)

Enclosure:

1. MFN 06-263 Supplement 1 - Response to NRC Request for Additional Information Letter No. 24 Related to ESBWR Design Certification Application - Technical Specifications - RAI Number 16.0-1 S01

cc: AE Cubbage USNRC (with enclosure)
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Enclosure 1

MFN 06-263 Supplement 1

Response to NRC Request for

Additional Information Letter No. 24

Related to ESBWR Design Certification Application

- Technical Specifications -

RAI Number 16.0-1 S01

NRC RAI 16.0-1, Supplement 1

Received by e-mail from Larry Rossbach - 03/27/07 (ADAMS accession number ML070871162):

1. Comment on response to RAI 16.0-1 from MFN 06-263 (ADAMS accession number ML062360275):

How has the response to this RAI changed with subsequent Design Control Document (DCD) revisions?

GEH Response

In the previous response to this RAI (MFN 06-263 dated August 8, 2006), the ESBWR design per Revision 1 of the Design Control Document (DCD) was evaluated against the four criteria of 10 CFR 50.36(c)(2)(ii) to provide the basis for the Technical Specification limiting conditions for operation.

GEH modeled the ESBWR Technical Specifications (TS) after Revision 3.1 of NUREG-1434, "Standard Technical Specifications, General Electric Plants, BWR/6," dated December 1, 2005, to the maximum extent practical. However, to account for the innovative and simplified passive design features of the ESBWR (i.e., it employs passive safety-related systems that rely on gravity and natural processes, such as convection, evaporation, and condensation), it was necessary to develop ESBWR TS beyond those in the Standard TS.

In most cases, the ESBWR system design functions are similar to those of existing boiling-water reactors (BWRs), even though the components and systems are new. However, to provide assurance that the scope of the ESBWR TS captured the unique process variables, design features, operating restrictions, and structures, systems, or components (SSCs) that meet one or more of the four criteria in 10 CFR 50.36(c)(2)(ii), the original response to RAI 16.0-1 elected to include a one-time extensive systematic and comprehensive evaluation of Revision 1 of the ESBWR DCD.

GEH has been requested to document how the original response to this RAI has changed since DCD Revision 1.

As ESBWR DCD revisions are made, including revisions as a direct result of design changes as well as revisions from all other sources, assessments are continuously made to determine the impact to all DCD Chapters. In conjunction, the DCD Chapter 16 development team independently monitors design and DCD changes for items that impact the ESBWR TS scope and content.

Additionally, as a result of the NRC's independent evaluations, various RAIs specifically questioned aspects of the conformance to 10 CFR 50.36 Criteria. For these RAIs, the response preparation entailed additional focused review and evaluation, and appropriate revisions in selected areas.

These multi-layer review processes have resulted in the ESBWR TS being maintained up-to-date as the ESBWR design progressed following Revision 1 of the DCD. The specific changes made to the ESBWR TS can be reviewed by consulting the Chapter 16 Change List issued with each revision of the DCD.

DCD Impact

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