

GE Hitachi Nuclear Energy

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MFN 08-188

Docket No. 52-010

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U.S. Nuclear Regulatory Commission Document Control Desk Washington, D.C. 20555-0001

Subject:

Response to January 16, 2008 Telephone Call with NRC Staff regarding ESBWR DCD Section 14.2 RAIs

The purpose of this letter is to submit the GE Hitachi Nuclear Energy (GEH) response to the U.S. Nuclear Regulatory Commission (NRC) question on the ESBWR Tier 2 DCD Section 14.2 Request for Additional Information (RAI) that were the subject of a January 16, 2008 telephone call.

The agenda of RAIs discussed included RAIs 14.2-67, 14.2-68, 14.2-70, 14.2-72, 14.2-73, 14.2-74, 14.2-75, and 14.2-76.

The NRC requested that GEH confirm implementation of several RAIs in DCD Revision 4 and also requested that GEH provide additional information on RAIs 14.2-70, 14.2-73, and 14.2-76. This is addressed in items (1) through (4) below:

(1) NRC requested that GEH confirm implementation of several RAIs in DCD Revision 4 (RAIs 14.2-64, 14.2-68, and 14.2-71).

GEH has reviewed the RAI responses transmitted on MFN-07-473 dated September 11, 2007 and MFN-07-495 dated September 21, 2007. GEH confirms that all RAIs on these letters that require changes to the DCD are scheduled to be implemented in DCD Revision 5. The specific RAIs that will be implemented in DCD Revision 5 are listed below.

D068 NRC MFN-07-473;

RAIs 14.2-64, 14.2-65, 14.2-66, 14.2-68, 14.2-70, 14.2-71, 14.2-80

MFN-07-495;

RAIs 14.2-77, 14.2-78, 14.2-79

(2) RAI 14.2-70; NRC requested that GEH review the RAI response to determine if additional specific module information should be added to the response.

GEH does not plan to add additional design details since this is a generic test plan (providing "general test methods"). As discussed in the response terms such as digital trip modules/digital trip logic modules, voting logic units, and output logic units, etc., are not called out specifically because their use and designation may vary depending on the logic platform. This level of detail is addressed in the actual test procedures.

As indicated in the response to RAI 14.2-70 GEH will update DCD Subsection 14.2.8.1.6 to:

"Verify proper operation of instrumentation and controls in appropriate design combinations of logic and instrument channel trip."

The NRC will have access to the detailed preoperational tests as part of the design implementation process. Therefore, whether GEH uses modules or controllers/PLCs, the associated function is tested.

(3) RAI 14.2-73; NRC requested that GEH review the response to RAI 14.2-73 to determine if the additional detail described in the RAI should be added to the GEH response.

GEH does not believe any additional detail is required in the RAI response because additional information is currently available in the DCD Tier 1 Revision 4 and DCD Tier 2 Revision 4 sections referenced below.

The operation of the LD&IS functional logic is demonstrated during a series of overlapping preoperational general tests. As indicated in the GEH response to RAI 14.2-73, ESBWR DCD Subsection 14.2.8.1.8 (5th and 6th bullets) perform the applicable preoperational tests requested by the NRC RAI. Also, LD&IS controls, interlocks and bypasses are verified through LD&IS ITAAC # 4 DCD Tier 1 Table 2.2.12-5. The LD&IS and RPS controls, interlocks and bypasses are described in DCD Tier 1 Table 2.2.12-4 and 2.2.7-3, respectively.

(4) RAI 14.2-76; NRC requested that GEH review and determine if the two bullets listed in RAI 14.2-76 should be added to Subsection 14.2.8.1.11

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GEH has reviewed this issue. GEH does not plan to add the two bullets to DCD Subsection 14.2.8.1.11. The second paragraph of the GEH response to RAI 14.2-76 clearly answers and addresses this concern of the NRC.

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

Sincerely,

James C. Kinsey

Vice President, ESBWR Licensing

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