## <u>Draft Requests for Additional Information (RAIs)</u> <u>ESBWR Design Control Document</u>

RAI Number	Reviewer	Question Summary	Full Text
7.1-47	Li H	Update the DCD Section 7.1 to demonstrate that the ESBWR design has complied with RG 1. 209.	NRC has issued a Regulatory Guide (RG) 1.209, "Guidelines for Environmental Qualification of Safety-Related Computer-Based Instrumentation and Control Systems in Nuclear Power Plants," March 2007. Update the DCD Section 7.1 to demonstrate that the ESBWR design has complied with RG 1. 209.
7.1-48	Li H	Update the DCD Section 7.3 to demonstrate that the ESBWR design has satisfied all the plant-specific requirements as identified in Section 5.2 of the NRC safety evaluation report on Triconex Topical Report 7286-545-1-A, "Qualification Summary Report."	By letter MFN 07-101, dated March 2, 2007, GE stated that GE intends to apply the Triconex architecture for the ESBWR ECCS/ESF function. Triconex Topical Report 7286-545-1-A, "Qualification Summary Report," March 8, 2002 is a generic requirements specification for qualifying a commercially available PLC for safety-related applications. Although this topical report was approved by NRC, the staff safety evaluation defines the basis for acceptance of the report. In staff's SER section 5.2, there are 18 items were identified as plant-specific requirements. DCD should address each of these requirements. Update the DCD Section 7.3 to demonstrate that the ESBWR design has satisfied all the plant-specific requirements as identified in Section 5.2 of the NRC safety evaluation report on Triconex Topical Report 7286-545-1-A, "Qualification Summary Report." Appropriate ITAAC acceptance criteria should be proposed to verify the completion of these plant-specific requirements.

## <u>Draft Requests for Additional Information (RAIs)</u> <u>ESBWR Design Control Document</u>

7.1-49	Li H	Provide copy of the Reference documents 8-1 through 8-17 as listed in NEDO-33288, Section 8.	By letter MFN 07-160, dated March 21, 2007, GE submitted Topical Report NEDO-33288, Revision 0, "Application of Nuclear Measurement Analysis and Control (NUMAC) for ESBWR Reactor Trip System" for NRC review and approval. The staff needs all the related reference documents to complete the review. Provide copy of the Reference documents 8-1 through 8-17 as listed in NEDO-33288, Section 8.
7.1-50	Li H	Propose appropriate design acceptance criteria (DAC or ITAAC) to verify the completion the NMS/RPS NUMAC design.	By letter MFN 07-004, dated January 20, 2007, GE intended to submit Revision 1 of NEDO-33288 that will provide the basic structure and overview of the NMS/RPS NUMAC in October, 2007, and Revision 2 of NEDO-33288 that will provide qualification reports in March, 2008. Since the Revision 1 and Revision 2 submittals will be beyond design certification stage, appropriate design acceptance criteria (DAC or ITAAC) should be proposed. Propose appropriate design acceptance criteria (DAC or ITAAC) to verify the completion the NMS/RPS NUMAC design.