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MFN 08-734

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

Subject: **Response to Portion of NRC Request for Additional Information Letter No. 228 - Related to ESBWR Design Certification Application - Design of Structures, Components, Equipment, and Systems - RAI Number 3.11-36**

The purpose of this letter is to submit the GE Hitachi Nuclear Energy (GEH) response to a portion of the U.S. Nuclear Regulatory Commission Request for Additional Information (RAI) sent by NRC Letter 228 (Reference 1). The GEH response to RAI Number 3.11-36 is addressed in Enclosure 1.

If you have any questions about the information provided here, please contact me.

Sincerely,

Richard E. Kingston
Vice President, ESBWR Licensing

D068
HRO

Reference:

1. MFN 08-623, *Letter from the U.S. Nuclear Regulatory Commission to Robert E. Brown, Request for Additional Information Letter No. 228, Related To ESBWR Design Certification Application*, dated August 6, 2008

Enclosure:

1. Response to Portion of NRC Request for Additional Information Letter No. 228, Related to ESBWR Design Certification Application – Design of Structures, Components, Equipment, and Systems - RAI Number 3.11-36

cc: AE Cabbage USNRC (with enclosure)
RE Brown GEH/Wilmington (with enclosure)
DH Hinds GEH/Wilmington (with enclosure)
eDRF 0000-0089-8063

Enclosure 1

MFN 08-734

Response to Portion of NRC Request for

Additional Information Letter No. 228

Related to ESBWR Design Certification Application

Design of Structures, Components, Equipment, and Systems

RAI Number 3.11-36

NRC RAI 3.11-36

NRC Summary:

Provide the clarifications between computer-based system and computer-based equipment.

NRC Full Text:

Modify the document to state "computer-based I&C equipment" instead of "computer-based I&C systems."

GEH Response

Regulatory Guide 1.209 "Guidelines for Environmental Qualification of Safety-Related Computer Based Instrumentation and Control Systems in Nuclear Power Plants," states: "The guidance described in IEEE Std. 323-2003 (Ref. 7) is appropriate for satisfying the environmental qualification of safety-related computer-based I&C systems for service in mild environments at nuclear power plants." DCD Tier 2, Subsection 3.11.4.3 Computer-based Instrumentation and Control Systems states: "EQ safety-related computer-based I&C systems comply with RG 1.209."

Therefore, to be in conformance with Regulatory Guide 1.209 the term "computer-based I&C systems" is used.

DCD Impact

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