



**HITACHI**

**GE Hitachi Nuclear Energy**

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MFN 08-153

Docket No. 52-010

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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. 122 Related to ESBWR Design Certification Application  
– Human Factors Engineering - RAI Number 18.11-36**

The purpose of this letter is to submit the GE Hitachi Nuclear Energy (GEH) response to the U.S. Nuclear Regulatory Commission (NRC) Request for Additional Information (RAI) Request for Additional Information (RAI) NRC letter 122, dated December 14, 2007 (Reference 1).

GEH's response to RAI 18.11-36 is addressed in Enclosure 1.

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

Sincerely,

James C. Kinsey  
Vice President, ESBWR Licensing

D068  
NRO

Reference:

1. MFN 07-659 - Letter from U.S. Nuclear Regulatory Commission to Robert E. Brown, GEH, *Request For Additional Information Letter No. 122 Related To ESBWR Design Certification Application*, dated December 6, 2007

Enclosure:

1. MFN 08-153 -Response to Portion of NRC Request for Additional Information Letter No. 122 Related to ESBWR Design Certification Application - Human Factors Engineering - RAI Number 18.11-36

cc: AE Cubbage USNRC (with enclosure)  
RE Brown GEH/Wilmington (with enclosure)  
DH Hinds GEH/ Wilmington (with enclosure)  
GB Stramback GEH/San Jose (with enclosure)  
eDRF 0000-0081-2779

**Enclosure 1**

**MFN 08-153**

**Response to Portion of NRC Request for Additional  
Information Letter Nos. 122 Related to ESBWR Design**

**Certification Application**

**Human Factors Engineering**

**RAI Number 18.11-36**

**NRC RAI 18.11-36**

*Please add a COL action item as follows, or alternatively, GEH is requested to provide the requested information as part of the design certification scope: The COL applicant shall develop a detailed HFE V&V implementation plan that provides the methodology and procedures for operation condition sampling, design verification, integrated system validation, and human engineering discrepancy resolution. The plan shall be submitted to the NRC staff for review using the review criteria contained in NUREG-0711, Section 11.*

**GE Response**

GEH will provide the requested information as part of the design certification scope. The requested information is the subject of other RAIs and the supporting information will be provided in their respective responses. These RAIs are listed as follows:

18.11-3 S01  
18.11-4 S01  
18.11-7 S01  
18.11-19 S01  
18.11-21 S01  
18.11-22 S01  
18.11-23 S01  
18.11-24 S01  
18.11-26 S01  
18.11-27 S01  
18.11-29 S01

This RAI response states the GEH decision to provide the requested information and does not result in specific changes to the V&V implementation plan. Refer to the above RAI responses, when submitted, for any specific DCD or LTR changes.

**DCD Impact**

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

No changes to LTR NEDO-33276 (V&V implementation plan) will be made in response to this RAI.