



GE Energy

David H. Hinds  
Manager, ESBWR

PO Box 780 M/C L60  
Wilmington, NC 28402-0780  
USA

T 910 675 6363  
F 910 362 6363  
david.hinds@ge.com

MFN 06-303

Docket No. 52-010

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

Subject: **Response to NRC Request for Additional Information Letter No. 55  
Related to ESBWR Design Certification Application – Floor Response  
Spectra Reduction Factors – RAI Number 3.7-58**

Enclosure 1 contains GE's response to the subject NRC RAI transmitted via the Reference 1 letter. This completes GE's response to RAI Letter No. 55.

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

Sincerely,

*Kathy Sedney for*

David H. Hinds  
Manager, ESBWR

Reference:

1. MFN 06-306, Letter from U.S. Nuclear Regulatory Commission to David Hinds, *Request for Additional Information Letter No. 55 Related to ESBWR Design Certification Application*, August 22, 2006

Enclosure:

1. MFN 06-303 – Response to NRC Request for Additional Information Letter No. 55 Related to ESBWR Design Certification Application – Floor Response Spectra Reduction Factors – RAI Number 3.7-58

cc: WD Beckner USNRC (w/o enclosures)  
AE Cabbage USNRC (with enclosures)  
LA Dudes USNRC (w/o enclosures)  
GB Stramback GE/San Jose (with enclosures)  
eDRF 0000-0058-0580

**Enclosure 1**

**MFN 06-303**

**Response to NRC Request for**

**Additional Information Letter No. 55**

**Related to ESBWR Design Certification Application**

**Floor Response Spectra Reduction Factors**

**RAI Number 3.7-58**

**NRC RAI 3.7-58**

*During the discussion of General Electric's (GEs) response to RAI 3.7-44 at the on-site audit from June 5 to 8, 2006, GE indicated that before broadening the in-structure response spectra by  $\pm 15$  percent, incoherence reduction factors, taken from ASCE 4-98, were applied to the raw spectrum results obtained from the time history analysis. The staff does not accept the incoherence reduction factors from ASCE 4-98. Therefore, the staff requests that GE submit an ESBWR specific technical basis for using the incoherence reduction factors.*

**GE Response**

The third bullet "The reduction factors due to wave incoherence according to ASCE 4-98 are applied to the site-envelope response spectra" in DCD Section 3A.9.2 will be deleted and DCD Figures 3A.9-1a through 3A.9-3g will be revised accordingly in the next DCD update.