



GE Energy

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MFN 07-150

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U.S. Nuclear Regulatory Commission
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Subject: **Response to Portion of NRC Request for Additional Information
Letter No. 73 Related to ESBWR Design Certification Application -
ESBWR Probabilistic Risk Assessment - RAI Number 19.1-42**

Enclosure 1 contains GE's response to the subject NRC RAI transmitted via the Reference 1 letter.

If you have any questions or require additional information regarding the information provided here, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Kathy Sedney for".

James C. Kinsey
Project Manager, ESBWR Licensing

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Reference:

1. MFN 06-385, Letter from U.S. Nuclear Regulatory Commission to David Hinds, *Request for Additional Information Letter No. 73 Related to ESBWR Design Certification Application*, October 8, 2006

Enclosures:

1. MFN 07-150, Response to Portion of NRC Request for Additional Information Letter No. 73 Related to ESBWR Design Certification Application - ESBWR Probabilistic Risk Assessment - RAI Number 19.1-42.

cc: AE Cabbage USNRC (with enclosures)
David Hinds GE/Wilmington (with enclosures)
Bob Brown GE/Wilmington (with enclosures)
eDRF 0000-0063-6468

Enclosure 1

MFN 07-150

Response to Portion of NRC Request for

Additional Information Letter No. 73

Related to ESBWR Design Certification Application

**ESBWR Probabilistic Risk
Assessment**

RAI Numbers 19.1-42

NRC RAI 19.1-42

The submitted PRA contains a large number of references to “designators” of systems, subsystems and functions, such as B21 for the Automatic Depressurization System (ADS) and E50 for the Gravity-Driven Cooling System (GDCS). The repeated use of these designators in the PRA document, instead of the name of the system, subsystem or function they represent, is confusing. In addition, the list of Table 4.0-1 is not complete. For example, some of the designators mentioned in the text, such as C31 and H23, are not listed in Table 4.0-1, while others, such as C71, are listed but not defined. Please revise Table 4.0-1 accordingly and include the system, subsystem or function names together with their designator (e.g., designators in parentheses) in Chapter 4 of the PRA.

GE Response

The plant system designators, such as “E50” are used in the naming of basic events that are related to components in the designated system. Table 4.0-1 also uses system designators in a column entitled “System ID”, to identify the relationship between the plant systems and the corresponding PRA functions modeled within fault trees. In the next PRA revision, system names will be provided for clarification.

DCD Impact

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