



GE Energy

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**Subject: Response to Portion of NRC Request for Additional Information
Letter No. 63 Related to ESBWR Design Certification Application –
Technical Specifications – RAI Number 16.2-11**

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

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

Sincerely,

James C. Kinsey
Project Manager, ESBWR Licensing

Reference:

1. MFN 06-375, Letter from U.S. Nuclear Regulatory Commission to David Hinds, *Request for Additional Information Letter No. 63 Related to ESBWR Design Certification Application*, October 4, 2006

Enclosures:

1. Response to Portion of NRC Request for Additional Information Letter No. 63 Related to ESBWR Design Certification Application - Technical Specifications - RAI Number 16.2-11

cc: AE Cabbage USNRC (with enclosures)
GB Stramback GE/San Jose (with enclosures)
RE Brown GE/Wilmington (with enclosures)
eDRF 0000-0068-3475

Enclosure 1

MFN 07-293

**Response to Portion of NRC Request for
Additional Information Letter No. 63
Related to ESBWR Design Certification Application
- Technical Specifications -
RAI Number 16.2-11**

NRC RAI 16.2-11

Using NUREG-1434, Rev. 3.1 as guidance, justify exclusion of the Physics Tests (Max Fraction of Limiting Power Density) definition from the proposed ESBWR TS Definitions Section 1.1.

GE Response

NUREG-1434, Revision 3.1, includes a definition for Physics Tests in Technical Specification (TS) 1.1, and uses the term Physics Tests in TS 3.10.9, Recirculation Loops – Testing. In the ESBWR, reactor core flow is by natural circulation, and there is no forced flow using recirculation pumps. No Physics Tests identified for the ESBWR require exceptions to normally required Technical Specifications that would necessitate exceptions in TS Section 3.10, Special Operations. As a result, the term Physics Tests is not used in Revision 3 of Design Control Document (DCD) Tier 2, Chapter 16 or Chapter 16B, and the definition was omitted.

NUREG-1434, Revision 3.1, includes a definition for Maximum Fraction Of Limiting Power Density (MFLPD) in TS 1.1, and refers to MFLPD in TS 3.2.4, "Average Power Range Monitor (APRM) Gain and Setpoints (Optional)." NUREG-1434 TS 3.2.4 is an optional TS for plants that must adjust either the flow biased scram setpoints or APRM gain or limit power level to provide protection from exceeding thermal limits due to local peaking at off-rated conditions. Similar to the approach used in NUREG-1434, the ESBWR core will maintain the required thermal limits in the Core Operating Limits Report, which will ensure that required thermal limits are met without the need for a TS equivalent to NUREG-1434 TS 3.2.4. As a result, there are no references to MFLPD in DCD Tier 2, Chapter 16 or Chapter 16B, and the definition was omitted.

DCD Impact

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