



# HITACHI

## GE Hitachi Nuclear Energy

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MFN 15-065, Supplement 1

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US Nuclear Regulatory Commission  
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Washington, DC 20555-0001

Subject: **Supplement 1 to GEH Proposed Resolution of Items # 18b, 19 and 20 of NRC Suggested U.S. Advanced Boiling Water Reactor Design Changes**

### References:

1. Letter from R.E. Kingston, GEH to USNRC, Subject: ABWR Standard Plant Design Certification Renewal Application Design Control Document, Revision 5, Tier 1 and Tier 2, December 7, 2010.
2. Letter from USNRC to Jerald G. Head, GEH, Subject: GE-Hitachi Nuclear Energy – United States Advanced Boiling-Water Reactor Design Certification Renewal Application, July 20, 2012.
3. Letter from Jerald G. Head, GEH, to USNRC, Subject: Response to NRC Letter: GE Hitachi Nuclear Energy – United States Advanced Boiling-Water Reactor Design Certification Renewal Application (July 20, 2012), September 17, 2012.
4. Letter from Jerald G. Head, GEH to USNRC: Subject: GEH Proposed Resolution of Items # 18b, 19 and 20 of NRC Suggested U.S. Advanced Boiling Water Reactor Design Changes, August 11, 2015

GEH submitted a Design Certification Renewal application for the U.S. Advanced Boiling Water Reactor (ABWR) in Reference 1 pursuant to the requirements of Subpart B, “Standard Design Certifications,” of Title 10 of the Code of Federal Regulations (10 CFR) Part 52, “Licenses, Certifications, and Approvals for Nuclear Power Plants.”

In Reference 2, the NRC suggested design changes to address issues that the agency considered to be regulatory improvements or changes that could meet the 10 CFR 52.59(b) criteria. In addition, the NRC requested that GEH implement the Fukushima Near-Term Task

Force recommendations contained in SECY-12-0025, "Proposed Orders and Requests for Information in Response to Lessons Learned from Japan's March 11, 2011, Great Tohoku Earthquake and Tsunami," dated February 17, 2012. Collectively, these items are termed the "28-item backfit list".

In Reference 3, GEH responded to Reference 2 and committed to address the "28-item backfit list".

In public and private meetings the NRC held with GEH on May 7<sup>th</sup>, 2015, GEH reviewed the closure plan for the "28-item backfit list" for those items that GEH would not receive any additional Requests for Additional Information. During that meeting, the following items of the "28-item backfit list" were discussed and GEH's approach was found to be acceptable by the staff: Item #18b - Structural, dynamic and impact analysis of new and spent fuel racks, Item #19 - Thermal hydraulic analysis of the spent fuel racks and Item #20 - Criticality analyses of new and spent fuel storage racks.

In Reference 4, GEH's proposed resolution to Items #18b, 19 and 20 of the "28-item backfit list" transmitted in Reference 2 was submitted to the NRC. In Reference 4, GEH committed to deletion of the new fuel storage vault. During recent review the ABWR DCD Chapter 16 - Technical Specifications, it was determined that deletion of the new fuel storage vault Design Features from Technical Specifications (TS) and from the Secondary Containment Control Guideline were not included in the previous markups in Reference 4.

Enclosure 1 contains a summary of the ABWR DCD changes as a result of this supplement as well as the impact on the ABWR DCD. Enclosure 2 contains the ABWR DCD Draft Rev 7 markups.

If you have any questions concerning this letter, please contact Hugh Upton at 408-314-8499.

Sincerely,



Jerald G. Head  
Senior Vice President, Regulatory Affairs

Commitments: No additional commitments are made in this response.

Enclosures:

1. MFN 15-065, Supplement 1 - GEH Summary of Changes
2. GEH ABWR DCD Draft Revision 7 Markups

cc: Adrian Muniz, NRC  
DBR - 0012230