



HITACHI

GE Hitachi Nuclear Energy

James C. Kinsey
Vice President, ESBWR Licensing

PO Box 780 M/C A-55
Wilmington, NC 28402-0780
USA

T 910 675 5057
F 910 362 5057
jim.kinsey@ge.com

MFN 07-640

Docket No. 52-010

December 4, 2007

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. 111 Related to ESBWR Design
Certification Application, RAI Number 22.5-19**

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) sent by NRC letter dated October 15, 2007 (Reference 1). The GEH response to RAI Number 22.5-19 is in Enclosure 1.

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

Sincerely,

James C. Kinsey
Vice President, ESBWR Licensing

Da8
u60

Reference:

1. MFN 07-556, Letter from U.S. Nuclear Regulatory Commission to Robert E. Brown, *Request for Additional Information Letter No. 111 Related to ESBWR Design Certification Application*, October 15, 2007.

Enclosure:

1. Response to Portion of NRC Request for Additional Information Letter No. 111 Related to ESBWR Design Certification Application Regulatory Treatment of Non-Safety Systems (RTNSS) RAI Number 22.5-19

cc: AE Cubbage USNRC (with enclosure)
GB Stramback GEH/San Jose (with enclosure)
RE Brown GEH/Wilmington (with enclosure)
eDRFSection 0000-0078-1993

Enclosure 1
MFN 07-640

**Response to Portion of NRC Request for
Additional Information Letter No. 111
Related to ESBWR Design Certification Application
Regulatory Treatment of Non-Safety Systems (RTNSS)
RAI Number 22.5-19**

NRC RAI 22.5-19

DCD Tier 2 Rev.3, Table 9.2-6, states that the Makeup Water System (MWS) is designed to provide makeup water for the Reactor Component Cooling Water System (RCCWS) and the Chilled Water System (CWS). These systems are identified as RTNSS systems in the response to RAI 14.3.69. Clarify whether the makeup to the RCCWS and CWS provided by the MWS is required to support the RCCWS and CWS cooling functions from 72 hours to 7 days in meeting the RTNSS selection Criterion B. If the MWS is selected for RTNSS then specify the corresponding regulatory treatment, including ITAAC.

GEH Response

The Makeup Water System is not selected for RTNSS. An analogous situation may be found at currently operating light water reactors with safety-related closed-loop component cooling systems. They do not require the makeup supply to be safety-related. If necessary, makeup water may be supplied from 72 hours to 7 days by on-site sources, including fire protection system water.

DCD/NEDO-33201 Impact

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

No NEDO-33201 changes will be made in response to this RAI.