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MFN 06-395
Supplement 1

Docket No. 52-010

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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. 39 Related to ESBWR Design
Certification Application – Conduct of Operations – RAI
Numbers 13.6-1 S01 and 13.6-2 S01**

Enclosure 1 contains GEH's response to the subject NRC RAIs transmitted via e-mail on June 25, 2007. Previous responses were provided in the Reference 1 letter.

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

Sincerely,

R. E. Brown for,

James C. Kinsey
Vice President, ESBWR Licensing

*1068
NRO*

Reference:

1. MFN 06-395, Letter from David H. Hinds to U.S. Nuclear Regulatory Commission, *Response to Portion of NRC Request for Additional Information Letter No. 39 Related to ESBWR Design Certification Application – Conduct of Operations – RAI Numbers 13.6-1 and 13.6-2*, dated October 11, 2006

Enclosure:

1. MFN 06-395. Supplement 1 - Response to Portion of NRC Request for Additional Information Letter No. 39 Related to ESBWR Design Certification Application – Conduct of Operations – RAI Numbers 13.6-1 S01 and 13.6-2 S01

cc: AE Cubbage USNRC (with enclosure)
GB Stramback GEH (with enclosure)
RE Brown GEH (with enclosure)
DH Hinds GEH (with enclosure)
eDRF 0000-0072-8948

Enclosure 1

MFN 06-395

Supplement 1

Response to Portion of NRC Request for

Additional Information Letter No. 39

Related to ESBWR Design Certification Application

Conduct of Operations

RAI Numbers 13.6-1 S01 and 13.6-2 S01

For historical purposes, the original text and GE responses to RAIs 13.6-1 and 13.6-2 are included.

NRC RAI 13.6-1

Provide a drawing that depicts all vital areas of the ESBWR. Include a listing of the vital areas and the vital components in them that may be cross-referenced against the drawing. Include in the diagram the locations of the central alarm station, secondary alarm station, control room and security related emergency power supplies.

GE Response

The vital areas list is provided in Enclosure 2. The vital areas list provides component description, building, floor elevation, and room number information. The information is cross referenced with the General Arrangement drawings provided to the NRC via MFN Letter 05-164.

NRC RAI 13.6-1 S01

Provide a revision to the vital area listing that included a listing of the vital equipment and corresponding location thereof. Missing from the list, provided as an answer to RAI 13.6-1, is the location of the central alarm station, and secondary power supply. Both the secondary power supply and central alarm station are required to be in an area designated as a vital area as described in 10 CFR 73.55(e)(1). Please, update the DCD to include this information.

GEH Response

Section 13.6 of DCD revision 4 has been revised to indicate that the CAS and the secondary security power supply are located in vital areas.

The location of the CAS in a vital area has been addressed by a new a paragraph in section 13.6.1.1.2 of revision 4 to the DCD.

The location of the security secondary power supply in a vital area has been addressed by a change to the DCD text in section 13.6.1.1.7.

A complete list of vital areas in the ESBWR has been included in NEDE-33391, "ESBWR Safeguards Assessment Report."

DCD Impact

DCD Tier 2, Section 13.6.1 has been revised in Rev. 4 as noted above.

NRC RAI 13.6-2

Provide inspection, test, analyses and acceptance criteria (ITACC) that address the following five design commitments: 1) locations to be bullet resisting and the corresponding level of minimum resistance, 2) designation of the central alarm station, secondary alarm station, and the control room as being located within vital areas, 3) designation of the backup power for alarm annunciator and non-portable communications as being located in a vital area, 4) vital areas are locked and alarmed with active intrusion detection systems that annunciate in the central and secondary alarm stations upon unauthorized intrusion into a vital area, and 5) locks utilized for the protection of the vital areas and special nuclear material are manipulative resistant.

GE Response

The inspection, test, analyses and acceptance criteria (ITAAC) that address the five design commitments was initially provided to the NRC via letter from Adrian P. Heymer (NEI) to Mr. Roy P. Zimmerman (NRC), "Technical Reports on Template for FSAR Section 13.6, *Physical Security*; and the Generic Security Inspections, Tests, Analyses and Acceptance Criteria for New Plants," August 18, 2006. All five design comments are addressed in the NEI letter and are pending NRC approval. It is GE's intent for the ESBWR to follow the ITAAC recommendations.

NRC RAI 13.6-2 S01

Provide a listing of physical security Inspections, Tests, Analysis and Acceptance Criteria (ITAAC) that applies to the ESBWR design. The response to RAI 13.6-2 stated that the ITAAC list would be that provided by the Nuclear Energy Institute (NEI) to the NRC. The subject list from the NEI has not been endorsed by the NRC. Regarding Physical Security ITAAC, we (the NRC) have reviewed addressed, and posted on the NRC Public Website updates to NUREG 0800, Section 14.3.12. The posted ITAAC should be utilized during both the design certification and combined license application process. Please, update the DCD to include this information.

GEH Response

The generic ITAAC developed by the NEI New Plant Security Task Force and reviewed and accepted by the NRC has been added to DCD Tier 1, Revision 4 (Section 2.19).

DCD Impact

DCD Tier 1, has been revised by adding an additional ITAAC as noted above.