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MFN 07-322

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Subject: **Response to Portion of NRC Request for Additional Information Letter No. 89 Related to ESBWR Design Certification Application – Tier 1, Local Control Panels and Instrument Racks – RAI Numbers 14.3-103 and -104**

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,

Kathy Sedney for

James C. Kinsey
Project Manager, ESBWR Licensing

D068

NRO

Reference:

1. MFN 07-103, Letter from U.S. Nuclear Regulatory Commission to David Hinds, "*Request for Additional Information Letter No. 89 Related to ESBWR Design Certification Application*," January 30, 2007.

Enclosure:

1. MFN 07-322 Response to Portion of NRC Request for Additional Information Letter No. 89 Related to ESBWR Design Certification Application – Tier 1, Local Control Panels and Instrument Racks – RAI Numbers 14.3-103 and 14.3-104

cc:	AE Cubbage	USNRC (with enclosures)
	DH Hinds	GE (with enclosures)
	RE Brown	GE (w/o enclosures)
	eDRF	0000-0068-2674

ENCLOSURE 1

MFN 07-322

Response to a Portion of NRC Request for

Additional Information Letter No. 89

Related to ESBWR Design Certification Application

Tier 1, Local Control Panels and Instrument Racks

RAI Numbers 14.3-103 and 14.3-104

NRC RAI 14.3-103

In DCD Tier 1, Rev 2, Table 2.7.3-1 for Local Control Panels, the Design Commitment and the Inspections, Tests, Analysis columns only mentions LCP (Local Control Panels) and does not address Racks. Describe the Design Commitment and Inspections, tests, analyses and acceptance criteria (ITAAC) for Racks.

GE Response to RAI 14.3-103

As indicated, ITAAC for Local Racks have not been addressed in Table 2.7.3-1 of DCD Tier 1. An ITAAC for Local Racks will be included in DCD Tier 1 as a part of ITAAC Item # 2 as shown in markup of the table. Also, existing ITAAC items 1 & 2 will be revised in DCD Tier 1 for clarity as shown in the markup of the table.

DCD Impact:

DCD Tier 1 Table 2.7.3-1 will be revised as shown in the following markup. No other changes will be made to DCD Tier 1 or 2 as a result of NRC RAI 14.3-103.

NRC RAI 14.3-104

In DCD Tier 1, Rev 2, Table 2.7.3-1 for Local Control Panels, the Acceptance Criteria 2b should be supplemented with the following additional acceptance criteria:

Local Control Panels should be restricted to only one Division.

GE Response to RAI 14.3-104

Safety-related Local Control Panels maintain divisional separation. Each safety-related divisional Local Control Panel interacts with its own divisional safety-related control circuits. In the response to RAI 14.3-103, ITACC # 2 states that "Inspection report(s) document(s) that the electrical and physical independence exists between safety-related divisions and between safety-related divisions including LCPs and instrument racks and nonsafety-related equipment." Therefore no additional acceptance criteria need be added.

DCD Impact:

No change will be made to DCD Tier 1 as a result of this RAI.

Table 2.7.3-1

ITAAC For Local Control Panels and Racks

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1. The basic configuration of the local control panels and instrument racks is as described in Subsection 2.7.3.	1. Inspections of the as-built system are conducted.	1. Inspection report(s) document that the as-built local control panels and instrument racks conform to the basic configuration described in Subsection 2.7.3.
2. Safety-related local control panels and instrument racks are powered from their respective safety-related divisions. Independence is provided among safety-related divisions and between safety-related divisions and nonsafety-related equipment.	2. a. Tests are conducted in the local control panels and instrument racks by providing a test signal to only one safety-related division at a time. b. Inspections of the as-built safety-related divisions in the local panels and instrument racks are conducted.	2. a. Test report(s) conclude that the test signal exists in only the safety-related division under test in the local control panels and instrument racks. b. Inspection report(s) document that in the local control panels and instrument racks, physical and electrical independence exists among as-built safety-related divisions. Physical and electrical independence exists between these safety-related divisions and nonsafety-related equipment.