



HITACHI

GE Hitachi Nuclear Energy

Richard E. Kingston
Vice President, ESBWR Licensing

P.O. Box 780 M/C A-65
Wilmington, NC 28402-0780
USA

T 910.675.6192
F 910.362.6192
rick.kingston@ge.com

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Subject: **Transmittal of ESBWR DCD Tier 2 Markups Related to Reference to 10 CFR 73 Section 55 – Chapter 9**

The purpose of this letter is to submit markups to the ESBWR DCD Tier 2, Chapter 9, resulting from an updated reference to 10 CFR 73 Section 55.

The Chapter 9 markups clarify the reference based on the latest edition (Jan. 1, 2010) of 10 CFR 73 Section 55.

Enclosure 1 provides the DCD Tier 2 markups to be incorporated into the DCD, Rev. 8.

Markups are provided for the following DCD sections:

Tier 2, Chapter 9, Section 9.5.2
Tier 2, Chapter 9, Subsection 9.5.2.6

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

Sincerely,

Richard E. Kingston
Vice President, ESBWR Licensing

Enclosure:

1. Transmittal of ESBWR DCD Tier 2 Markups Related to Reference to 10 CFR 73 Section 55 – Chapter 9 – DCD Markups

cc: AE Cubbage USNRC (with enclosure)
JG Head GEH/Wilmington (with enclosure)
DH Hinds GEH/Wilmington (with enclosure)
TL Enfinger GEH/Wilmington (with enclosure)
eDRF Section 0000-0117-4109 Revision 1 (Chapter 9 markups)

Enclosure 1

MFN 10-237

**Transmittal of ESBWR DCD Tier 2 Markups Related to
Reference to 10 CFR 73 Section 55**

Chapter 9

DCD Markups

9.5.1-7-A *FHA Compliance Review*

The COL Applicant will provide a milestone for confirming the assumptions and requirements of the FHA against the as-built conditions and updating the FHA as necessary. (Subsection 9.5.1.12)

9.5.1-8-A *Fire Protection Program Description*

The COL Applicant shall provide a milestone for implementation of the applicant's fire protection program (Subsection 9.5.1.15).

9.5.1-9-A *Fire Protection License Changes (Deleted)***9.5.1-10-A *Fire Brigade***

The COL Applicant will provide a milestone for implementing the provisions for manual fire-fighting capability for all plant areas (Subsection 9.5.1.15.4).

9.5.1-11-A *Quality Assurance*

The COL Applicant shall provide details of the QA program for the fire protection program (Subsection 9.5.1.15.9).

9.5.1.17 References

All applicable references are listed in Table 9.5-1.

9.5.2 Communications System

The communication system provides the means to conveniently and effectively communicate between various plant locations and with offsite locations during normal, maintenance, transient, ~~fire, and accident conditions under maximum potential noise levels. The communication system~~ allows guards and watchmen on duty to maintain continuous communication with personnel in manned alarm stations, and offsite/onsite agencies as required by 10 CFR 73, Sections 55(e) and (f) (Reference 9.5.2-3). This is accomplished by either private automatic branch (telephone) exchange (PABX) or wireless communication system. Communication equipment used with respiratory protection gear is designed and selected in accordance with EPRI NP-6559 (Reference 9.5.2-2). The communication system consists of the following systems:

- Plant page/party-line (PA/PL) system;
- Private automatic branch (telephone) exchange (PABX) system;
- Plant sound-powered telephone system;
- Plant radio system;
- Evacuation alarm and remote warning system;
- Emergency communication system; and
- Completely independent ~~radio~~communications system for security purposes as described in Section 13.6.

9.5.2.5 COL Information**9.5.2.5-1-A Emergency Notification System**

The COL applicant will describe the Emergency Notification System provisions required by 10 CFR 50.47(b)(6) and will address recommendations described in IE-Bulletin-80-15. (Subsection 9.5.2.2)

9.5.2.5-2-A Grid Transmission Operator

The COL applicant will describe the voice communication link availability with the grid transmission system operator. (Subsection 9.5.2.2)

9.5.2.5-3-A Offsite Interfaces (1)

The COL applicant will describe the means of communication between the control room, TSC, EOF, State and local emergency operation centers and radiological field personnel in accordance with NUREG – 0696 and NUREG – 0654. (Subsection 9.5.2.2)

9.5.2.5-4-A Offsite Interfaces (2)

The COL applicant will describe the communication methods from the control room, TSC, and EOF to NRC headquarters including establishment of Emergency Response Data Systems (ERDS) in accordance with NUREG – 0696. (Subsection 9.5.2.2)

9.5.2.5-5-A Fire Brigade Radio System

The COL applicant will describe the Fire Brigade Radio System in accordance with RG 1.189, Position 4.1.7 (Subsection 9.5.2.2).

9.5.2.6 References

9.5.2-1 (Deleted)

9.5.2-2 EPRI Report NP 6559, “Voice Communication System Compatible with Respiratory Protection”.

9.5.2-3 10 CFR 73 Section 55~~(e) and (f)~~, [“Requirements for Physical Protection of ~~Plants and Material~~ Licensed Activities in Nuclear Power Reactors Against Radiological Sabotage”](#).

9.5.2-4 10 CFR 50, Appendix E, IV.E.9, Emergency Facilities and Equipment”.

9.5.2-5 NRC Information Notice 86-097, “Emergency Communication Systems”.

9.5.2-6 NRC Information Notice 87-058, “Continuous Communication Following Emergency Notifications”.

9.5.2-7 NRC IE Circular No.80-09, “Problems with Plant Internal Communication Systems”.

9.5.2-8 NUREG-0654, “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans & Preparedness; Support of Nuclear Power Plants”.

9.5.2-9 IE Bulletin 80-15, “Possible Loss of Emergency Notification System (ENS) with Loss of Offsite Power.” June 18, 1980.

9.5.2-10 NRC Generic Letter 89-15, “Emergency Response Data System”.