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MFN 10-290 Supplement 1

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U.S. Nuclear Regulatory Commission  
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Washington, D.C. 20555-0001

Subject: **Transmittal of ESBWR DCD Tier 2, Chapter 1 Markup Related to Tier 2\* Indication for ASME B&PV Code, Section III**

The purpose of this letter is to submit a markup to the ESBWR DCD, Tier 2, Chapter 1 to remove Tier 2\* indication to a reference to the ASME Boiler and Pressure Vessel Code, Section III, 2001 Edition including Addenda through 2003, with other edition references for seismic design of piping and weld leg dimensions. This change allows design flexibility as stated in Reference 1 and corresponds to the markup previously submitted for Chapter 5 in Reference 2. The markup page is contained in Enclosure 1.

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

Sincerely,

A handwritten signature in cursive script that reads "Richard E. Kingston".

Richard E. Kingston  
Vice President, ESBWR Licensing

Reference:

1. E-mail, Amy Cubbage (NRC) to Hugh Upton (GEH), "Tier 2\* Versus NCA-1140 for ASME Code Changes", dated August 19, 2010
2. MFN 10-290, Letter from Richard E. Kingston to U.S. Nuclear Regulatory Commission, Transmittal of ESBWR DCD Tier 2, Chapter 5 Markup Related to Tier 2\* Indication for ASME B&PV Code, Section III, September 29, 2010

Enclosure:

1. Transmittal of ESBWR DCD Tier 2, Chapter 1 Markup Related to Tier 2\* Indication for ASME B&PV Code, Section III – DCD Markup

cc: AE Cubbage      USNRC (with enclosure)  
JG Head            GEH/Wilmington (with enclosure)  
DH Hinds          GEH/Wilmington (with enclosure)  
TL Enfinger        GEH/Wilmington (with enclosure)

**Enclosure 1**

**MFN 10-290 Supplement 1**

**Transmittal of ESBWR DCD Tier 2, Chapter 1 Markup Related  
to Tier 2\* Indication for ASME B&PV Code, Section III**

**DCD Markup**

Table 1.9-22

Industrial Codes and Standards<sup>1</sup> Applicable to ESBWR

Code or Standard Number	Year	Title
[BPVC Sec III]*	{2001 including Addenda through 2003}*	{BPVC Section III, Rules for Construction of Nuclear Facility Components Division 1: NCA, NB, NC, ND, NF, NG Weld Leg Dimensions: The 1989 Edition, with no Addenda, is used when applying paragraph NB-3683.4(c)(1), or applying Footnote 11 to Figure NC-3673.2(b)-1, or applying Figure ND-3673.2(b)-1 to weld leg dimensioning. Seismic Design of Piping: The 1992 Edition with 1993 Addenda is used when applying Articles NB-3200, NB-3600, NC-3600, and ND-3600 (Class 1, 2, 3 Piping and Components) for seismic design of piping in lieu of later ASME Code, Section III, editions and addenda.  Note: All limitations and modifications specified in 10 CFR 50.55a(b)(1) are met.}*
BPVC Sec V	2001 including Addenda through 2003	BPVC Section V: Nondestructive Examination
BPVC Sec VIII	2001 including Addenda through 2003	BPVC Section VIII: Rules for Construction of Pressure Vessels Div. 1 Div. 2 Alternative Rules
BPVC Sec IX	2001 including Addenda through 2003	BPVC Section IX, Welding and Brazing Qualifications
BPVC Sec XI	2001 including Addenda through 2003	BPVC Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components
OM Code	2001 including Addenda through 2003	Code for Operation and Maintenance of Nuclear Power Plants
OM-S/G-1990	1990	Standards and Guides for Operation and Maintenance of Nuclear Power Plants (Note: more recent versions exist)
ASME Steam Tables	1967	Thermodynamic and Transport Properties of Steam
<b>ASTM International (formerly American Society for Testing and Materials)</b>		
A36/A36M-05	2005	Standard Specification for Carbon Structural Steel
A106/A106M-06a	2006	Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service
A126-04	2004	Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings