Enclosure 2

MFN 15-039

GEH Response to RAI 06.02.01-1

ABWR DCD DRAFT Revision 6 Markup

IMPORTANT NOTICE REGARDING CONTENTS OF THIS DOCUMENT
Please Read Carefully

Table 1.9-1 Summary of ABWR Standard Plant COL License Information (Continued)

Item No.	Subject	Subsection
3.3	Effect of Remainder of Plant Structures, Systems and Components Not Designed for Wind Loads	3.3.3.3
3.4	Effects of Remainder of Plant Structures, Systems and Components Not Designed for Tornado Loads	3.3.3.4
3.5	Flood Elevation	3.4.3.1
3.6	Ground Water Elevation	3.4.3.2
3.7	Flood Protection Requirements for Other Structures	3.4.3.3
3.8	Not Used	
3.9	Protection of Ultimate Heat Sink	3.5.4.1
3.10	Missiles Generated by Other Natural Phenomena	3.5.4.2
3.11	Site Proximity Missiles and Aircraft Hazards	3.5.4.3
3.12	Impact of Failure of Out of ABWR Standard Plant Scope Non-Safety-Related Structures, Systems, and Components Due to Design Basis Tornado	3.5.4.4
3.13	Turbine System Maintenance Program	3.5.4.5
3.14	Maintenance Equipment Missile Prevention Inside Containment	3.5.4.6
3.15	Failure of Structures, Systems, and Components Outside ABWR Standard Plant Scope	3.5.4.7
3.16	Details of Pipe Break Analysis Results and Protection Methods	3.6.5.1
3.17	Leak-Before-Break Analysis Report	3.6.5.2
3.18	Inservice Inspection of Piping in Containment Penetration Areas	3.6.5.3
3.19	Seismic Design Parameters	3.7.5.1
3.20	Pre-Earthquake Planning and Post-Earthquake Actions	3.7.5.2
3.21	Piping Analysis, Modeling of Piping Supports	3.7.5.3
3.22	Assessment of Interaction Due to Seismic Effects	3.7.5.4
3.23	Foundation Waterproofing	3.8.6.1
3.24	Site Specific Physical Properties and Foundation Settlement	3.8.6.2
3.25	Structural Integrity Pressure Results	3.8.6.3
3.26	Identification of Seismic Category I Structures	3.8.6.4
3.26a	Loads Associated with Post-DBA Suppression Pool Water Level	3.8.6.5

where F_s and F_p are the shearing and sliding resistance, and passive soil pressure resistance, respectively. F_d is the maximum lateral seismic force including any dynamic active earth pressure, and F_h is the maximum lateral force due to all loads except seismic loads.

The factor of safety against flotation is defined as:

$$FS = F_{DL}/F_B$$

where F_{DL} is the downward force due to dead load and F_B is the upward force due to buoyancy.

3.8.5.6 Materials, Quality Control, and Special Construction Techniques

The foundations of Seismic Category I structures are constructed of reinforced concrete using proven methods common to heavy industrial construction. For further discussion, see Subsection 3.8.1.6.

3.8.5.7 Testing and Inservice Inspection Requirements

A formal program of testing and inservice inspection is not planned and is not required for the Seismic Category I structures of the ABWR.

3.8.6 COL License Information

3.8.6.1 Foundation Waterproofing

The capability of foundations to transfer shear loads where foundation waterproofing is used will be evaluated (Subsection 3.8.5.4).

3.8.6.2 Site Specific Physical Properties and Foundation Settlement

Physical properties of the site-specific subgrade medium shall be determined and the settlement of foundations and structures, including Seismic Category I, will be evaluated (Subsection 3.8.5.4).

3.8.6.3 Structural Integrity Pressure Result

Each COL applicant will perform the structural integrity test (SIT) of the ABWR containment in accordance with Subsection 3.8.1.7.1. Additionally, the first ABWR containment is considered as a prototype and its SIT performed accordingly. The details of the test and the instrumentation, as required for such a test, will be provided by the first COL applicant for NRC review and approval.

3.8.6.4 Identification of Seismic Category I Structures

The COL applicant will identify all Seismic Category I Structures (Subsection 3.8.4).

3.8.6.5 Loads Associated with Post-DBA Suppression Pool Water Level

The COL applicants will confirm that the suppression pool water level used in the containment loads evaluation is based on the maximum predicted post-accident suppression pool water level rise that can occur concurrent with each of the defined containment loads (Appendix 3B). This load will then be used to update the associated analyses in Section 3.8, Appendix 3G and Appendix 3H.