

## **Enclosure 2**

### **MFN 15-062 Supplement 1**

#### **GEH Supplemental Response to RAI 02.05.04-1**

#### **ABWR DCD Revision 5 Markups**

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## 2.3 COL License Information

### 2.3.1 Envelope of Standard Plant Design Parameters

#### Non-Seismic Design Parameters

Compliance with the envelope of standard plant site non-seismic design parameters of Table 2.0-1 shall be demonstrated for design bases events (Subsection 2.2.1).

#### Seismic Design Parameters

To confirm seismic design adequacy of the standard plant, COL applicants shall demonstrate that the site-specific conditions meet the following site envelope parameters considered in the standardized design.

(1) SSE Ground Motion

The site-specific SSE ground response spectra of 5% damping at plant grade in the free-field are enveloped by the design ground spectra shown in Figures 3.7-1 and 3.7-2 for the horizontal and vertical components, respectively, which are based on Regulatory Guide 1.60 anchored to 0.3g peak ground acceleration. When the site-specific control ground motion is determined to locate at the rock outcrop or a hypothetical rock outcrop according to SRP 3.7.1 guidelines (e.g., shallow soil site), the site-specific soil free-surface motion through soil layer amplification shall be calculated and the resulting ground surface response spectra shall be bounded by the design ground spectra.

(2) Bearing Capacity

The site soil static bearing capacity at the foundation level of the reactor and control building is 718.20 kPa minimum.

The site soil dynamic bearing capacity at the foundation level of the reactor and control building is 2700 kPa minimum.

#### Standard Review Plant Site Characteristics

Identification and description of all differences from SRP Section II Acceptance Criteria for site characteristics (as augmented by Table 2.1-1) shall be provided. Where such differences exist, the evaluation shall discuss how the alternate site characteristic is acceptable. In addition, the COL applicant will provide/address the following:

#### 2.3.2.1 Site Location and Description

COL applicants will provide site-specific information to site location, including political subdivisions, natural and man-made features, population, highways, railways, waterways, and other significant features of the area.

(3) Settlement

The maximum settlement of the reactor and control building foundations is 75mm.  
The maximum angular distortion of the reactor and control building is 1/750.

The maximum static bearing demand is compared with the site-specific allowable static bearing pressure, which is obtained by dividing the ultimate soil bearing capacity by a factor of safety appropriate for the design load combination. The maximum dynamic bearing demand is compared with the site-specific allowable dynamic bearing pressure, which is obtained by dividing the ultimate soil bearing capacity by a factor of safety appropriate for the design load combination.