

## 19I Seismic Margins Analysis

The information in this appendix of the reference ABWR DCD, including all subsections, tables, and figures, is incorporated by reference with the following departure and supplement.

STP DEP 1.1-2

STD DEP 19I.7-1

### 19I.3.1 Support State Event Tree

STP DEP 1.1-2

The following supplement is provided for clarification after the fourth paragraph:

The STP 3 & 4 ABWR dual unit design will use the same fire protection system water volume as the single unit design of the reference ABWR DCD as described in STP DEP 1.1-2. This aspect does not change the SMA conclusions that no HCLPF accident sequence is less than two times the SSE.

### 19I.7 Containment Isolation and Bypass Analysis

STD DEP 19I.7-1

*The bypass paths for atmospheric control system crosstie lines (Figure 19E.2-19h) ~~require inadvertent opening of two normally closed motor operated valves. Since the seismic analysis does not consider a fail open mode for normally closed valves, these bypass paths are not included in the analysis.~~ are protected by air operated valves. The seismic-induced bypass analysis for these lines is the same as that described for the drywell inerting/purge lines.*

**Table 19I-1a HCLPF Values for Site-Specific Systems and Components**

| <b>Site-specific SSC</b>                | <b>Governing Failure Mode</b>            | <b>Governing HCLPF</b> | <b>Ratio to GMRS PGA</b> |
|-----------------------------------------|------------------------------------------|------------------------|--------------------------|
| UHS/Pump House/Cooling Tower Structure  | Structural failure                       | 0.20 g                 | 2.0                      |
| RSW Piping Tunnel                       | Stability (Overturning)                  | 0.22 g                 | 2.2                      |
| Diesel Generator Fuel Oil Storage Vault | Stability (Sliding)                      | 0.26 g                 | 2.65                     |
| Service Water Cooling Fans              | Functional Failure During the Earthquake | 0.20 g                 | 2.0                      |