

## 2.2 Requirements for Determination of ABWR Site Acceptability

The information in this section of the reference ABWR DCD, including all subsections and tables, is incorporated by reference with the following departures.

STD DEP 2.2-5

STP DEP T1 5.0-1

### 2.2.1 Design Basis Events

STP DEP T1 5.0-1

*For design basis events, the site is acceptable if all of the site characteristics fall within the envelope of ABWR Standard Plant site design parameters given in Table 2.0-1. For cases where a characteristic exceeds its envelope, it will be necessary for the COL applicant to submit analyses to a discussion is provided in Table 2.0-2. Subsection 2.4S.10, and Sections 2.2S, 2.5S, 3H.6, 3.4, and 3.8 demonstrate demonstrating that the overall set of site characteristics do not exceed the capability of the design.*

### 2.2.2 Severe Accidents

STD DEP 2.2-5

A site-specific accident consequence analysis has been performed for the STP site using the MACCS2 code (NUREG/CR-6613). This analysis demonstrates that the acceptance criteria have been met for the site, and the reference ABWR DCD CRAC2 results are bounding. The site-specific consequence analysis is documented in App 19E.3.

**Acceptance Criteria:** *Site acceptability for severe accidents will be is based upon a calculation using the ~~CRAC-2~~MACCS2 computer code. The results of such a calculation will be are compared to the goals of Table 19E.3-7 as shown in Table 2.2-1. The site will be is deemed acceptable if the results fall within the given goals.*

**Data Input:** *The input to the ~~CRAC-2~~MACCS2 computer code will be is a combination of ABWR and site parameters. The ~~CRAC-2~~MACCS2 code input is divided into specific areas. The areas defined in Table 2.2-2 as ABWR will be are used as input with their specific data listed in Appendix 2A. The areas defined as GENERAL are also provided in Appendix 2A. The areas defined as UTILITY are to be were supplied by the licensing utility STPNOC as specified in the ~~CRAC-2~~MACCS2 manual (NUREG/CR-23266613) and are site specific. The input data are specified in App 19E.3.2 and the results are presented in App 19E.3.3.2.*

**Analysis:** *The analysis for evaluation of a specific site will be STP 3 & 4 is accomplished with the ~~CRAC-2~~MACCS2 computer code as modified through Sandia National Laboratory Version 1.13.1 (January 2004) Modification 46. Basic input and code characteristics are described in ~~NUREG/CR-2326~~ and ~~NUREG/CR-2552~~NUREG/CR-6613.*

