

Enclosure 2

MFN 15-045

GEH Response to Item #3

ABWR DCD DRAFT Revision 6 Markups

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**Table 1.9-1 Summary of ABWR Standard Plant
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2.2 Requirements for Determination of ABWR Site Acceptability

This section provides the requirements for the determination of ABWR site acceptability. Acceptability is required from the standpoint of both design basis events and severe accident.

2.2.1 Design Basis Events

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 demonstrate that the overall set of site characteristics do not exceed the capability of the design. See Subsection 2.3.1 for COL license information requirements.

2.2.2 Severe Accidents

The ABWR PRA results were calculated for an average or typical site, as outlined in Subsection 19E.3. Although these results form a good basis for assessing the general ABWR capability to satisfy offsite dose-related goals, they do not form a basis for concluding that the ABWR would meet dose-related goals at a specific site whose characteristics cannot be defined at the point of ABWR certification. Consistent with the certification concept that all key technical issues be resolved before certification, it is appropriate to define the process for determining future site acceptability. This process is defined below in terms of (1) acceptance criteria, (2) data input, and (3) analysis.

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

Data Input: The input to the CRAC 2 computer code will be a combination of ABWR and site parameters. The CRAC 2 code input is divided into specific areas. The areas defined in Table 2.2-2 as ABWR will be 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 supplied by the licensing utility as specified in the CRAC 2 manual (NUREG/CR-2326) and are site specific.

The basic reference case for determining individual and societal risk comparisons (Table 2.2-1) uses a 95/5 evacuation model as shown in Table 19E.3-3. For the determination of dose consequences for comparison to the dose goal shown in Table 2.2-1, no evacuation or shielding factors were assumed. If the results for a specific site using the above assumptions prove unacceptable, then site-specific evacuation and shielding parameters may be substituted in lieu of the reference values in Subgroup Evacuation. However, if the results of such an evaluation for a specific site are unacceptable, site-specific evacuation and shielding parameters may be substituted in lieu of the reference values in Subgroup Evacuation.

an appropriate
severe accident
consequence
code, such as
MACCS2

severe accident
consequence

In order to describe
appropriate input to
the severe accident
consequence code,
input required for the
CRAC 2 computer
code is provided as
an example.

computer code,
such as MACCS2,

an appropriate
severe accident
consequence

Analysis: The analysis for evaluation of a specific site will be accomplished with the CRAC 2 computer code as modified through Sandia National Laboratory Modification 46. Basic input and code characteristics are described in NUREG/CR-2326 and NUREG/CR-2552.

code characteristics
for MACCS2

See Subsection 2.3.3 for COL license information requirements.

NUREG/CR-6613



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2.3.3 ~~CPAC 2~~ Computer Code Calculations

Compliance with acceptance criteria, data input and analysis of Subsection 2.2.2 for the determination of ABWR site acceptability for severe accidents shall be demonstrated.