

1AA Plant Shielding to Provide Access to Vital Areas and Protective Safety Equipment for Post-Accident Operation [II.B.2]

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

STD DEP 1AA-1

STD DEP T1 2.4-1 (Table 1AA-2)

STD DEP T1 2.14-1

STD DEP Admin (Table 1AA-2)

The Hydrogen Recombiner deletion was provided in ABWR Licensing Topical Report NEDE-33330P “Advanced Boiling Water Reactor (ABWR) Hydrogen Recombiner Requirements Elimination.” Pages C-12 through C-14 of this LTR are incorporated by reference.

1AA.2 Summary of Shielding Design Review

STD DEP 1AA-1

The results of the review are:

- (2) *Based upon the accident source terms of Regulatory Guides 1.3 and 1.7 and Standard Review Plan 15.6.5 including normal operations, the vital equipment exposures will be enveloped based upon the table below:*

Area	Gamma (Gy)	Beta (Gy)
ECCS Rooms	4x10⁵ 3x10 ⁷	8x10 ⁷
SGTS Area	5x10⁵ 3x10 ⁷	2x10⁻¹ 3x10 ²

1AA.5.1.2 Emergency Core Cooling Systems and Auxiliaries

STD DEP T1 2.4-1

The fuel pool cooling function (Subsection 1.2.2.7.2) is also included on the basis that a recently unloaded fuel batch could require continued cooling during the post-accident period. This function is also supplemented by the RHR Fuel Pool Cooling Mode as described in Section 9.1.3.2. The RHR equipment is environmentally qualified, so access is not required and redundancy is included in system components.

Table 1AA-2 Post-Accident Emergency Core Cooling Systems and Auxiliaries

Equipment	MPL	Location
HPCF		
SP Water Level	T31-LT0058A,B,C,D	By HPCF Rm. B,C (SC)
LPCF		
FPC Supply Valve	E11-F015A,B,C	Valve Rm. A,B,C (SC)