9A Fire Hazards Analysis

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

STD DEP T1 2.14-1

STP DEP 1.2-2 (Figures 9A.4-17 through 9A.4-21)

STD DEP 3.8-1 (Figures 9A.4-28 through 9A-4-32)

The Flammability Control System, as referenced in this appendix, was eliminated in accordance with ABWR Licensing Topical Report NEDE-33330P, "Advanced Boiling Water Reactor (ABWR) Hydrogen Recombiner Requirements Elimination," dated May 2007. The information on pages C-70 through C-89 in the Licensing Topical Report is incorporated by reference.

9A.1 Introduction

STP DEP 1.2-2 (Figures 9A-4-17 through 9A-4-21)

STD DEP 3.8-1 (Figures 9A.4-28 through 9A-4-32)

As stated in Fire Protection System ITAAC (Tier 1, Section 2.15.6), a fire hazards report will exist for the as-built plant which concludes that, for each postulated fire, the plant can be shut down and maintained in a safe shut down condition.

Such fire hazards report will reflect the final plant layout, purchased equipment type, quantity, and final location, cable routing, and distribution of other combustibles, after as-built drawings are prepared and verified.

The preparation of the fire hazards report will take into consideration the following recognized departures from the certified ABWR design:

- Approved departures made in conjunction with changes to the Turbine Building general arrangement
- Approved departures made in conjunction with changes to the Radwaste Building general arrangement
- Other approved departures as documented in COLA Part 7 (includes complete list and description of departures from certified ABWR DCD) which can have impact on fire zoning, fire loading, location of safety-related structures, equipment and components and which affect the fire hazards analysis

The above departures will be reviewed using the same criteria used in the certified ABWR design. These criteria consider potential fire hazards and assess the effect of postulated fires on the ability to shutdown and cooldown the reactor to a cold shutdown condition; each postulated fire will be documented in the fire hazard report. (COM 9A-1)

9A.2 Analysis

STP DEP 1.2-2 (Figures 9A-4-17 through 9A-4-21)

STD DEP 3.8-1 (Figures 9A.4-28 through 9A-4-32)

The following figures are located in Chapter 21:

- Figure 9A.4-17 Turbine Building Fire Protection, Section A-A
- Figure 9A.4-18 Turbine Building Fire Protection at El. 5300 mm
- Figure 9A.4-19 Turbine Building Fire Protection at El. 12300 mm
- Figure 9A.4-20 Turbine Building Fire Protection at El. 20300 mm
- Figure 9A.4-21 Turbine Building Fire Protection at El. 30300 mm
- Figure 9A.4-28 Radwaste Building Fire Protection, ~~*Section A-A*~~ RWB Sections
- Figure 9A.4-29 Radwaste Building Fire Protection at El - ~~*1500*~~ 1700 mm
- Figure 9A.4-30 Radwaste Building Fire Protection at El ~~*4800*~~ 5300 mm
- Figure 9A.4-31 Radwaste Building Fire Protection at El 12300 mm
- Figure 9A.4-32 Radwaste Building Fire Protection at El ~~*21000*~~ 18300 mm