

2.1 Nuclear Steam Supply Systems

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

STD DEP T1 2.1-1

2.1.2 Nuclear Boiler System

Safety/Relief Valves

The following standard departure is made to the table under the Safety/Relief Valves item (1), on page 2.1.2-3 of the reference ABWR DCD/Tier 1.

The following table identifies the SRV spring set pressures and flow capacities. The opening time for the SRVs, from the time the pressure exceeds the valve set pressure to the time the valve is fully open, is less than or equal to 0.3 seconds. The safety relief valves all have a simmer margin of more than 15%. The SRV set pressure and capacities shall be as follows:

Set Pressures and Capacities				
SRVs	Number* of Valves	Nameplate Spring Set Pressure (MPaG) [†]	ASME Rated Capacity at 103% Spring Set Pressure (kg/h each) [‡]	Used For ADS
J, P	2	7.92 8.00	395,000 398,725	
B, G, M, S	4	7.99 8.07	399,000 402,121	
D, E, K, U	4	8.06 8.14	402,000 405,516	
C, H, N, T	4	8.13 8.20	406,000 408,912	X
A, F, L, R	4	8.20 8.27	409,000 412,307	X

* Eight of the SRVs serve in the automatic depressurization system function.

† Spring set pressure tolerances as permitted by the ASME Boiler and Pressure Vessel Code, Section III.

‡ Minimum capacity per the ASME Boiler and Pressure Vessel Code, Section III.

