1.7 Drawings

The information in this section of the reference ABWR DCD, including all tables and figures, is incorporated by reference with the following departures and site-specific supplements.

STD DEP T1 2.14-1 (Table 1.7-1)

STD DEP T1 3.4-1 (Table 1.7-5)

Table 1.7-6 is a supplemental tabulation of additional or updated instrumentation and control (I&C) functional diagrams and electrical one-line diagrams, including legends for electrical power, I&C, lighting, and communication drawings.

Table 1.7-7 is a supplemental tabulation of system drawings and system designators for systems not included in the reference ABWR DCD. The information includes the applicable drawing legends and notes.

1.7.1 Piping and Instrumentation and Process Flow Drawings

STD DEP T1 2.14-1 (Table 1.7-1)

Table 1.7-1 contains a list of system piping and instrumentation diagrams (P&ID) and process flow diagrams (PFD) provided in Tier 2. Figure 1.7-1, sheets 1 and 2 define the symbols used on these drawings.

1.7.6 COL License Information

1.7.6.1 P&ID Pipe Schedules

The following standard supplement addresses COL License Information Item 1.2.

The minimum pipe schedule for ANSI nominal pipe sizes are identified below for any individual piping system shown on a Piping and Instrumentation Diagram (P&ID).

	ASME Section III	ASME B31.1
Carbon Steel and Alloy Pipe		
50mm (2 inch) and smaller	Schedule 80	Schedule 80
65mm (2-1/2 inch) and larger	Standard Weight	Standard Weight
Stainless Steel Pipe		
50mm (2 inch) and smaller	Schedule 40S	Schedule 40S
65mm (2-1/2 inch) through 150mm (6 inch)	Schedule 10S	Schedule 10S
200mm (8 inch) through 300mm (12 inch)	Schedule 40S	Schedule 40S
350mm (14 inch) and larger	10mm (0.375 inch)	10mm (0.375 inch)

Table 1.7-1 Piping and Instrumentation and Process Flow Diagrams

Tier 2 Fig. No.	Title	Type
~~6.2-40~~	~~Flammability Control System~~	~~P&ID~~

Table 1.7-5: Drawing Standards

1.4.5 Instrument Numbering	
601 to 999	*Instruments installed in main control room, including instrument functions performed by ~~multiplexer~~* data communication*. The instrument number assigned to the latter is prefixed by the letter Z.*
1.4.6 Numbering Within a Loop	
Instruments or instrument functions performed by ~~the multiplexer~~ data communication *in the same loop have the same last two numbers. Instruments located in the main control room that receive signals from locally installed instruments in the same loop are numbered by adding 600 to the local or local panel-mounted instrument number in the loop.*	

Table 1.7-6 Additional or Updated I&C and Electrical Drawings

Figure No.	Title	Type
5.2-8	Leak Detection and Isolation System	IED
7.2-9	Reactor Protection System	IED
7.2-10	Reactor Protection System	IBD
7.3-1	High Pressure Core Flooder System	IBD
7.3-2	Nuclear Boiler System	IBD
7.3-3	Reactor Core Isolation Cooling System	IBD
7.3-4	Residual Heat Removal System	IBD
7.3-5	Leak Detection and Isolation System	IBD
7.4-2	Remote Shutdown System	IED
7.4-3	Remote Shutdown System	IBD
7.6-1	Neutron Monitoring System	IED
7.6-2	Neutron Monitoring System	IBD
7.6-5	Process Radiation Monitoring System	IED
7.6-11	Suppression Pool Temperature Monitoring System	IED
7.6-12	Suppression Pool Temperature Monitoring System	IBD
7.7-2	Rod Control and Information System	IED
7.7-3	Rod Control and Information System	IBD
7.7-4	Control Rod Drive System	IBD
7.7-5	Recirculation Flow Control System	IED
7.7-7	Recirculation Flow Control System	IBD
7.7-8	Feedwater Control System	IED
7.7-9	Feedwater Control System	IBD
7.7-12	Steam Bypass and Pressure Control System	IED
7.7-13	Steam Bypass and Pressure Control System	IBD
8.2-1	Power Distribution System Routing Diagram	SLD
8.2-2	345 kV General Arrangement	SLD
8.2-3	345 kV Switchyard Single Line Diagram	SLD
8.2-4	345 kV Switchyard Arrangement	SLD
8.2-5	345 kV Transmission Configuration Map	SLD
8.2-6	Topographic Map of 345 kV Transmission Line (Blessing SE Line)	SLD
8.3-1	Electrical Power Distribution System	SLD
8.3-2	Instrument and Control Power Supply System	SLD

Table 1.7-7 System Drawings Not Included in the ABWR DCD

Figure No.	Title	Type
9.2-9	Potable Water System	P&ID
9.3-10	Breathing Air System	P&ID
9.3-11	Radioactive Drain Transfer System	P&ID
9.3-12	Non-Radioactive Drainage System	P&ID
11.2-2	Radwaste System	P&ID