

PROPOSED REVISION 15
AP1000 DESIGN CONTROL DOCUMENT

Tier 1 Tables 2.2.3-1 through 2.2.3-4 and Table 2.2.3-6; and Figure 2.2.3-1
Passive Core Cooling System

Description of Change

Provide precise references for ITAAC items in the tables. Correct Tier 1 Figure 2.2.3-1 for the passive core cooling system.

Technical Justification

The reference change in Table 2.2.3-4 provides direct references to the relevant material.

The figure change adds orifice numbers.

Items were added and corrected in Table 2.2.3-1, Table 2.2.3-2, Table 2.2.3-3, and Table 2.2.3-6 to accurately reflect design.

Regulatory Consequence

There is no change to design functions. There is not change to analysis or analysis methodology. There is no effect on the FSER. However, these corrections do represent changes in Tier 1 material.

Change Markup

Tier 1 Table 2.2.3-1 Revise the seventh entry on the third page of Tier 1 Table 2.2.3-1 as shown on the next page.

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Table 2.2.3-1 (cont.)									
Equipment Name	Tag No.	ASME Code Section III	Seismic Cat. I	Remotely Operated Valve	Class 1E/ Qual. Harsh Envir.	Safety- Related Display	Control PMS/ DAS	Active Function	Loss of Motive Power Position
Nitrogen Supply Containment Isolation Valve	PXS-PL-V042	Yes	Yes	Yes	Yes/ No s	Yes (position)	Yes/No	Transfer Closed	Close

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Tier 1 Table 2.2.3-2 Revise the first, fourth , fifth, and seventh entries of Tier 1 Table 2.2.3-2 as follows:

Table 2.2.3-2				
Line Name	Line Number	ASME Code Section III	Leak Before Break	Functional Capability Required
PRHR HX inlet line from hot leg and outlet line to steam generator channel head	RCS-L134, PXS-L102, PXS-L103, PXS-L104A, PXS-L104B, PXS-L105, RCS-L114 , RCS-L113	Yes	Yes	Yes
	PXS-L107	Yes	Yes	No
Accumulator A discharge line to DVI line A	PXS-L025A, PXS-L027A , PXS-L029A	Yes Yes	Yes No	Yes Yes
Accumulator B discharge line to DVI line B	PXS-L025B PXS-L027B , PXS-L029B	Yes Yes	Yes No	Yes Yes
IRWST injection line B to DVI line B	PXS-L125B, PXS-L127B	Yes	Yes	Yes
	PXS-L123B, PXS-L124B, PXS-L118B, PXS-L117B, PXS-L116B, PXS-L114B, PXS-L112B, <u>PXS-L120</u>	Yes	No	Yes

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Tier 1 Table 2.2.3-3 Add containment recirculation valves to Tier 1 Table 2.2.3-3 as follows:

Table 2.2.3-3			
Equipment	Tag No.	Display	Control Function
PRHR HX Control Valve (Position)	PXS-PL-V108A	Yes (Position)	-
PRHR HX Control Valve (Position)	PXS-PL-V108B	Yes (Position)	-
Containment Recirculation A Isolation Valve	PXS-PL-V017A	Yes (Position)	
Containment Recirculation B Isolation Valve	PXS-PL-V017B	Yes (Position)	
Containment Recirculation A Isolation Valve (Position)	PXS-PL-V118A	Yes (Position)	-
Containment Recirculation B Isolation Valve (Position)	PXS-PL-V118B	Yes (Position)	-

Tier 1 Table 2.2.3-4 Revise Tier 1 Table 2.2.3-4 items 7.c) and 8.a) as follows:

Table 2.2.3-4 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria		
Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
7.c) Separation is provided between PXS Class 1E divisions, and between Class 1E divisions and non-Class 1E cable.	See Tier 1 Material, Table 3.3-6, item 7.d, Section 3.3, Nuclear Island Buildings.	See Tier 1 Material, Table 3.3-6, item 7.d, Section 3.3, Nuclear Island Buildings.
8.a) The PXS provides containment isolation of the PXS lines penetrating the containment.	See Tier 1 Material, Table 2.2.1-3, items 1 and 7, subsection 2.2.1, Containment System.	See Tier 1 Material, Table 2.2.1-3, items 1 and 7, subsection 2.2.1, Containment System.

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Tier 1 Table 2.2.3-6 Revise Tier 1 Table 2.2.3-6 as follows:

Table 2.2.3-6		
Equipment	Tag No.	Function
Containment Air Sample Containment Isolation Valve IRC	PSS-PL-V001A/B, 010A/B8	Transfer open
Containment Pressure Sensors	PCS-012, 013, 014005, 006, 007, 008	Sense pressure
RCS Wide Range Pressure Sensors	RCS-19140A, B, C, D	Sense pressure
SG1 Wide Range Level Sensors	SGS-011, 012, 015, 016013, 014	Sense level
SG2 Wide Range Level Sensors	SGS-013, 014016, 017, 018, 019	Sense level
Hydrogen Monitors	VLS-001, 002, 003	Sense concentration
Hydrogen Igniteors	VLS-EH-01 through 64	Ignite hydrogen
Containment Electrical Penetrations	VUS-JY-EP01, P02, P06, P09, P10, P11, P12, P13, P14, P15, P16, P17, 18, P21, P22, P23, P24, 25, P26, P27, P28, P29, P30, P31, P32	Maintain containment boundary

