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Subject: Administrative Changes to Tier 1 of AP1000 Design Control Document

Administrative changes to the Tier 1 AP1000 Design Control Document related to ITAACs that were found during Westinghouse and NRC review of ITAACs. The administrative changes are:

- Correcting an Equipment name in the Tier 1 Table 2.2.2-1.
- Fixing typos in Tier 1 Tables 2.1.2-1, 2.1.2-4, 2.3.6-4 and 2.3.10-1.
- Deleting two null set ITAACs.

There was one equipment name that has been corrected to match the description in Tier 2 Table 3.2-3. In Tier 1 Table 2.2.2-1, PCS Recirculation Loop Isolation Valve has been corrected to PCS Recirculation Return Isolation Valve.

In Tier 1 Table 2.1.2-1 the dashes that are reserved for no info were removed from the Pressurizer information related to Class 1E Qual. for Harsh Envir. and Control PMS/DAS. In Tier 1 Table 2.1.2-4 the Inspections, Tests, Analyses column references components when the ITAAC is associated with Piping. In Tier 1 Table 2.3.6-4, ITAAC 12a.iii references Table 2.1.2-1 when the reference should be to Table 2.3.6-1.

Two sets of ITAACs became null sets with the issuance of DCD Rev. 17. ITAACs 12a.i, 12a.ii, and 12a.iii from DCD Tier 1 Table 2.2.3-4 and ITAAC 2a.i, 2a.ii, and 2a.iii from Tier 1 Table 2.3.11-2 are now null sets based on changes to the referenced tables from each of those ITAACs.

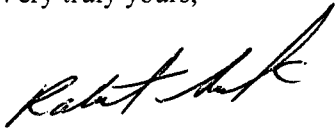
ITAACs 12a.i, 12a.ii, and 12a.iii of Tier 1 Table 2.2.3-4 is for the active safety-related function of the motor-operated valves to change position as indicated in Tier 1 Table 2.2.3-1 of the DCD. Tier 1 Table 2.2.3-1 was changed in Revision 17 of the DCD to remove the safety related function of the Motor Operated Valves. During that change the ITAACs Tier 1 Section 2.2.3 design description and Tier 1 Table 2.2.3-4 needs to be updated to reflect that same change. Currently the ITAACs would be null because there are no motor operated valves in Tier 1 Table 2.2.3-1 that perform an active safety-related function.

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The second null set of ITAACs, 2a.i, 2a.ii, and 2a.iii in Tier 1 Table 2.3.11-2, was created due to an editorial change to correct the classification of the carbon delay beds in the gaseous radwaste system (WGS). The seismic classification of the carbon delay beds was non-seismic in DCD Rev. 15 Tier 2 Table 3.2-3 and was never changed. To keep the classification consistent between Tier 1 Table 2.3.11-1 and Tier 2 Table 3.2-3, Tier 1 Table 2.3.11-1 was corrected in DCD Rev. 17. During that change the ITAACs in Tier 1 Section 2.3.11 design description and Tier 1 Table 2.3.11-2 needs to be updated to reflect that same change. Currently the ITAACs would be null because there are no seismic category 1 equipment identified in Tier 1 Table 2.3.11-1.

Please let me know if you have any questions or need anything else. Thank you.

Very truly yours,



Robert Sisk, Manager  
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## 2.1.2 Reactor Coolant System

Table 2.1.2-1									
Equipment Name	Tag No.	ASME Code Section III	Seismic Cat. I	Remotely Operated Valve	Class 1E/Qual. for Harsh Envir.	Safety-Related Display	Control PMS/DAS	Active Function	Loss of Motive Power Position
Steam Generator 1	RCS-MB-01	Yes	Yes	-	-/-	-	-	-	-
Steam Generator 2	RCS-MB-02	Yes	Yes	-	-/-	-	-	-	-
RCP 1A	RCS-MP-01A	Yes	Yes	-	No/No	No	Yes/Yes (pump trip)	No	-
RCP 1B	RCS-MP-01B	Yes	Yes	-	No/No	No	Yes/Yes (pump trip)	No	-
RCP 2A	RCS-MP-02A	Yes	Yes	-	No/No	No	Yes/Yes (pump trip)	No	-
RCP 2B	RCS-MP-02B	Yes	Yes	-	No/No	No	Yes/Yes (pump trip)	No	-
Pressurizer	RCS-MV-02	Yes	Yes	-	No/No (heaters) +	-	Yes/No (heater trip) +	No	-
Automatic Depressurization System (ADS) Sparger A	PXS-MW-01A	Yes	Yes	-	-/-	-	-/-	-	-
ADS Sparger B	PXS-MW-01B	Yes	Yes	-	-/-	-	-/-	-	-

Note: Dash (-) indicates not applicable.

<b>Table 2.1.2-4</b> <b>Inspections, Tests, Analyses, and Acceptance Criteria</b>		
<b>Design Commitment</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
1. The functional arrangement of the RCS is as described in the Design Description of this Section 2.1.2.	Inspection of the as-built system will be performed.	The as-built RCS conforms with the functional arrangement described in the Design Description of this Section 2.1.2.
2.a) The components identified in Table 2.1.2-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.	Inspection will be conducted of the as-built components as documented in the ASME design reports.	The ASME Code Section III design reports exist for the as-built components identified in Table 2.1.2-1 as ASME Code Section III.
2.b) The piping identified in Table 2.1.2-2 as ASME Code Section III is designed and constructed in accordance with ASME Code Section III requirements.	Inspection will be conducted of the as-built <del>components</del> piping as documented in the ASME design reports.	The ASME code Section III design reports exist for the as-built piping identified in Table 2.1.2-2 as ASME Code Section III.

*[Rest of Table 2.1.2-4 is unchanged]*

## 2.2.1 Passive Containment Cooling System

Table 2.2.2-1									
Component Name	Tag No.	ASME Code Section III	Seismic Cat. I	Remotely Operated Valve	Class 1E/Qual. for Harsh Envir.	Safety-Related Display	Control PMS/DAS	Active Function	Loss of Motive Power Position
PCCWST	PCS-MT-01	No	Yes	-	-	-	-	-	-
Water Distribution Bucket	PCS-MT-03	No	Yes	-	-	-	-	-	-
Water Distribution Wiers	PCS-MT-04	No	Yes	-	-	-	-	-	-
PCCWST Isolation Valve	PCS-PL-V001A	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/Yes	Transfer Open	Open
PCCWST Isolation Valve	PCS-PL-V001B	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/Yes	Transfer Open	Open
PCCWST Isolation Valve	PCS-PL-V001C	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/Yes	Transfer Open	As Is
PCCWST Isolation Block MOV	PCS-PL-V002A	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/No	Transfer Open	As Is
PCCWST Isolation Block MOV	PCS-PL-V002B	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/No	Transfer Open	As Is
PCCWST Isolation Block MOV	PCS-PL-V002C	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/No	Transfer Open	As Is
PCS Recirculation Loop Return Isolation Valve	PCS-PL-V023	Yes	Yes	-	-/No	No	-	Transfer Close	-
PCCWST Supply to Fire Protection System Isolation Valve	PCS-PL-V005	Yes	Yes	-	-/No	No	-	Transfer Close	-

Note: Dash (-) indicates not applicable.

### 2.2.3 Passive Core Cooling System

#### Design Description

*[Other parts of Design Description unchanged]*

12. a) The ~~motor-operated and~~ check valves identified in Table 2.2.3-1 perform an active safety-related function to change position as indicated in the table.

Table 2.2.3-4 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria		
Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
12.a) The <del>motor-operated and</del> check valves identified in Table 2.2.3-1 perform an active safety-related function to change position as indicated in the table.	i) Tests <del>or type tests of</del> motor-operated valves will be performed <del>that demonstrate the capability of the valve to operate under its design conditions.</del> Deleted.	i) A test report exists and concludes that each <del>motor-operated valve</del> changes position as indicated in Table 2.2.3-1 under design conditions. Deleted.
	ii) <del>Inspection will be performed for the existence of a report verifying that the as-installed motor-operated valves are bounded by the tests or type tests.</del> Deleted.	ii) <del>A report exists and concludes that the as-installed motor-operated valves are bounded by the tests or type tests.</del> Deleted.
	iii) Tests of the as-installed <del>motor-operated valves will be performed under preoperational flow, differential pressure, and temperature conditions.</del> Deleted.	iii) Each <del>motor-operated valve</del> changes position as indicated in Table 2.2.3-1 under preoperational test conditions. Deleted.
	iv) Exercise testing of the check valves with active safety functions identified in Table 2.2.3-1 will be performed under preoperational test pressure, temperature and fluid flow conditions.	iv) Each check valve changes position as indicated in Table 2.2.3-1.

*[Rest of Table 2.2.3-4 is unchanged]*

## 2.3.6 Normal Residual Heat Removal System

<b>Table 2.3.6-4 (cont.)</b> <b>Inspections, Tests, Analyses, and Acceptance Criteria</b>		
<b>Design Commitment</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
12.a) The motor-operated and check valves identified in Table 2.3.6-1 perform an active safety-related function to change position as indicated in the table.	<p>i) Tests or type tests of motor-operated valves will be performed that demonstrate the capability of the valve to operate under its design conditions.</p> <p>ii) Inspection will be performed for the existence of a report verifying that the as-installed motor-operated valves are bounded by the tested conditions.</p> <p>iii) Tests of the as-installed motor-operated valves will be performed under preoperational flow, differential pressure and temperature conditions.</p> <p>iv) Exercise testing of the check valves active safety functions identified in Table 2.3.6-1 will be performed under preoperational test pressure, temperature and fluid flow conditions.</p>	<p>i) A test report exists and concludes that each motor-operated valve changes position as indicated in Table 2.3.6-1 under design conditions.</p> <p>ii) A report exists and concludes that the as-installed motor-operated valves are bounded by the tested conditions.</p> <p>iii) Each motor-operated valve changes position as indicated in Table 2.3.6-1 under preoperational test conditions.</p> <p>iv) Each check valve changes position as indicated in Table 2.3.6-1.</p>

*[Rest of Table 2.3.6-4 is unchanged]*

### **2.3.11 Gaseous Radwaste System**

#### **Design Description**

The gaseous radwaste system (WGS) receives, processes, and discharges the radioactive waste gases received within acceptable off-site release limits during normal modes of plant operation including power generation, shutdown and refueling.

The WGS is as shown in Figure 2.3.11-1 and the component locations of the WGS are as shown in Table 2.3.11-3.

1. The functional arrangement of the WGS is as described in the Design Description of this Section 2.3.11.
- ~~2. The seismic Category I equipment identified in Table 2.3.11-1 can withstand seismic design basis loads without loss of its structural integrity function. Deleted.~~
3. The WGS provides the nonsafety-related functions of:
  - a) Processing radioactive gases prior to discharge.
  - b) Controlling the releases of radioactive materials in gaseous effluents.
  - c) The WGS is purged with nitrogen on indication of high oxygen levels in the system.

#### **Inspections, Tests, Analyses, and Acceptance Criteria**

Table 2.3.11-2 specifies the inspections, tests, analyses, and associated acceptance criteria for the WGS.



<p align="center"><b>Table 2.3.11-2</b> <b>Inspections, Tests, Analyses, and Acceptance Criteria</b></p>		
<b>Design Commitment</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
1. The functional arrangement of the WGS is as described in the Design Description of this Section 2.3.11.	Inspection of the as-built system will be performed.	The as-built WGS conforms with the functional arrangement as described in the Design Description of this Section 2.3.11.
2. The seismic Category I equipment identified in Table 2.3.11-1 can withstand seismic design basis loads without loss of its structural integrity functionDeleted.	<p>i) Inspection will be performed to verify that the seismic Category I equipment identified in Table 2.3.11-1 is located on the Nuclear IslandDeleted.</p> <p>ii) Type tests, analyses, or a combination of type tests and analyses of seismic Category I equipment will be performedDeleted.</p> <p>iii) Inspection will be performed for the existence of a report verifying that the as-installed equipment including anchorage is seismically bounded by the tested or analyzed conditionsDeleted.</p>	<p>i) The seismic Category I equipment identified in Table 2.3.11-1 is located on the Nuclear IslandDeleted.</p> <p>ii) A report exists and concludes that the seismic Category I equipment can withstand seismic design basis loads without loss of its safety functionDeleted.</p> <p>iii) A report exists and concludes that the as-installed equipment including anchorage is seismically bounded by the tested or analyzed conditionsDeleted.</p>

*[Rest of Table 2.3.11-2 is unchanged]*