Tier 1 Subsection 2.2.2; Tables 2.2.2-1, 2.2.2-2, and 2.2.2-3; and Figure 2.2.2-1

Passive Containment Cooling System

Description of Change

Provide clarifications and corrections to Tier 1 subsection 2.2.2.

Technical Justification

1. Standardize the descriptive terms for "components" versus "equipment" and for "pipes" versus "lines" versus "piping," throughout the ITAAC to be component(s) and pipeline(s), respectively.

2. Revise the text throughout to exclude the use of the awkward phrase, e.g., "The PCS provides for the delivery of water…" to simply, "The PCS delivers water…" in order to more clearly state the passive containment cooling system (PCS) functions.

3. In Table 2.2.2-1, show valves PCS-PL-V001A and B to have a safety-related (valve position) display. These valves are normally closed, but must open to initiate PCS water drain down. These valves can also fail to the open position, and therefore, the valve position indication would provide the operator with the only unambiguous signal that indicates which motor-operated valve to close to terminate inadvertent drain down of the PCCWST.

4. In Table 2.2.2-1, replace water makeup stop check valve PCS-PL-V014A with water makeup isolation valve PCS-PL-044, in order to agree with the AP1000 P&ID, APP-PCS-M6-001, Revision 0. This valve is a normally closed, manual valve.

5. Add pipeline PCS-PL-005 to Table 2.2.2-2. This is the third PCCWST discharge line with a diverse, motor-operated, isolation valve.

6. Table 2.2.2-3, item 7.a), i; revise the Inspections, Tests, and Analyses entry and the Acceptance Criteria entry to state that "each one of three parallel paths" is to be tested, and meets the stated criteria.

7. Table 2.2.2-3, item 7.a), i; revise the Acceptance Criteria flow rates to be the flow rates used in the safety analysis, namely: 469.1 gpm, 226.6 gpm, 176.3 gpm, and 144.2 gpm.

8. Table 2.2.2-3, item 7.a), ii; revise the Acceptance Criteria wording to more clearly state that the flow rate at 72 hours is to be greater than or equal to 100.7 gpm.

9. Table 2.2.2-3, item 7.b), I; revise the Inspections, Tests, and Analyses entry and the Acceptance Criteria entry to state that "each one of three parallel paths" is to be tested, and meets the stated criteria.

10. Table 2.2.2-3, item 7.b), I; revise the Acceptance Criteria to include the containment surface wetted areas used in the safety analysis, namely: 90 percent, 72.9 percent, and 59.6 percent.

11. Table 2.2.2-3, item 11.a); revise the Design Commitment to delete reference to check valves. No check valves are used in the AP1000 PCS for safety-related functions (see 4, above).

12. Table 2.2.2-3, item 11.a), iv; delete the Inspections, Tests, and Analyses entry and the Acceptance Criteria entry. No check valves are used in the AP1000 PCS for safety-related functions (see 4 and 11, above).

13. Table 2.2.2-3, item 11.a), iii; revise the Inspections, Tests, and Analyses entry and the Acceptance Criteria entry to more clearly state that the motor-operated valve capability shall bound the test conditions.

14. Modify Figure 2.2.2-1 to illustrate that the third PCS water delivery line connects to only one of the two delivery header lines that terminate in the water distribution bucket. This change agrees with the AP1000 APP-PCS-M6-001, Revision 0.

15. Modify Figure 2.2.2-1 to revise valve number PCS-PL-014A to PCS-PL-044. This change agrees with the AP1000 APP-PCS-M6-001, Revision 0 (see 4, above).

Regulatory Consequence

These changes are clarifications and corrections to test guidance, and they do not change the design function. These changes have no adverse effect on analysis or analysis methods.

Change Markup

Revise the "Design Description" in Tier 1 subsection 2.2.2 as follows:

2.2.2 Passive Containment Cooling System

Design Description

The passive containment cooling system (PCS) ~~provides~~ removes heat ~~removal~~ from the containment during design basis events.

The PCS is as shown in Figure 2.2.2-1 and the component locations of the PCS are as shown in Table 2.2.2-4.

1. The functional arrangement of the PCS is as described in the Design Description of this Section 2.2.2.

2. a) The components identified in Table 2.2.2-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.

   b) The pipelines~~ing~~ identified in Table 2.2.2-2 as ASME Code Section III ~~is~~ are designed and constructed in accordance with ASME Code Section III requirements.

3. a) Pressure boundary welds in components identified in Table 2.2.2-1 as ASME Code Section III meet ASME Code Section III requirements.

   b) Pressure boundary welds in the pipelines~~ing~~ identified in Table 2.2.2-2 as ASME Code Section III meet ASME Code Section III requirements.

4. a) The components identified in Table 2.2.2-1 as ASME Code Section III retain their pressure boundary integrity at their design pressure.

b) The pipelinesing identified in Table 2.2.2-2 as ASME Code Section III retains their its pressure boundary integrity at itstheir design pressure.

5. a) The seismic Category I equipment components identified in Table 2.2.2-1 can withstand seismic design basis loads without loss of safety function.

   b) Each of the pipelines identified in Table 2.2.2-2 for which functional capability is required is designed to withstand combined normal and seismic design basis loads without a loss of its functional capability.

   c) The passive containment cooling ancillary water storage tank (PCCAWST) can withstand a seismic event.

6. a) The Class 1E equipment components identified in Table 2.2.2-1 as being qualified for a harsh environment can withstand the environmental conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.

   b) The Class 1E components identified in Table 2.2.2-1 are powered from their respective Class 1E division.

   c) Separation is provided between PCS Class 1E divisions, and between Class 1E divisions and non-Class 1E cable.

7. The PCS provides performs the following safety-related functions:

   a) The PCS provides the deliversy of water from the PCCWST to the outside, top of the containment vessel.

   b) The PCS provides wetsting of the outside surface of the containment vessel., and tThe inside and the outside of the containment vessel above the operating deck isare coated with an inorganic zinc material.

   c) The PCS provides air flow over the outside of the containment vessel by a natural circulation air flow path from the air inlets to the air discharge structure.

   d) The PCS provides drainsage of the excess water from the outside of the containment vessel through the two upper annulus drains.

   e) The PCS provides a flow path for long-term water makeup to the passive containment cooling water storage tank (PCCWST).

   f) The PCS provides a flow path for for long-term water makeup from the PCCWST to the spent fuel pool.

8. The PCS performsrovides the following nonsafety-related functions:

   a) The PCS provides a PCCAWST contains an initial inventory of cooling water sufficient for PCS delivery containment fromcooling from hour 72 through day 7.

b) The PCS ~~provides the~~ deliver~~sy of~~ water from the PCCAWST to the PCCWST and spent fuel pool simultaneously.

c) The PCCWSTS ~~provides~~ includes a water inventory for the fire protection system.

9. Safety-related displays identified in Table 2.2.2-1 can be retrieved in the main control room (MCR).

10. a) Controls exist in the MCR to cause the remotely operated valves identified in Table 2.2.2-1 to perform active functions.

b) The valves identified in Table 2.2.2-1 as having protection and safety monitoring system (PMS) control perform an active safety function after receiving a signal from the PMS.

c) The valves identified in Table 2.2.2-1 as having diverse actuation system (DAS) control perform an active safety function after receiving a signal from the DAS.

11. a) The motor-operated ~~and check~~ valves identified in Table 2.2.2-1 perform an active safety-related function to change position as indicated in the table.

b) After loss of motive power, the remotely operated valves identified in Table 2.2.2-1 assume the indicated loss of motive power position.

Tier 1 Table 2.2.2-1 Revise Tier 1 Table 2.2.2-1 as shown on the following pages.

Table 2.2.2-1									
~~Equipment~~ 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 ~~Collection~~ Distribution Wiers~~Troughs~~	PCS-MT-04	No	Yes	-	-	-	-	-	-
PCCWST Isolation Valve	PCS-PL-V001A	Yes	Yes	Yes	Yes/No	~~No~~Yes (Valve Position)	Yes/Yes	Transfer Open	Open
PCCWST Isolation Valve	PCS-PL-V001B	Yes	Yes	Yes	Yes/No	~~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 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.

Table 2.2.2-1 (cont.)

~~Equipment~~ 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
PCS Makeup to SFS Isolation Valve	PCS-PL-V009	Yes	Yes	-	- /No	No	-	Transfer Open/ Transfer Close	-
Water Makeup Isolation ~~Stop Check~~ Valve	PCS-PL-V04~~1~~4~~A~~	Yes	Yes	-	-/No	No	-	Transfer Open	-
PCS Water Delivery Flow Sensor	PCS-001	No	Yes	-	Yes/No	Yes	-	-	-
PCS Water Delivery Flow Sensor	PCS-002	No	Yes	-	Yes/No	Yes	-	-	-
PCS Water Delivery Flow Sensor	PCS-003	No	Yes	-	Yes/No	Yes	-	-	-
PCS Water Delivery Flow Sensor	PCS-004	No	Yes	-	Yes/No	Yes	-	-	-
Containment Pressure Sensor	PCS-005	No	Yes	-	Yes/Yes	Yes	-	-	-
Containment Pressure Sensor	PCS-006	No	Yes	-	Yes/Yes	Yes	-	-	-
Containment Pressure Sensor	PCS-007	No	Yes	-	Yes/Yes	Yes	-	-	-
Containment Pressure Sensor	PCS-008	No	Yes	-	Yes/Yes	Yes	-	-	-
PCCWST Water Level Sensor	PCS-010	No	Yes	-	Yes/No	Yes	-	-	-
PCCWST Water Level Sensor	PCS-011	No	Yes	-	Yes/No	Yes	-	-	-

Table 2.2.2-1 (cont.)									
~~Equipment~~ 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
High-range Containment Pressure Sensor	PCS-012	No	Yes	-	Yes/Yes	Yes	-	-	-
High-range Containment Pressure Sensor	PCS-013	No	Yes	-	Yes/Yes	Yes	-	-	-
High-range Containment Pressure Sensor	PCS-014	No	Yes	-	Yes/Yes	Yes	-	-	-

Note: Dash (-) indicates not applicable.

Tier 1 Table 2.2.2-2 Revise Tier 1 Table 2.2.2-2 as follows:

Table 2.2.2-2			
Pipe~~L~~line Name	**Line Number**	**ASME Code Section III**	**Functional Capability Required**
PCCWST Discharge Lines	PCS-PL-L001A/B/C/D	Yes	Yes
PCCWST Discharge Cross-connect Line	PCS-PL-L002	Yes	Yes
PCCWST Discharge Line	PCS-PL-L005	Yes	Yes
PCCWST Discharge Header Lines	PCS-PL-L003A, L003B	Yes	Yes
Post-72-hour PCCWST Makeup Supply Line Connections	PCS-PL-L004 PCS-PL-L051	Yes	Yes
Post-72-hour PCCWST Makeup Supply Lines	PCS-PL-L029 PCS-PL-L054	Yes	Yes
Post-72-hour SFS Makeup Lines	PCS-PL-L017 PCS-PL-L049	Yes	Yes

Tier 1 Table 2.2.2-3 Revise Tier 1 Table 2.2.2-3 as follows:

Table 2.2.2-3
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1. The functional arrangement of the PCS is as described in the Design Description of this Section 2.2.2.	Inspection of the as-built system will be performed.	The as-built PCS conforms ~~with~~to the functional arrangement as described in the Design Description of this Section 2.2.2.
2.a) The components identified in Table 2.2.2-1 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 2.2.2-1 as ASME Code Section III.
2.b) The pipelines~~ing~~ identified in Table 2.2.2-2 as ASME Code Section III ~~is~~are designed and constructed in accordance with ASME Code Section III requirements.	Inspection will be conducted of the as-built piping as documented in the ASME design reports.	The ASME Code Section III design reports exist for the as-built piping identified in Table 2.2.2-2 as ASME Code Section III.
3.a) Pressure boundary welds in components identified in Table 2.2.2-1 as ASME Code Section III meet ASME Code Section III requirements.	Inspection of the as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.	A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.
3.b) Pressure boundary welds in the pipelines~~ing~~ identified in Table 2.2.2-2 as ASME Code Section III meet ASME Code Section III requirements.	Inspection of the as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.	A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.
4.a) The components identified in Table 2.2.2-1 as ASME Code Section III retain their pressure boundary integrity at their design pressure.	A hydrostatic test will be performed on the components required by the ASME Code Section III to be hydrostatically tested.	A report exists and concludes that the results of the hydrostatic test of the components identified in Table 2.2.2-1 as ASME Code Section III conform with the requirements of the ASME Code Section III.

Table 2.2.2-3 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
4.b) The pipelines~~ing~~ identified in Table 2.2.2-2 as ASME Code Section III retain~~s its~~ their pressure boundary integrity at ~~its~~their design pressure.	A hydrostatic test will be performed on the piping required by the ASME Code Section III to be hydrostatically tested.	A report exists and concludes that the results of the hydrostatic test of the piping identified in Table 2.2.2-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.
5.a) The seismic Category I ~~equipment~~ components identified in Table 2.2.2-1 can withstand seismic design basis loads without loss of safety function.	i) Inspection will be performed to verify that the seismic Category I ~~equipment~~ components and valves identified in Table 2.2.2-1 are located on the Nuclear Island.	i) The seismic Category I ~~equipment~~ components identified in Table 2.2.2-1 ~~is~~are located on the Nuclear Island.
	ii) Type tests, analyses, or a combination of type tests and analyses of seismic Category I components~~equipment~~ will be performed.	ii) A report exists and concludes that the seismic Category I components~~equipment~~ can withstand seismic design basis loads without loss of safety function.
	iii) Inspection will be performed for the existence of a report verifying that the as-installed components~~equipment~~ including anchorage ~~is~~are seismically bounded by the tested or analyzed conditions.	iii) The report exists and concludes that the as-installed components~~equipment~~ including anchorage ~~is~~are seismically bounded by the tested or analyzed conditions.
5.b) Each of the ~~lines~~ pipelines identified in Table 2.2.2-2 for which functional capability is required is designed to withstand combined normal and seismic design basis loads without a loss of its functional capability.	Inspection will be performed for the existence of a report concluding that the as-built pipelines ~~ing~~ meet~~s~~ the requirements for functional capability.	A report exists and concludes that each of the as-built ~~lines~~ pipelines identified in Table 2.2.2-2 for which functional capability is required meets the requirements for functional capability.
5.c) The PCCAWST can withstand a seismic event.	Inspection will be performed for the existence of a report verifying that the as-installed PCCAWST and its anchorage are designed using seismic Category II methods and criteria.	A report exists and concludes that the as-installed PCCAWST and its anchorage are designed using seismic Category II methods and criteria.

Table 2.2.2-3 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
6.a) The Class 1E equipment components identified in Table 2.2.2-1 as being qualified for a harsh environment can withstand the environmental conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.	i) Type tests or a combination of type tests and analyses will be performed on Class 1E componentsequipment located in a harsh environment.	i) A report exists and concludes that the Class 1E componentsequipment identified in Table 2.2.2-1 as being qualified for a harsh environment can withstand the environmental conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.
	ii) Inspection will be performed of the as-installed Class 1E equipmentcomponents and the associated wiring, cables, and terminations located in a harsh environment.	ii) A report exists and concludes that the as-installed Class 1E equipment components and the associated wiring, cables, and terminations identified in Table 2.2.2-1 as being qualified for a harsh environment are bounded by type tests, analyses, or a combination of type tests and analyses.
6.b) The Class 1E components identified in Table 2.2.2-1 are powered from their respective Class 1E division.	Testing will be performed by providing a simulated test signal in each Class 1E division.	A simulated test signal exists at the Class 1E equipment components identified in Table 2.2.2-1 when the assigned Class 1E division is provided the test signal.
6.c) Separation is provided between PCS 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.

Table 2.2.2-3 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
7.a) The PCS provides the deliversy of water from the PCCWST to the outside, top of the containment vessel.	i) Testing will be performed to measure the PCCWST delivery rate from two each one of the three parallel flow paths.	i) When tested two each one of the three flow paths delivers water at greater than or equal to: – 46971.1 gpm at a PCCWST water level of 27.4 ft + 0.2, -0.0 ft above the tank floor – 226.638.4 gpm when the PCCWST water level uncovers the first (i.e. tallest) standpipe – 176.384.0 gpm when the PCCWST water level uncovers the second tallest standpipe – 144.251.4 gpm when the PCCWST water level uncovers the third tallest standpipe
	ii) Testing and or analysis will be performed to demonstrate the PCCWST inventory provides 72 hours of adequate water flow.cooling.	ii) When tested and/or analyzed with all flow paths delivering and an initial water level at 27.4 + 0.2, - 0.00 ft, the PCCWST water inventory provides greater than or equal to 72 hours of flow, and the with a flow rate rate at 72 hours is greater than or equal to 100.7 gpm.
	iii) Inspection will be performed to determine the PCCWST standpipes elevations.	iii) The elevations of the standpipes above the tank floor are: – 16.8 ft ± 0.2 ft – 20.3 ft ± 0.2 ft – 24.1 ft ± 0.2 ft

Table 2.2.2-3 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
7.b) The PCS ~~provides~~ wets~~ting of~~ the outside surface of the containment vessel. ~~and t~~The inside and the outside of the containment vessel above the operating deck ~~is~~are coated with an inorganic zinc material.	i) Testing will be performed to measure the outside wetted surface of the containment vessel ~~from~~with ~~two~~ one of the three parallel flow paths delivering water to the top of the containment vessel.	i) A report exists and concludes that when the water in the PCCWST uncovers the standpipes at the following levels, the water deliver~~y~~ed by one of the three parallel flow paths to the containment shell provides coverage measured at the spring line that is equal to or greater than the ~~corresponding~~ stated coverages. ~~used to calculate peak containment pressure in the safety analysis.~~ - 24.1 ± 0.2 ft above the tank floor; at least 90% of the perimeter is wetted. - 20.3 ± 0.2 ft above the tank floor; at least 72.9% of the perimeter is wetted. - 16.8 ± 0.2 ft above the tank floor; at least 59.6% of the perimeter is wetted.
	ii) Inspection of the containment vessel exterior coating will be conducted.	ii) A report exists and concludes that the containment vessel exterior surface is coated with an inorganic zinc coating above elevation 135'-3".
	iii) Inspection of the containment vessel interior coating will be conducted.	iii) A report exists and concludes that the containment vessel interior surface is coated with an inorganic zinc coating above 7' above the operating deck.
7.c) The PCS provides air flow over the outside of the containment vessel by a natural circulation air flow path from the air inlets to the air discharge structure.	Inspections of the air flow path segments will be performed.	Flow paths exist at each of the following locations: – Air inlets – Base of the outer annulus – Base of the inner annulus – Discharge structure
7.d) The PCS ~~provides~~ drains~~age of~~ the excess water from the outside of the containment vessel through the two upper annulus drains.	Testing will be performed to verify the upper annulus drain flow performance.	With a water level within the upper annulus 10" ± 1" above the annulus drain inlet, the flow rate through each drain is greater than or equal to 525 gpm.

Table 2.2.2-3 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
7.e) The PCS provides a flow path for long-term water makeup to the PCCWST.	i) See item 1 in this table. ii) Testing will be performed to measure the delivery rate from the long-term makeup connection to the PCCWST.	i) See item 1 in this table. ii) With a water supply connected to the PCS long-term makeup connection, each PCS recirculation pump delivers greater than or equal to 100 gpm when tested separately.
7.f) The PCS provides a flow path for long-term water makeup from the PCCWST to the spent fuel pool.	i) Testing will be performed to measure the delivery rate from the PCCWST to the spent fuel pool. ii) Inspection of the PCCWST will be performed.	i) With the PCCWST water level at 27.4 ft + 0.2, - 0.0 ft above the bottom of the tank, the flow path from the PCCWST to the spent fuel pool delivers greater than or equal to 118 gpm. ii) The volume of the PCCWST is greater than 756,700 gallons.
8.a) The ~~PCS provides a~~ PCCAWST contains an ~~initial~~ inventory of cooling water sufficient for PCS containment cooling ~~delivery~~ from hour 72 through day 7.	Inspection of the PCCAWST will be performed.	The volume of the PCCAWST is greater than 780,000 gallons.
8.b) The PCS ~~provides the~~ deliversy ~~of~~ water from the PCCAWST to the PCCWST and spent fuel pool simultaneously.	Testing will be performed to measure the delivery rate from the PCCAWST to the PCCWST and spent fuel pool simultaneously.	With PCCASWST aligned to the suction of the recirculation pumps, each pump delivers greater than or equal to 100 gpm to the PCCWST and 35 gpm to the spent fuel pool simultaneously when each pump is tested separately.
8.c) The PCCWST includes a ~~S provides~~ water inventory for the fire protection system.	See Tier 1 Material, Table 2.3.4-2, items 1 and 2.~~subsection 2.3.4, Fire Protection System.~~	See Tier 1 Material, Table 2.3.4-2, items 1 and 2.~~subsection 2.3.4, Fire Protection System.~~
9. Safety-related displays identified in Table 2.2.2-1 can be retrieved in the MCR.	Inspection will be performed for retrievability of the safety-related displays in the MCR.	Safety-related displays identified in Table 2.2.2-1 can be retrieved in the MCR.
10.a) Controls exist in the MCR to cause the remotely operated valves identified in Table 2.2.2-1 to perform active functions.	Stroke testing will be performed on the remotely operated valves identified in Table 2.2.2-1 using the controls in the MCR.	Controls in the MCR operate to cause remotely operated valves identified in Table 2.2.2-1 to perform active functions.

Table 2.2.2-3 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
10.b) The valves identified in Table 2.2.2-1 as having PMS control perform an active safety function after receiving a signal from the PMS.	Testing will be performed on the remotely operated valves in Table 2.2.2-1 using real or simulated signals into the PMS.	The remotely operated valves identified in Table 2.2.2-1 as having PMS control perform the active function identified in the table after receiving a signal from the PMS.
10.c) The valves identified in Table 2.2.2-1 as having DAS control perform an active safety function after receiving a signal from the DAS.	Testing will be performed on the remotely operated valves listed in Table 2.2.2-1 using real or simulated signals into the DAS.	The remotely operated valves identified in Table 2.2.2-1 as having DAS control perform the active function identified in the table after receiving a signal from the DAS.
11.a) The motor-operated and check valves identified in Table 2.2.2-1 perform an active safety-related function to change position as indicated in the table.	i) Tests or type tests of motor-operated valves will be performed to demonstrate the capability of the valve to operate under its design conditions.	i) A test report exists and concludes that each motor-operated valve changes position as indicated in Table 2.2.2-1 under design conditions.
	ii) Inspection will be performed for the existence of a report verifying that the capability of the as-installed motor-operated valves are bounded by the tested conditions.	ii) A report exists and concludes that the capability of the as-installed motor-operated valves are bounded by the tested conditions.
	iii) Tests of the as-installed motor-operated valves will be performed under preoperational flow, differential pressure, and temperature conditions.	iii) Each motor-operated valve changes position as indicated in Table 2.2.2-1 under preoperational test conditions.
	iv) Exercise testing of the check valves with active safety functions identified in Table 2.2.2-1 will be performed under preoperational test pressure, temperature and fluid flow conditions.	iv) Each check valve changes position as indicated in Table 2.2.2-1.
11.b) After loss of motive power, the remotely operated valves identified in Table 2.2.2-1 assume the indicated loss of motive power position.	Testing of the installed valves will be performed under the conditions of loss of motive power.	After loss of motive power, each remotely operated valve identified in Table 2.2.2-1 assumes the indicated loss of motive power position.

Tier 1 Figure 2.2.2-1 Revise Tier 1 Figure 2.2.2-1 as shown on the following page.

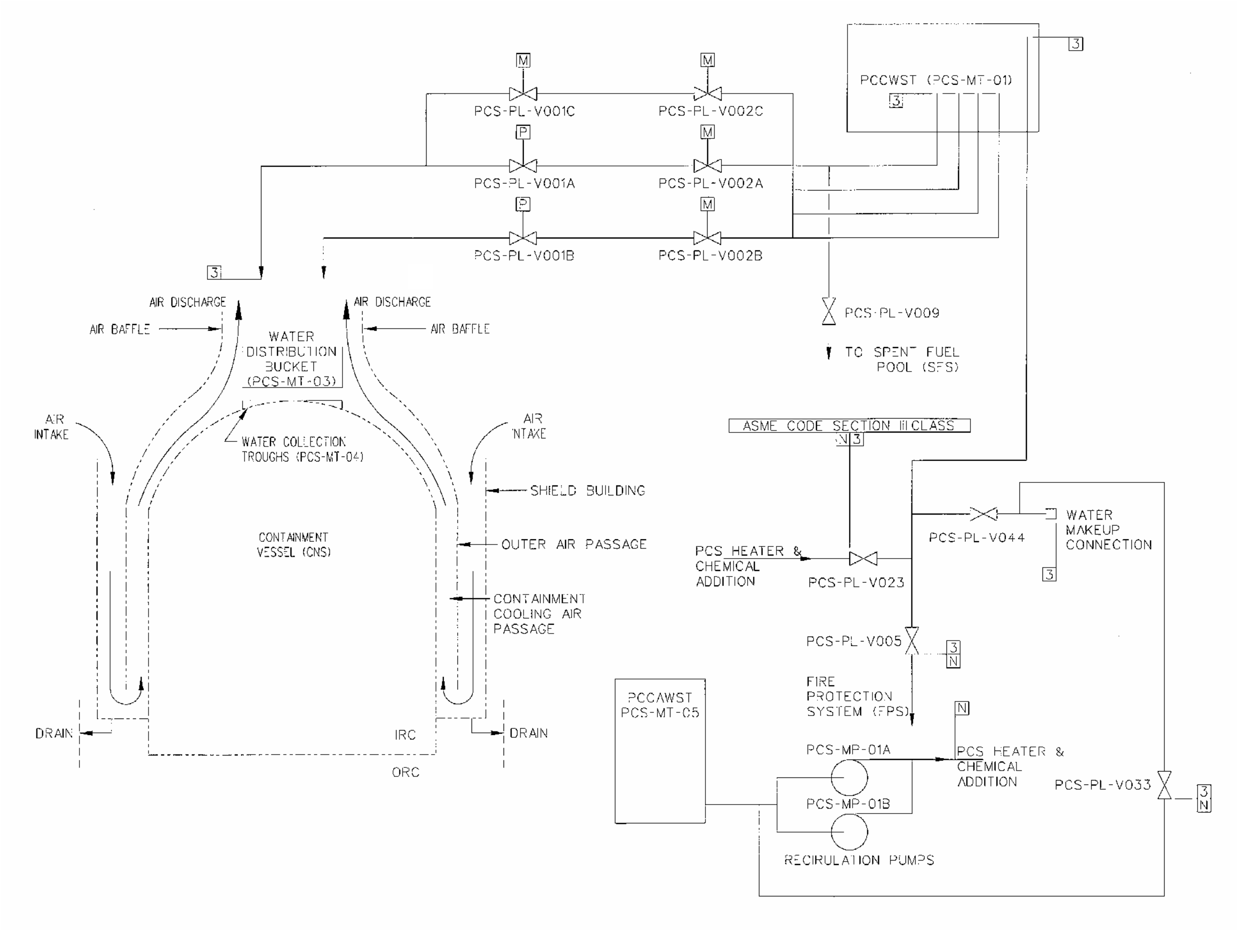

Figure 2.2.2-1
Passive Containment Cooling System