

2.2.2 In-Containment Refueling Water Storage Tank System

1.0 Description

The in-containment refueling water storage tank system (IRWSTS) is a safety-related system. The IRWSTS provides the following safety-related functions:

- Borated water supply for the emergency core cooling systems.
- Containment isolation.

The IRWSTS provides the following non-safety-related function:

- Borated water supply to the severe accident heat removal system (SAHRS) during a severe accident.

2.0 Arrangement

2.1 The functional arrangement of the IRWSTS is as shown on Figure 2.2.2-1—In-Containment Refueling Water Storage Tank System Functional Arrangement.

2.2 The location of the IRWSTS equipment is as listed in Table 2.2.2-1—IRWSTS Equipment Mechanical Design.

2.3 Physical separation exists between divisions of the IRWSTS.

3.0 Mechanical Design Features

3.1 Valves listed in Table 2.2.2-1 will be functionally designed and qualified such that each valve is capable of performing its intended function for a full range of system differential pressure and flow, ambient temperatures, and available voltage (as applicable) under conditions ranging from normal operating to design-basis accident conditions.

3.2 Deleted.

3.3 Components identified as Seismic Category I in Table 2.2.2-1 can withstand seismic design basis loads without a loss of the function listed in Table 2.2.2-1.

3.4 Deleted.

3.5 Deleted.

3.6 Deleted.

3.7 Deleted.

3.8 IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 is designed in accordance with ASME Code Section III requirements.

3.9 IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 is installed in accordance with an ASME Code Section III Design Report.

- 3.10 Pressure boundary welds in IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 are in accordance with ASME Code Section III.
- 3.11 IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 retains pressure boundary integrity at design pressure.
- 3.12 IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 is installed and inspected in accordance with ASME Code Section III requirements.
- 3.13 Components listed in Table 2.2.2-1 as ASME Code Section III are designed in accordance with ASME Code Section III requirements.
- 3.14 Components listed in Table 2.2.2-1 as ASME Code Section III are fabricated in accordance with ASME Code Section III requirements.
- 3.15 Pressure boundary welds on components listed in Table 2.2.2-1 as ASME Code Section III are in accordance with ASME Code Section III requirements.
- 3.16 Components listed in Table 2.2.2-1 as ASME Code Section III retain pressure boundary integrity at design pressure.
- 3.17 Components listed in Table 2.2.2-1 as ASME Code Section III are installed in accordance with ASME Code Section III requirements.

4.0 Instrumentation and Controls (I&C) Design Features, Displays, and Controls

- 4.1 Displays listed in Table 2.2.2-2—IRWSTS Equipment I&C and Electrical Design are retrievable in the main control room (MCR) and the remote shutdown station (RSS) as listed in Table 2.2.2-2.
- 4.2 The IRWSTS equipment controls are provided in the MCR and the RSS as listed in Table 2.2.2-2.
- 4.3 Equipment listed as being controlled by a priority and actuator control system (PACS) module in Table 2.2.2-2 responds to the state requested by a test signal.
- 4.4 IRWST has level indication.

5.0 Electrical Power Design Features

- 5.1 The components designated as Class 1E in Table 2.2.2-2 are powered from the Class 1E division as listed in Table 2.2.2-2 in a normal or alternate feed condition.
- 5.2 Deleted.

6.0 Environmental Qualifications

- 6.1 Components in Table 2.2.2-2, that are designated as harsh environment, will perform the function listed in Table 2.2.2-1 in the environments that exist during and following design basis events..

7.0 Equipment and System Performance

- 7.1 Class 1E valves listed in Table 2.2.2-2 can perform the function listed in Table 2.2.2-1 under system operating conditions.
- 7.2 Containment isolation valves listed in Table 2.2.2-1 close within the containment isolation response time following initiation of a containment isolation signal.
- 7.3 The IRWST provides a required water volume.
- 7.4 Post-LOCA pH control is provided for the IRWST with trisodium phosphate (TSP).
- 7.5 The IRWST suction inlet line for each safety injection system division has a debris screen.
- 7.6 Deleted.
- 7.7 The IRWST provides water to flood the spreading area.
- 7.8 The IRWST has a retaining basket located directly below each heavy floor opening.
- 7.9 The IRWST has a trash rack located over each heavy floor opening.
- 7.10 The IRWST has a weir located around each trash rack at the heavy floor opening.
- 7.11 The IRWST has a weir located at the annular space wall openings.

8.0 Inspections, Tests, Analyses, and Acceptance Criteria

Table 2.2.2-3 lists the IRWSTS ITAAC.

Table 2.2.2-1—IRWSTS Equipment Mechanical Design (3 Sheets)

Description	Tag Number ⁽¹⁾	Location	ASME Code Section III	Function	Seismic Category
IRWST Three-way Isolation Valve for SIS Division 1	30JNK10AA001	Safeguard Building 1	Yes	open/close (Cont. Isol.)	I
IRWST Three-way Isolation Valve for SIS division 2	30JNK20AA001	Safeguard Building 2	Yes	open/close (Cont. Isol.)	I
IRWST Three-way Isolation valve for SIS Division 3	30JNK30AA001	Safeguard Building 3	Yes	open/close (Cont. Isol.)	I
IRWST Three-way Isolation Valve for SIS Division 4	30JNK40AA001	Safeguard Building 4	Yes	open/close (Cont. Isol.)	I
IRWST Isolation Valve for CVCS	30JNK10AA009	Safeguard Building 1	Yes	close (Cont. Isol.)	I
IRWST Isolation Valve for CVCS	30JNK10AA013	Safeguard Building 1	Yes	close (Cont. Isol.)	I
IRWST Isolation Valve for SAHRS	30JNK11AA009	Safeguard Building 4	Yes	open/close (Cont. Isol.)	I
SIS Division 1 Strainer Backflush Isolation Valve	30JNK10AA006	Reactor Building	N/A	close	II
SIS Division 1 Strainer Backflush Isolation Valve	30JNK10AA007	Reactor Building	N/A	close	II
SIS Division 2 Strainer Backflush Isolation Valve	30JNK10AA004	Reactor Building	N/A	close	II
SIS Division 2 Strainer Backflush Isolation Valve	30JNK10AA005	Reactor Building	N/A	close	II
SIS Division 3 Strainer Backflush Isolation Valve	30JNK11AA004	Reactor Building	N/A	close	II
SIS Division 3 Strainer Backflush Isolation Valve	30JNK11AA005	Reactor Building	N/A	close	II

Table 2.2.2-1—IRWSTS Equipment Mechanical Design (3 Sheets)

Description	Tag Number ⁽¹⁾	Location	ASME Code Section III	Function	Seismic Category
SIS Division 4 Strainer Backflush Isolation Valve	30JNK11AA006	Reactor Building	N/A	close	II
SIS Division 4 Strainer Backflush Isolation Valve	30JNK11AA007	Reactor Building	N/A	close	II
Trash Rack (IRWST Heavy Floor Opening)	30JNK10AT014	Reactor Building	N/A	debris retaining device	I
Trash Rack (IRWST Heavy Floor Opening)	30JNK10AT015	Reactor Building	N/A	debris retaining device	I
Trash Rack (IRWST Heavy Floor Opening)	30JNK11AT014	Reactor Building	N/A	debris retaining device	I
Trash Rack (IRWST Heavy Floor Opening)	30JNK11AT015	Reactor Building	N/A	debris retaining device	I
IRWST Retaining Basket	30JNK10AT004	Reactor Building	N/A	debris retaining device	I
IRWST Retaining Basket	30JNK10AT005	Reactor Building	N/A	debris retaining device	I
IRWST Retaining Basket	30JNK11AT004	Reactor Building	N/A	debris retaining device	I
IRWST Retaining Basket	30JNK11AT005	Reactor Building	N/A	debris retaining device	I
SIS Sump Strainer Division 1	30JNK10AT001	Reactor Building	N/A	filtering device	I
SIS Sump Strainer Division 2	30JNK10AT002	Reactor Building	N/A	filtering device	I
SIS Sump Strainer Division 3	30JNK11AT002	Reactor Building	N/A	filtering device	I
SIS Sump Strainer Division 4	30JNK11AT001	Reactor Building	N/A	filtering device	I
CVCS Sump Strainer	30JNK10AT003	Reactor Building	N/A	filtering device	II

Table 2.2.2-1—IRWSTS Equipment Mechanical Design (3 Sheets)

Description	Tag Number ⁽¹⁾	Location	ASME Code Section III	Function	Seismic Category
SAHRS Sump Strainer	30JNK11AT003	Reactor Building	N/A	filtering device	II
TSP Basket	30JNK10AT024	Reactor Building	N/A	TSP source	I
TSP Basket	30JNK10AT025	Reactor Building	N/A	TSP source	I
TSP Basket	30JNK11AT024	Reactor Building	N/A	TSP source	I
TSP Basket	30JNK11AT025	Reactor Building	N/A	TSP source	I
IRWST Tank	30JNK00BB001	Reactor Building	N/A	storage volume	I

1) Equipment tag numbers are provided for information only and are not part of the certified design.

Table 2.2.2-2—IRWSTS Equipment I&C and Electrical Design (2 Sheets)

Description	Tag Number ⁽¹⁾	Location	IEEE Class 1E ⁽²⁾	EQ – Harsh Env.	PACS	MCR/RSS Displays	MCR/RSS Controls
IRWST Three-way Isolation Valve for SIS Division 1	30JNK10AA001	Safeguard Building 1	1 ^N 2 ^A	yes	yes	Position/Position	Open-Close/Open-Close
IRWST Three-way Isolation Valve for SIS Division 2	30JNK20AA001	Safeguard Building 2	2 ^N 1 ^A	yes	yes	Position/Position	Open-Close/Open-Close
IRWST Three-way Isolation valve for SIS Division 3	30JNK30AA001	Safeguard Building 3	3 ^N 4 ^A	yes	yes	Position/Position	Open-Close/Open-Close
IRWST Three-way Isolation Valve for SIS Division 4	30JNK40AA001	Safeguard Building 4	4 ^N 3 ^A	yes	yes	Position/Position	Open-Close/Open-Close
IRWST Isolation Valve for CVCS	30JNK10AA009	Safeguard Building 1	1 ^N 2 ^A	yes	yes	Position/Position	Open-Close/Open-Close
IRWST Isolation Valve for CVCS	30JNK10AA013	Safeguard Building 1	4 ^N 3 ^A	yes	yes	Position/Position	Open-Close/Open-Close
IRWST Isolation Valve for SAHRS	30JNK11AA009	Safeguard Building 4	4 ^N 3 ^A	yes	yes	Position/Position	Open-Close/Open-Close
IRWST Train 1 and 2	30JNK10CL050	Reactor Building Annulus	yes	yes	no	Level	N/A
IRWST Train 1 and 2	30JNK10CL052	Reactor Building Annulus	yes	yes	no	Level	N/A
IRWST Train 3 and 4	30JNK11CL050	Reactor Building Annulus	yes	yes	no	Level	N/A

Table 2.2.2-2—IRWSTS Equipment I&C and Electrical Design (2 Sheets)

Description	Tag Number ⁽¹⁾	Location	IEEE Class 1E ⁽²⁾	EQ – Harsh Env.	PACS	MCR/RSS Displays	MCR/RSS Controls
IRWST Train 3 and 4	30JNK11CL052	Reactor Building Annulus	yes	yes	no	Level	N/A

- 1) Equipment tag numbers are provided for information only and are not part of the certified design.
- 2) ^N denotes the division the component is normally powered from. ^A denotes the division the component is powered from when alternate feed is implemented.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank System ITAAC (9 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
2.1	The functional arrangement of the IRWSTS is as shown on Figure 2.2.2-1.	Inspections of the as-built system as shown on Figure 2.2.2-1 will be conducted.	The as-built IRWSTS conforms with the functional arrangement as shown on Figure 2.2.2-1.
2.2	The location of the IRWSTS equipment is as listed in Table 2.2.2-1.	An inspection will be performed of the location of the equipment listed in Table 2.2.2-1.	The equipment listed in Table 2.2.2-1 is located as listed in Table 2.2.2-1.
2.3	Physical separation exists between divisions of the IRWSTS.	Inspections will be performed to verify physical separation of the divisions of the IRWSTS.	<ul style="list-style-type: none"> a) The IRWSTS is physically separated as shown on Figure 2.2.2-1 in the Reactor Building. b) The IRWSTS equipment in the Safeguard Buildings is located in separate Safeguard Buildings as listed in Table 2.2.2-1.
3.1	Valves listed in Table 2.2.2-1 will be functionally designed and qualified such that each valve is capable of performing its intended function for a full range of system differential pressure and flow, ambient temperatures, and available voltage (as applicable) under conditions ranging from normal operating to design-basis accident conditions.	Tests or type tests of the valves listed in Table 2.2.2-1 will be conducted to demonstrate that the pumps and valves function under conditions ranging from normal operating to design-basis accident conditions.	A test report exists and concludes that the valves listed in Table 2.2.2-1 function under conditions ranging from normal operating to design-basis accident conditions.
3.2	Deleted.	Deleted.	Deleted.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank System ITAAC (9 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.3	<p>Components identified as Seismic Category I in Table 2.2.2-1 can withstand seismic design basis loads without a loss of the function listed in Table 2.2.2-1.</p>	<ul style="list-style-type: none"> a. Type tests, analyses, or a combination of type tests and analyses will be performed on the components identified as Seismic Category I in Table 2.2.2-1 using analytical assumptions, or under conditions, which bound the Seismic Category I design requirements. b. Inspections will be performed of the Seismic Category I components identified in Table 2.2.2-1 to verify that the components, including anchorage, are installed as specified on the construction drawings and deviations have been reconciled to the seismic qualification reports (SQDP, EQDP, or analyses). c. An analysis of the structural evaluation and design margins report for the Seismic Category I IRWST debris interceptor components and TSP baskets identified in Table 2.2.2-1, including the anchorages of the components to the walls or the floor and the attachments of the screen, will be performed. 	<ul style="list-style-type: none"> a. Seismic qualification reports (SQDP, EQDP, or analyses) exist and conclude that the Seismic Category I components identified in Table 2.2.2-1 can withstand seismic design basis loads without a loss of the function listed in Table 2.2.2-1 including the time required to perform the listed function. b. Inspection reports exist and conclude that the Seismic Category I components identified in Table 2.2.2-1, including anchorage, are installed as specified on the construction drawings and deviations have been reconciled to the seismic qualification reports (SQDP, EQDP, or analyses). c. The structural evaluation and design margins report confirms that the as-designed Seismic Category I IRWST debris interceptor components and TSP baskets identified in Table 2.2.2-1, including the anchorages of the components to the walls or the floor and the attachments of the screens, are structurally qualified.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank System ITAAC (9 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
		d. Inspection will be performed of the Seismic Category I IRWST debris interceptor components and TSP baskets identified in Table 2.2.2-1 to verify that the components, including their anchorages to the walls or the floor and the attachments of the screens, are installed as specified on the construction drawings and deviations have been reconciled to the structural evaluation and design margins report.	d. Inspection reports exist and conclude that the Seismic Category I IRWST debris interceptor components and TSP baskets identified in Table 2.2.2-1, including the anchorages of the components to the walls or the floor and the attachments of the screens, are installed as specified on the construction drawings and deviations have been reconciled to the structural evaluation and design margins report.
3.4	Deleted.	Deleted.	Deleted.
3.5	Deleted.	Deleted.	Deleted.
3.6	Deleted.	Deleted.	Deleted.
3.7	Deleted.	Deleted.	Deleted.
3.8	IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 is designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. {{DAC}}	ASME Code Section III Design Reports (NCA-3550) exist and conclude that IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 complies with ASME Code Section III requirements. {{DAC}}
3.9	IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 is installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed.	For IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1, ASME Code Data Reports (N-5) exist and conclude that design reconciliation (NCA-3554) has been completed in accordance with the ASME Code Section III for the as-built system. The report(s) document the as-built condition.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank System ITAAC (9 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.10	Pressure boundary welds in IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 are in accordance with ASME Code Section III.	Inspections of pressure boundary welds verify that welding is performed in accordance with ASME Code Section III requirements.	ASME Code Section III Data Reports exist and conclude that pressure boundary welding for IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 has been performed in accordance with ASME Code Section III.
3.11	IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 retains pressure boundary integrity at design pressure.	Hydrostatic tests will be performed on the as-built system.	For IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1, ASME Code Section III Data Reports exist and conclude that hydrostatic test results comply with ASME Code Section III requirements.
3.12	IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1 is installed and inspected in accordance with ASME Code Section III requirements.	An inspection of the as-built piping will be performed.	For IRWSTS piping shown as ASME Code Section III on Figure 2.2.2-1, N-5 Data Reports exist and conclude that installation and inspection are in accordance with ASME Code Section III requirements.
3.13	Components listed in Table 2.2.2-1 as ASME Code Section III are designed in accordance with ASME Code Section III requirements.	Inspections of ASME Code Section III Design Reports and associated reference documents will be performed.	ASME Code Section III Design Reports (NCA-3550) exist and conclude that components listed as ASME Code Section III in Table 2.2.2-1 comply with ASME Code Section III requirements.
3.14	Components listed in Table 2.2.2-1 as ASME Code Section III are fabricated in accordance with ASME Code Section III requirements.	An analysis will be performed to verify that deviations to the component design reports (NCA-3550) have been reconciled.	ASME Code Section III Design Reports (NCA-3550) exist and conclude that components listed as ASME Code Section III in Table 2.2.2-1 comply with ASME Code Section III requirements and any deviations to the design report have been reconciled.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank System ITAAC (9 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.15	Pressure boundary welds on components listed in Table 2.2.2-1 as ASME Code Section III are in accordance with ASME Code Section III requirements.	Inspections of pressure boundary welds will be performed to verify that welding is performed in accordance with ASME Code Section III requirements.	For components listed as ASME Code Section III in Table 2.2.2-1, ASME Code Section III Data Reports (NCA-8000) exist and conclude that pressure boundary welding has been performed in accordance with ASME Code Section III.
3.16	Components listed in Table 2.2.2-1 as ASME Code Section III retain pressure boundary integrity at design pressure.	Hydrostatic tests will be performed on the components.	For components listed as ASME Code Section III in Table 2.2.2-1, ASME Code Section III Data Reports exist and conclude that hydrostatic test results comply with ASME Code Section III requirements.
3.17	Components listed in Table 2.2.2-1 as ASME Code Section III are installed in accordance with ASME Code Section III requirements.	An inspection of ASME Code Data reports will be performed.	ASME Code Section III N-5 Data Reports exist and conclude that components listed as ASME Code Section III in Table 2.2.2-1 have been installed in accordance with ASME Code Section III requirements.
4.1	Displays exist or can be retrieved in the MCR and the RSS as identified in Table 2.2.2-2.	Tests will be performed for the retrievability of the displays in the MCR or the RSS as listed in Table 2.2.2-2.	<ul style="list-style-type: none"> a. The displays listed in Table 2.2.2-2 as being retrieved in the MCR can be retrieved in the MCR. b. The displays listed in Table 2.2.2-2 as being retrieved in the RSS can be retrieved in the RSS.
4.2	Controls exist in the MCR and the RSS as identified in Table 2.2.2-2.	Tests will be performed for the existence of control signals from the MCR and the RSS to the equipment listed in Table 2.2.2-2.	<ul style="list-style-type: none"> a. The controls listed in Table 2.2.2-2 as being in the MCR exist in the MCR. b. The controls listed in Table 2.2.2-2 as being in the RSS exist in the RSS.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank System ITAAC (9 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
4.3	Equipment listed as being controlled by a PACS module in Table 2.2.2-2 responds to the state requested by a test signal.	A test will be performed using test signals.	Equipment listed as being controlled by a PACS module in Table 2.2.2-2 responds to the state requested by the signal.
4.4	IRWST has level indication.	A test will be performed.	<ul style="list-style-type: none"> a. IRWST level instruments included in Table 2.2.2-2 provide level indication in the MCR. b. IRWST level instruments included in Table 2.2.2-2 provide level indication in the RSS.
5.1	The components designated as Class 1E in Table 2.2.2-2 are powered from the Class 1E division as listed in Table 2.2.2-2 in a normal or alternate feed condition.	<ul style="list-style-type: none"> a. Testing will be performed for components designated as Class 1E in Table 2.2.2-2 by providing a test signal in each normally aligned division. b. Testing will be performed for components designated as Class 1E in Table 2.2.2-2 by providing a test signal in each division with the alternate feed aligned to the divisional pair. 	<ul style="list-style-type: none"> a. The test signal provided in the normally aligned division is present at the respective Class 1E component identified in Table 2.2.2-2. b. The test signal provided in each division with the alternate feed aligned to the divisional pair is present at the respective Class 1E component identified in Table 2.2.2-2.
5.2	Deleted.	Deleted.	Deleted.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank System ITAAC (9 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
6.1	Components in Table 2.2.2-2, that are designated as harsh environment, will perform the function listed in Table 2.2.2-1 in the environments that exist during and following design basis events.	<p>a. Type tests or type tests and analysis will be performed to demonstrate the ability of the components listed as harsh environment in Table 2.2.2-2 to perform the function listed in Table 2.2.2-1 for the environmental conditions that could occur during and following design basis events.</p> <p>b. Components listed as harsh environment in Table 2.2.2-2 will be inspected to verify installation in accordance with the construction drawings including the associated wiring, cables and terminations. Deviations to the construction drawings will be reconciled to the EQDP.</p>	<p>a. Environmental Qualification Data Packages (EQDP) exist and conclude that the components listed as harsh environment in Table 2.2.2-2 can perform the function listed in Table 2.2.2-1 during and following design basis events including the time required to perform the listed function.</p> <p>b. Inspection reports exist and conclude that the components listed in Table 2.2.2-2 as harsh environment has been installed per the construction drawings and any deviations have been reconciled to the EQDP.</p>
7.1	Class 1E valves listed in Table 2.2.2-2 perform the function listed in Table 2.2.2-1 under system operating conditions.	Tests and analyses or a combination of tests and analyses will be performed to demonstrate the ability of the valves listed in Table 2.2.2-2 to change position as listed in Table 2.2.2-1 under system operating conditions.	The valve changes position as listed Table 2.2.2-1 under system operating conditions.
7.2	Containment isolation valves listed in Table 2.2.2-1 close within the containment isolation response time following initiation of a containment isolation signal.	Tests will be performed to demonstrate the ability of the containment isolation valves listed in Table 2.2.2-1 to close within the containment isolation response time following initiation of a containment isolation signal.	Containment isolation valves listed in Table 2.2.2-1 close within 60 seconds following initiation of a containment isolation signal.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank System ITAAC (9 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
7.3	The IRWST provides a required water volume.	An inspection will be performed of the IRWST required water volume.	The IRWST provides the following required minimum water volume: 66,886 ft ³ .
7.4	Post-LOCA pH control is provided for the IRWST with TSP.	An inspection will be performed for the capacity of the TSP baskets to provide post-LOCA pH control.	The TSP baskets listed in Table 2.2.2-1 can hold the following combined capacity of TSP to provide post-LOCA pH control: ≥ 12,200 lb _m TSP.
7.5	The IRWST suction inlet line for each safety injection system division has a debris screen.	<ul style="list-style-type: none"> a. An inspection will be performed for the existence of a debris screen in the IRWST suction inlet line for each safety injection system division. b. An inspection will be performed to verify the minimum surface area and maximum mesh grid opening of the debris screen. 	<ul style="list-style-type: none"> a. A debris screen exists in the IRWST suction inlet line for each safety injection system division. b. The debris screen has a minimum surface area of 753 ft² and the screen mesh is a maximum grid opening of 0.08 x 0.08 inches.
7.6	Deleted.	Deleted.	Deleted.
7.7	The IRWST provides water to flood the spreading area.	An inspection will be performed of the IRWST and severe accident heat removal system piping to provide water to flood the spreading area.	The IRWST and interfacing severe accident heat removal system pipe configuration provides a flow path to the core spreading area.
7.8	The IRWST has a retaining basket located directly below each heavy floor opening.	<ul style="list-style-type: none"> a. An inspection will be performed for the existence of a retaining basket in the IRWST directly under each heavy floor opening. b. An inspection will be performed to verify the minimum surface area and maximum mesh grid opening of the retaining basket. 	<ul style="list-style-type: none"> a. A retaining basket exists in the IRWST directly below each heavy floor opening. b. The retaining basket has a minimum surface area of 721 ft² and a maximum grid opening of 0.08 x 0.08 inches.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank System ITAAC (9 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
7.9	The IRWST has a trash rack located over each heavy floor opening.	<ul style="list-style-type: none"> a. An inspection will be performed for the existence of a trash rack over each heavy floor opening. b. An inspection will be performed to verify the maximum grid opening of the trash rack. 	<ul style="list-style-type: none"> a. A trash rack exists over each heavy floor opening to the IRWST. b. The trash rack has a maximum grid opening of 4 x 4 inches.
7.10	The IRWST has a weir located around each trash rack at the heavy floor opening.	<ul style="list-style-type: none"> a. An inspection will be performed for the existence of a weir around each trash rack at the heavy floor opening. b. An inspection will be performed to verify the height of the weir around each trash rack at the heavy floor opening. 	<ul style="list-style-type: none"> a. A weir exists around each trash rack at the heavy floor opening. b. The weir has a minimum height of 2 inches.
7.11	The IRWST has a weir located at the annular space wall openings.	<ul style="list-style-type: none"> a. An inspection will be performed for the existence of a weir at the annular space wall openings. b. An inspection will be performed to verify the height of the weir at the annular space wall openings. 	<ul style="list-style-type: none"> a. A weir exists at the annular space wall opening. b. The weir has a minimum height of 4 inches.

Next File