ATTACHMENT 1 TO LICENSE AMENDMENT NO. 106

TO FACILITY COMBINED LICENSE NO. NPF-92

DOCKET NO. 52-026

Replace the following pages of the Facility Combined License No. NPF-92 with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Combined License No. NPF-92

REMOVE	INSERT
7	7
9	9

Appendix C to Facility Combined License No. NPF-92

REMOVE	INSERT
C-43	C-43
C-204	C-204
C-205	C-205
C-206	C-206
C-208	C-208
C-209	C-209
C-251	C-251
C-252	C-252
C-253	C-253
C-256	C-256
C-420	C-420

Attachment 1 to Appendix C to Facility Combined License No. NPF-92

REMOVE	INSERT
C-489	C-489

(7) Reporting Requirements

(a) Within 30 days of a change to the initial test program described in FSAR Section 14, Initial Test Program, made in accordance with 10 CFR 50.59 or in accordance with 10 CFR Part 52, Appendix D, Section VIII, "Processes for Changes and Departures," SNC shall report the change to the Director of NRO, or the Director's designee, in accordance with 10 CFR 50.59(d).

(b) SNC shall report any violation of a requirement in Section 2.D.(3), Section 2.D.(4), Section 2.D.(5), and Section 2.D.(6) of this license within 24 hours. Initial notification shall be made to the NRC Operations Center in accordance with 10 CFR 50.72, with written follow up in accordance with 10 CFR 50.73.

(8) Incorporation

The Technical Specifications, Environmental Protection Plan, and ITAAC in Appendices A, B, and C, respectively of this license, as revised through Amendment No. 106, are hereby incorporated into this license.

(9) Technical Specifications

The technical specifications in Appendix A to this license become effective upon a Commission finding that the acceptance criteria in this license (ITAAC) are met in accordance with 10 CFR 52.103(g).

(10) Operational Program Implementation

SNC shall implement the programs or portions of programs identified below, on or before the date SNC achieves the following milestones:

(a) Environmental Qualification Program implemented before initial fuel load;

(b) Reactor Vessel Material Surveillance Program implemented before initial criticality;

(c) Preservice Testing Program implemented before initial fuel load;

(d) Containment Leakage Rate Testing Program implemented before initial fuel load;

(e) Fire Protection Program

1. The fire protection measures in accordance with Regulatory Guide (RG) 1.189 for designated storage building areas (including adjacent fire areas that could affect the storage area) implemented before initial receipt

(m) Initial Test Program (ITP)

1. Component Test Program implemented before the first component test;

2. Preoperational Test Program implemented before the first preoperational test; and

3. Startup Test Program implemented before initial fuel load;

(n) Special Nuclear Material Control and Accounting Program implemented before initial receipt of special nuclear material; and

(o) Special Nuclear Material Physical Protection Program implemented before initial receipt of special nuclear material on site.

(11) Operational Program Implementation Schedule

No later than 12 months after issuance of the COL, SNC shall submit to the Director of NRO, or the Director's designee, a schedule for implementation of the operational programs listed in FSAR Table 13.4-201, including the associated estimated date for initial loading of fuel. The schedule shall be updated every 6 months until 12 months before scheduled fuel loading, and every month thereafter until all the operational programs listed in FSAR Table 13.4-201 have been fully implemented.

(12) Site- and Unit-specific Conditions

(a) SNC shall either remove and replace, or shall improve, the soils directly above the blue bluff marl for soils under or adjacent to Seismic Category I structures, to eliminate any liquefaction potential.

(b) Before commencing installation of individual piping segments and connected components in their final locations, SNC shall complete the as-designed pipe rupture hazards analysis for compartments (rooms) containing those segments in accordance with the criteria outlined in the AP1000 DCD, Rev. 19, Sections 3.6.1.3.2 (as revised by Amendment No. 51 and Amendment No. 106) and 3.6.2.5, and shall inform the Director of NRO, or the Director's designee, in writing, upon the completion of this analysis and the availability of the as-designed pipe rupture hazards analysis reports.

(c) Before commencing installation of individual piping segments, identified in AP1000 DCD, Rev. 19, Section 3.9.8.7, and connected components in their final locations in the facility, SNC shall complete the analysis of the as-designed individual piping segments and shall inform the Director of NRO, or the Director's

List of Acronyms and Abbreviations (cont.)

QA	Quality Assurance
RAP	Reliability Assurance Program
RAT	Reserve Auxiliary Transformer
RC	Reinforced Concrete
RCA	Radiologically Controlled Area
RCCA	Rod Cluster Control Assembly
RCDT	Reactor Coolant Drain Tank
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RFI	Radio Frequency Interference
RM	Refueling Machine
RMS	Radiation Monitoring System
RNS	Normal Residual Heat Removal System
RPV	Reactor Pressure Vessel
RSR	Remote Shutdown Room
RSW	Remote Shutdown Workstation
RTD	Resistance Temperature Detector
RXS	Reactor System
RV	Reactor Vessel
SC	Steel and Concrete
scf	Standard Cubic Feet
scfm	Standard Cubic Feet per Minute
SDS	Sanitary Drainage System
SFHT	Spent Fuel Handling Tool
SFP	Spent Fuel Pool
SFS	Spent Fuel Pool Cooling System
SG	Steam Generator
SGS	Steam Generator System
SJS	Seismic Monitoring System
SMS	Special Monitoring System
SRS	Savannah River Site
SSCs	Structures, Systems, and Components
SSE	Safe Shutdown Earthquake
SWC	Surge Withstand Capability
SWS	Service Water System
TEDE	Total Effective Dose Equivalent
TSC	Technical Support Center
UAT	Unit Auxiliary Transformer
UPS	Uninterruptible Power Supply
V	Volt
VAS	Radiologically Controlled Area Ventilation System
VBS	Nuclear Island Nonradioactive Ventilation System
VCS	Containment Recirculation Cooling System

2.3.4 Fire Protection System

Design Description

The fire protection system (FPS) detects and suppresses fires in the plant. The FPS consists of water distribution systems, automatic and manual suppression systems, a fire detection and alarm system, and portable fire extinguishers. The FPS provides fire protection for the nuclear island, the annex building, the turbine building, the radwaste building and the diesel generator building.

The FPS is as shown in Figure 2.3.4-1 and the component locations of the FPS are as shown in Table 2.3.4-3.

1. The functional arrangement of the FPS is as described in the Design Description of this Section 2.3.4.
2. The FPS piping shown on Figure 2.3.4-2 remains functional following a safe shutdown earthquake.
3. The FPS provides the safety-related function of preserving containment integrity by isolation of the FPS line penetrating the containment.
4. The FPS provides for manual fire fighting capability in plant areas containing safety-related equipment.
5. Displays of the parameters identified in Table 2.3.4-1 can be retrieved in the main control room (MCR).
6. The FPS provides nonsafety-related containment spray for severe accident management.
7. The FPS provides two fire water storage tanks, each capable of holding at least 100 percent of the water supply necessary for FPS use.
8. Two FPS fire pumps provide at least 2000 gpm each at a total head of at least 350 ft.
9. The fuel tank for the diesel-driven fire pump is capable of holding at least 385 gallons.
10. Individual fire detectors provide fire detection capability and can be used to initiate fire alarms in areas containing safety-related equipment.
11. The FPS seismic standpipe subsystem can be supplied from the FPS fire main by opening the normally closed cross-connect valve to the FPS plant fire main.

Table 2.3.4-1

Equipment Name	Tag No.	Display	Control Function
Motor-driven Fire Pump	FPS-MP-01A	Yes (Run Status)	Start
Diesel-driven Fire Pump	FPS-MP-01B	Yes (Run Status)	Start
Jockey Pump	FPS-MP-02	Yes (Run Status)	Start

Table 2.3.4-2
Inspections, Tests, Analyses, and Acceptance Criteria

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
326	2.3.04.01	1. The functional arrangement of the FPS is as described in the Design Description of this Section 2.3.4.	Inspection of the as-built system will be performed.	The as-built FPS conforms with the functional arrangement described in the Design Description of this Section 2.3.4.
327	2.3.04.02.i	2. The FPS piping shown on Figure 2.3.4-2 remains functional following a safe shutdown earthquake.	i) Inspection will be performed to verify that the piping shown on Figure 2.3.4-2 is located on the Nuclear Island.	i) The piping shown on Figure 2.3.4-2 is located on the Nuclear Island.
328	2.3.04.02.ii	2. The FPS piping shown on Figure 2.3.4-2 remains functional following a safe shutdown earthquake.	ii) A reconciliation analysis using the as-designed and as-built piping information will be performed, or an analysis of the as-built piping will be performed.	ii) The as-built piping stress report exists and concludes that the piping remains functional following a safe shutdown earthquake.
329	2.3.04.03	Not used per Amendment No. 84		
330	2.3.04.04.i	4. The FPS provides for manual fire fighting capability in plant areas containing safety-related equipment.	i) Inspection of the passive containment cooling system (PCS) storage tank will be performed.	i) The volume of the PCS tank above the standpipe feeding the FPS and below the overflow is at least 18,000 gal.
331	2.3.04.04.ii	4. The FPS provides for manual fire fighting capability in plant areas containing safety-related equipment.	ii) Testing will be performed by measuring the water flow rate as it is simultaneously discharged from the two highest fire-hose stations and when the water for the fire is supplied from the PCS storage tank.	ii) Water is simultaneously discharged from each of the two highest fire-hose stations in plant areas containing safety-related equipment at not less than 75 gpm.
332	2.3.04.05	5. Displays of the parameters identified in Table 2.3.4-1 can be retrieved in the MCR.	Inspection will be performed for retrievability of the parameters in the MCR.	The displays identified in Table 2.3.4-1 can be retrieved in the MCR.
333	2.3.04.06	6. The FPS provides nonsafety-related containment spray for severe accident management.	Inspection of the containment spray headers will be performed.	The FPS has spray headers and nozzles as follows: At least 44 nozzles at plant elevation of at least 260 feet, and 24 nozzles at plant elevation of at least 275 feet.
334	2.3.04.07	7. The FPS provides two fire water storage tanks, each capable of holding at least 100 percent of the water supply necessary for FPS use.	Inspection of each fire water storage tank will be performed.	The volume of water dedicated to FPS use provided in each fire water storage tank is at least 396,000 gallons.

Table 2.3.4-2
Inspections, Tests, Analyses, and Acceptance Criteria

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
335	2.3.04.08	8. Two FPS fire pumps provide at least 2000 gpm each at a total head of at least 350 ft.	Testing and/or analysis of each fire pump will be performed.	The tests and/or analysis concludes that each fire pump provides a flow rate of at least 2000 gpm at a total head of at least 350 ft.
336	2.3.04.09	9. The fuel tank for the diesel-driven fire pump is capable of holding at least 385 gallons.	Inspection of the diesel-driven fire pump fuel tank will be performed.	The volume of the diesel driven fire pump fuel tank is at least 385 gallons.
337	2.3.04.10	10. Individual fire detectors provide fire detection capability and can be used to initiate fire alarms in areas containing safety-related equipment.	Testing will be performed on the as-built individual fire detectors in the fire areas identified in subsection 3.3, Table 3.3-3. (Individual fire detectors will be tested using simulated fire conditions.)	The tested individual fire detectors respond to simulated fire conditions.
338	2.3.04.11	11. The FPS seismic standpipe subsystem can be supplied from the FPS fire main by opening the normally closed cross-connect valve to the FPS plant fire main.	Inspection for the existence of a cross-connect valve from the FPS seismic standpipe subsystem to FPS plant fire main will be performed.	Valve FPS-PL-V101 exists and can connect the FPS seismic standpipe subsystem to the FPS plant fire main.

Table 2.3.4-3

Component Name	Tag No.	Location
Motor-driven Fire Pump	FPS-MP-01A	Yard
Diesel-driven Fire Pump	FPS-MP-01B	Yard
Jockey Pump	FPS-MP-02	Yard
Primary Fire Water Tank	FPS-MT-01A	Yard
Secondary Fire Water Tank	FPS-MT-01B	Yard
Fire Pump Diesel Fuel Day Tank	FPS-MT-02	Yard

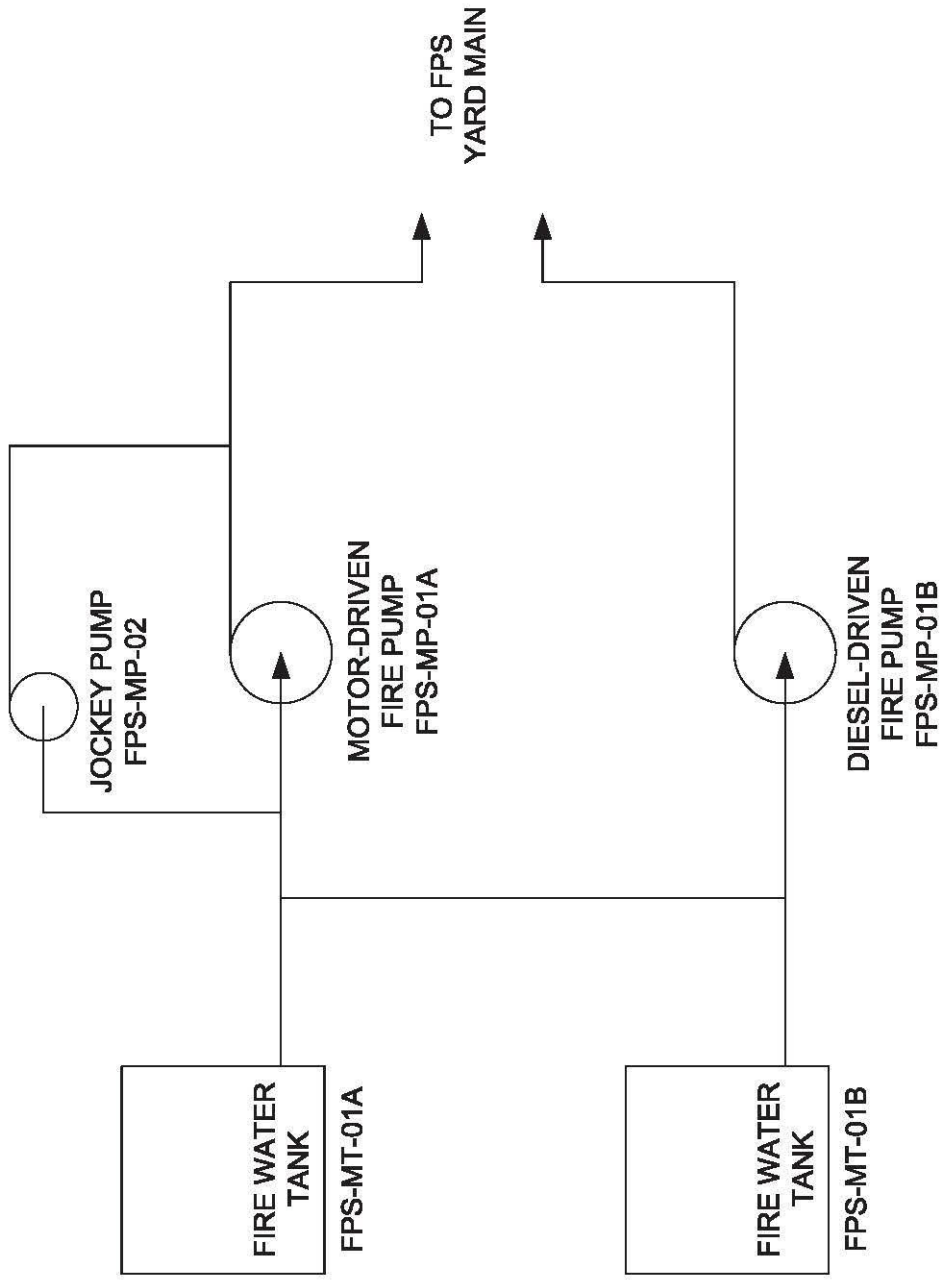

Figure 2.3.4-1 (Sheet 1 of 2)
Fire Protection System

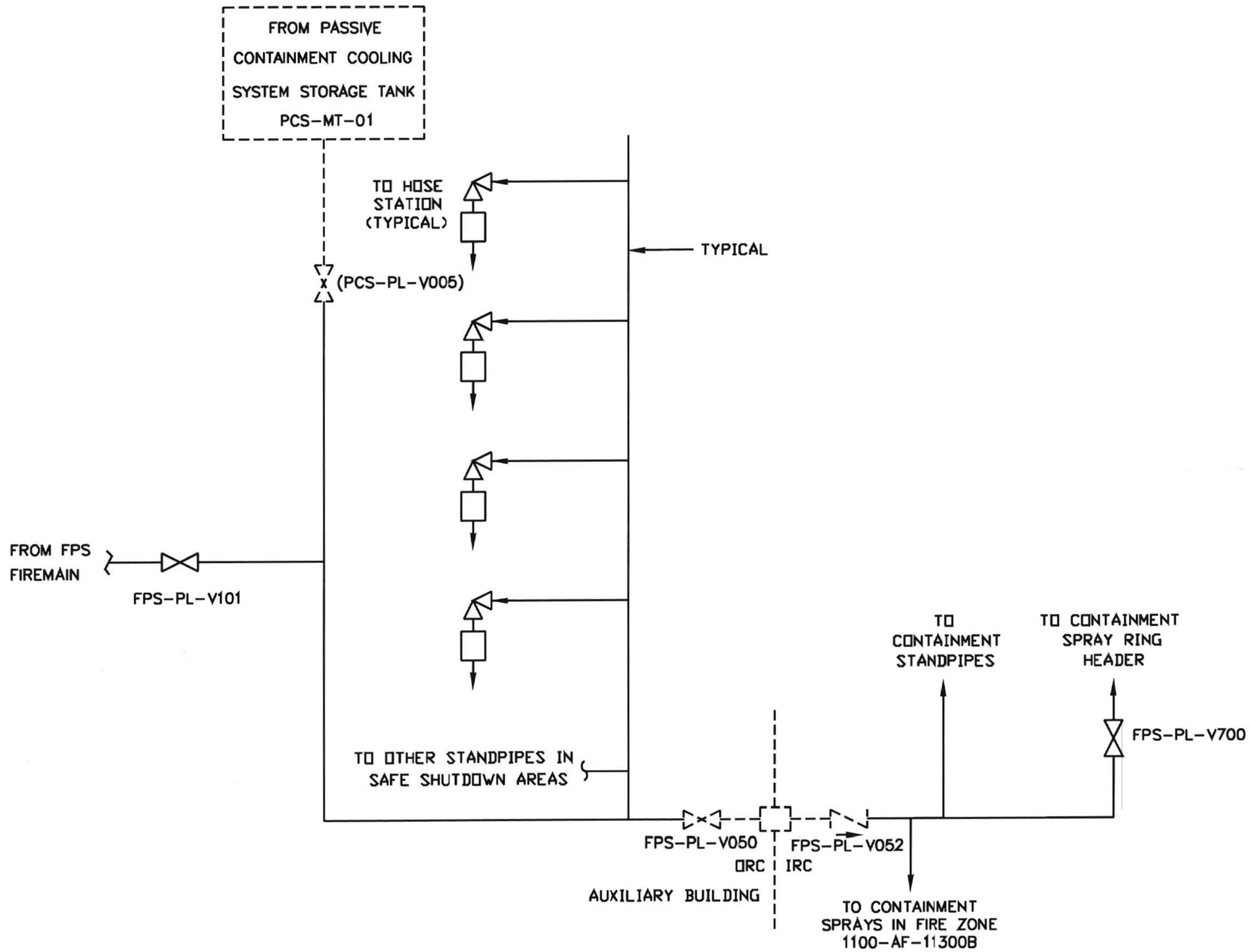

Figure 2.3.4-1 (Sheet 2 of 2)
Fire Protection System

9. The check valves identified in Table 2.3.10-1 perform an active safety-related function to change position as indicated in the table.
10. Displays of the parameters identified in Table 2.3.10-3 can be retrieved in the MCR.
11. a) The Class 1E components identified in Table 2.3.10-1 are powered from their respective Class 1E division.

    b) Separation is provided between WLS Class 1E divisions, and between Class 1E divisions and non-Class 1E cable.
12. Safety-related displays identified in Table 2.3.10-1 can be retrieved in the main control room (MCR).

Table 2.3.10-1							
Equipment Name	**Tag No.**	**ASME Code Section III**	**Seismic Cat. I**	**Remotely Operated Valve**	**Class 1E/ Qual. for Harsh Envir.**	**Safety-Related Display**	**Active Function**
WLS Containment Sump Level Sensor	WLS-034	No	Yes	No	No/No	No	-
WLS Containment Sump Level Sensor	WLS-035	No	Yes	No	No/No	No	-
WLS Containment Sump Level Sensor	WLS-036	No	Yes	No	No/No	No	-
WLS Drain from Passive Core Cooling System (PXS) Compartment A (Room 11206) Check Valve	WLS-PL-V071B	Yes	Yes	No	-/-	No	Transfer Closed
WLS Drain from PXS Compartment A (Room 11206) Check Valve	WLS-PL-V072B	Yes	Yes	No	-/-	No	Transfer Closed
WLS Drain from PXS Compartment B (Room 11207) Check Valve	WLS-PL-V071C	Yes	Yes	No	-/-	No	Transfer Closed
WLS Drain from PXS Compartment B (Room 11207) Check Valve	WLS-PL-V072C	Yes	Yes	No	-/-	No	Transfer Closed
WLS Drain from Chemical and Volume Control System (CVS) Compartment (Room 11209) Check Valve	WLS-PL-V071A	Yes	Yes	No	-/-	No	Transfer Closed
WLS Drain from CVS Compartment (Room 11209) Check Valve	WLS-PL-V072A	Yes	Yes	No	-/-	No	Transfer Closed
WLS Auxiliary Building Radiologically Controlled Area (RCA) Floodup Level Sensor	WLS-400A	No	Yes	No	Yes/No	Yes	-
WLS Auxiliary Building RCA Floodup Level Sensor	WLS-400B	No	Yes	No	Yes/No	Yes	-

Note: Dash (-) indicates not applicable.

Table 2.3.10-2			
Line Name	**Line No.**	**ASME Section III**	**Functional Capability Required**
WLS Drain from PXS Compartment A	WLS-PL-L062	Yes	Yes
WLS Drain from PXS Compartment B	WLS-PL-L063	Yes	Yes
WLS Drain from CVS Compartment	WLS-PL-L061	Yes	Yes

Table 2.3.10-3			
Equipment Name	**Tag No.**	**Display**	**Active Function**
WLS Effluent Discharge Isolation Valve	WLS-PL-V223	-	Close
Reactor Coolant Drain Tank Level	WLS-JE-LT002	Yes	-
Letdown Flow from CVS to WLS	WLS-JE-FT020	Yes	-
WLS Auxiliary Building RCA Floodup Level Sensor	WLS-400A	Yes	-
WLS Auxiliary Building RCA Floodup Level Sensor	WLS-400B	Yes	-

Table 2.3.10-4
Inspections, Tests, Analyses, and Acceptance Criteria

No.	**ITAAC No.**	**Design Commitment**	**Inspections, Tests, Analyses**	**Acceptance Criteria**
430	2.3.10.01	1. The functional arrangement of the WLS is as described in the Design Description of this Section 2.3.10.	Inspection of the as-built system will be performed.	The as-built WLS conforms with the functional arrangement as described in the Design Description of this Section 2.3.10.
431	2.3.10.02a	2.a) The components identified in Table 2.3.10-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements. 2.b) The piping identified in Table 2.3.10-2 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 components and piping as documented in the ASME design reports.	The ASME Code Section III design report exists for the as built components and piping identified in Tables 2.3.10-1 and 2.3.10-2 as ASME Code Section III.

Table 2.3.10-4 Inspections, Tests, Analyses, and Acceptance Criteria				
No.	**ITAAC No.**	**Design Commitment**	**Inspections, Tests, Analyses**	**Acceptance Criteria**
448	2.3.10.10	10. Displays of the parameters identified in Table 2.3.10-3 can be retrieved in the MCR.	Inspection will be performed for retrievability of the displays identified in Table 2.3.10-3 in the MCR.	Displays identified in Table 2.3.10-3 can be retrieved in the MCR.
878	2.3.10.11a	11. a) The Class 1E components identified in Table 2.3.10-1 are powered from their respective Class 1E division.	Testing will be performed on the WLS by providing a simulated test signal in each Class 1E division.	A simulated test signal exists at the Class 1E components identified in Table 2.3.10-1 when the assigned Class 1E division is provided the test signal.
879	2.3.10.12	12. Safety-related displays identified in Table 2.3.10-1 can be retrieved in the main control room (MCR).	Inspection will be performed for retrievability of the safety-related displays in the MCR.	Safety-related displays identified in Table 2.3.10-1 can be retrieved in the MCR.

Table 2.3.10-5

Component Name	**Tag No.**	**Component Location**
WLS Reactor Coolant Drain Tank	WLS-MT-01	Containment
WLS Containment Sump	WLS-MT-02	Containment
WLS Degasifier Column	WLS-MV-01	Auxiliary Building
WLS Effluent Holdup Tanks	WLS-MT-05A WLS-MT-05B	Auxiliary Building
WLS Waste Holdup Tanks	WLS-MT-06A WLS-MT-06B	Auxiliary Building
WLS Waste Pre-Filter	WLS-MV-06	Auxiliary Building
WLS Ion Exchangers	WLS-MV-03 WLS-MV-04A WLS-MV-04B WLS-MV-04C	Auxiliary Building
WLS Waste After-Filter	WLS-MV-07	Auxiliary Building
WLS Monitor Tanks	WLS-MT-07A WLS-MT-07B WLS-MT-07C	Auxiliary Building
	WLS-MT-07D WLS-MT-07E WLS-MT-07F	Radwaste Building

Table 3.3-2
Nuclear Island Building Room Boundaries
Required to Have Flood Barrier Floors and Walls

Boundary/ Maximum Flood Level (inches)	Between Room Number to Room Number	
	Room with Postulated Flooding Source	Adjacent Room
Floor/36	12306	12211
Floor/3	12303	12203/12207
Floor/3	12313	12203/12207
Floor/1	12300	12201/12202/12207 12203/12204/12205
Floor/3	12312	12212
Wall/36	12306	12305
Floor/1	12401	12301/12302/12303 12312/12313
Wall/1	12401	12411/12412
Floor/36	12404	12304
Floor/4	12405	12305
Floor/36	12406	12306
Wall/36	12404	12421
Wall/30	12452	12421
Floor/3	12501	12401/12411/12412
Floor/3	12555	12421/12423/12422
Wall/168	12156	12111/12112
Wall/76.5	12158	12111
Wall/132	12258	12211/12212

SRI

Figure 3.3-11B
Turbine Building General Arrangement Plan at Elevation 100′-0″