

ATTACHMENT TO LICENSE AMENDMENT NO. 108

TO FACILITY COMBINED LICENSE NO. NPF-91

DOCKET NO. 52-025

Replace the following pages of the Facility Combined License No. NPF-91 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-91

REMOVE

7

INSERT

7

Appendix A to Facility Combined License Nos. NPF-91 and NPF-92

REMOVE

3.3.13-1

3.3.16-1

3.7.6-1

3.7.6-2

3.7.6-3

3.7.6-4

INSERT

3.3.13-1

3.3.16-1

3.7.6-1

3.7.6-2

3.7.6-3

3.7.6-4

3.7.6-5

Appendix C to Facility Combined License No. NPF-91

REMOVE

C-168

C-169

C-172

C-175

C-178

C-294

INSERT

C-168

C-169

C-172

C-175

C-178

C-294

(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. 108, 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

3.3 INSTRUMENTATION

3.3.13 Engineered Safety Feature Actuation System (ESFAS) Control Room Air Supply Radiation Instrumentation

LCO 3.3.13 Two channels of ESFAS Control Room Air Supply Radiation - High 2 instrumentation shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4,
During movement of irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One channel inoperable in MODE 1, 2, 3, or 4.	A.1 Verify alternate radiation monitors are OPERABLE.	72 hours
	<u>AND</u> A.2 Verify main control room isolation, air supply initiation, and electrical load de-energization manual controls are OPERABLE.	72 hours
B. One channel inoperable during movement of irradiated fuel assemblies.	B.1 Restore channel to OPERABLE status.	72 hours
C. Required Action and associated Completion Time of Condition A not met. <u>OR</u> Two channels inoperable in MODE 1, 2, 3, or 4.	C.1 Be in MODE 3.	6 hours
	<u>AND</u> C.2 Be in MODE 5.	36 hours

3.3 INSTRUMENTATION

3.3.16 Engineered Safety Feature Actuation System (ESFAS) Actuation Logic – Shutdown

LCO 3.3.16 Four divisions with one subsystem for each of the following Functions shall be OPERABLE:

- a. ESF Coincidence Logic; and
- b. ESF Actuation.

- NOTE -

Only the divisions necessary to support Main Control Room Isolation, Air Supply Initiation, and Electrical Load De-energization are required to be OPERABLE during movement of irradiated fuel assemblies when not in MODE 1, 2, 3, 4, 5, or 6.

APPLICABILITY: MODES 5 and 6,
During movement of irradiated fuel assemblies.

ACTIONS

- NOTE -

Separate condition entry is allowed for each Function.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions within one required division inoperable.	A.1 Restore required division to OPERABLE status.	72 hours

3.7 PLANT SYSTEMS

3.7.6 Main Control Room Emergency Habitability System (VES)

LCO 3.7.6 The VES shall be OPERABLE.

- NOTE -

The main control room envelope (MCRE) boundary may be opened intermittently under administrative control.

APPLICABILITY: MODES 1, 2, 3, and 4,
During movement of irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One valve or damper inoperable.	A.1	Restore valve or damper to OPERABLE status.	7 days
B. One PMS Division inoperable in one or more MCR load shed panel(s).	B.1	Restore PMS division in both MCR load shed panels to OPERABLE status.	7 days
C. Thermal mass of one or more required heat sink(s) not within limit(s).	C.1	Restore required heat sink air temperatures to within limit(s).	24 hours
	<u>AND</u> C.2	Restore thermal mass of required heat sink(s) to within limit(s).	5 days

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. VES inoperable due to inoperable MCRE boundary in MODE 1, 2, 3, or 4.	D.1 Initiate action to implement mitigating actions.	Immediately
	<u>AND</u>	
	D.2 Verify mitigating actions ensure MCRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits.	24 hours
	<u>AND</u>	
	D.3 Restore MCRE boundary to OPERABLE status.	90 days
E. One bank of VES air tanks inoperable.	E.1 Verify that the OPERABLE tanks contain > 245,680 scf of compressed air.	2 hours
	<u>AND</u>	<u>AND</u>
		Once per 12 hours thereafter
	<u>AND</u>	
	E.2 Verify VBS MCRE ancillary fans and supporting equipment are available.	24 hours
	<u>AND</u>	
	E.3 Restore VES to OPERABLE status.	7 days

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>F. Required Action and associated Completion Time of Condition A, B, C, D, or E not met in MODE 1, 2, 3, or 4.</p> <p><u>OR</u></p> <p>VES inoperable for reasons other than Condition A, B, C, D, or E in MODE 1, 2, 3, or 4.</p>	F.1 Be in MODE 3.	6 hours
	<p><u>AND</u></p> <p>F.2 Be in MODE 5.</p>	36 hours
<p>G. Required Action and associated Completion Time of Condition A, B, C, or E not met during movement of irradiated fuel.</p> <p><u>OR</u></p> <p>VES inoperable for reasons other than Condition A, B, C, or E during movement of irradiated fuel.</p> <p><u>OR</u></p> <p>VES inoperable due to inoperable MCRE boundary during movement of irradiated fuel.</p>	G.1 Suspend movement of irradiated fuel assemblies.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.6.1	Verify the compressed air storage tanks contain > 327,574 scf of compressed air.	24 hours
SR 3.7.6.2	<p>Verify thermal mass for the following heat sink locations is within limit:</p> <ul style="list-style-type: none"> a. MCRE; b. Each required individual room adjacent to and below MCRE; c. Each required room-pair adjacent to and below MCRE; and d. Room above MCRE. 	24 hours
SR 3.7.6.3	Operate VES for ≥ 15 minutes.	31 days
SR 3.7.6.4	Verify each VES air header manual isolation valve is in an open position.	31 days
SR 3.7.6.5	Verify the air quality of the air storage tanks meets the requirements of Appendix C, Table C-1 of ASHRAE Standard 62 with a pressure dew point of $\leq 40^{\circ}\text{F}$ at ≥ 3400 psig.	92 days
SR 3.7.6.6	Verify all MCRE isolation valves are OPERABLE and will close upon receipt of an actual or simulated actuation signal.	24 months
SR 3.7.6.7	Verify each VES pressure relief isolation valve within the MCRE pressure boundary is OPERABLE.	In accordance with the Inservice Testing Program
SR 3.7.6.8	Verify each VES pressure relief damper is OPERABLE.	24 months

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.6.9	Verify the self-contained pressure regulating valve in each VES air delivery flow path is OPERABLE.	In accordance with the Inservice Testing Program
SR 3.7.6.10	Perform required MCRE unfiltered air inleakage testing in accordance with the Main Control Room Envelope Habitability Program.	In accordance with the Main Control Room Envelope Habitability Program
SR 3.7.6.11	Perform required VES Passive Filtration system filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.6.12	Verify the MCR load shed function actuates upon receipt of an actual or simulated actuation signal.	24 months
SR 3.7.6.13	Verify each VES main air delivery isolation valve actuates to the correct position upon receipt of an actual or simulated actuation signal.	24 months

- b) The VES maintains the MCR pressure boundary at a positive pressure with respect to the surrounding areas. There is a discharge of air through the MCR vestibule.
 - c) The heat loads within the MCR, the I&C equipment rooms, and the Class 1E dc equipment rooms are within design basis assumptions to limit the heatup of the rooms identified in Table 2.2.5-4.
 - d) The system provides a passive recirculation flow of MCR air to maintain main control room dose rates below an acceptable level during VES operation.
8. Safety-related displays identified in Table 2.2.5-1 can be retrieved in the MCR.
9. a) Controls exist in the MCR to cause those remotely operated valves identified in Table 2.2.5-1 to perform their active functions.
- b) The valves identified in Table 2.2.5-1 as having protection and safety monitoring system (PMS) control perform their active safety function after receiving a signal from the PMS.
- c) The MCR Load Shed Panels identified in Table 2.2.5-1 perform their active safety function after receiving a signal from the PMS.
10. After loss of motive power, the remotely operated valves identified in Table 2.2.5-1 assume the indicated loss of motive power position.
11. Displays of the parameters identified in Table 2.2.5-3 can be retrieved in the MCR.
12. The background noise level in the MCR does not exceed 65 dB(A) at the operator workstations when the VES is operating.

Table 2.2.5-1									
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	Active Function	Loss of Motive Power Position
MCR Load Shed Panel 1	VES-EP-01	No	Yes	-	Yes/No	Yes	Yes	De-energize MCR Loads	-
MCR Load Shed Panel 2	VES-EP-02	No	Yes	-	Yes/No	Yes	Yes	De-energize MCR Loads	-
Emergency Air Storage Tank 01	VES-MT-01	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 02	VES-MT-02	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 03	VES-MT-03	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 04	VES-MT-04	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 05	VES-MT-05	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 06	VES-MT-06	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 07	VES-MT-07	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 08	VES-MT-08	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 09	VES-MT-09	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 10	VES-MT-10	No	Yes	-	-/-	-	-	-	-

Note: Dash (-) indicates not applicable.

Table 2.2.5-1 (cont.)									
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	Active Function	Loss of Motive Power Position
Eductor Bypass Isolation Valve	VES-PL-V046	Yes	Yes	No	-/-	No	-	Transfer Open	-
Pressure Regulating Valve A	VES-PL-V002A	Yes	Yes	No	-/-	No	-	Throttle Flow	-
Pressure Regulating Valve B	VES-PL-V002B	Yes	Yes	No	-/-	No	-	Throttle Flow	-
MCR Air Delivery Isolation Valve A	VES-PL-V005A	Yes	Yes	Yes	Yes/No	No	Yes	Transfer Open	Open
MCR Air Delivery Isolation Valve B	VES-PL-V005B	Yes	Yes	Yes	Yes/No	No	Yes	Transfer Open	Open
Temporary Instrument Isolation Valve A	VES-PL-V018	Yes	Yes	No	-/-	No	No	Transfer Open	-
Temporary Instrument Isolation Valve B	VES-PL-V019	Yes	Yes	No	-/-	No	No	Transfer Open	-
MCR Pressure Relief Isolation Valve A	VES-PL-V022A	Yes	Yes	Yes	Yes/No	No	Yes	Transfer Open	Open
MCR Pressure Relief Isolation Valve B	VES-PL-V022B	Yes	Yes	Yes	Yes/No	No	Yes	Transfer Open	Open

Table 2.2.5-2			
Line Name	Line Number	ASME Code Section III	Functional Capability Required
MCR Relief Line	VES-PL-022A	Yes	Yes
MCR Relief Line	VES-PL-022B	Yes	Yes

Table 2.2.5-3		
Equipment	Tag No.	Display
Air Storage Tank Pressure	VES-001A	Yes
Air Storage Tank Pressure	VES-001B	Yes

Table 2.2.5-4			
Room Name	Room Numbers	Heat Load 0 to 24 Hours (Btu/s)	Heat Load 24 to 72 Hours (Btu/s)
MCR Envelope	12401	23.5 (hour 0 to 0.5) 14.5 (hour 0.5 to 3.5) 4.75 (hour 3.5 through 24)	3.95
I&C Rooms	12301, 12305	8.8	0
I&C Rooms	12302, 12304	13.0	4.2
dc Equipment Rooms	12201, 12205	3.7 (hour 0 through 1) 2.4 (hour 2 through 24)	0
dc Equipment Rooms	12203, 12207	5.8 (hour 0 through 1) 4.5 (hour 2 through 24)	2.0

Table 2.2.5-5 Inspections, Tests, Analyses, and Acceptance Criteria				
No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
252	2.2.05.01	1. The functional arrangement of the VES is as described in the Design Description of this Section 2.2.5.	Inspection of the as-built system will be performed.	The as-built VES conforms with the functional arrangement described in the Design Description of this Section 2.2.5.

Table 2.2.5-5 Inspections, Tests, Analyses, and Acceptance Criteria				
No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
270	2.2.05.07c	7.c) The heat loads within the MCR, the I&C equipment rooms, and the Class 1E dc equipment rooms are within design basis assumptions to limit the heatup of the rooms identified in Table 2.2.5-4.	An analysis will be performed to determine that the heat loads from as-built equipment within the rooms identified in Table 2.2.5-4 are less than or equal to the design basis assumptions.	A report exists and concludes that: the heat loads within rooms identified in Table 2.2.5-4 are less than or equal to the specified values or that an analysis report exists that concludes: <ul style="list-style-type: none"> – The temperature and humidity in the MCR remain within limits for reliable human performance for the 72-hour period. – The maximum temperature for the 72-hour period for the I&C rooms is less than or equal to 120°F. – The maximum temperature for the 72-hour period for the Class 1E dc equipment rooms is less than or equal to 120°F.
271	2.2.05.07d	7.d) The system provides a passive recirculation flow of MCR air to maintain main control room dose rates below an acceptable level during VES operation.	Testing will be performed to confirm that the required amount of air flow circulates through the MCR passive filtration system.	The air flow rate at the outlet of the MCR passive filtration system is at least 600 cfm greater than the flow measured by VES-003A/B.
272	2.2.05.08	8. Safety-related displays identified in Table 2.2.5-1 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 2.2.5-1 can be retrieved in the MCR.
273	2.2.05.09a	9.a) Controls exist in the MCR to cause remotely operated valves identified in Table 2.2.5-1 to perform their active functions.	Stroke testing will be performed on remotely operated valves identified in Table 2.2.5-1 using the controls in the MCR.	Controls in the MCR operate to cause remotely operated valves identified in Table 2.2.5-1 to perform their active safety functions.
274	2.2.05.09b	9.b) The valves identified in Table 2.2.5-1 as having PMS control perform their active safety function after receiving a signal from the PMS.	Testing will be performed on remotely operated valves listed in Table 2.2.5-1 using real or simulated signals into the PMS.	The remotely operated valves identified in Table 2.2.5-1 as having PMS control perform the active safety function identified in the table after receiving a signal from the PMS.
877	2.2.05.09c	9.c) The MCR Load Shed Panels identified in Table 2.2.5-1 perform their active safety function after receiving a signal from the PMS.	Testing will be performed on the MCR Load Shed Panels listed in Table 2.2.5-1 using real or simulated signals into the PMS.	The MCR Load Shed Panels identified in Table 2.2.5-1 perform their active safety function identified in the table after receiving a signal from the PMS.

Table 2.5.2-3
PMS Automatically Actuated Engineered Safety Features

Safeguards Actuation
 Containment Isolation
 Automatic Depressurization System (ADS) Actuation
 Main Feedwater Isolation
 Reactor Coolant Pump Trip
 CMT Injection
 Turbine Trip (Isolated signal to nonsafety equipment)
 Steam Line Isolation
 Steam Generator Relief Isolation
 Steam Generator Blowdown Isolation
 Passive Containment Cooling Actuation
 Startup Feedwater Isolation
 Passive Residual Heat Removal (PRHR) Heat Exchanger Alignment
 Block of Boron Dilution
 Chemical and Volume Control System (CVS) Makeup Line Isolation
 Steam Dump Block (Isolated signal to nonsafety equipment)
 Main Control Room Isolation, Air Supply Initiation, and Electrical Load De-energization
 Auxiliary Spray and Letdown Purification Line Isolation
 Containment Air Filtration System Isolation
 Normal Residual Heat Removal Isolation
 Refueling Cavity and Spent Fuel Pool Cooling System (SFS) Isolation
 In-Containment Refueling Water Storage Tank (IRWST) Injection
 IRWST Containment Recirculation
 CVS Letdown Isolation
 Pressurizer Heater Block (Isolated signal to nonsafety equipment)
 Containment Vacuum Relief

Table 2.5.2-4
PMS Manually Actuated Functions

Reactor Trip
 Safeguards Actuation
 Containment Isolation
 Depressurization System Stages 1, 2, and 3 Actuation
 Depressurization System Stage 4 Actuation
 Feedwater Isolation
 Core Makeup Tank Injection Actuation
 Steam Line Isolation
 Passive Containment Cooling Actuation
 Passive Residual Heat Removal Heat Exchanger Alignment
 IRWST Injection
 Containment Recirculation Actuation
 Main Control Room Isolation, Air Supply Initiation, and Electrical Load De-energization
 Steam Generator Relief Isolation
 Chemical and Volume Control System Isolation
 Normal Residual Heat Removal System Isolation
 Containment Vacuum Relief