

ATTACHMENT TO LICENSE AMENDMENT NO. 104

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

3.4.14-1

3.4.14-2

3.4.14-3

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INSERT

3.4.14-1

3.4.14-2

3.4.14-3

3.4.14-4

Appendix C to Facility Combined License No. NPF-91

REMOVE

C-101

C-218

C-220

C-221

C-225

C-230

INSERT

C-101

C-218

C-220

C-221

C-225

C-230

(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. 104, 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

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.14 Low Temperature Overpressure Protection (LTOP)

LCO 3.4.14 At least one of the following overpressure protection methods shall be OPERABLE, with the accumulators isolated:

- a. Two Normal Residual Heat Removal System (RNS) suction relief valves and Chemical and Volume Control System (CVS) makeup line containment isolation valve, CVS-PL-V091, closed; or
- b. The RCS depressurized and an RCS vent of  $\geq 4.15$  square inches.

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**- NOTES -**  
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1. No reactor coolant pump (RCP) shall be started when the RCS temperature is  $\geq 350^{\circ}\text{F}$  unless pressurizer level is  $< 92\%$ .
  2. No RCP shall be started with any RCS cold leg temperature  $\leq 350^{\circ}\text{F}$  unless the secondary side water temperature of each steam generator (SG) is  $\leq 50^{\circ}\text{F}$  above each of the RCS cold leg temperatures and the RCP is started at  $\leq 25\%$  of RCP speed.
  3. Accumulator isolation is only required when accumulator pressure is greater than or equal to the maximum RCS pressure for the existing RCS cold leg temperature allowed by the P/T limit curves provided in the PTLR.
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APPLICABILITY: MODE 4 when any cold leg temperature is  $\leq 275^{\circ}\text{F}$ ,  
MODE 5,  
MODE 6 when the reactor vessel head is on.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. An accumulator not isolated when the accumulator pressure is greater than or equal to the maximum RCS pressure for existing cold leg temperature allowed in the PTLR.	A.1 Isolate affected accumulator.	1 hour

ACTIONS (continued)

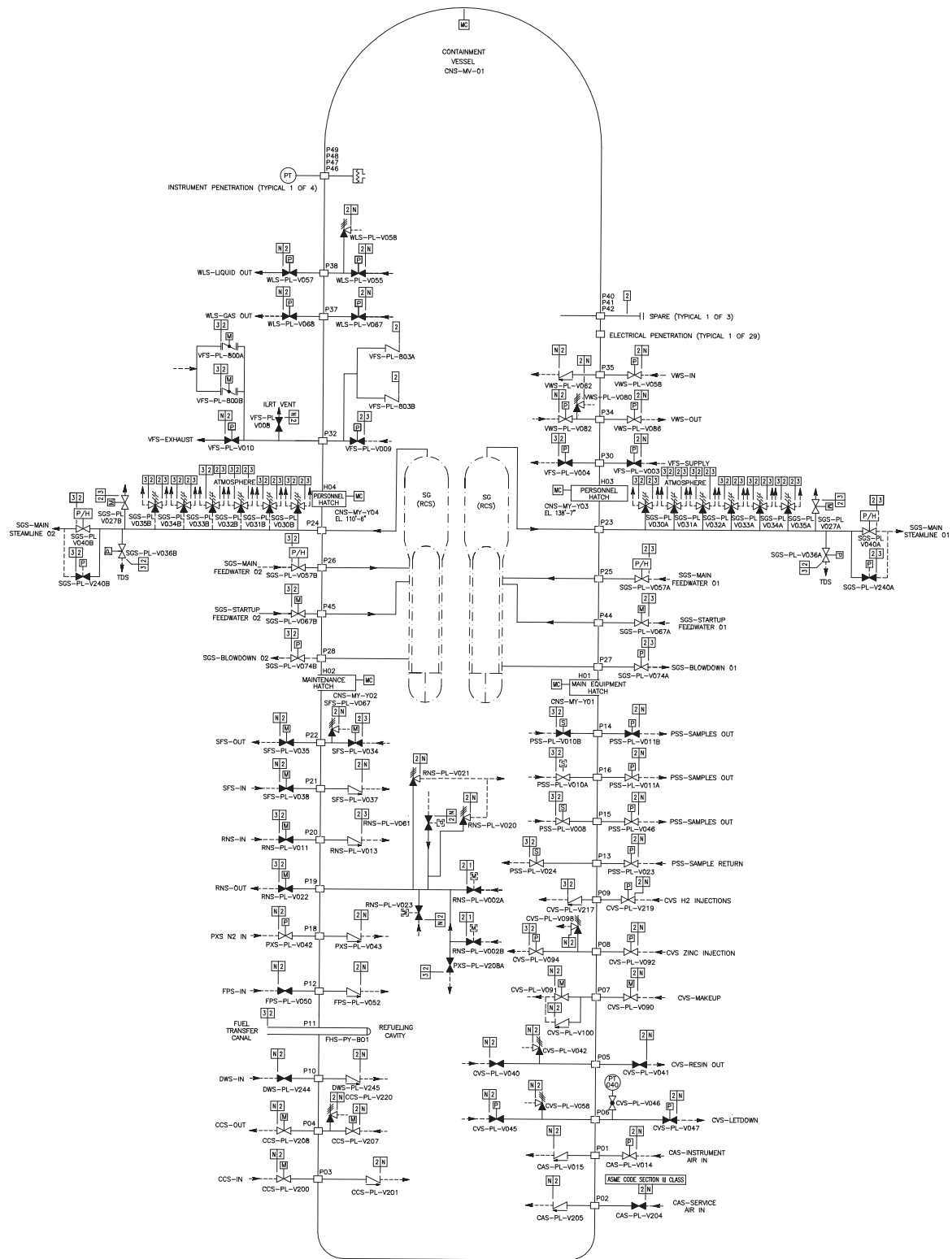
CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>B. -----</p> <p><b>- NOTE -</b></p> <p>Not applicable when an RCS vent of <math>\geq 4.15</math> square inches is established.</p> <p>-----</p> <p>CVS-PL-V091 not closed.</p>	<p>B.1 Close CVS-PL-V091.</p>	<p>1 hour</p>
<p>C. Required Action and associated Completion Time of Condition A not met.</p>	<p>C.1 Increase RCS cold leg temperature to a level acceptable for the existing accumulator pressure allowed in the PTLR.</p> <p><u>OR</u></p> <p>C.2 Depressurize affected accumulator to less than the maximum RCS pressure for existing cold leg temperature allowed in the PTLR.</p>	<p>12 hours</p> <p>12 hours</p>
<p>D. Required LTOP method inoperable for reasons other than Condition A, B, or C.</p>	<p>D.1 Restore two RNS suction relief valves to OPERABLE status.</p> <p><u>OR</u></p> <p>D.2 Depressurize RCS and establish RCS vent of <math>\geq 4.15</math> square inches.</p>	<p>12 hours</p> <p>12 hours</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.4.14.1	<p>-----</p> <p><b>- NOTE -</b></p> <p>Only required to be met when accumulator pressure is greater than or equal to the maximum RCS pressure for the existing RCS cold leg temperature allowed by the P/T limit curves provided in the PTLR.</p> <p>-----</p> <p>Verify each accumulator is isolated.</p>	12 hours
SR 3.4.14.2	<p>-----</p> <p><b>- NOTE -</b></p> <p>Only required to be met when complying with LCO 3.4.14.a.</p> <p>-----</p> <p>Verify both RNS suction isolation valves in one RNS suction flow path are open.</p>	12 hours
SR 3.4.14.3	<p>-----</p> <p><b>- NOTE -</b></p> <p>Only required to be met when complying with LCO 3.4.14.a.</p> <p>-----</p> <p>Verify CVS makeup line containment isolation valve, CVS-PL-V091, is closed.</p>	12 hours
SR 3.4.14.4	<p>-----</p> <p><b>- NOTE -</b></p> <p>Only required to be met when complying with LCO 3.4.14.b.</p> <p>-----</p> <p>Verify RCS vent <math>\geq 4.15</math> square inches is open.</p>	<p>12 hours for unlocked-open vent</p> <p><u>AND</u></p> <p>31 days for locked-open vent</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.4.14.5 -----</p> <p style="text-align: center;"><b>- NOTE -</b></p> <p>Only required to be met when complying with LCO 3.4.14.a.</p> <p>-----</p> <p>Verify the lift setting of each RNS suction relief valve in accordance with the Inservice Testing Program.</p>	<p></p> <p>In accordance with the Inservice Testing Program</p>



**Figure 2.2.1-1  
Containment System**

Table 2.3.6-1 (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
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL-V017A	Yes	Yes	No	-/-	No	-	Transfer Open/Transfer Closed	-
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL-V017B	Yes	Yes	No	-/-	No	-	Transfer Open/Transfer Closed	-
RNS Hot Leg Suction Pressure Relief Valve	RNS-PL-V020	Yes	Yes	No	-/-	No	-	Transfer Open/Transfer Closed	-
RNS Hot Leg Suction Pressure Relief Valve	RNS-PL-V021	Yes	Yes	No	-/-	No	-	Transfer Open/Transfer Closed	-
RNS Suction Header Motor-operated Containment Isolation Valve	RNS-PL-V022	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes	Transfer Closed	As Is
RNS Suction from IRWST Motor-operated Isolation Valve	RNS-PL-V023	Yes	Yes	Yes	Yes/Yes	Yes (Valve Position)	Yes	Transfer Closed	As Is
RNS Discharge to IRWST Motor-operated Isolation Valve	RNS-PL-V024	Yes	Yes	Yes	-/-	No	No	No	As Is
RNS Pump Discharge Relief	RNS-PL-V045	Yes	Yes	No	-/-	No	-	No	-
RNS Suction from Cask Loading Pit Motor-operated Isolation Valve	RNS-PL-V055	Yes	Yes	Yes	No/No	No	No	No	As Is

Table 2.3.6-2				
Line Name	Line No.	ASME Code Section III	Leak Before Break	Functional Capability Required
RNS Suction Lines, from the RCS Hot Leg Connection to the RCS Side of Valves RNS PL-V001A and RNS-PL-V001B	RNS-L001 RNS-L002A RNS-L002B	Yes	Yes	No
RNS Suction Lines, from the RCS Pressure Boundary Valves, RNS-PL-V001A and RNS-PL-V001B, to the RNS pumps	RNS-L004A RNS-L004B RNS-L005 RNS-L006 RNS-L007A RNS-L007B RNS-L009A RNS-L009B	Yes	No	Yes Yes Yes Yes Yes Yes Yes Yes
RNS Suction Line from CVS	RNS-L061	Yes	No	Yes
RNS Suction Line from IRWST	RNS-L029	Yes	No	Yes
RNS Suction Line LTOP Relief	RNS-L040 RNS-L090	Yes	No	Yes
RNS Discharge Lines, from the RNS Pumps to the RNS Heat Exchangers RNS-ME-01A and RNS-ME-01B	RNS-L011A RNS-L011B	Yes	No	Yes
RNS Discharge Lines, from RNS Heat Exchanger RNS-ME-01A to Containment Isolation Valve RNS-PL-V011	RNS-L012A RNS-L014	Yes	No	Yes
RNS Discharge Line, from RNS Heat Exchanger RNS-ME-01B to Common Discharge Header RNS-L014	RNS-L012B	Yes	No	Yes
RNS Discharge Lines, Containment Isolation Valve RNS-PL-V011 to Containment Isolation Valve RNS-PL-V013	RNS-L016	Yes	No	Yes
RNS Suction Line from Cask Loading Pit	RNS-L065	Yes	No	No

Table 2.3.6-2				
Line Name	Line No.	ASME Code Section III	Leak Before Break	Functional Capability Required
RNS Discharge Lines, from Containment Isolation Valve RNS-PL-V013 to RCS Pressure Boundary Isolation Valves RNS-PL-V015A and RNS-PL-V015B	RNS-L017 RNS-L018A RNS-L018B	Yes	No	Yes
RNS Discharge Lines, from Direct Vessel Injection (DVI) Line RNS-BBC-L018A to Passive Core Cooling System (PXS) IRWST Return Isolation Valve RNS-PL-V024	RNS-L020	Yes	No	No
RNS Discharge Lines, from RCS Pressure Boundary Isolation Valves RNS-PL-V015A and RNS-PL-V015B to RCS Pressure Boundary Isolation Valves RNS-PL-V017A and RNS-PL-V017B	RNS-L019A RNS-L019B	Yes	No	Yes
RNS Heat Exchanger Bypass	RNS-L008A RNS-L008B	Yes	No	No
RNS Suction from Spent Fuel Pool	RNS-L052	Yes	No	No
RNS Pump Miniflow Return	RNS-L030A RNS-L030B	Yes	No	No
RNS Discharge to Spent Fuel Pool	RNS-L051	Yes	No	No
RNS Discharge to CVS Purification	RNS-L021	Yes	No	No

Table 2.3.6-4 Inspections, Tests, Analyses, and Acceptance Criteria				
No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
366	2.3.06.07a.i	Not used per Amendment No. 85		
367	2.3.06.07a.ii	Not used per Amendment No. 85		
368	2.3.06.07b	7.b) The Class 1E components identified in Table 2.3.6-1 are powered from their respective Class 1E division.	Testing will be performed on the RNS by providing a simulated test signal in each Class 1E division.	A simulated test signal exists at the Class 1E equipment identified in Table 2.3.6-1 when the assigned Class 1E division is provided the test signal.
369	2.3.06.07c	Not used per Amendment No. 85		
370	2.3.06.08a	Not used per Amendment No. 85		
371	2.3.06.08b	Not used per Amendment No. 85		
372	2.3.06.09a.i	9.a) The RNS provides LTOP for the RCS during shutdown operations.	i) Inspections will be conducted on the low temperature overpressure protection relief valves to confirm that the capacities of the vendor code plate ratings are greater than or equal to system relief requirements.	i) The rated capacities recorded on the valves' vendor code plates are not less than the flow required to provide low-temperature overpressure protection for the RCS, as determined by the LTOPS evaluation based on the pressure-temperature curves developed for the as-procured reactor vessel material.
373	2.3.06.09a.ii	9.a) The RNS provides LTOP for the RCS during shutdown operations.	ii) Testing and analysis in accordance with the ASME Code Section III will be performed to determine set pressure.	ii) A report exists and concludes that the relief valves open at a pressure not greater than the set pressures required to provide low-temperature overpressure protection for the RCS, as determined by the LTOPS evaluation based on the pressure-temperature curves developed for the as-procured reactor vessel material.
374	2.3.06.09b.i	9.b) The RNS provides heat removal from the reactor coolant during shutdown operations.	i) Inspection will be performed for the existence of a report that determines the heat removal capability of the RNS heat exchangers.	i) A report exists and concludes that the product of the overall heat transfer coefficient and the effective heat transfer area, UA, of each RNS heat exchanger is greater than or equal to 2.2 million Btu/hr-°F.

