

ATTACHMENT TO LICENSE AMENDMENT NO. 122

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

| <u>REMOVE</u> | <u>INSERT</u> |
|---------------|---------------|
| 7 | 7 |

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

| <u>REMOVE</u> | <u>INSERT</u> |
|---------------|---------------|
| ii | ii |
| 3.3.13-1 | 3.3.13-1 |
| 3.3.13-2 | 3.3.13-2 |
| --- | 3.3.13-3 |
| 3.7.4-1 | 3.7.4-1 |

Appendix C to Facility Combined License No. NPF-92

| <u>REMOVE</u> | <u>INSERT</u> |
|---------------|---------------|
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| C-168 | C-168 |
| C-173 | C-173 |
| C-178 | C-178 |
| C-367 | C-367 |

(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. 122, 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

Technical Specifications

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3.3 INSTRUMENTATION

3.3.13 Engineered Safety Feature Actuation System (ESFAS) Main Control Room Isolation, Air Supply Initiation, and Electrical Load De-energization

LCO 3.3.13 Two channels of each of the following Functions shall be OPERABLE:

- a. Main Control Room Air Supply Iodine or Particulate Radiation – High 2; and
- b. Main Control Room Differential Pressure – Low.

APPLICABILITY: MODES 1, 2, 3, and 4,
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 with one channel inoperable in MODE 1, 2, 3, or 4. | A.1 ----- <p style="text-align: center;">- NOTE -</p> Not applicable to an inoperable Main Control Room Differential Pressure – Low channel. ----- Verify alternate radiation monitors are OPERABLE. <u>AND</u> | 72 hours |

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|--|---------------------------------|
| A. (continued) | A.2 Verify main control room isolation, air supply initiation, and electrical load de-energization manual controls are OPERABLE. | 72 hours |
| B. One or more Functions with 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> One or more Functions with two channels inoperable in MODE 1, 2, 3, or 4. | C.1 Be in MODE 3. <u>AND</u> C.2 Be in MODE 5. | 6 hours 36 hours |
| D. Required Action and associated Completion Time of Condition B not met. <u>OR</u> One or more Functions with two channels inoperable during movement of irradiated fuel assemblies. | D.1 Suspend movement of irradiated fuel assemblies. | Immediately |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | | FREQUENCY |
|--------------|---|-------------------------------------|
| SR 3.3.13.1 | Perform CHANNEL CHECK. | 12 hours |
| SR 3.3.13.2 | Perform CHANNEL OPERATIONAL TEST (COT) in accordance with Setpoint Program. | 92 days |
| SR 3.3.13.3 | <p>-----</p> <p style="text-align: center;">- NOTE -</p> <p>This surveillance shall include verification that the time constants are adjusted to within limits.</p> <p>-----</p> <p>Perform CHANNEL CALIBRATION in accordance with Setpoint Program.</p> | 24 months |
| SR 3.3.13.4 | Verify ESF RESPONSE TIME is within limit. | 24 months on a STAGGERED TEST BASIS |

3.7 PLANT SYSTEMS

3.7.4 Secondary Specific Activity

LCO 3.7.4 The specific activity of the secondary coolant shall be $\leq 0.01 \mu\text{Ci/gm}$
DOSE EQUIVALENT I-131.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|-------------------|-----------------|
| A. Specific activity not within limit. | A.1 Be in MODE 3. | 6 hours |
| | <u>AND</u> | |
| | A.2 Be in MODE 5. | 36 hours |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|--|-----------|
| SR 3.7.4.1 Verify the specific activity of the secondary coolant $\leq 0.01 \mu\text{Ci/gm}$ DOSE EQUIVALENT I-131. | 31 days |

2.2.5 Main Control Room Emergency Habitability System

Design Description

The main control room emergency habitability system (VES) provides a supply of breathable air for the main control room (MCR) occupants and maintains the MCR at a positive pressure with respect to the surrounding areas whenever ac power is not available to operate the nuclear island nonradioactive ventilation system (VBS), MCR differential pressure is not maintained, or high radioactivity is detected in the MCR air supply. (See Section 3.5 for Radiation Monitoring). The VES also limits the heatup of the MCR, the 1E instrumentation and control (I&C) equipment rooms, and the Class 1E dc equipment rooms by using the heat capacity of surrounding structures.

The VES is as shown in Figure 2.2.5-1 and the component locations of the VES are as shown in Table 2.2.5-6.

1. The functional arrangement of the VES is as described in the Design Description of this Section 2.2.5.
2.
 - a) The components identified in Table 2.2.5-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.
 - b) The piping identified in Table 2.2.5-2 as ASME Code Section III is designed and constructed in accordance with ASME Code Section III requirements.
3.
 - a) Pressure boundary welds in components identified in Table 2.2.5-1 as ASME Code Section III meet ASME Code Section III requirements.
 - b) Pressure boundary welds in piping identified in Table 2.2.5-2 as ASME Code Section III meet ASME Code Section III requirements.
4.
 - a) The components identified in Table 2.2.5-1 as ASME Code Section III retain their pressure boundary integrity at their design pressure.
 - b) The piping identified in Table 2.2.5-2 as ASME Code Section III retains its pressure boundary integrity at its design pressure.
5.
 - a) The seismic Category I equipment identified in Table 2.2.5-1 can withstand seismic design basis loads without loss of safety function.
 - b) Each of the lines identified in Table 2.2.5-2 for which functional capability is required is designed to withstand combined normal and seismic design basis loads without a loss of its functional capability.
6.
 - a) The Class 1E components identified in Table 2.2.5-1 are powered from their respective Class 1E division.
 - b) Separation is provided between VES Class 1E divisions, and between Class 1E divisions and non-Class 1E cable.
7. The VES provides the following safety-related functions:
 - a) The VES provides a 72-hour supply of breathable quality air for the occupants of the MCR.

- 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.
 - e) The system provides shielding below the VES filter that is sufficient to ensure main control room doses are 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 (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 |
|---|----------------|------------------------------|-----------------------|--------------------------------|--|-------------------------------|--------------------|------------------------|--------------------------------------|
| MCR Air Filtration Line Eductor | VES-PY-N01 | Yes | Yes | - | - | - | - | - | - |
| MCR Air Filtration Line Charcoal Filter | VES-MY-F01 | No | Yes | - | - | - | - | - | - |
| MCR Air Filtration Line HEPA Filter | VES-MY-F02 | No | Yes | - | - | - | - | - | - |
| MCR Air Filtration Line Postfilter | VES-MY-F03 | No | Yes | - | - | - | - | - | - |
| MCR Filter Shielding | 12401-NS-01 | No | Yes | - | - | - | - | - | - |
| MCR Gravity Relief Dampers | VES-MD-D001A | No | Yes | - | - | - | - | - | - |
| MCR Gravity Relief Dampers | VES-MD-D001B | No | Yes | - | - | - | - | - | - |
| MCR Air Filtration Line Supply Damper | VES-MD-D002 | No | Yes | - | - | - | - | - | - |
| MCR Air Filtration Line Supply Damper | VES-MD-D003 | No | Yes | - | - | - | - | - | - |
| MCR Air Filtration Line Silencer | VES-MY-Y01 | No | Yes | - | - | - | - | - | - |
| MCR Air Filtration Line Silencer | VES-MY-Y02 | No | Yes | - | - | - | - | - | - |
| MCR Air Delivery Line Flow Sensor | VES-003A | No | Yes | - | Yes/No | Yes | - | - | - |
| MCR Air Delivery Line Flow Sensor | VES-003B | No | Yes | - | Yes/No | Yes | - | - | - |

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 | Not used per Amendment No. 112 | | |
| 880 | 2.2.05.07e | 7e) Shielding below the VES filter is capable of providing attenuation that is sufficient to ensure main control room doses are below an acceptable level during VES operation. | Inspection will be performed for the existence of a report verifying that the as-built shielding meets the requirements for functional capability. | A report exists and concludes that the as-built shielding identified in Table 2.2.5-1 meets the functional requirements and exists below the filtration unit, and within its vertical projection. |
| 272 | 2.2.05.08 | Not used per Amendment No. 112 | | |
| 273 | 2.2.05.09a | Not used per Amendment No. 112 | | |
| 274 | 2.2.05.09b | Not used per Amendment No. 112 | | |
| 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. |

2.7 HVAC Systems

2.7.1 Nuclear Island Nonradioactive Ventilation System

Design Description

The nuclear island nonradioactive ventilation system (VBS) serves the main control room (MCR), control support area (CSA), Class 1E dc equipment rooms, Class 1E instrumentation and control (I&C) rooms, Class 1E electrical penetration rooms, Class 1E battery rooms, remote shutdown room (RSR), reactor coolant pump trip switchgear rooms, adjacent corridors, and passive containment cooling system (PCS) valve room during normal plant operation. The VBS consists of the following independent subsystems: the main control room/control support area HVAC subsystem, the class 1E electrical room HVAC subsystem, and the passive containment cooling system valve room heating and ventilation subsystem. The VBS provides heating, ventilation, and cooling to the areas served when ac power is available. The system provides breathable air to the control room and maintains the main control room and control support area areas at a slightly positive pressure with respect to the adjacent rooms and outside environment during normal operations. The VBS monitors the main control room supply air for radioactive particulate and iodine concentrations and provides filtration of main control room/control support area air during conditions of abnormal "High-1" airborne radioactivity. In addition, the VBS isolates the HVAC penetrations in the main control room boundary on "High-2" particulate or iodine radioactivity in the main control room supply air duct or on a loss of ac power for more than 10 minutes or if main control room differential pressure is below the "Low" setpoint for more than 10 minutes. The Sanitary Drainage System (SDS) also isolates a penetration in the main control room boundary on "High-2" particulate or iodine radioactivity in the main control room supply air duct or on a loss of ac power for more than 10 minutes or if main control room differential pressure is below the "Low" setpoint for more than 10 minutes. Additional penetrations from the SDS and Potable Water System (PWS) into the main control room boundary are maintained leak tight using a loop seal in the piping, and the Waste Water System (WWS) is isolated using a normally closed safety related manual isolation valve. These features support operation of the main control room emergency habitability system (VES), and have been included in Tables 2.7.1-1 and 2.7.1-2.

The VBS is as shown in Figure 2.7.1-1 and the component locations of the VBS are as shown in Table 2.7.1-5.

1. The functional arrangement of the VBS is as described in the Design Description of this subsection 2.7.1.
2.
 - a) The components identified in Table 2.7.1-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.
 - b) The piping identified in Table 2.7.1-2 as ASME Code Section III is designed and constructed in accordance with ASME Code Section III requirements.
3.
 - a) Pressure boundary welds in components identified in Table 2.7.1-1 as ASME Code Section III meet ASME Code Section III requirements.
 - b) Pressure boundary welds in piping identified in Table 2.7.1-2 as ASME Code Section III meet ASME Code Section III requirements.