

ATTACHMENT TO LICENSE AMENDMENT NO. 147

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

5.5-8

INSERT

5.5-8

Appendix C to Facility Combined License No. NPF-91

REMOVE

C-111

C-111a

C-111b

C-409

C-426

INSERT

C-111

C-111a

C-111b

C-409

C-426

(7) Reporting Requirements

- (a) Within 30 days of a change to the initial test program described in UFSAR 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. 147, 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

5.5 Programs and Manuals

5.5.7 Safety Function Determination Program (SFDP) (continued)

- b. A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:
 - 1. A required system redundant to the system(s) supported by the inoperable support system is also inoperable; or
 - 2. A required system redundant to the system(s) in turn supported by the inoperable supported system is also inoperable; or
 - 3. A required system redundant to the support system(s) for the supported systems b.1 and b.2 above is also inoperable.
- c. The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered. When a loss of safety function is caused by the inoperability of a single Technical Specification support system, the appropriate Conditions and Required Actions to enter are those of the support system.

5.5.8 Containment Leakage Rate Testing Program

- a. A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program, dated September 1995," as modified by approved exceptions.
- b. The calculated peak containment internal pressure for the design basis loss of coolant accident, P_a , is 58.1 psig. The containment design pressure is 59 psig.
- c. The maximum allowable primary containment leakage rate, L_a , at P_a , shall be 0.10% of primary containment air weight per day.

Table 2.2.2-3

Inspections, Tests, Analyses, and Acceptance Criteria

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
138	2.2.02.07b.i	7.a) The PCS delivers water from the PCCWST to the outside, top of the containment vessel.	<p>i) Testing will be performed to measure the PCCWST delivery rate from each one of the three parallel flow paths.</p> <p>ii) Testing and or analysis will be performed to demonstrate the PCCWST inventory provides 72 hours of adequate water flow.</p>	<p>i) When tested, each one of the three flow paths delivers water at greater than or equal to:</p> <ul style="list-style-type: none"> - 469.1 gpm at a PCCWST water level of 27.4 ft + 0.2, - 0.0 ft above the tank floor - 226.6 gpm when the PCCWST water level uncovers the first (i.e. tallest) standpipe - 176.3 gpm when the PCCWST water level uncovers the second tallest standpipe - 144.2 gpm when the PCCWST water level uncovers the third tallest standpipe <p>- or a report exists and concludes that the as-measured flow rates delivered by the PCCWST to the containment vessel provides sufficient heat removal capability such that the limiting containment pressure and temperature values are not affected and the PCS is able to perform its safety function to remove heat from containment to maintain plant safety.</p> <p>ii) When tested and/or analyzed with all flow paths delivering and an initial water level at 27.4 + 0.2, - 0.00 ft, the PCCWST water inventory provides greater than or equal to 72 hours of flow, and the flow rate at 72 hours is greater than or equal to 100.7 gpm or a report exists and concludes that the as-measured flow rates delivered by the PCCWST to the containment vessel provides sufficient heat removal capability such that the limiting containment pressure and temperature values are not affected and the PCS is able to perform its safety function to remove heat from containment to maintain plant safety.</p>

Table 2.2.2-3

Inspections, Tests, Analyses, and Acceptance Criteria

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
		<p>7.b) The PCS wets the outside surface of the containment vessel. The inside and the outside of the containment vessel above the operating deck are coated with an inorganic zinc material.</p> <p>7.c) The PCS provides air flow over the outside of the containment vessel by a natural circulation air flow path from the air inlets to the air discharge structure.</p> <p>7.d) The PCS drains the excess water from the outside of the containment vessel through the two upper annulus drains.</p> <p>7.e) The PCS provides a flow path for long-term water makeup to the PCCWST.</p>	<p>i) Testing will be performed to measure the outside wetted surface of the containment vessel with one of the three parallel flow paths delivering water to the top of the containment vessel.</p> <p>ii) Inspection of the containment vessel exterior coating will be conducted.</p> <p>iii) Inspection of the containment vessel interior coating will be conducted.</p> <p>Inspections of the air flow path segments will be performed.</p> <p>Testing will be performed to verify the upper annulus drain flow performance.</p> <p>ii) Testing will be performed to measure the delivery rate from the long-term makeup connection to the PCCWST.</p>	<p>i) A report exists and concludes that when the water in the PCCWST uncovers the standpipes at the following levels, the water delivered by one of the three parallel flow paths to the containment shell provides coverage measured at the spring line that is equal to or greater than the stated coverages.</p> <ul style="list-style-type: none"> - 24.1 ± 0.2 ft above the tank floor; at least 90% of the perimeter is wetted. - 20.3 ± 0.2 ft above the tank floor; at least 72.9% of the perimeter is wetted. - 16.8 ± 0.2 ft above the tank floor; at least 59.6% of the perimeter is wetted. <p>ii) A report exists and concludes that the containment vessel exterior surface is coated with an inorganic zinc coating above elevation 135'-3".</p> <p>iii) A report exists and concludes that the containment vessel interior surface is coated with an inorganic zinc coating above the operating deck.</p> <p>Flow paths exist at each of the following locations:</p> <ul style="list-style-type: none"> - Air inlets - Base of the outer annulus - Base of the inner annulus - Discharge structure <p>With a water level within the upper annulus 10" ± 1" above the annulus drain inlet, the flow rate through each drain is greater than or equal to 525 gpm.</p> <p>ii) With a water supply connected to the PCS long-term makeup connection, each PCS recirculation pump delivers greater than or equal to 100 gpm when tested separately.</p>

Table 2.2.2-3

Inspections, Tests, Analyses, and Acceptance Criteria

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
		<p>9. Safety-related displays identified in Table 2.2.2-1 can be retrieved in the MCR.</p> <p>10.a) Controls exist in the MCR to cause the remotely operated valves identified in Table 2.2.2-1 to perform active functions.</p> <p>10.b) The valves identified in Table 2.2.2-1 as having PMS control perform an active safety function after receiving a signal from the PMS.</p> <p>11.a) The motor-operated valves identified in Table 2.2.2-1 perform an active safety-related function to change position as indicated in the table.</p> <p>11.b) After loss of motive power, the remotely operated valves identified in Table 2.2.2-1 assume the indicated loss of motive power position.</p>	<p>Inspection will be performed for retrievability of the safety-related displays in the MCR.</p> <p>Stroke testing will be performed on the remotely operated valves identified in Table 2.2.2-1 using the controls in the MCR.</p> <p>Testing will be performed on the remotely operated valves in Table 2.2.2-1 using real or simulated signals into the PMS.</p> <p>iii) Tests of the motor-operated valves will be performed under preoperational flow, differential pressure, and temperature conditions.</p> <p>Testing of the remotely operated valves will be performed under the conditions of loss of motive power.</p>	<p>Safety-related displays identified in Table 2.2.2-1 can be retrieved in the MCR.</p> <p>Controls in the MCR operate to cause remotely operated valves identified in Table 2.2.2-1 to perform active functions.</p> <p>The remotely operated valves identified in Table 2.2.2-1 as having PMS control perform the active function identified in the table after receiving a signal from the PMS.</p> <p>iii) Each motor-operated valve changes position as indicated in Table 2.2.2-1 under preoperational test conditions.</p> <p>After loss of motive power, each remotely operated valve identified in Table 2.2.2-1 assumes the indicated loss of motive power position.</p>
139	2.2.02.07b.ii	Not used per Amendment No. 113		
140	2.2.02.07b.iii	Not used per Amendment No. 113		
141	2.2.02.07c	Not used per Amendment No. 113		
142	2.2.02.07d	Not used per Amendment No. 113		

1. The physical arrangement of the nuclear island structures, the annex building, and the turbine building is as described in the Design Description of this Section 3.3, and as shown on Figures 3.3-1 through 3.3-14. The physical arrangement of the radwaste building and the diesel generator building is as described in the Design Description of this Section 3.3.
2.
 - a) The nuclear island structures, including the critical sections listed in Table 3.3-7, are seismic Category I and are designed and constructed to withstand design basis loads, as specified in the Design Description, without loss of structural integrity and the safety-related functions. The design bases loads are those loads associated with:
 - Normal plant operation (including dead loads, live loads, lateral earth pressure loads, and equipment loads, including hydrodynamic loads, temperature and equipment vibration);
 - External events (including rain, snow, flood, tornado, tornado generated missiles and earthquake); and
 - Internal events (including flood, pipe rupture, equipment failure, and equipment failure generated missiles).
 - b) Site grade level is located relative to floor elevation 100'-0" per Table 3.3-5. Floor elevation 100'-0" is defined as the elevation of the floor at design plant grade.
 - c) The containment and its penetrations are designed and constructed to ASME Code Section III, Class MC.⁽¹⁾
 - d) The containment and its penetrations retain their pressure boundary integrity associated with the design pressure.
 - e) The containment and its penetrations maintain the containment leakage rate less than the maximum allowable leakage rate associated with the peak containment pressure for the design basis accident.
 - f) The key dimensions of the nuclear island structures are as defined on Table 3.3-5.
 - g) The containment vessel above the operating deck provides a heat transfer surface. A free volume exists inside the containment shell above the operating deck.
 - h) The containment free volume below elevation 107.68' provides containment floodup during a postulated loss-of-coolant accident.
3. Walls and floors of the nuclear island structures as defined on Table 3.3-1, except for designed openings and penetrations, provide shielding during normal operations.
4.
 - a) Walls and floors of the annex building as defined on Table 3.3-1, except for designed openings and penetrations, provide shielding during normal operations.
 - b) The walls on the outside of the waste accumulation room in the radwaste building provide shielding from accumulated waste.

1. Containment isolation devices are addressed in subsection 2.2.1, Containment System.

Table 3.3-6
Inspections, Tests, Analyses, and Acceptance Criteria

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
772	3.3.00.02d	Not used per Amendment No. 85		
773	3.3.00.02e	Not used per Amendment No. 85		
774	3.3.00.02f	2.f) The key dimensions of nuclear island structures are defined on Table 3.3-5.	An inspection will be performed of the as-built configuration of the nuclear island structures.	A report exists and concludes that the key dimensions of the as-built nuclear island structures are consistent with the dimensions defined on Table 3.3-5.
775	3.3.00.02g	2.g) The containment vessel above the operating deck provides a heat transfer surface. A free volume exists inside the containment shell above the operating deck.	The maximum containment vessel inside height from the operating deck is measured and the inner radius below the spring line is measured at two orthogonal radial directions at one elevation.	The containment vessel maximum inside height from the operating deck is 146'-7" (with tolerance of +12", -6"), and the inside diameter is 130 feet nominal (with tolerance of +12", -6").
776	3.3.00.02h	2.h) The free volume in the containment allows for floodup to support long-term core cooling for postulated loss-of-coolant accidents.	An inspection will be performed of the as-built containment structures and equipment. The portions of the containment included in this inspection are the volumes that flood with a loss-of-coolant accident in passive core cooling system valve/equipment room B (11207). The in-containment refueling water storage tank volume is excluded from this inspection.	A report exists and concludes that the floodup volume of this portion of the containment is less than 71,960 ft ³ to an elevation of 107.68'.