

ATTACHMENT TO LICENSE AMENDMENT NO. 138

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

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Appendix C to Facility Combined License No. NPF-92

REMOVE

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C-116

C-116

C-139

C-139

C-142

C-142

C-246

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C-247

C-247

(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. 138, 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

plant design objective. Submit this PTS evaluation report to the Director of NRO, or the Director's designee, in writing, at least 18 months before initial fuel load;

6. Review differences between the as-built plant and the design used as the basis for the AP1000 seismic margin analysis. SNC shall perform a verification walkdown to identify differences between the as-built plant and the design. SNC shall evaluate any differences and must modify the seismic margin analysis as necessary to account for the plant-specific design and any design changes or departures from the certified design. SNC shall compare the as-built structures, systems, and components (SSC) high confidence, low probability of failures (HCLPFs) with those assumed in the AP1000 seismic margin evaluation, before initial fuel load. SNC shall evaluate deviations from the HCLPF values or assumptions in the seismic margin evaluation due to the as-built configuration and final analysis to determine if vulnerabilities have been introduced;
7. Review differences between the as-built plant and the design used as the basis for the AP1000 probabilistic risk assessment (PRA) and UFSAR Table 19.59-18. SNC shall evaluate the plant-specific PRA-based insight differences and shall modify the plant-specific PRA model as necessary to account for the plant-specific design and any design changes or departure from the PRA certified in Rev. 19 of the AP1000 DCD;
8. Review differences between the as-built plant and the design used as the basis for the AP1000 internal fire and internal flood analysis. SNC shall evaluate the plant-specific internal fire and internal flood analyses and shall modify the analyses as necessary to account for the plant-specific design and any design changes or departures from the design certified in Rev. 19 of the AP1000 DCD; and
9. Perform a thermal lag assessment of the equipment listed in UFSAR Tables 19D-8 and 19D-9 to provide additional assurance that this equipment can perform its severe accident functions during environmental conditions resulting from hydrogen burns associated with severe accidents. SNC shall perform this assessment for equipment used for severe accident mitigation that has not been tested at severe accident conditions. SNC shall assess the ability of the equipment to perform during accident hydrogen burns using the environment enveloping method or the test based thermal analysis

- a) The PXS provides containment isolation of the PXS lines penetrating the containment.
 - b) The PRHR HX provides core decay heat removal during design basis events.
 - c) The CMTs, accumulators, in-containment refueling water storage tank (IRWST) and containment recirculation provide reactor coolant system (RCS) makeup, boration, and safety injection during design basis events.
 - d) The PXS provides pH adjustment of water flooding the containment following design basis accidents.
9. The PXS has the following features:
- a) The PXS provides a function to cool the outside of the reactor vessel during a severe accident.
 - b) The accumulator discharge check valves (PXS-PL-V028A/B and V029A/B) are of a different check valve type than the CMT discharge check valves (PXS-PL-V016A/B and V017A/B).
10. Safety-related displays of the parameters identified in Table 2.2.3-1 can be retrieved in the main control room (MCR).
11. a) Controls exist in the MCR to cause the remotely operated valves identified in Table 2.2.3-1 to perform their active function(s).
- b) The valves identified in Table 2.2.3-1 as having protection and safety monitoring system (PMS) control perform their active function after receiving a signal from the PMS.
 - c) The valves identified in Table 2.2.3-1 as having diverse actuation system (DAS) control perform their active function after receiving a signal from the DAS.
12. a) The squib valves and check valves identified in Table 2.2.3-1 perform an active safety-related function to change position as indicated in the table.
- b) After loss of motive power, the remotely operated valves identified in Table 2.2.3-1 assume the indicated loss of motive power position.
13. Displays of the parameters identified in Table 2.2.3-3 can be retrieved in the MCR.

Table 2.2.3-4

Inspections, Tests, Analyses, and Acceptance Criteria

| No. | ITAAC No. | Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
|-----|----------------|--|---|---|
| 202 | 2.2.03.09a.ii | 9.a) The PXS provides a function to cool the outside of the reactor vessel during a severe accident. | ii) Inspections of the as-built reactor vessel insulation will be performed. | ii) The combined total flow area of the water inlets is not less than 6 ft ² . The combined total flow area of the steam outlet(s) is not less than 12 ft ² . A report exists and concludes that the minimum flow area between the vessel insulation and reactor vessel for the flow path that vents steam is not less than 12 ft ² considering the maximum deflection of the vessel insulation with a static pressure of 12.95 ft of water. |
| 203 | 2.2.03.09a.iii | 9.a) The PXS provides a function to cool the outside of the reactor vessel during a severe accident. | iii) Inspections will be conducted of the flow path(s) from the loop compartments to the reactor vessel cavity. | iii) A flow path with a flow area not less than 6 ft ² exists from the loop compartment to the reactor vessel cavity. |
| 204 | 2.2.03.09b | 9.b) The accumulator discharge check valves (PXS-PL-V028A/B and V029A/B) are of a different check valve type than the CMT discharge check valves (PXS-PL-V016A/B and V017A/B). | An inspection of the accumulator and CMT discharge check valves is performed. | The accumulator discharge check valves are of a different check valve type than the CMT discharge check valves. |
| 205 | 2.2.03.09c | 9.c) Not used per Amendment No. 138. | | |

Table 2.2.3-6 is not used.

| Table 2.3.9-2 | | | | | |
|---------------------|------------|----------|--------------------|--|----------|
| Equipment Name | Tag Number | Function | Power Group Number | Location | Room No. |
| Hydrogen Igniter 05 | VLS-EH-05 | Energize | 1 | Loop compartment 02 | 11402 |
| Hydrogen Igniter 06 | VLS-EH-06 | Energize | 2 | Loop compartment 02 | 11502 |
| Hydrogen Igniter 07 | VLS-EH-07 | Energize | 2 | Loop compartment 02 | 11402 |
| Hydrogen Igniter 08 | VLS-EH-08 | Energize | 1 | Loop compartment 02 | 11502 |
| Hydrogen Igniter 09 | VLS-EH-09 | Energize | 1 | In-containment refueling water storage tank (IRWST) sparger side | 11305 |
| Hydrogen Igniter 10 | VLS-EH-10 | Energize | 2 | IRWST sparger side | 11305 |
| Hydrogen Igniter 11 | VLS-EH-11 | Energize | 2 | Loop compartment 01 | 11401 |
| Hydrogen Igniter 12 | VLS-EH-12 | Energize | 1 | Loop compartment 01 | 11501 |
| Hydrogen Igniter 13 | VLS-EH-13 | Energize | 1 | Loop compartment 01 | 11401 |
| Hydrogen Igniter 14 | VLS-EH-14 | Energize | 2 | Loop compartment 01 | 11501 |
| Hydrogen Igniter 15 | VLS-EH-15 | Energize | 2 | IRWST vacuum breaker vents | 11305 |
| Hydrogen Igniter 16 | VLS-EH-16 | Energize | 1 | IRWST vacuum breaker vents | 11305 |
| Hydrogen Igniter 17 | VLS-EH-17 | Energize | 2 | Northeast valve room | 11207 |
| Hydrogen Igniter 18 | VLS-EH-18 | Energize | 1 | Northeast accumulator room | 11207 |
| Hydrogen Igniter 19 | VLS-EH-19 | Energize | 2 | East valve room | 11208 |
| Hydrogen Igniter 20 | VLS-EH-20 | Energize | 2 | Southeast accumulator room | 11206 |
| Hydrogen Igniter 21 | VLS-EH-21 | Energize | 1 | Southeast valve room | 11206 |
| Hydrogen Igniter 22 | VLS-EH-22 | Energize | 1 | Lower compartment area (core makeup tank [CMT] and valve area) | 11400 |
| Hydrogen Igniter 23 | VLS-EH-23 | Energize | 2 | Lower compartment area (CMT and valve area) | 11400 |
| Hydrogen Igniter 24 | VLS-EH-24 | Energize | 2 | Lower compartment area (CMT and valve area) | 11400 |
| Hydrogen Igniter 25 | VLS-EH-25 | Energize | 2 | Lower compartment area (CMT and valve area) | 11400 |
| Hydrogen Igniter 26 | VLS-EH-26 | Energize | 2 | Lower compartment area (CMT and valve area) | 11400 |
| Hydrogen Igniter 27 | VLS-EH-27 | Energize | 1 | Lower compartment area (CMT and valve area) | 11300 |
| Hydrogen Igniter 28 | VLS-EH-28 | Energize | 1 | Lower compartment area (CMT and valve area) | 11400 |

| Table 2.3.9-2 | | | | | |
|---------------------|------------|----------|--------------------|---|----------|
| Equipment Name | Tag Number | Function | Power Group Number | Location | Room No. |
| Hydrogen Igniter 29 | VLS-EH-29 | Energize | 1 | Lower compartment area (CMT and valve area) | 11400 |
| Hydrogen Igniter 30 | VLS-EH-30 | Energize | 2 | Lower compartment area (CMT and valve area) | 11403 |
| Hydrogen Igniter 31 | VLS-EH-31 | Energize | 1 | Lower compartment area (CMT and valve area) | 11400 |
| Hydrogen Igniter 32 | VLS-EH-32 | Energize | 1 | Lower compartment area (CMT and valve area) | 11400 |
| Hydrogen Igniter 33 | VLS-EH-33 | Energize | 2 | North CVS equipment room | 11209 |
| Hydrogen Igniter 34 | VLS-EH-34 | Energize | 1 | North CVS equipment room | 11209 |
| Hydrogen Igniter 35 | VLS-EH-35 | Energize | 1 | IRWST hooded vents | 11500 |
| Hydrogen Igniter 36 | VLS-EH-36 | Energize | 2 | IRWST hooded vents | 11500 |
| Hydrogen Igniter 37 | VLS-EH-37 | Energize | 1 | IRWST hooded vents | 11500 |
| Hydrogen Igniter 38 | VLS-EH-38 | Energize | 2 | IRWST hooded vents | 11500 |
| Hydrogen Igniter 39 | VLS-EH-39 | Energize | 1 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 40 | VLS-EH-40 | Energize | 2 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 41 | VLS-EH-41 | Energize | 2 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 42 | VLS-EH-42 | Energize | 1 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 43 | VLS-EH-43 | Energize | 1 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 44 | VLS-EH-44 | Energize | 1 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 45 | VLS-EH-45 | Energize | 2 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 46 | VLS-EH-46 | Energize | 2 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 47 | VLS-EH-47 | Energize | 1 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 48 | VLS-EH-48 | Energize | 2 | Upper compartment lower region | 11500 |
| Hydrogen Igniter 49 | VLS-EH-49 | Energize | 1 | Pressurizer compartment | 11503 |
| Hydrogen Igniter 50 | VLS-EH-50 | Energize | 2 | Pressurizer compartment | 11503 |
| Hydrogen Igniter 51 | VLS-EH-51 | Energize | 1 | Upper compartment mid-region | 11500 |
| Hydrogen Igniter 52 | VLS-EH-52 | Energize | 2 | Upper compartment mid-region | 11500 |
| Hydrogen Igniter 53 | VLS-EH-53 | Energize | 2 | Upper compartment mid-region | 11500 |
| Hydrogen Igniter 54 | VLS-EH-54 | Energize | 1 | Upper compartment mid-region | 11500 |