## ATTACHMENT TO LICENSE AMENDMENT NO. 68

### 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	<u>INSERT</u>
7	7
Appendix C to Facility Combined Li	cense No. NPF-92
C-334	C-334
C-336	C-336
	C-336a
C-342	C-342
C-343	C-343
C-345	C-345
	C-345a

#### (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) <u>Incorporation</u>

The Technical Specifications, Environmental Protection Plan, and ITAAC in Appendices A, B, and C, respectively of this license, as revised through Amendment No. 68, 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
  - 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

# 2.6.3 Class 1E dc and Uninterruptible Power Supply System Design Description

The Class 1E dc and uninterruptible power supply system (IDS) provides dc and uninterruptible ac electrical power for safety-related equipment during normal and off-normal conditions.

The IDS is as shown in Figure 2.6.3-1 and the component locations of the IDS are as shown in Table 2.6.3-4.

- 1. The functional arrangement of the IDS is as described in the Design Description of this Section 2.6.3.
- 2. The seismic Category I equipment identified in Table 2.6.3-1 can withstand seismic design basis loads without loss of safety function.
- 3. Separation is provided between Class 1E divisions, and between Class 1E divisions and non-Class 1E cables.
- 4. The IDS provides the following safety-related functions:
  - a) The IDS provides electrical independence between the Class 1E divisions.
  - b) The IDS provides electrical isolation between the non-Class 1E ac power system and the non-Class 1E lighting in the MCR.
  - c) Each IDS 24-hour battery bank supplies a dc switchboard bus load for a period of 24 hours without recharging.
  - d) Each IDS 72-hour battery bank supplies a dc switchboard bus load for a period of 72 hours without recharging.
  - e) The IDS spare battery bank supplies a dc load equal to or greater than the most severe switchboard bus load for the required period without recharging.
  - f) Each IDS 24-hour inverter supplies its ac load.
  - g) Each IDS 72-hour inverter supplies its ac load.
  - h) Each IDS 24-hour battery charger provides the protection and safety monitoring system (PMS) with two loss-of-ac input voltage signals.
  - i) The IDS supplies an operating voltage at the terminals of the Class 1E motor-operated valves identified in subsections 2.1.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3.2, 2.3.6, and 2.7.1 that is greater than or equal to the minimum specified voltage.
  - j) The IDS provides electrical isolation between the non-Class 1E battery monitors and the Class 1E battery banks
- 5. The IDS provides the following nonsafety-related functions:
  - a) Each IDS 24-hour battery charger supplies a dc switchboard bus load while maintaining the corresponding battery charged.
  - b) Each IDS 72-hour battery charger supplies a dc switchboard bus load while maintaining the corresponding battery charged.
  - c) Each IDS regulating transformer supplies an ac load when powered from the 480 V motor control center (MCC).

<b>Table 2.6.3-1</b>				
Equipment Name	Tag No.	Seismic Cat. I	Class 1E/ Qual. for Harsh Envir.	Safety- Related Display
Division D 250 Vdc Distribution Panel	IDSD-DD-1	Yes	Yes/No	No
Division A 120 Vac Distribution Panel 1	IDSA-EA-1	Yes	Yes/No	No
Division A 120 Vac Distribution Panel 2	IDSA-EA-2	Yes	Yes/No	No
Division B 120 Vac Distribution Panel 1	IDSB-EA-1	Yes	Yes/No	No
Division B 120 Vac Distribution Panel 2	IDSB-EA-2	Yes	Yes/No	No
Division B 120 Vac Distribution Panel 3	IDSB-EA-3	Yes	Yes/No	No
Division C 120 Vac Distribution Panel 1	IDSC-EA-1	Yes	Yes/No	No
Division C 120 Vac Distribution Panel 2	IDSC-EA-2	Yes	Yes/No	No
Division C 120 Vac Distribution Panel 3	IDSC-EA-3	Yes	Yes/No	No
Division D 120 Vac Distribution Panel 1	IDSD-EA-1	Yes	Yes/No	No
Division D 120 Vac Distribution Panel 2	IDSD-EA-2	Yes	Yes/No	No
Division A Fuse Panel 4	IDSA-EA-4	Yes	Yes/No	No
IDSA Battery Monitor Fuse Panel	IDSA-EA-5	Yes	Yes/No	No
Division B Fuse Panel 4	IDSB-EA-4	Yes	Yes/No	No
Division B Fuse Panel 5	IDSB-EA-5	Yes	Yes/No	No
Division B Fuse Panel 6	IDSB-EA-6	Yes	Yes/No	No
IDSB Battery Monitor Fuse Panel	IDSB-EA-7	Yes	Yes/No	No
IDSB Battery Monitor Fuse Panel	IDSB-EA-8	Yes	Yes/No	No
Division C Fuse Panel 4	IDSC-EA-4	Yes	Yes/No	No
Division C Fuse Panel 5	IDSC-EA-5	Yes	Yes/No	No
Division C Fuse Panel 6	IDSC-EA-6	Yes	Yes/No	No
IDSC Battery Monitor Fuse Panel	IDSC-EA-7	Yes	Yes/No	No
IDSC Battery Monitor Fuse Panel	IDSC-EA-8	Yes	Yes/No	No
Division D Fuse Panel 4	IDSD-EA-4	Yes	Yes/No	No
IDSD Battery Monitor Fuse Panel	IDSD-EA-5	Yes	Yes/No	No
IDSS Battery Monitor Fuse Panel	IDSS-EA-1	Yes	Yes/No	No

Table 2.6.3-1				
Equipment Name	Tag No.	Seismic Cat. I	Class 1E/ Qual. for Harsh Envir.	Safety- Related Display
Division A Fused Transfer Switch Box 1	IDSA-DF-1	Yes	Yes/No	No
Division B Fused Transfer Switch Box 1	IDSB-DF-1	Yes	Yes/No	No
Division B Fused Transfer Switch Box 2	IDSB-DF-2	Yes	Yes/No	No
Division C Fused Transfer Switch Box 1	IDSC-DF-1	Yes	Yes/No	No
Division C Fused Transfer Switch Box 2	IDSC-DF-2	Yes	Yes/No	No
Division D Fused Transfer Switch Box 1	IDSD-DF-1	Yes	Yes/No	No
Spare Fused Transfer Switch Box 1	IDSS-DF-1	Yes	Yes/No	No
Division A 250 Vdc MCC	IDSA-DK-1	Yes	Yes/No	No

	Table 2.6.3-3 Inspections, Tests, Analyses, and Acceptance Criteria				
No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria	
608	2.6.03.04h	4.h) Each IDS 24-hour battery charger provides the PMS with two loss-of-ac input voltage signals.	Testing will be performed by simulating a loss of input voltage to each 24-hour battery charger.	Two PMS input signals exist from each 24-hour battery charger indicating loss of ac input voltage when the loss-of-input voltage condition is simulated.	
609	2.6.03.04i	4.i) The IDS supplies an operating voltage at the terminals of the Class 1E motor operated valves identified in subsections 2.1.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3.2, 2.3.6, and 2.7.1 that is greater than or equal to the minimum specified voltage.	Testing will be performed by stroking each specified motor-operated valve and measuring the terminal voltage at the motor starter input terminals with the motor operating. The battery terminal voltage will be no more than 210 Vdc during the test.	The motor starter input terminal voltage is greater than or equal 200 Vdc with the motor operating.	
876	2.6.03.04j	4.j) The IDS provides electrical isolation between the non- Class 1E battery monitors and the Class 1E battery banks.	Type tests, analyses, or a combination of type tests and analyses of the isolation devices will be performed.	A report exists and concludes that the battery monitor fuse isolation panels prevent credible faults from propagating into the Class 1E portions of the IDS.	
610	2.6.03.05a	5.a) Each IDS 24-hour battery charger supplies a dc switchboard bus load while maintaining the corresponding battery charged.	Testing of each as-built 24-hour battery charger will be performed by applying a simulated or real load, or a combination of simulated or real loads.	Each 24-hour battery charger provides an output current of at least 150 A with an output voltage in the range 210 to 280 V.	
611	2.6.03.05b	5.b) Each IDS 72-hour battery charger supplies a dc switchboard bus load while maintaining the corresponding battery charged.	Testing of each 72-hour as-built battery charger will be performed by applying a simulated or real load, or a combination of simulated or real loads.	Each 72-hour battery charger provides an output current of at least 125 A with an output voltage in the range 210 to 280 V.	
612	2.6.03.05c	5.c) Each IDS regulating transformer supplies an ac load when powered from the 480 V MCC.	Testing of each as-built regulating transformer will be performed by applying a simulated or real load, or a combination of simulated or real loads, equivalent to a resistive load greater than 30 kW when powered from the 480 V MCC.	Each regulating transformer supplies a line-to-line output voltage of 208 ± 2% V.	
613	2.6.03.05d.i	5.d) The IDS Divisions B and C regulating transformers supply their post-72-hour ac loads when powered from an ancillary diesel generator.	Inspection of the as-built system will be performed.	i) Ancillary diesel generator 1 is electrically connected to regulating transformer IDSC-DT-1	

	Table 2.6.3-3 Inspections, Tests, Analyses, and Acceptance Criteria				
No.	ITAAC No.	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria	
614	2.6.03.05d.ii	5.d) The IDS Divisions B and C regulating transformers supply their post-72-hour ac loads when powered from an ancillary diesel generator.	Inspection of the as-built system will be performed.	ii) Ancillary diesel generator 2 is electrically connected to regulating transformer IDSB-DT-1.	
615	2.6.03.06	6. Safety-related displays identified in Table 2.6.3-1 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 2.6.3-1 can be retrieved in the MCR.	
616	2.6.03.07	7. The IDS dc battery fuses and battery charger circuit breakers, and dc distribution panels, MCCs, and their circuit breakers and fuses, are sized to supply their load requirements.	Analyses for the as-built IDS dc electrical distribution system to determine the capacities of the battery fuses and battery charger circuit breakers, and dc distribution panels, MCCs, and their circuit breakers and fuses, will be performed.	Analyses for the as-built IDS dc electrical distribution system exist and conclude that the capacities of as-built IDS battery fuses and battery charger circuit breakers, and dc distribution panels, MCCs, and their circuit breakers and fuses, as determined by their nameplate ratings, exceed their analyzed load requirements.	
617	2.6.03.08	8. Circuit breakers and fuses in IDS battery, battery charger, dc distribution panel, and MCC circuits are rated to interrupt fault currents.	Analyses for the as-built IDS dc electrical distribution system to determine fault currents will be performed.	Analyses for the as-built IDS dc electrical distribution system exist and conclude that the analyzed fault currents do not exceed the interrupt capacity of circuit breakers and fuses in the battery, battery charger, dc distribution panel, and MCC circuits, as determined by their nameplate ratings.	
618	2.6.03.09	9. The IDS batteries, battery chargers, dc distribution panels, and MCCs are rated to withstand fault currents for the time required to clear the fault from its power source.	Analyses for the as-built IDS dc electrical distribution system to determine fault currents will be performed.	Analyses for the as-built IDS dc electrical distribution system exist and conclude that the fault current capacities of as-built IDS batteries, battery chargers, dc distribution panels, and MCCs, as determined by manufacturer's ratings, exceed their analyzed fault currents for the time required to clear the fault from its power source as determined by the circuit interrupting device coordination analyses.	

<b>Table 2.6.3-4</b>			
Component Name	Tag No.	Component Location	
Division B 250 Vdc Distribution Panel	IDSB-DD-1	Auxiliary Building	
Division C 250 Vdc Distribution Panel	IDSC-DD-1	Auxiliary Building	
Division D 250 Vdc Distribution Panel	IDSD-DD-1	Auxiliary Building	
Division A 120 Vac Distribution Panel 1	IDSA-EA-1	Auxiliary Building	
Division A 120 Vac Distribution Panel 2	IDSA-EA-2	Auxiliary Building	
Division B 120 Vac Distribution Panel 1	IDSB-EA-1	Auxiliary Building	
Division B 120 Vac Distribution Panel 2	IDSB-EA-2	Auxiliary Building	
Division B 120 Vac Distribution Panel 3	IDSB-EA-3	Auxiliary Building	
Division C 120 Vac Distribution Panel 1	IDSC-EA-1	Auxiliary Building	
Division C 120 Vac Distribution Panel 2	IDSC-EA-2	Auxiliary Building	
Division C 120 Vac Distribution Panel 3	IDSC-EA-3	Auxiliary Building	
Division D 120 Vac Distribution Panel 1	IDSD-EA-1	Auxiliary Building	
Division D 120 Vac Distribution Panel 2	IDSD-EA-2	Auxiliary Building	
Division A Fuse Panel 4	IDSA-EA-4	Auxiliary Building	
IDSA Battery Monitor Fuse Panel	IDSA-EA-5	Auxiliary Building	
Division B Fuse Panel 4	IDSB-EA-4	Auxiliary Building	
Division B Fuse Panel 5	IDSB-EA-5	Auxiliary Building	
Division B Fuse Panel 6	IDSB-EA-6	Auxiliary Building	
IDSB Battery Monitor Fuse Panel	IDSB-EA-7	Auxiliary Building	
IDSB Battery Monitor Fuse Panel	IDSB-EA-8	Auxiliary Building	
Division C Fuse Panel 4	IDSC-EA-4	Auxiliary Building	
Division C Fuse Panel 5	IDSC-EA-5	Auxiliary Building	
Division C Fuse Panel 6	IDSC-EA-6	Auxiliary Building	
IDSC Battery Monitor Fuse Panel	IDSC-EA-7	Auxiliary Building	
IDSC Battery Monitor Fuse Panel	IDSC-EA-8	Auxiliary Building	
Division D Fuse Panel 4	IDSD-EA-4	Auxiliary Building	
IDSD Battery Monitor Fuse Panel	IDSD-EA-5	Auxiliary Building	
IDSS Battery Monitor Fuse Panel	IDSS-EA-1	Auxiliary Building	

<b>Table 2.6.3-4</b>			
Component Name	Tag No.	Component Location	
Division A Fused Transfer Switch Box 1	IDSA-DF-1	Auxiliary Building	
Division B Fused Transfer Switch Box 1	IDSB-DF-1	Auxiliary Building	
Division B Fused Transfer Switch Box 2	IDSB-DF-2	Auxiliary Building	
Division C Fused Transfer Switch Box 1	IDSC-DF-1	Auxiliary Building	
Division C Fused Transfer Switch Box 2	IDSC-DF-2	Auxiliary Building	
Division D Fused Transfer Switch Box 1	IDSD-DF-1	Auxiliary Building	
Spare Fused Transfer Switch Box 1	IDSS-DF-1	Auxiliary Building	
Division A 250 Vdc MCC	IDSA-DK-1	Auxiliary Building	