ATTACHMENT

TO LICENSE AMENDMENT NO. 86

VOGTLE ELECTRIC GENERATING PLANT, UNIT 4

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 |
|---|---|
| 7 | 7 |

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

| REMOVE | INSERT |
|---|---|
| 3.3.1-6 | 3.3.1-6 |
| 3.3.1-7 | 3.3.1-7 |
| 3.3.8-6 | 3.3.8-6 |
| 3.3.8-7 | 3.3.8-7 |
| 3.3.10-5 | 3.3.10-5 |
| 3.3.11-1 | 3.3.11-1 |

Appendix C to Facility Combined License No. NPF-92

| REMOVE | INSERT |
|---|---|
| C-293 | C-293 |
| C-297 | C-297 |

(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. 86, 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

Table 3.3.1-1 (page 1 of 2)
Reactor Trip System Instrumentation

| FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS | CONDITIONS | SURVEILLANCE REQUIREMENTS |
|---|---|---|---|---|
| 1. Power Range Neutron Flux | | | | |
| a. High Setpoint | 1,2 | 4 | D | SR 3.3.1.1<br>SR 3.3.1.2<br>SR 3.3.1.6<br>SR 3.3.1.9<br>SR 3.3.1.11 |
| b. Low Setpoint | 1[(a)],2 | 4 | D | SR 3.3.1.1<br>SR 3.3.1.7<br>SR 3.3.1.9<br>SR 3.3.1.11 |
| 2. Power Range Neutron Flux High Positive Rate | 1,2 | 4 | D | SR 3.3.1.6<br>SR 3.3.1.9<br>SR 3.3.1.11 |
| 3. Overtemperature ΔT | 1,2 | 4 (2/loop) | D | SR 3.3.1.1<br>SR 3.3.1.3<br>SR 3.3.1.4<br>SR 3.3.1.5<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |
| 4. Overpower ΔT | 1,2 | 4 (2/loop) | D | SR 3.3.1.1<br>SR 3.3.1.3<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |
| 5. Pressurizer Pressure | | | | |
| a. Low 2 Setpoint | 1[(b)] | 4 | E | SR 3.3.1.1<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |
| b. High 2 Setpoint | 1,2 | 4 | D | SR 3.3.1.1<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |
| 6. Pressurizer Water Level – High 3 | 1[(b)] | 4 | E | SR 3.3.1.1<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |

(a) Below the P-10 (Power Range Neutron Flux) interlocks.

(b) Above the P-10 (Power Range Neutron Flux) interlock.

Table 3.3.1-1 (page 2 of 2)
Reactor Trip System Instrumentation

| FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS | CONDITIONS | SURVEILLANCE REQUIREMENTS |
|---|---|---|---|---|
| 7. Reactor Coolant Flow – Low 2 | 1[(b)] | 4 per hot leg | E | SR 3.3.1.1<br>SR 3.3.1.3<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |
| 8. Reactor Coolant Pump (RCP) Bearing Water Temperature – High 2 | 1,2 | 4 per RCP | D | SR 3.3.1.1<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |
| 9. RCP Speed – Low 2 | 1[(b)] | 4 (1/pump) | E | SR 3.3.1.1<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |
| 10. Steam Generator (SG) Narrow Range Water Level – Low | 1,2 | 4 per SG | D | SR 3.3.1.1<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |
| 11. Steam Generator (SG) Narrow Range Water Level – High 3 | 1,2[(c)] | 4 per SG | D | SR 3.3.1.1<br>SR 3.3.1.6<br>SR 3.3.1.8<br>SR 3.3.1.11 |
| 12. Passive Residual Heat Removal Actuation | 1,2 | 4 per valve | D | SR 3.3.1.9<br>SR 3.3.1.10<br>SR 3.3.1.11 |

(b) Above the P-10 (Power Range Neutron Flux) interlock.

(c) Above the P-11 (Pressurizer Pressure) interlock.

Table 3.3.8-1 (page 1 of 2)
Engineered Safeguards Actuation System Instrumentation

| | FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS | CONDITIONS |
|---|---|---|---|---|
| 1. | Containment Pressure –Low 2 | 1,2,3,4,5[(a)],6[(a)] | 4 | P |
| 2. | Containment Pressure – High 2 | 1,2,3,4 | 4 | H |
| 3. | Containment Radioactivity – High | 1,2,3,4[(b)] | 4 | I |
| 4. | Containment Radioactivity – High 2 | 1,2,3 | 4 | I |
| 5. | Pressurizer Pressure – Low 3 | 1,2,3[(c)] | 4 | E |
| 6. | Pressurizer Water Level – Low | 1,2 | 4 | D |
| 7. | Pressurizer Water Level – Low 2 | 1,2,3,4[(b)] | 4 | F |
| | | 4[(d)],5[(e)(f)] | 4 | J |
| 8. | Pressurizer Water Level – High | 1,2,3 | 4 | I |
| 9. | Pressurizer Water Level – High 2 | 1,2,3,4[(g)] | 4 | I |
| 10. | Pressurizer Water Level, High 3 | 1,2,3,4[(g)] | 4 | F |
| 11. | RCS Cold Leg Temperature ($T_{cold}$) – Low 2 | 1,2,3[(c)] | 4 per loop | E |
| 12. | Reactor Coolant Average Temperature ($T_{avg}$) – Low | 1,2 | 4 | D |
| 13. | Reactor Coolant Average Temperature ($T_{avg}$) – Low 2 | 1,2 | 4 | D |
| 14. | RCS Wide Range Pressure – Low | 1,2,3,4 | 4 | H |
| | | 5 | 4 | K |
| | | 6[(h)] | 4 | L |

(a) Without an open containment air flow path ≥ 6 inches in diameter.

(b) With the RCS not being cooled by the Normal Residual Heat Removal System (RNS).

(c) Above the P-11 (Pressurizer Pressure) interlock, when the RCS boron concentration is below that necessary to meet the SDM requirements at an RCS temperature of 200°F.

(d) With the RCS being cooled by the RNS.

(e) With the RCS pressure boundary intact.

(f) With RCS not being cooled by the RNS and with pressurizer level ≥ 20%.

(g) Above the P-19 (RCS Pressure) interlock with the RCS not being cooled by RNS.

(h) With upper internals in place.

Table 3.3.8-1 (page 2 of 2)
Engineered Safeguards Actuation System Instrumentation

| FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS | CONDITIONS |
|---|---|---|---|
| 15. Core Makeup Tank (CMT) Level – Low 3 | 1,2,3,4 | 4 per tank | H |
| | 5[i] | 4 per OPERABLE tank | J |
| 16. CMT Level – Low 6 | 1,2,3,4 | 4 per tank | H |
| | 5 | 4 per OPERABLE tank | J |
| 17. Source Range Neutron Flux Doubling | 2[j],3[j],4[l] | 4 | I |
| | 5[l] | 4 | I |
| 18. IRWST Level – Low 3 | 1,2,3,4[b] | 4 | F |
| | 4[d],5 | 4 | M |
| | 6[h] | 4 | N |
| 19. Reactor Coolant Pump Bearing Water Temperature – High 2 | 1,2,3,4 | 4 per RCP | O |
| 20. SG Narrow Range Water Level – Low | 1,2,3,4[b] | 4 per SG | F |
| 21. SG Wide Range Water Level – Low | 1,2,3,4[b] | 4 per SG | F |
| 22. SG Narrow Range Water Level High | 1,2,3,4 | 4 per SG | I |
| 23. SG Narrow Range Water Level – High 3 | 1,2 | 4 per SG | D |
| | 3,4 | 4 per SG | I |
| 24. Steam Line Pressure – Low 2 | 1,2,3,4[b] | 4 per steam line | G |
| 25. Steam Line Pressure – Negative Rate – High | 3[k] | 4 per steam line | I |

(b) With the RCS not being cooled by the Normal Residual Heat Removal System (RNS).

(d) With the RCS being cooled by the RNS.

(g) Above the P-19 (RCS Pressure) interlock with the RCS not being cooled by RNS.

(h) With upper internals in place.

(i) With RCS pressure boundary intact and with pressurizer level ≥ 20%.

(j) With unborated water source flow paths not isolated except when critical or except during intentional approach to criticality.

(k) Below the P-11 (Pressurizer Pressure) interlock.

(l) With unborated water source flow paths not isolated.

Table 3.3.10-1 (page 1 of 1)
Engineered Safeguards Actuation System Instrumentation

| FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS | CONDITIONS |
|---|---|---|---|
| 1. Hot Leg Level – Low 4 | 4[(a)],5 | 1 per loop | C |
| | 6[(b)] | 1 per loop | D |
| 2. Hot Leg Level – Low 2 | 4[(a)(c)],5[(c)] | 1 per loop | E |
| | 6[(c)(d)] | 1 per loop | F |

(a) With the RCS being cooled by the RNS.

(b) With upper internals in place.

(c) Below the P-12 (Pressurizer Level) interlock.

(d) With the water level < 23 feet above the top of the reactor vessel flange.

3.3 INSTRUMENTATION

3.3.11 Engineered Safety Feature Actuation System (ESFAS) Startup Feedwater Flow Instrumentation

LCO 3.3.11 Two channels of ESFAS Startup Feedwater Flow - Low 2 instrumentation for each startup feedwater line shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3,
MODE 4 with the Reactor Coolant System (RCS) not being cooled by the Normal Residual Heat Removal Sysem (RNS).

ACTIONS

**- NOTE -**

Separate condition entry is allowed for each startup feedwater line.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|---|
| A. One or more startup feedwater lines with one channel inoperable. | A.1 Place channel in trip. | 6 hours |
| B. Required Action and associated Completion Time of Condition A not met.<br><br>OR<br><br>One or more startup feedwater lines with two channels inoperable. | B.1 Be in MODE 3.<br><br>AND<br><br>B.2 Be in MODE 4 with the RCS cooling provided by the RNS. | 6 hours<br><br><br><br>24 hours |

**Table 2.5.2-1**
**PMS Equipment Name and Classification**

| Equipment Name | Seismic Cat. I | Class 1E | Qual. for Harsh Envir. |
|---|---|---|---|
| PMS Cabinets, Division A | Yes | Yes | No |
| PMS Cabinets, Division B | Yes | Yes | No |
| PMS Cabinets, Division C | Yes | Yes | No |
| PMS Cabinets, Division D | Yes | Yes | No |
| Reactor Trip Switchgear, Division A | Yes | Yes | No |
| Reactor Trip Switchgear, Division B | Yes | Yes | No |
| Reactor Trip Switchgear, Division C | Yes | Yes | No |
| Reactor Trip Switchgear, Division D | Yes | Yes | No |
| MCR/RSW Transfer Panels | Yes | Yes | No |
| MCR Safety-related Display, Division A | Yes | Yes | No |
| MCR Safety-related Display, Division B | Yes | Yes | No |
| MCR Safety-related Display, Division C | Yes | Yes | No |
| MCR Safety-related Display, Division D | Yes | Yes | No |
| MCR Safety-related Controls | Yes | Yes | No |

**Table 2.5.2-2**
**PMS Automatic Reactor Trips**

Source Range High Neutron Flux Reactor Trip
Intermediate Range High Neutron Flux Reactor Trip
Power Range High Neutron Flux (Low Setpoint) Trip
Power Range High Neutron Flux (High Setpoint) Trip
Power Range High Positive Flux Rate Trip
Reactor Coolant Pump High-2 Bearing Water Temperature Trip
Overtemperature Delta-T Trip
Overpower Delta-T Trip
Pressurizer Low-2 Pressure Trip
Pressurizer High-2 Pressure Trip
Pressurizer High-3 Water Level Trip
Low-2 Reactor Coolant Flow Trip
Low-2 Reactor Coolant Pump Speed Trip
Low Steam Generator Water Level Trip
High-3 Steam Generator Water Level Trip
Automatic or Manual Safeguards Actuation Trip
Automatic or Manual Depressurization System Actuation Trip
Automatic or Manual Core Makeup Tank (CMT) Injection Trip
Passive Residual Heat Removal (PRHR) Actuation Reactor Trip

| Table 2.5.2-6<br>PMS Blocks |
|---|
| Reactor Trip Functions:<br><br>Source Range High Neutron Flux Reactor Trip<br>Intermediate Range High Neutron Flux Reactor Trip<br>Power Range High Neutron Flux (Low Setpoint) Trip<br>Pressurizer Low-2 Pressure Trip<br>Pressurizer High-3 Water Level Trip<br>Low-2 Reactor Coolant Flow Trip<br>Low-2 Reactor Coolant Pump Speed Trip<br>High-3 Steam Generator Water Level Trip<br><br>Engineered Safety Features:<br><br>Automatic Safeguards<br>Containment Isolation<br>Main Feedwater Isolation<br>Reactor Coolant Pump Trip<br>Core Makeup Tank Injection<br>Steam Line Isolation<br>Startup Feedwater Isolation<br>Block of Boron Dilution<br>Chemical and Volume Control System Isolation<br>Chemical and Volume Control System Letdown Isolation<br>Steam Dump Block<br>Auxiliary Spray and Letdown Purification Line Isolation<br>Passive Residual Heat Removal Heat Exchanger Alignment<br>Normal Residual Heat Removal System Isolation |

| Table 2.5.2-7<br>PMS Interlocks |
|---|
| RNS Suction Valves<br>PRHR Heat Exchanger Inlet Isolation Valve<br>CMT Cold Leg Balance Line Isolation Valves<br>Containment Vacuum Relief Isolation Valves |

Table 2.5.2-8

Inspections, Tests, Analyses, and Acceptance Criteria

| No. | ITAAC No. | Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
|---|---|---|---|---|
| 521 | 2.5.02.01 | Not used per Amendment No. 84 | | |