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Southern Nuclear Operating Company ND-17-1563 Enclosure 1

Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Docket No: 52-025 & 52-026

Completion Plan for Uncompleted ITAAC 2.5.02.06a.i [Index Number 529]

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ITAAC Statement

Design Commitment

6.a) The PMS initiates an automatic reactor trip, as identified in Table 2.5.2-2, when plant process signals reach specified limits.

Inspections/Tests/Analyses

An operational test of the as-built PMS will be performed using real or simulated test signals.

Acceptance Criteria

i) The reactor trip switchgear opens after the test signal reaches the specified limit. This only needs to be verified for one automatic reactor trip function.

ITAAC Completion Description

Multiple ITAAC are performed to verify that the Protection and Safety Monitoring System (PMS) initiates an automatic reactor trip, as identified in the Combined License (COL) Appendix C Table 2.5.2-2 (Attachment A), when plant process signals reach specified limits. The subject ITAAC performs testing to confirm the reactor trip switchgear opens after the test signal reaches the specified limit.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures SV3-PMS-T1P-504 and SV4-PMS-T1P-504 (References 1 and 2, respectively) to confirm that the reactor trip switchgear opens during an operational test of the as-built PMS using a real signal. When the real signal reaches the specified limit the Reactor Trip Circuit Breakers (RTCBs) are verified to open. This test only needs to be verified for one automatic reactor trip function.

The RTCBs are placed in the closed position and one of the Passive Residual Heat Removal (PRHR) Heat Exchanger (HX) outlet Flow Control Valves (FCVs) (PXS-V108A/B) is opened. This valve opening generates a PRHR Actuation Reactor Trip. Each RTCB is verified to be open locally at the Reactor Trip Switchgear Cabinet. The testing verifies that each of the RTCBs receive a PMS reactor trip signal.

The completed Unit 3 and Unit 4 preoperational test results reports SV3-PMS-T2R-504 and SV4-PMS-T2R-504 (References 3 and 4, respectively) confirm that the reactor trip switchgear opens after the test signal reaches the specified limit. This is only verified for one automatic reactor trip function.

References 1, 2, 3 and 4 are available for NRC inspection as part of the ITAAC 2.5.02.06a.i Completion Package (Reference 5).

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List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

References (available for NRC inspection)

- 1. SV3-PMS-T1P-504, "PMS Reactor Trip Actuation Preoperational Test Procedure"
- 2. SV4-PMS-T1P-504, "PMS Reactor Trip Actuation Preoperational Test Procedure"
- 3. SV3-PMS-T2R-504, "PMS Reactor Trip Actuation Test Results Report"
- 4. SV4-PMS-T2R-504, "PMS Reactor Trip Actuation Test Results Report"
- 5. ITAAC 2.5.02.06a.i Completion Package
- 6. NEI 08-01, Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A

COL Appendix C Table 2.5.2-2

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 Bearing Water Temperature Trip

Overtemperature Delta-T Trip

Overpower Delta-T Trip

Pressurizer Low Pressure Trip

Pressurizer High Pressure Trip

Pressurizer High Water Level Trip

Low Reactor Coolant Flow Trip

Low Reactor Coolant Pump Speed Trip

Low Steam Generator Water Level Trip

High-2 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