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AUG 2 6 2019

Docket Nos.: 52-026

ND-19-1029
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC C.2.6.12.04 [Index Number 674]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item C.2.6.12.04 [Index Number 674] demonstrating the as-built offsite circuit for Vogtle Unit 4 can supply the required frequency at the interface with the onsite ac power system. The closure process for this ITAAC is based on the guidance described in NEI 08-01, Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52, which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Tom Petrak at 706-848-1575.

Respectfully submitted,

Kellie Roberts for MJY

Michael J. Yox
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC C.2.6.12.04 [Index Number 674]

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Southern Nuclear Operating Company
ND-19-1029
Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC C.2.6.12.04 [Index Number 674]

ITAAC Statement

Design Commitment:

4. During steady state operation, each offsite circuit is capable of supplying required frequency to the interface with the onsite ac power system that will support operation of assumed loads during normal, abnormal and accident conditions.

Inspections, Tests, Analyses:

Analyses of the as-built offsite circuit will be performed to evaluate the capability of each offsite circuit to supply the frequency requirements at the interface with the onsite ac power system.

Acceptance Criteria:

A report exists and concludes that during steady state operation each as-built offsite circuit is capable of supplying the frequency at the interface with onsite ac power system that will support operation of assumed loads during normal, abnormal and accident conditions.

ITAAC Determination Basis

Analyses were performed to demonstrate that during steady state operation each as-built offsite circuit to Vogtle Unit 4 is capable of supplying the frequency at the interface with the onsite alternating current (ac) power system that will support operation of assumed loads during normal, abnormal and accident conditions.

The offsite power system of Plant Vogtle Units 1, 2, 3 and 4 was modeled in proprietary power transmission system planning software using the 2022 valley load dynamics ready case (2018 vintage). Multiple stability simulations were performed in the analyses to assess the ability of the offsite power supply to withstand contingency events on the system. All four plants were assumed to be operating at full output as the worst-case scenario for each contingency event analyzed. The plant load assumptions modeled for Units 1 and 2 were based on historical information. The plant load assumptions modeled for Units 3 and 4 were based on conservative values, which are greater than the maximum calculated loads for normal operating conditions, and also bound the abnormal and accident condition loads (Reference 2). Units 3 and 4 plant loads are defined in the report "Assumed Loads During Normal, Abnormal And Accident Conditions", attached to Memorandum ND-17-1189 (Reference 1).

The contingency events modeled were three phase fault followed by a breaker failure and remote clearing of the fault, common right-of-way faults, large generation trips or large load trips. Each frequency transient resulting from a simulated contingency was measured and recorded. The analyses results of all contingencies modeled were within the acceptable range of 59.5 to 60.5 Hertz (Hz) at the interface with the onsite ac power system of Unit 4, as specified in the Updated Final Safety Analysis Report (UFSAR) Table 8.2-201.

The analyses report C.2.6.12.04-PCD-Rev 0 2019, "2019 Vogtle FSAR Report – Stability" (Reference 2), concludes that during steady state operation each as-built offsite circuit for Vogtle Unit 4 is capable of supplying the frequency at the interface with the onsite ac power system that will support operation of assumed loads during normal, abnormal and accident conditions.

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review determined that there are no relevant ITAAC findings associated with this ITAAC. The ITAAC finding closure review document number is included in the ITAAC C.2.6.12.04 Completion Package (Reference 3) and available for NRC inspection.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC C.2.6.12.04 was performed for Vogtle Unit 4 and that the prescribed acceptance criteria are met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. Southern Nuclear Intercompany Correspondence, ND-17-1189, "Assumed Loads During Normal, Abnormal and Accident Conditions", 6/30/17
2. C.2.6.12.04-PCD-Rev 0 2019, "2019 Vogtle FSAR Report – Stability"
3. C.2.6.12.04-U4-CP Rev0, "Vogtle Unit 4 ITAAC C.2.6.12.04 (674) Completion Package"