

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION II
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200
ATLANTA, GEORGIA 30303-1200

August 4, 2023

Jamie Coleman Regulatory Affairs Director Southern Nuclear Operating Company 7825 River Road, BIN 63031 Waynesboro, GA 30830

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT (VEGP), UNIT 3 – INITIAL TEST

PROGRAM AND OPERATIONAL PROGRAMS INTEGRATED INSPECTION

REPORT 05200025/2023011

Dear Jamie Coleman:

On June 30, 2023, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at VEGP, Unit 3. The enclosed inspection report documents the inspection results, which the inspectors discussed on July 11, 2023, with Mr. Glen Chick, VEGP Units 3 & 4 Executive Vice President, and other members of your staff.

The inspection examined a sample of construction activities conducted under your Combined License (COL) as it relates to safety and compliance with the Commission's rules and regulations and with the conditions of these documents. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any), will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system ADAMS. ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Should you have any questions concerning this letter, please contact us.

Sincerely,

Bradley J Davis Signed by Davis, Bradley on 08/04/23

Bradley J. Davis, Chief Construction Inspection Branch 2 Division of Construction Oversight

Docket Nos.: 5200025 License Nos: NPF-91

Enclosure:

NRC Inspection Report (IR) 05200025/2023011

w/attachment: Supplemental Information

cc w/ encl: Distribution via LISTSERV

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNIT 3 – NRC INITIAL TEST PROGRAM AND OPERATIONAL PROGRAMS INTEGRATED INSPECTION REPORTS 05200025/2023011 DATED AUGUST 4, 2023

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DATE	08/04/2023	08/03/2023	08/04/2023			

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U.S. NUCLEAR REGULATORY COMMISSION Region II

Docket Numbers: 5200025 License Numbers: NPF-91 Report Numbers: 05200025/2023011 Enterprise Identifier I-2023-011-0035 Licensee: Southern Nuclear Operating Company, Inc. Facility: Vogtle Unit 3 Combined License Location: Waynesboro, GA Inspection Dates: April 1, 2023, through June 30, 2023 J. Eargle, Senior Resident Inspector - Testing, Division of Inspectors: Construction Oversight (DCO) S. Egli, Senior Construction Inspector, DCO B. Kemker, Senior Resident Inspector, DCO Approved by: Bradley J. Davis, Chief Construction Inspection Branch 2 Division of Construction Oversight

SUMMARY OF FINDINGS

Inspection Report (IR) 05200025/2023010; April 1 – June 30, 2023; Vogtle Unit 3 Combined License, initial test program and operational programs integrated inspection report.

This report covers a three-month period of announced inspections of startup testing and operational programs by resident and regional inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, or Red), using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process." Cross-cutting aspects are determined using IMC 0310, "Aspects Withing the Cross-Cutting Areas." All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy. The NRC's program for oversight of AP1000 start-up activities is described in IMC 2514, "AP1000 Reactor Inspection Program – Startup Testing Phase."

A. NRC-Identified and	Self Revealed Findings
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None

B. Licensee-Identified Violations

None

REPORT DETAILS

Summary of Plant Construction Status

During this report period for Unit 3, the licensee completed surveillance testing to meet Technical Specification Mode 1 requirements, and power ascension testing at 25%, 50%, and 75% power plateaus. This testing included remote shutdown room testing, loss of offsite power testing at 25% and 50% power plateaus, and a plant trip from 100% power. Also, the licensee entered a planned maintenance outage at the end of the inspection period.

3. OPERATIONAL READINESS

Cornerstones: Operational Programs

IMC 2514, AP1000 Reactor Inspection Program – Startup Testing Phase

3T01 Initial Test Program (Startup)

a. Inspection Scope

The inspectors used appropriate portions of the inspection procedure (IP) to observe the licensee's performance of the following procedure to verify if Unit 3 could be tripped from the remote shutdown workstation and be maintained stable in Hot Standby conditions for at least 30 minutes. The inspectors observed the conduct of these procedures to verify if they satisfied the applicable quality and technical requirements of the Updated Final Safety Analysis Report (UFSAR) and the Technical Specifications.

• 3-GEN-ITPS-640, Remote Shutdown Workstation Startup Test Procedure, Ver. 3.1

The inspectors used appropriate portions of the IP to review the test results of the following procedure to verify if Unit 3 could be tripped from the remote shutdown workstation and be maintained stable in Hot Standby conditions for at least 30 minutes. The results were reviewed to verify whether the test satisfied the applicable technical and quality requirements of the UFSAR and Technical Specifications.

• 3-GEN-ITPS-640, Remote Shutdown Workstation Startup Test Procedure, Ver. 3.1

b. Findings

No findings were identified.

3T02 Initial Test Program (Startup)

a. Inspection Scope

The inspectors used appropriate portions of the IP to review the results of the following procedure used to verify if in response to a simulated loss of load the rapid power reduction system operated to reduce the nuclear power to a level capable of being handled by the steam dump system for a large load rejection. The results were reviewed to verify whether the test satisfied the applicable technical and quality requirements of the UFSAR.

3-PLS-ITPS-605, Rapid Power Reduction Startup Test Procedure, Ver. 4.0

b. Findings

No findings were identified.

3T03 Initial Test Program (Startup)

a. Inspection Scope

The inspectors used appropriate portions of the IP to observe the licensee's performance of the following procedure to verify if Unit 3's automatic control systems had the ability to sustain a manual main generator trip from 100% rated thermal power and to bring the plant to stable conditions following the transient, in addition to assessing the dynamic response of the plant when the turbine was subjected to its maximum overspeed condition. The inspectors observed the conduct of this procedure to verify if they satisfied the applicable quality and technical requirements of the UFSAR and the Technical Specifications.

3-GEN-ITPS-636, Plant Trip from 100% Power Startup Test Procedure, Ver.
 2.1

b. Findings

No findings were identified.

3T04 Initial Test Program (Startup)

a. Inspection Scope

The inspectors used the appropriate portions of the IP to review the results of the post fuel load core verification to verify if all fuel assemblies were loaded into the vessel in the correct location and orientation consistent with the prespecified configuration for the initial reactor core. The inspectors reviewed the results to verify if they met the technical and quality requirements of the UFSAR and the Technical Specifications.

b. Findings

No findings were identified

4. OTHER INSPECTION RESULTS

4OA6 Meetings, Including Exit

.1 Exit Meeting.

On July 11, 2023, the inspectors presented the inspection results to Mr. Glen Chick, VEGP, Units 3 &4 Executive Vice President, and other licensee and contractor staff members. Proprietary information was reviewed during the inspection period but was not included in the inspection report.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensees and Contractor Personnel

- S. Briggs, Testing and Turnover Director
- A. Nix, ITP Director
- E. Loehlein, Operations Director
- J. Coleman, Regulatory Affairs Director
- R. Nicoletto, NI Manager
- J. Hartman, Shift Operations Manager
- D. Trafford, Operations Support Manager
- C. Parkes, Operations Services Manager
- S. Leighty, Regulatory Affairs Manager
- W. Garrett, Licensing Manager
- C. Houseal, Startup Manager
- J. Olsen, NI Supervisor
- F. Bonilla, Startup
- M. Lindquist, Startup
- K. Middlebrooks, Startup
- P. Miner, Startup
- J. Abshire, Startup
- J. Andino Valle, Startup
- M. Easter, Startup

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Item Number Type Status Description

None

LIST OF DOCUMENTS REVIEWED

3. OPERATIONAL READINESS

Section 3T01

3-GEN-ITPS-640, Remote Shutdown Workstation Startup Test Procedure, Ver. 3.1

3-GEN-ITPS-618, Power Ascension Test Sequence Startup Test Procedure, Ver. 4.0

3-GOP-202, Plant Shutdown 25% Power To Mode 3, Ver. P=0.15

3-EOP-E-0, Reactor trip or Safeguards Actuation, Ver. 1.1

3-EOP-ES-0.1, Reactor Trip Response, Ver. 1.2

3-AOP-601, Evacuation of Main Control Room, Ver. 3.0

WO# 1115729

Section 3T02

3-PLS-ITPS-605, Rapid Power Reduction Startup Test Procedure, Ver. 4.0-V3TPC1 3-PLS-ITPS-605, Rapid Power Reduction Startup Test Procedure, Ver. 4.0-V3TPC2 3-PLS-ITPS-605, Rapid Power Reduction Startup Test Procedure, Ver. 4.0-V3TPC3

WO 1115185 CR 10945112

CR 10945714 CR 10946157

CR 10937936

CR 10939329

CR 10939330

CR 10945549

Section 3T03

3-GEN-ITPS-636, Plant Trip from 100% Power Startup Test Procedure, Ver. 2.1 3-GEN-ITPS-618, Power Ascension Test Sequence Startup Test Procedure, Ver. 6 CR 10978042

Section 3T04

3-GOP-301, Attachment 24, Initial Fuel Loading Mode 6 Entry Checklist, Ver. K=0.10 NMP-RE-007-F03, Vogtle 3&4 – Core Verification Signoff, Ver. 1 Unit 3 Core, Cycle 1 Core Map, 10/04/2022

LIST OF ACRONYMS

COL Combined License

IMC Inspection Manual Chapter

IP inspection procedure IR inspection report

NRC Nuclear Regulatory Commission

PARS Publicly Available Records

UFSAR Updated Final Safety Analysis Report VEGP Vogtle Electric Generating Plant