



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

March 21, 2008

EA-06-132

Mr. Tom E. Tynan
Vice President
Southern Nuclear Operating Company, Inc.
Vogtle Electric Generating Plant
7821 River Road
Waynesboro, GA 30830

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT - NRC 95001 INSPECTION
REPORT 05000424/2007502 AND 05000425/2007502

Dear Mr. Tynan:

On February 14, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed a supplemental inspection at Vogtle Electric Generating Plant, Units 1 and 2. The enclosed report documents the inspection results which were discussed on February 14, 2008, with you and members of your staff.

As required by the NRC Reactor Oversight Process Action Matrix, this supplemental inspection was performed in accordance with Inspection Procedure 95001. The purpose of this inspection was to assess your evaluation for the White inspection finding associated with a breakdown of your emergency exercise critique process to properly identify a weakness associated with a risk-significant planning standard (RSPS) that was determined to be a Drill/Exercise Performance (DEP) Performance Indicator (PI) opportunity failure during a full-scale exercise. The supplemental inspection was conducted to determine if the root and contributing causes of the finding were understood, to assess the extent of condition review, and to determine if the corrective actions were sufficient to address the root and contributing causes and to prevent recurrence. The inspection consisted of a review of selected procedures and records, and interviews with personnel.

Based on the results of this inspection, we concluded that you have adequately completed a root cause analysis of the performance deficiency and have identified and implemented appropriate corrective actions. No findings of significance were identified. Therefore, the White inspection finding, Violation 50-424, 50-425/2006009-001 is considered closed.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be 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).

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ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Brian R. Bonser, Chief
Plant Support Branch 1
Division of Reactor Safety

Docket Nos. 50-424, 50-425
License Nos. NPF-68, NPF-81

(cc w/encl: See Page 3)

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DATE	3/ /2008	3/ /2008	3/ /2008				
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U. S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket Nos: 50-424, 50-425

License Nos: NPF-68, NPF-81

Report Nos: 05000424/2007502, 05000425/2007502

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Vogtle Electric Generating Plant, Units 1 and 2

Location: Waynesboro, GA 30830

Dates: December 11-14, 2006
February 12-14, 2007

Inspectors: Lee Miller, Senior Emergency Preparedness Inspector
Robert Kahler, Team Leader, Nuclear Security and Incident
Response

Approved by: Brian R. Bonser, Chief
Plant Support Branch 1
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000424/2007-502, 05000425/2007-502; 12/11-14/07 and 02/11-14/2008; Vogtle Electric Generating Plant, Units 1 and 2; Supplemental Inspection; IP 95001, "Inspection For One Or Two White Inputs In A Strategic Performance Area."

This supplemental inspection was performed by a Senior Emergency Preparedness Inspector from Region II and one technical expert from the Office of Nuclear Security and Incident Response. No findings of significance were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

Cornerstone: Emergency Preparedness

The U.S. Nuclear Regulatory Commission (NRC) performed this supplemental inspection in accordance with Inspection Procedure 95001, to assess the licensee's evaluation associated with a failure of the licensee's exercise critique process to properly identify a weakness associated with risk-significant planning standard (RSPS) that was determined to be a Drill/Exercise Performance (DEP) Performance Indicator (PI) opportunity failure during a full-scale exercise. This performance issue was previously characterized as having low to moderate risk significance (White) in NRC Inspection Report 05000424/2006011 and 05000425/2006011. The inspectors concluded that the licensee performed an adequate evaluation of the root causes of the issue and had identified appropriate corrective actions.

The licensee's evaluation of the issue identified one root cause. The identified root cause was the criteria for evaluation of drill/exercise objectives were written in an ineffective manner that did not ensure identification of all areas for improvement or weaknesses. The licensee identified seven contributory causes.

Given the acceptable performance in addressing the root and contributing causes associated with the White finding and that the performance issue has been open for seven quarters, as provided in Nuclear Regulatory Commission (NRC) Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program the White finding," this performance issue will not be held open beyond the first quarter of calendar year 2008.

Enclosure

REPORT DETAILS

01 INSPECTION SCOPE

The U.S. Nuclear Regulatory Commission (NRC) performed this supplemental inspection to assess the licensee's evaluation associated with a failure of the licensee's critique process to properly identify a weakness associated with a risk significant planning standard (RSPS) that was determined to be a Drill/Exercise Performance (DEP) Performance Indicator (PI) opportunity failure during a full-scale exercise. This performance issue was previously characterized as having low to moderate risk significance (White) in NRC Inspection Report 05000424/2006011 and 05000425/2006011 and is related to the emergency preparedness cornerstone in the reactor safety strategic performance area.

02 EVALUATION OF INSPECTION REQUIREMENTS

02.01 Problem Identification

- a. Determination of who identified the issue (i.e., licensee, self-revealing, or NRC) and under what conditions.

The licensee made an inaccurate Site Area Emergency (SAE) classification during a full-scale emergency exercise on March 22, 2006. The licensee's critique following the exercise failed to identify that the SAE classification during the exercise was an inaccurate classification. After the critique, the inspectors notified the station of an identified risk-significant performance deficiency involving a failure of the licensee's exercise critique process to identify a weakness associated with an RSPS that was determined to be a DEP PI opportunity failure.

- b. Determination of how long the issue existed, and prior opportunities for identification.

The Root Cause and Corrective Action (RCCA) indicated that the failure was specific to the 2006 Emergency Preparedness Exercise critique and had not previously occurred. The inspectors agreed with the root cause evaluation conclusion that there were no prior instances in recent years of difficulties in the licensee's exercise critique process to properly identify a weakness associated with an RSPS.

- c. Determination of the plant-specific risk consequences (as applicable) and compliance concerns associated with the issue.

The RCCA and the "SNC Readiness Guideline for NRC 95001 Inspection", a document developed for the 95001 inspection, demonstrated that the risk consequences associated with a mis-classification of an event was adequately understood. The licensee clearly understood and appreciated the need for accurate and timely event classification, and the associated risk commensurate with an event misclassification.

With respect to compliance concerns, the licensee's evaluation and the inspector's discussions with the licensee acknowledged acceptance of the associated NRC violation, the need for a root cause evaluation and identification of corrective actions.

Enclosure

The inspectors concluded that the licensee's evaluations of the risk consequences and compliance concerns associated with the inaccurate SAE declaration were adequate.

02.02 Root Cause and Extent of Condition Evaluation

- a. Evaluation of methods to identify root cause(s) and contributing cause(s).

The licensee's root cause evaluation utilized event and causal factors charting with a barrier analysis and the bubble chart.

The inspectors reviewed the root cause analysis methods employed by the licensee and concluded that an adequate, formal, structured approach was utilized to identify the root and contributing causes.

- b. Level of detail of the root cause evaluation.

The licensee's final root cause evaluation identified one root cause and seven contributing causes. The inspectors determined that the root cause evaluation was conducted to a sufficient level of detail for the issue and sufficient corrective actions were identified commensurate with the significance of the issue.

- c. Consideration of prior occurrences of the problem and knowledge of prior operating experience.

The licensee evaluated industry operating experience, as well as internal records to determine if a similar failure of an exercise critique to identify an emergency event classification as inaccurate had occurred previously. Based on a records review of past Condition Reports or Plant Issues, the licensee did not identify prior instances.

Based upon the reviews summarized in Subsections 02.01.b and 02.02.c of this inspection report, the inspectors concluded that the licensee had adequately searched for prior occurrences of the issue.

- d. Consideration of extent of condition and the extent of cause of the problem.

The licensee's evaluation included an extent of condition evaluation of the issue. The extent of condition considered an evaluation of station performance regarding improper EAL classification. A review was performed of six previous exercises to determine if any other drills/exercises had incorrect classifications and were evaluated as successful DEP/PI opportunities. There was one case in which a Notice of Unusual Event (NOUE) classification was missed in the spring of 2005, but the post-event critique correctly identified the missed NOUE

The licensee's evaluation adequately encompassed the following topics: (1) Inadequate evaluation criteria of drill/exercise objectives; (2) Two inadequate procedures 91001-C, "Emergency Classification and Implementing Instructions", and 18039-C, "Confirmed Loose Part in the RCS or Steam Generator Secondary Side;" (3) Inadequate administrative controls to develop, review and validate drill/exercise scenarios; (4) Knowledge deficiencies in effects of natural circulation on the pressurizer under all conditions; (5) Affects of delaying training on Natural Circulation to avoid the appearance of pre-conditioning the crew for the exercise; (6) The effects of focused training prior to the exercise on inappropriate early operator actions. None of these evaluations resulted in the identification of prior occurrences of the issue at Vogtle Electric Generating Plant, Units 1 and 2.

The inspectors concluded that the licensee's extent of condition and extent of cause evaluations were adequate.

e. Consideration of safety culture components.

The licensee's evaluation considered safety culture components. There were no weaknesses associated with the safety culture determination that had an effect on the stations failure to critique the exercise appropriately.

The causes of this event could relate to the safety culture component area of decision-making. The emergency director (ED) is responsible for making a proper classification within 15 minutes following the existence of plant conditions requiring classification. This places the ED under significant time pressure. The ED considered the pressurizer level decrease, caused by establishing natural circulation and reactor coolant system cooldown, a loss of coolant accident and therefore did not verify the EAL threshold indications of a potential loss of reactor coolant system barrier prior to making the decision the indications for an SAE were met. The Emergency Preparedness organization made the decision that the SAE declaration was not a DEP PI opportunity failure.

The inspectors concluded that the root cause evaluation, extent of condition, and the extent of cause appropriately considered the safety culture components.

02.03 Corrective Actions

a. Appropriateness of corrective action(s).

The licensee's evaluation resulted in eighteen actions items and three specific condition reports that were relevant to the one root cause and seven contributing causes. The actions items provide for development of drill and exercise criteria that ensure identification of all areas for improvement or weaknesses, and address the concerns of the seven contributing causes.

The inspectors concluded that all of the corrective actions were appropriate and should be adequate to prevent recurrence of the issue.

b. Prioritization of corrective actions.

The inspectors discussed with the licensee the uncompleted corrective actions. They were prioritized with consideration of risk significance. The inspectors determined that the corrective action program's records contained accurate information regarding what action items were completed and what other actions were ongoing.

c. Establishment of a schedule for implementing and completing the corrective actions.

The inspectors determined that action items should be completed on schedule, as documented in corrective action program records. The inspectors discussed the status of ongoing corrective actions with the licensee. The licensee did not identify concerns that planned corrective actions would not be completed by their currently scheduled due dates. The inspectors concluded that the overall schedule for completion of corrective actions was reasonable.

d. Establishment of quantitative or qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence.

An assignment for the performance of a focused self assessment prior to performance of the effectiveness review corrective action has been entered into the corrective action system (AI 2008200620 due October 3, 2008 and AI 2007202718 due October 17, 2008).

The inspectors concluded that the RCCA included adequate provisions for an effectiveness review. The timing of this review was reasonable and is currently planned for October 2008.

03 MANAGEMENT MEETINGS

Exit Meeting Summary

The lead inspector presented the inspection results to Mr. T. Tynan, Vice President - Vogtle, and other members of his staff at the conclusion of the inspection on February 14, 2008. The licensee acknowledged the information presented. No proprietary information was discussed.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION**KEY POINTS OF CONTACT**Licensee personnel

T. Tynan, Vice President - Vogtle
 J. Williams, Plant Support Manager
 R. Dedrickson, Plant Manager
 D. Vineyard, Operations Manager
 R. Brown, Training and Emergency Preparedness Manager
 W. Copeland, Performance Improvement Supervisor
 L. Mayo, Site Emergency Preparedness Coordinator
 C. Hartfield, Emergency Planning Coordinator
 M. Sharma, Nuclear Specialist

NRC Personnel

G. McCoy, Senior Resident Inspector
 B. Bonser, Chief, Plant Support Branch 1

LIST OF ITEMS OPENED, CLOSED AND DISCUSSEDOpened

None.

Closed

50-424, 50-425/2006009-001	VIO	White Finding Involving Failure to Identify a Weakness During an Emergency Exercise Critique Associated with an RSPS.
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Discussed

None.

LIST OF DOCUMENTS REVIEWEDProcedures

NMP-GM-002-GL03, Cause Determination Guideline, Rev. 7.0
 NMP-GM-002-001, Corrective Action Program Instructions, Rev. 3.0
 18039-C, Confirmed Loose Part in the Reactor Coolant System or Steam Generator Secondary Side, Rev. 3
 91001-C, Emergency Classification and Implementing Instruction, Rev. 28 and 29
 91602-C, Emergency Drills and Exercises, Rev. 19 and 20

Documents

SNC Readiness Guideline for an NRC 95001 Inspection, 11/06/2007 and 02/02/2008
 V-LO-SE-37002, Operator Response to Loss of Forced Flow, Rev. 14
 V-RQ-LP-63219-00, Current Events Segment 20073, Rev. 1
 V-RQ-SE-06206, Loss of ACCW / Small Break LOCA, Rev. 0
 V-RQ-SE-06601, 2006 Annual Operating Exam Lessons Learned
 V-LO-LP-40101-45-C, EPIP Overview, Rev. 45
 V-RQ-LP-63219-00, Current Events: Segment 20073, Rev. 1
 V-RQ-LP-63225-00, Current Events: Segment 20077, Rev. 0.0

Condition Reports

2006101112
 2007104728
 2007105707
 2007112655

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
CFR	Code of Federal Regulations
CR	Condition Report
DEP	Drill and Exercise Performance
EAL	Emergency Action Level
EPIP	Emergency Plan Implementing Procedure
IMC	Inspection Manual Chapter
NOUE	Notification of Unusual Event
NRC	Nuclear Regulatory Commission
PARS	Publically Available Records
PI	Performance Indicator
RSPS	Risk Significant Planning Standard
SAE	Site Area Emergency
SEM	Station Emergency Manager
TSC	Technical Support Center
VIO	Violation