



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

December 6, 2011

Mr. Dennis R. Madison
Vice President
Southern Nuclear Operating Company, Inc.
Edwin I. Hatch Nuclear Plant
11028 Hatch Parkway North
Baxley, GA 31513

**SUBJECT: EDWIN I. HATCH NUCLEAR PLANT - NRC EMERGENCY PREPAREDNESS
INSPECTION REPORT 05000321/2011501 AND 05000366/2011501**

Dear Mr. Madison:

On November 4, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Edwin I. Hatch Nuclear Plant, Units 1 and 2. The enclosed inspection report documents the inspection results, which were discussed on November 3, 2011, with Mr. W. Barger and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations, and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings were identified during this inspection.

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 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 Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

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

Docket No.: 50-321, 50-366
License No.: DPR-57, NPF-5

Enclosure:
Inspection Report 05000321/2011501 and 05000366/2011501
w/Attachment: Supplemental Information

cc w/encl.: (See page 2)

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cc w/encl.: (See page 2)

Distribution w/Encl

See page 4

(*) See previous concurrence page

X PUBLICLY AVAILABLE
ADAMS: X Yes

NON-PUBLICLY AVAILABLE
ACCESSION NUMBER: **ML113410451**

SENSITIVE
X SUNSI REVIEW COMPLETE X FORM 665 ATTACHED

OFFICE	RII: DRS/PSB1	RII: DRS/PSB1	RII: DRS/PSB1	RII: DRP/BR 2			
SIGNATURE	RA/BB FOR MS	RA/BB *	RA/WL VIA EMAIL	RA/ TL VIA EMAIL			
NAME	M. SPECK	B. BONSER	W. LOO	T. LIGHTY			
DATE	12/05/2011	12/05/2011	12/05/2011	12/05/2011			
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

cc w/encl:
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(cc w/encl continued on page 3)

cc w/encl.-continued from page 2

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Letter to Dennis R. Madison from B. Bonser dated December 6, 2011.

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT - NRC EMERGENCY PREPAREDNESS
INSPECTION REPORT 05000321/2011501 AND 05000366/2011501NRC

Distribution w/encl:

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OE Mail (email address if applicable)
RIDSNRRDIRS
PUBLIC
RidsNrrPMHatch Resource

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 05000321, 05000366

License Nos: DPR-57, NPF-5

Report Nos: 05000321/2011501 and 05000366/2011501

Licensee: Southern Nuclear Operating Company, Inc

Facility: Edwin I. Hatch Nuclear Plants, Units 1 and 2

Location: Baxley, GA

Dates: October 31, 2011, through November 4, 2011

Inspectors: M. Speck, Senior Emergency Preparedness Inspector
W. Loo, Senior Health Physics Inspector
D. Hardage, Resident Inspector
T. Lighty, Project Engineer

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

Enclosure

SUMMARY OF FINDINGS

IR 05000321/2011501, 05000366/2011501; 10/31/2011 – 11/04/2011; Edwin I. Hatch Nuclear Plant, Units 1 and 2; Exercise and baseline inspection.

The report covered an announced inspection by one emergency preparedness inspector, one resident inspector, one project engineer, and one health physics inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process."

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Emergency Preparedness

None

B. Licensee-Identified Violations

None

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation

a. Inspection Scope

Prior to the inspection activity, the inspectors conducted an in-office review of the exercise objectives and scenario submitted to the NRC to determine if the exercise would test major elements of the emergency plan as required by 10 CFR 50.47(b)(14). This inspection activity represents one sample on a biennial cycle.

The onsite inspection consisted of the following review and assessment:

- The adequacy of the licensee's performance in the biennial exercise conducted on November 2, 2011, was reviewed and assessed regarding the implementation of the Risk Significant Planning Standards (RSPSs) in 10 CFR 50.47 (b)(4), (5), (9), and (10), which address emergency classification, offsite notification, radiological assessment, and protective action recommendations, respectively.
- The overall adequacy of the licensee's emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities" and Emergency Plan commitments. The facilities assessed were the Control Room simulator, Operations Support Center (OSC), Technical Support Center (TSC), and Emergency Operations Facility (EOF).
- Other performance areas besides the RSPS, such as the emergency response organization's (ERO) recognition of abnormal plant conditions, command and control, intra- and inter-facility communications, prioritization of mitigation activities, utilization of repair and field monitoring teams, interface with offsite agencies, and the overall implementation of the emergency plan and its implementing procedures.
- Past performance issues from NRC inspection reports and Federal Emergency Management Agency (FEMA)/Department of Homeland Security (DHS) exercise reports to determine effectiveness of corrective actions as demonstrated during this exercise to ensure compliance with 10 CFR 50.47(b)(14).
- The post-exercise critique process and the presentation to the licensee's senior management conducted on November 3, 2011, to evaluate the licensee's self-assessment of its ERO performance during the exercise and to ensure compliance with 10 CFR 50 Appendix E.IV.F.2.g.

The inspectors reviewed various documents which are listed in the Attachment.

Enclosure

b. Findings

No findings were identified.

1EP4 Emergency Action Level (EAL) and Emergency Plan Changes

a. Inspection Scope

Since the last NRC inspection of this program area, Revision 31, of the Radiological Emergency Response Plan was implemented based on the licensee's determination, in accordance with 10 CFR 50.54(q), that the changes resulted in no decrease in the effectiveness of the Plan, and that the revised Plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. The inspector conducted a review of the Plan changes and a sampling review of the implementing procedure changes made between October 1, 2010, and October 31, 2011, to evaluate for potential decreases in effectiveness of the Plan. This review was not documented in a Safety Evaluation Report and does not constitute formal NRC approval of the changes. Therefore, these changes remain subject to future NRC inspection in their entirety.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 04, "Emergency Action Level and Emergency Plan Changes". The applicable planning standard 10 CFR 50.47(b)(4) and related requirements contained in 10 CFR 50.54(q) and Appendix E to 10 CFR Part 50 were used as reference criteria. This inspection activity represents one sample on an annual cycle.

The inspector reviewed various documents which are listed in the Attachment.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors sampled licensee submittals for the two performance indicators (PI) listed below. For each of the submittals, the inspectors reviewed the period from July 1, 2010, through September 30, 2011. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Indicator Guideline, Revision 6, were used to verify the basis in reporting for each data element.

- Emergency Response Organization Drill/Exercise Performance (DEP)
- Emergency Response Organization Readiness (ERO)

The inspectors reviewed portions of the raw PI data developed from monthly performance indicator reports and discussed the methods for compiling and reporting the PIs with the responsible emergency preparedness personnel. The inspectors also

independently screened drill and exercise opportunity evaluations, drill participation reports, and drill evaluations. Selected reported values were calculated to verify their accuracy. The inspectors compared graphical representations from the most recent PI report to the raw data to verify that the data was correctly reflected in the report. Reviewed documents are listed in the Attachment.

The inspection was conducted in accordance with NRC Inspection Procedure 71151, "Performance Indicator Verification." This inspection activity represents two samples on an annual cycle.

The inspectors reviewed various documents which are listed in the Attachment.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On November 3, 2011, the lead inspector for the emergency preparedness inspection presented the inspection results to Mr. W. Barger and other members of the licensee management. The inspectors confirmed that proprietary information was not provided or taken during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

W. Bargeron, Plant Manager
S. Grantham, Training Manager
B. Duvall, Site Support Manager
T. Marioneaux, Emergency Preparedness
T. Hendrix, Emergency Preparedness
J. Butler, Emergency Preparedness
B. Anderson, Health Physics Manager
C. Coop, Emergency Preparedness Supervisor
S. Grantham, Training Manager
P. Underwood, Operations Training Supervisor
J. Love, Fleet Oversight Supervisor
K. Long, Operations Superintendent

ITEMS OPENED, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Section 1EP1: Exercise Evaluation

Procedures

Edwin I. Hatch Nuclear Plant Emergency Plan, Rev. 31
 NMP-EP-101, Emergency Operations Facility (EOF) Activation, Rev. 3.0
 NMP-EP-102, EOF Manager, Rev. 2.0
 NMP-EP-104, Dose Assessment, Rev. 4
 NMP-EP-110, Emergency Classification Determination and Initial Action, Rev. 2
 NMP-EP-110-GL02, HNP EALs – ICs, Threshold Values and Basis, Rev. 2
 NMP-EP-111, Emergency Notifications, Rev. 5
 73EP-EIP-005-0, On-Shift Operations Personnel Emergency Duties, Rev. 11.1
 73EP-EIP-015, Offsite Dose Assessment, Rev. 7.6
 73EP-EIP-023-0, Core Damage Assessment, Rev. 0.6
 73EP-EIP-016-0, TSC HVAC Operation, Rev. 5
 73EP-EIP-020-0, Offsite Environmental Monitoring During Emergencies, Rev. 3.3
 73EP-EIP-062-0, Operations Support Center Activation, Rev. 6.0
 73EP-EIP-063-0, Technical Support Center Activation, Rev. 10.1
 NMP-EP-112, Protective Action Recommendations, Rev. 1.0
 NMP-EP-303, Drill and Exercise Standards, Rev. 7
 31EO-EOP-011-2, Attachment 1, RCA RPV Control (ATWAS), Rev 9
 31EO-EOP-103-2, EOP Control Rod Insertion Methods, Rev. 6.0
 31EO-EOP-012-2, PC Primary Containment Control Rev. 6
 34AB-C71-001-2, Scram Procedure, Rev. 11.1
 34SO-E11-010-2, Residual Heat Removal System Rev. 36.2

Documentation

Control Room (Simulator), Technical Support Center, Operational Support Center, Emergency Operations Facility, Joint Information Center - Documentation packages (logs, event notification forms, Protective Action Recommendations, Media releases, and Radiological Dose/Core damage Assessments)
 Drill and exercise reports 2009, 2010, and 2011

Corrective Action Documents

369716, Missed Performance Indicator
 369394, PI reporting errors
 369657, Delay in response team dispatch
 36965833, Drill control issue
 369660, LAN printer problem
 369662, OSC briefing failure
 369664, WebEOC enhancement
 369665, Confusing initial habitability request
 369668, Operator late hearing test
 369669, FMTs not briefed prior to dispatch
 369671, ENF errors
 369672, PAR had minor wind direction error

Section 1EP4: Emergency Action Level (EAL) and Emergency Plan ChangesProcedures

NMP-AD-008, Applicability Determinations, Version 13

Technical Requirements Manual section 3.10.1, Emergency Response Facilities, Rev. 67

Change packages

Edwin I. Hatch Nuclear Plant Emergency Plan, Rev. 30 and 31

Design Change for TSC HVAC replacement dated 10/28/2011

73EP-EIP-001-0, Emergency Classification and Initial Actions, Rev. 18 and 19

NMP-EP-110, Emergency Classification Determination and Initial Action, Rev. 1 and 2

NMP-EP-110-GL02, HNP EALs – ICs, Threshold Values and Basis, Rev. 1 and 2

73EP-EIP-002, Recovery, Rev. 1 and 2

Section 4OA1: Performance Indicator (PI) VerificationProcedures

FEMA-43 Report/ANS Evaluation Guide

DI-TRN-49-0691, Alert and Notification Radio Program, version 7.0

00AC-REG-005-0, Preparation and Reporting of NRC PI Data, Rev. 6.1

Records and Data

2010 Prompt Notification System Annual Report

Tone Alert Radio Weekly Tests

Tone Alert Radio Annual Tests

Documentation of Performance Indicator data from July 1, 2010, through September 30, 2011
for DEP and ERO

Sample of eight simulator guides

LIST OF ACRONYMS USED

ANS	Alert and Notification System
CFR	Code of Federal Regulations
DEP	Drill and Exercise Performance
DHS	Department of Homeland Security
EAL	Emergency Action Level
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
FEMA	Federal Emergency Management Agency
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OSC	Operations Support Center
PARS	Publicly Available Records
PI	Performance Indicator
PS	Planning Standards
RSPS	Risk Significant Planning Standard
TSC	Technical Support Center