



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

December 23, 2015

Mr. David R. Vineyard
Site 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 – U.S. NUCLEAR REGULATORY
COMMISSION EMERGENCY PREPAREDNESS INSPECTION REPORT
05000321/2015502 AND 05000366/2015502

Dear Mr. Vineyard:

On December 11, 2015, 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 (IR) documents the inspection results that were discussed on December 10, 2015, with you and members of the plant staff.

No findings were identified during this inspection.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public inspections, exemptions, requests for withholding," of the NRC's "Agency Rules of Practice and Procedure," 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 Documents Access and Management System (ADAMS); 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. 50-321 and 50-366
License Nos. DPR-57 and NPF-5

Enclosure:
NRC IR 05000321/2015502 and
05000366/2015502 w/Attachment:
Supplementary Information

cc: Distribution via Listserv

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ADAMS: Yes ACCESSION NUMBER: ML15357A392 SUNSI REVIEW COMPLETE FORM 665 ATTACHED

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SIGNATURE	SPS via e-mail	WTL for CAF2	WTL	CWR1 via e-mail	CWR1 for SRS5	BRB1	
NAME	S. Sanchez	C. Fontana	W. Loo	C. Rapp	S. Sandal	B. Bonser	
DATE	12/ 22 /2015	12/ 22 /2015	12/ 22 /2015	12/ 23 /2015	12/ 23 /2015	12/ 23 /2015	
E-MAIL COPY	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	

OFFICIAL RECORD COPY

Letter to David Vineyard from Brian Bonser dated December 23, 2015

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT – U.S. NUCLEAR REGULATORY
COMMISSION EMERGENCY PREPAREDNESS INSPECTION REPORT
05000321/2015502 AND 05000366/2015502

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 05000321 and 05000366

License Nos: DPR-57 and NPF-5

Report Nos: 05000321/2015502 and 05000366/2015502

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Edwin I. Hatch Nuclear Plant

Location: Baxley, GA

Dates: December 7–11, 2015

Inspectors: Steven Sanchez, Senior Emergency Preparedness Inspector
Christopher Fontana, Emergency Preparedness Inspector
Wade Loo, Senior Health Physicist Inspector
Curtis Rapp, Senior Project Engineer

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

Enclosure

SUMMARY

Inspection Report (IR) 05000321/2015502 and 05000366/2015502; 12/7/2015 – 12/11/2015; Edwin I. Hatch, Units 1 and 2; Exercise and Baseline Inspection

This report covers an announced inspection by two emergency preparedness inspectors, one senior project engineer, and one senior health physicist. No findings 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 5.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation

a. Inspection Scope

The onsite inspection consisted of the following review and assessment:

- The adequacy of the licensee's performance in the biennial exercise, conducted on December 9, 2015, was reviewed and assessed regarding the implementation of the Risk Significant Planning Standards 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, Technical Support Center (TSC), Operations Support Center, and Emergency Operations Facility (EOF).
- Other performance areas, 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 (E-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 the 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 December 9–10, 2015, to evaluate the licensee's self-assessment of its ERO performance during the exercise, and to ensure compliance with 10 CFR Part 50, Appendix E, Subsection IV.F.2.g.

The inspectors reviewed various documents, which are listed in the Attachment. The inspectors also attended the FEMA-sponsored public meeting on December 11, 2015. This inspection activity satisfied one inspection sample for the exercise evaluation on a biennial basis.

b. Findings

No findings were identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

Since the last NRC inspection of this program area, multiple revisions have been made to the Radiological Emergency Plan and its implementing procedures. The licensee determined that, in accordance with 10 CFR 50.54(q), the Plan continued to meet the requirements of 10 CFR 50.47(b), and Appendix E to 10 CFR Part 50. The inspectors reviewed the revisions, and sampled implementing procedure changes to evaluate potential reductions in the effectiveness of the Plan. As this review was not documented in a Safety Evaluation Report, and does not constitute formal NRC approval of the changes, these changes remain subject to future NRC inspection in their entirety.

The inspection was conducted in accordance with NRC Inspection Procedure (IP) 71114, Attachment 04, Emergency Action Level and Emergency Plan Changes. The applicable planning standards of 10 CFR 50.47(b), and its related requirements in 10 CFR Part 50, Appendix E, were used as reference criteria.

The inspectors reviewed various documents, which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the emergency action level, and E-Plan changes on an annual basis.

b. Findings

No findings were identified.

1EP8 Exercise Evaluation – Scenario Review

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 using IP 71114.08, "Exercise Evaluation - Scenario Review," to determine if the exercise would test major elements of the E-Plan as required by 10 CFR 50.47(b)(14).

The inspectors reviewed various documents, which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the exercise valuation on a biennial basis.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors sampled licensee submittals relative to the performance indicators (PIs) listed below for the period October 1, 2014, through September 30, 2015. To verify the

accuracy of the PI data reported during that period, PI definitions and guidance contained in Nuclear Energy Institute 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, was used to confirm the reporting basis for each data element.

Emergency Preparedness Cornerstone

- Drill/Exercise Performance (DEP)
- Emergency Response Organization (ERO) Readiness
- Alert Notification System (ANS) Reliability

For the specified review period, the inspectors examined data reported to the NRC, procedural guidance for reporting PI information, and records used by the licensee to identify potential PI occurrences. The inspectors verified the accuracy of the PIs for ERO and DEP through review of a sample of drill and event records. The inspectors reviewed selected training records to verify the accuracy of the PI for ERO drill participation for personnel assigned to key positions in the ERO. The inspectors verified the accuracy of the PI for ANS reliability through review of a sample of the licensee's records of periodic system tests. The inspectors also interviewed the licensee personnel who were responsible for collecting and evaluating the PI data. Licensee procedures, records, and other documents reviewed within this inspection area, are listed in the Attachment.

This inspection satisfied three inspection samples for PI verification on an annual basis.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On December 10, 2015, the inspection team presented the inspection results to Mr. D. Vineyard and other members of the plant staff. The inspectors confirmed that no proprietary information was provided during the inspection.

ATTACHMENT: Supplementary Information

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

B. Anderson, Radiation Protection Manager
A. Belcher, Nuclear Oversight Manager
G. Brinson, Maintenance Director
J. Calhoun, Fleet Drill & Exercise Coordinator
R. Clark, I&C Manager
R. Collings, Fleet Emergency Preparedness
C. Collins, Licensing Supervisor
B. Duvall, Chemistry Manager
A. Giancattarino, Engineering Director
G. Johnson, Regulatory Affairs Director
D. Komm, Operations Director
K. Long, Work Management Director
J. Major, Licensing Engineer
L. Mansfield, Fleet Emergency Preparedness Director
A. Meadows, Security Operations Manager
J. Merritt, Security Manager
D. Moore, Emergency Preparedness Specialist
S. Odom, Fleet Emergency Preparedness Manager
R. Outler, Emergency Preparedness Supervisor
C. Prandini, Licensing Engineer
R. Spring, Plant Manager
P. Swinson, Information Technology Manager
M. Torrance, Nuclear Oversight Manager
K. Underwood, Performance Improvement Manager
D. Vineyard, Site Vice President
C. Vonier, Shift Operations Manager
A. Wheeler, Site Projects Manager

LIST OF DOCUMENTS REVIEWED

1EP1 Exercise Evaluation

Procedures

NMP-EP-101, Emergency Operations Facility (EOF) Activation, Ver. 3.1
NMP-EP-102, EOF Manager, Ver. 6.0
NMP-EP-103, Dose Assessment, Ver. 8.0
NMP-EP-110, Emergency Classification Determination and Initial Action, Ver. 8.1
NMP-EP-111, Emergency Notifications, Ver. 11.0
NMP-EP-112, Protective Action Recommendations, Ver. 5.0
NMP-EP-303, Drills and Exercise Standards, Ver. 16.1

Records and Data

Plant Hatch Emergency Preparedness, 2015 Evaluated Exercise, 12/9/2015, Exercise Controller Book

Corrective Action Program Documents (Condition Reports)

CR 10156213, The Field Monitoring Team Lead Controller did not attend a facility critique
 CR 10156214, A Drill message inject was provided to the exercise participant that impacted determination of a General Emergency Declaration
 CR10156216, A spokesperson for the JIC provided information to the public from bridge line information rather than information provided by the TSC
 CR 10156217, Risk Significant Planning Standard was not met during the 2015 Graded Exercise
 CR 10156226, Clarify distinction between EOF being activated versus operational
 CR10156207, ASCOM Phone System periodic unavailability during Emergency Preparedness (EP) Exercise
 CR10156208, 73EP-EIP-062 requires revision
 CR 10157984, An incorrect power level of 0 percent was entered on the ENN form for Unit 2 during the EP drill
 CR10157988, Equipment issues during 15EX04
 CR 10157989, Maintenance personnel reporting to the OSC were not clean shaven and ready to wear respiratory protection as needed to support activities
 CR 10157953, Request improvement in PAR worksheet for human factors
 CR 10158001, Equipment needed at county EMA offices
 CR 10157994, Item identified during 2015 NRC EP evaluation

1EP4 Emergency Action Level and Emergency Plan ChangesProcedures

NMP-EP-110-GL02, HNP Emergency Action Levels – Initiating Conditions, Threshold Values, and Basics, Ver. 4.2
 NMP-EP-310, Maintaining the Emergency Plan, Ver. 3.1
 NMP-EP-EIP-002, Duty Manager, Ver. 7.2, 2/18/2015
 NMP-GM-002, Corrective Action Program, Ver. 13.2
 NMP-GM-002-001, Corrective Action Program Instructions, Ver. 34.0
 73-EIP-020-0, Offsite Environmental Monitoring During Emergencies, Ver. 3.3
 73EP-EIP-062-0, Operations Support Center Activation, Ver. 7.3
 Edwin I. Hatch, Unit 1 and Unit 2 Emergency Plan, Ver. 35, 36, 37, and 38

Change Packages

HNP-14-029, 10CFR50.54(q) Screening/Evaluation for Emergency Plan Ver. 35, dated 11/13/2014
 HNP-15-002, 10CFR50.54(q) Screening/Evaluation for Emergency Plan Ver. 36, dated 1/19/2015
 HNP-15-010, 10CFR50.54(q) Screening/Evaluation for Emergency Plan Ver. 37, dated 3/19/2015
 HNP-15-016, 10CFR50.54(q) Screening/Evaluation for Emergency Plan Ver. 38, dated 11/5/2015

Corrective Action Program Documents

CR 10052135, Failure to complete a timely classification

CR 10058231, Discrepancy between historical Hatch E-Plan on-shift staffing and current on-shift staffing levels

CR 10058233, Historic documentation of Hatch E-Plan

CR 10091342, EAL scheme discrepancy

1EP8 Exercise Evaluation

Records and Data

Plant Hatch Emergency Preparedness, 2015 Evaluated Exercise, 12/9/15, Exercise Controller Book

4OA1 Performance Indicator Verification

Procedures

00AC-REG-005-0, Preparation and Reporting of NR Performance Indicator Data, Ver. 8.0

NMP-EP-311, SNC Emergency Preparedness Tier 4 Performance Indicators, Ver. 2

NMP-GM-002, Corrective Action Program, Ver. 13.2

NMP-GM-002-001, Corrective Action Program Instructions, Ver. 34.0

Records and Data

DEP opportunities documentation for Fourth quarter 2014; and First, Second, and Third quarters 2015

Siren test data for Fourth quarter 2014; and First, Second, and Third quarters 2015

Drill and exercise participation records of ERO personnel for Fourth quarter 2014; and First, Second, and Third quarters 2015

Corrective Action Program Documents

CR 00855620, Emergency Notification Form not available in WebEOC for EAL SA5

CR 00858874, Alert notification was not completed within 15 minute requirement

CR 10004623, Siren 28 (solar) batteries are depleted and need replacing

CR 10017677, NRC integrated inspection report – Green LIV – staffing analysis gap

CR 10017679, NRC integrated inspection report – Green LIV – EAL threshold

CR 10024768, Emergency Outdoor Warning Siren 55 has a partial activation

CR 10039314, Siren 14 partial activation

CR 10045402, Siren 42 loss of AC power due to flooding

CR 10052135, Failure to complete a timely classification IAW NEI 99-01

CR 10074737, During an as-found evaluation, failure to properly classify plant emergency per NMP-EP-110

CR 10075243, Siren 30 lost AC power

CR 10075326, Siren 40 bad CPU – Replaced on 5/27

CR 10091147, Siren 28 loss of DC power

CR 10098949, Siren 7 partial activation

LIST OF ACRONYMS USED

ANS	Alert and Notification System
DEP	Drill and Exercise Performance
DHS	Department of Homeland Security
EAL	Emergency Action Level
EOF	Emergency Operations Facility
EP	Emergency Preparedness

E-Plan	Emergency Plan
ERO	Emergency Response Organization
FEMA	Federal Emergency Management Agency
IP	Inspection Procedure
NEI	Nuclear Energy Institute
OSC	Operations Support Center
PIs	Performance Indicators
TSC	Technical Support Center