



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

September 22, 2006

Tennessee Valley Authority
ATTN: Mr. Karl W. Singer
Chief Nuclear Officer and
Executive Vice President
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: SEQUOYAH NUCLEAR POWER PLANT - NRC INSPECTION REPORT
05000327/2006008 AND 05000328/2006008

Dear Mr. Singer:

On September 1, 2006, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your Sequoyah Nuclear Power Plant. The enclosed inspection report documents the inspections results, which were discussed with you, 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.

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 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). 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,

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Brian R. Bonser, Chief
Plant Support Branch 2
Division of Reactor Safety

Docket Nos. 50-327, 50-328
License Nos. DPR-77, DPR-79

Enclosure: (See page 2)

DEC

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Enclosure: NRC Inspection Report 05000327/2006008 and 05000328/2006008
w/Attachment: Supplemental Information

cc w/encl:

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(cc w/encl cont'd - See page 3)

DEC

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(cc w/encl cont'd)

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U. S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket Nos.: 50-327, 50-328

License Nos.: DPR-77, DPR-79

Report No: 05000327, 05000328/2006-008

Licensee: Tennessee Valley Authority

Facility: Sequoyah Nuclear Power Plant

Location: 2600 Igou Ferry
Soddy-Daisy TN 37379

Dates: August 28 - September 1, 2006

Inspectors: L. Miller, Senior Emergency Preparedness Inspector
(Section 1EP1,1EP4)
J. Kreh, Emergency Preparedness Inspector (Section 1EP1, 4OA1)
S. Freeman, Senior Resident Inspector, (Section 1EP1)

Approved by: Brian R. Bonser, Chief
Plant Support Branch 2
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000327/2006008, 05000328/2006008; 08/28-9/1/2006; Sequoyah Nuclear Power Plant, Units 1 and 2; routine baseline inspection.

The report covered an announced inspection by two emergency preparedness inspectors and one resident inspector. 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.

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 August 30, 2006, 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 are 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), Operational Support Center (OSC) and Central Emergency Control Center (CECC)/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 conducted September 1, 2006, 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 to this report.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspector's review of revisions to the emergency plan, implementing procedures and EAL changes was performed to determine that changes had not decreased the effectiveness of the plan. The inspectors also evaluated the associated 10 CFR 50.54(q) reviews associated with non-administrative emergency plan, implementing procedures and EAL changes. The Radiological Emergency Plan (Generic part Revision 82 and the Appendix B Sequoyah Nuclear Plant, Revision 80) were reviewed and covered the period from July 2005 to September 2006.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 04, "Emergency Action Level and Emergency Plan Changes." The applicable planning standard (PS), 10 CFR 50.47(b)(4) and its related 10 CFR 50, Appendix E requirements were used as reference criteria. The criteria contained in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, NUMARC/NESP-007, "Methodology for Development of Emergency Action Levels", Revision 2, and Regulatory Guide 1.101 were also used as references. This inspection activity represents one sample on an annual basis.

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

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors reviewed the licensee's procedure for developing the data for the Emergency Preparedness PIs which are: (1) Drill/Exercise Performance (DEP); (2) ERO Drill Participation; and (3) Alert and Notification System (ANS) Reliability. The inspectors examined data reported to the NRC for the period April, 2005 to June, 2006. Procedural guidance for reporting PI information and records used by the licensee to identify potential PI occurrences were also reviewed. The inspectors verified the accuracy of the PI for ERO 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 inspection was conducted in accordance with NRC Inspection Procedure 71151, "Performance Indicator Verification." The applicable planning standard, 10 CFR 50.9 and Nuclear Energy Institute (NEI) 99-02, Revisions 3 and 4, "Regulatory Assessment Performance Indicator Guidelines," were used as reference criteria. This inspection activity represents three samples on an annual basis.

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

b. Findings

No findings of significance were identified.

4OA6 Meetings, including Exit

On September 1, 2006, the lead inspector for the emergency preparedness inspection presented the inspection results to L. Bryant, Vice President - Engineering and Technical Support, and other members of the licensee's staff. 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

L. Bryant, Vice President - Engineering and Technical Support
B. Marks Emergency Services Manager, Corporate
J. Wilkes, Emergency Preparedness Manager
R. Bruno, Training Manager
T. Niessen, Site Quality Manager
J. Smith, Licensing Supervisor
R. Proffitt, Nuclear Engineer
C. Mathes, Operations/Nuclear Assurance

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1EP1: Exercise Evaluation

Plans and Procedures

CECC EPIP-1, Central Emergency Control Center (CECC) Operations, Revision 43
CECC EPIP-3, Operations Duty Specialist Procedure for Alert, Revision 35
CECC EPIP-7, CECC Radiological Assessment, Staff Procedure for Alert, Site Area
Emergency, and General Emergency, Revision 30
CECC EPIP-8, Dose Assessment Staff Activities during Nuclear Plant Radiological
Emergencies, Revision 29
EPIP-1, Emergency Plan Classification Matrix, Revision 37
EPIP-2, Notification of Unusual Event, Revision 27
EPIP-3, Alert, Revision 29
EPIP-4, Site Area Emergency, Revision 29
EPIP-5, General Emergency, Revision 36
EPIP-6, Activation and Operation of the Technical Support Center, Revision 41

Records and data from 08/30/2006 exercise

CECC Director's Log
CECC Sequence of Events (chronology)
TSC Plant Status Log
TSC Sequence of Events (chronology)
Unit 1 Operations Log
EPIP-3, Alert, Revision 29 record
EPIP-4, Site Area Emergency, Revision 29 record
EPIP-5, General Emergency, Revision 36 record

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

Procedures

EPIL-1, Emergency Preparedness Instruction Letter - Procedures, Maps, and Drawings,
Revision 21

Records and Data

Plan Effectiveness Determination Package -EPIP-2, Revision 27
Plan Effectiveness Determination Package - EPIP-3, Revision 29
Plan Effectiveness Determination Package - EPIP-4, Revision 29
Plan Effectiveness Determination Package - EPIP-5, Revision 36
Plan Effectiveness Determination Package - EPIP-6, Revision 41
Plan Effectiveness Determination Package - EPIP-7, Revision 25
Plan Effectiveness Determination Package - EPIP-11, Revision 7
Plan Effectiveness Determination Package - EPIP-13, Revision 10
Plan Effectiveness Determination Package - Generic REP Revision 80
Plan Effectiveness Determination Package - NP-REP Appendix B Revision 80

Plan Effectiveness Determination Package - Generic REP Revision 82

Section 4OA1: Performance Indicator (PI) Verification

Procedures

EPIL [Emergency Preparedness Instruction Letter] -15, Emergency Preparedness Performance Indicators, Revision 10

Records and Data

Documentation (scenario, time line, event notification forms) of ERO integrated drill on 02/22/2006

Documentation of DEP opportunities from Operations Simulator evaluations in November-December 2005

Selected training records of drill/exercise participation by ERO personnel during 2005-2006
Siren weekly and monthly test records: 04/01/2005 - 06/30/2006

Corrective Action Documents

PER 109718, DEP Performance Indicator discrepancies

LIST OF ACRONYMS

ANS	Alert and Notification System
CECC	Central Emergency Control Center
DEP	Drill/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
OSC	Operational Support Center
PI	Performance Indicator
PS	Planning Standard
RSPS	Risk Significant Planning Standard
TSC	Technical Support Center

