



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

September 2, 2009

Mr. David A. Heacock
President and Chief Nuclear Officer
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: SURREY POWER STATION - NRC EMERGENCY PREPAREDNESS
INSPECTION REPORT 05000280/2009501 AND 05000281/2009501

Dear Mr. Heacock:

On August 7, 2009, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Surry Power Station, Units 1 and 2. The enclosed inspection report documents the inspection results, which were discussed on August 7, 2009, with Mr. B. Stanley 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, 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.: 50-280, 50-281
License No.: DPR-32, DPR-37

Enclosure: Inspection Report 05000280/2009501 and 05000281/2009501
w/Attachment: Supplemental Information

cc w/encl.: (See page 2)

September 2, 2009

Mr. David A. Heacock
President and Chief Nuclear Officer
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: SURRY POWER STATION - NRC EMERGENCY PREPAREDNESS INSPECTION
REPORT 05000280/2009501 AND 05000281/2009501

Dear Mr. Heacock:

On August 7, 2009, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Surry Power Station, Units 1 and 2. The enclosed inspection report documents the inspection results, which were discussed on August 7, 2009, with Mr. B. Stanley 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, 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.: 50-280, 50-281
License No.: DPR-32, DPR-37

Enclosure: Inspection Report 05000280/2009501 and 05000281/2009501
w/Attachment: Supplemental Information

cc w/encl.: (See page 2)

X PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE X NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: _____ X SUNSI REVIEW COMPLETE **BRB**

OFFICE	RII:DRS	RII:DRP	RII:DRP	RII:DRP	RII:DRP	RII:DRS	
SIGNATURE	via telecom	via email	via email	via email	GJM /RA/	BRB /RA/	
NAME	LMiller	JDodson	CWelch	JNadel	GMcCoy	BBonser	
DATE	09/02/2009	08/27/2009	08/27/2009	08/27/2009	09/02/2009	09/02/2009	
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRSII\PSB1\EMERGENCY PREPAREDNESS\SURRY\INSPECTION
PLAN AND INPUT\FY2009\SURRY IR LETTER 2009501.DOC

VEPCO

2

cc w/encl:

Gerald T. Bischof
Site Vice President
Surry Power Station
Virginia Electric and Power Company
Electronic Mail Distribution

B. L. (Sonny) Stanley
Director, Nuclear Safety and Licensing
Virginia Electric and Power Company
Electronic Mail Distribution

Lillian M. Cuoco, Esq.
Senior Counsel
Dominion Resources Services, Inc.
Electronic Mail Distribution

Chris L. Funderburk
Director, Nuclear Licensing & Operations
Support
Virginia Electric and Power Company
Electronic Mail Distribution

Ginger L. Alligood
Virginia Electric and Power Company
Electronic Mail Distribution

Virginia State Corporation Commission
Division of Energy Regulation
P.O. Box 1197
Richmond, VA 23209

Attorney General
Supreme Court Building
900 East Main Street
Richmond, VA 23219

Michael M. Cline
Director
Virginia Department of Emergency Services
Management
Electronic Mail Distribution

VEPCO

3

Letter to David A. Heacock from Brian Bonser dated September 2, 2009

SUBJECT: SURRY POWER STATION - NRC EMERGENCY PREPAREDNESS
INSPECTION REPORT 05000280/2009501 AND 05000281/2009501

Distribution w/encl:

C. Evans, RII

L. Slack, RII

OE Mail

RIDSNRRDIRS

PUBLIC

RidsNrrPMSurry Resource

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-280, 50-281

License Nos: DPR-32, DPR-37

Report Nos: 05000280/2009-501 and 05000281/2009-501

Licensee: Virginia Electric and Power Company (VEPCO)

Facility: Surry Power Station

Location: 5850 Hog Island Road
Surry, VA 23883

Dates: August 3-7, 2009

Inspectors: L. Miller, Senior Emergency Preparedness Inspector
J. Dodson, Senior Project Engineer
C. Welch, Senior Resident Inspector
J. Nadel, Resident Inspector

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

Enclosure

SUMMARY OF FINDINGS

IR 05000280/2009501, 05000281/2009501; 08/03/2009 - 08/07/2009; Surry Power Station, Units 1 and 2; Exercise and baseline inspection.

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

No findings of significance were identified.

B. Licensee-Identified Violations.

None

Enclosure

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 4, 2009, 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, 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 August 6, 2009, 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 of significance were identified.

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

a. Inspection Scope

Since the last NRC inspection of this program area, Revision 54, of the Surry Emergency 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 July 1, 2008 and July 31, 2009, 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 of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors sampled licensee submittals for the three performance indicators (PI) listed below. For each of the submittals, the inspectors reviewed the period from April 1, 2008 through June 30, 2009. 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 5, were used to verify the basis in reporting for each data element.

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

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 three samples on an annual cycle.

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

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On August 7, 2009, the lead inspector for the emergency preparedness inspection presented the inspection results to Mr. B. Stanley and other members of the onsite management 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. Baker, Manager, Operations (Acting)
G. Bischof, Site Vice President
J. Collins, Manager Virginia Nuclear Emergency Preparedness
J. Eggart, Emergency Preparedness Supervisor
B. Garber, Supervisor, Licensing
K. Grover, Plant Manager (Acting)
B. Stanley, Director, Nuclear Station Safety and Licensing

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1EP1: Exercise Evaluation

Procedures

EPIP-1.01, Emergency Manager Controlling Procedure, Rev. 52
EPIP-1.02, Response to Notification of Unusual Event, Rev. 15
EPIP-1.03, Response to Alert, Rev. 19
EPIP-1.04, Response to Site Area Emergency, Rev. 19
EPIP-1.05, Response to General Emergency, Rev. 21
EPIP-1.06, Protective Action Recommendations, Rev. 8
EPIP-2.01, Notification of State and Local Governments, Rev. 38
EPIP-3.02, Activation of Technical Support Center, Rev. 28
EPIP-4.01, Radiological Assessment Director Controlling Procedure, Rev. 23
EPIP-4.02, Radiation Protection Supervisor Controlling Procedure, Rev. 23
EPIP-4.07, Protective Measures, Rev. 12
EPIP-4.09, Source Term Assessment, Rev. 17
EPIP-4.17, Monitoring of Emergency Response Facilities, Rev. 12
EPIP-5.03, Personnel Accountability, Rev. 26
EPIP-5.07, Administration of Radio-protective Drugs, Rev. 13

Documentation

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

Corrective Action - Condition Report (CR)

343657, Siren 18 continuously transmitting polling response
343676, Normal Gaitronics announcements can not be heard in Warehouse
343688, MIDAS report did not consistently reflect entered event tree during exercise
343703, Several enhancements are needed in EIPs for Dose Assessment
343719, Instaphone failed during exercise
343724, Instaphone backup process procedure does not direct how to initiate
343729, Operation of plant equipment during EP exercise
343730, Time critical operation during biennial exercise delayed
343738, ERO staff not familiar with Radiological Protection Standing Order 2008-02
343798, Gaitronics from simulator could not be heard in OSC
343858, Time critical operation during biennial exercise delayed
343876, Confusion on Health Physics requirements during Graded Exercise
343823, TSC accountability card-reader light response confusing
343848, Unit 1 PCS display 10412 "Emerg. Comm. Data" has error MS safety valve indications
343852, RCS sample issues during ERO graded exercise
344001, Potential disparity between EPA 400 and PC-MIDAS guideline
344002, Evaluate the process of tracking total dose

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

Change packages

SEP, Surry Power Station Emergency Plan, Rev. 54
 EPIP-1.01, Emergency Manager Controlling Procedure, Rev. 50, 51, and 52
 EPIP-1.06, Protective Action Recommendations, Rev. 008
 EPIP-2.01, Notification of State and Local Governments, Rev. 37 and 38
 EPIP-2.02, Notification of NRC, Rev. 21
 EPIP-3.02, Activation of Technical Support Center, Rev. 28
 EPIP-4.01, Radiological Assessment Director Controlling Procedure, Rev. 22 and 23
 EPIP-4.02, Radiation Protection Supervisor Controlling Procedure, Rev. 23
 EPIP-4.03, Dose Assessment Team Controlling Procedure, Rev. 13
 EPIP-4.18, Monitoring of LEOF, Rev. 10
 EPIP-4.27, Exposure Control Emergency Response, Rev. 8
 EPIP-4.35, Chemistry Sampling, Rev. 1

Section 4OA1: Performance Indicator (PI) Verification

Procedures

DNAP-2605, Emergency Preparedness Performance Indicators, Rev. 8
 O-LSP-EW-001, Early Warning System Polling Functional Test, Rev. 7
 Condition Report 100472
 Condition Report 335402

Records and Data

Documentation of Performance Indicator data from April 1, 2008 through June 30, 2009 for DEP, ANS, and ERO

LIST OF ACRONYMS USED

ADAMS	Agency-wide Documents Access and Management System
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
ERP	Emergency Response Plan
FEMA	Federal Emergency Management Agency
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PI	Performance Indicator
RSPS	Risk Significant Planning Standard
TSC	Technical Support Center