

November 22, 2004

Mr. Bryce L. Shriver
President, PPL Generation, LLC and
Chief Nuclear Officer
PPL Generation, LLC
2 North Ninth Street
Allentown, PA 18101

SUBJECT: SUSQUEHANNA STEAM AND ELECTRIC STATION - NRC EVALUATED
EMERGENCY PREPAREDNESS EXERCISE - INSPECTION REPORT NOS.
05000387/2004010 AND 05000388/2004010

Dear Mr. Shriver:

On October 29, 2004, the US Nuclear Regulatory Commission (NRC) completed an inspection at your Susquehanna Steam and Electric Station. The enclosed inspection report documents the inspection findings, which were discussed on October 29, 2004, with yourself 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 10CFR2.390 of the NRC's "Rules of Practice," a copy of this letter and 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 Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

John R. White, Chief
Security, Emergency Preparedness, and
Radiological Protection Branch
Division of Reactor Safety

Docket Nos. 50-387, 50-388
License Nos. NPF-14, NPF-22

Enclosure: Inspection Report Nos. 05000387/2004010 and 05000388/2004010
w/Attachment: Supplemental Information

cc w/encl:

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Mr. Bryce L. Shriver

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OFFICE	RI/DRS		RI/DRP		RI/DRS				
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U. S. NUCLEAR REGULATORY COMMISSION REGION I
REGION I

Docket Nos: 50-387, 50-388

License Nos: NPF-14, NPF-22

Report Nos: 05000387/2004010 and 05000388/2004010

Licensee: PPL Susquehanna, LLC

Facility: Susquehanna Steam Electric Station

Location: 769 Salem Boulevard
Berwick, PA 18603

Dates: October 26 - 29, 2004

Inspectors: D. Silk, Sr. Emergency Preparedness Inspector, DRS, (Lead)
N. McNamara, Emergency Preparedness Inspector, DRS
F. Jaxheimer, Resident Inspector, Susquehanna, DRP
J. Williams, Operations Engineer, DRS

Observers: A. Blamey, Senior Resident Inspector, SSES, DRP
J. Josey, Reactor Inspector, DRS
A. Patel, Reactor Engineer, DRP

Approved by: John R. White, Chief
Security, Emergency Preparedness, and
Radiological Protection Branch
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000387/2004-010 and 05000388/2004-010; 10/26/2004-10/29/2004; Susquehanna Steam Electric Station; Emergency Preparedness Exercise; Emergency Preparedness Performance Indicators.

This inspection was conducted by region-based inspectors and the resident inspector. No findings of significance were identified using IMC 0609, Significance Determination Process (SDP). 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 Findings

Cornerstone: Emergency Preparedness

None.

B. Licensee-Identified Findings

None.

Report Details

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness (EP)

1EP1 Exercise Evaluation (71114.01)

a. Inspection Scope

Prior to the exercise, an in-office review was conducted 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 the completion of one sample on a biennial cycle.

The onsite inspection consisted of the following review and assessment:

- The adequacy of PPL's performance in the biennial full-participation exercise regarding the implementation of the risk-significant planning standards (RSPS) in 10 CFR 50.47 (b) (4), (5), (9) & (10) which are emergency classification, offsite notification, radiological assessment, and protective action recommendations, respectively.
- The overall adequacy of PPL's emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities" and Emergency Plan commitments. The facilities assessed were the simulator, Technical Support Center (TSC), Operations Support Center (OSC), 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 PPL's drill reports to determine effectiveness of corrective actions as demonstrated during this exercise to ensure compliance with 10CFR50.47(b)(14).
- The post-exercise critique to evaluate PPL's self-assessment of its ERO performance during the exercise and to ensure compliance with 10CFR50 Appendix E.IV.F.2.g.

The inspectors reviewed various documents which are listed in Attachment 1 to this report.

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b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator (PI) Verification (71151)

a. Inspection Scope

The inspectors reviewed the licensee's procedure for developing the data for the EP PIs which are: (1) Drill and Exercise Performance (DEP); (2) ERO Drill Participation; and (3) ANS Reliability. The inspector reviewed supporting documentation from drills in 2003 and 2004 and ANS testing data to verify the accuracy of the reported data. Data generated from the second quarter of 2003 through the end of the third quarter of 2004 was reviewed during this inspection. The review of these performance indicators was conducted in accordance with NRC Inspection Procedure 71151. The acceptance criteria used for the review were 10 CFR 50.9 and NEI 99-02, Revision 2, Regulatory Assessment Performance Indicator Guidelines.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152: PI&R Sample)

a. Inspection Scope

The inspectors reviewed PPL's critique findings as documented in condition reports from 2002 through 2004. This review was conducted to determine if significant performance trends exist and to determine the effectiveness of licensee corrective actions based upon ERO performance during this exercise. The inspectors verified that issues identified during this exercise were entered into PPL's corrective action program and are listed in an attachment to this report. The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 01; 10 CFR 50.47(b)(14); and Appendix E IV.F.2.g were used as reference criteria.

b. Findings and Observations

No findings of significance were identified.

40A6 Meetings, including Exit

The inspectors presented the inspection results to Mr. B. Shriver, Vice President Nuclear Operations, and other members of the licensee's staff at the conclusion of the inspection on October 29, 2004. The licensee had no objections to the NRC observations. No proprietary information was provided to the inspectors during this inspection.

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ATTACHMENT 1
SUPPLEMENTAL INFORMATION
KEY POINTS OF CONTACT

Licensee Personnel

J. Grisewood, Supervisor, Nuclear Emergency Planning
R. Lengel, Senior Emergency Planning Coordinator
W. Morrissey, Supervising Engineer, Nuclear Regulatory Affairs

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1EP1: Exercise Evaluation

Susquehanna Steam Electric Station Emergency Plan
Emergency Plan Implementing Procedures

Section 40A1: Performance Indicator Verification

Section 40A2: Identification and Resolution of Problems

AR 614421	OSC Logkeeping practices need improvement.
AR 614420	Scenario inputs contained an error in SBGTS flow
AR 614490	Determine which TSC group should be assigned to use the TSC SPING console and provide training on how to accomplish this.
AR 614492	Plant PA system is difficult to hear in the OSC area.
AR 614494	OSC drill player critique was not sufficiently self-critical.
AR 614288	Develop guidance to assess the loss of the RCS barrier and its affect on making the determination of a non-routine radiological release in progress.
AR 614493	Improve the interface between emergency response engineering functions.
AR 614204	The RMS system seemed to fail for short time periods during the 10/26/04 exercise.

October 8, 2002 Biennial Exercise Critique Report
January 21, 2003 Health Physics Drill Critique Report
June 3, 2003 Full Scale Drill Report
September 10, 2003 Health Physics Drill Critique Report
January 20, 2004 Full Scale Drill Report
May 18, 2004 Drill Report
August 3, 2004 Full Scale Drill Report

LIST OF ACRONYMS

ANS	Alert and Notification System
CFR	Code of Federal Regulations
EAL	Emergency Action Level
ERO	Emergency Response Organization
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
OSC	Operations Support Center
PI	Performance Indicator
RSPS	Risk Significant Planning Standard
TSC	Technical Support Center