March 6, 2002

Mr. Robert G. Byram Senior Vice President and Chief Nuclear Officer PPL Susquehanna, LLC Susquehanna Steam Electric Station 2 North Ninth Street Allentown, Pennsylvania 18101

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION - NRC EMERGENCY PREPAREDNESS PROGRAM INSPECTION REPORT 50-387/02-09, 50-388/02-09

Dear Mr. Byram:

On January 25, 2002, the NRC completed an emergency preparedness (EP) baseline inspection at your Susquehanna Steam Electric Station, Units 1 & 2. In addition, a supplemental inspection was conducted to assess the corrective actions associated with not maintaining on-shift staffing in accordance with your Emergency Plan (E-Plan) which resulted in a violation with White significance which was identified in Inspection Report 50-387/01-06, 50-388/01-06. The enclosed report documents both the EP baseline and supplemental inspection findings which were discussed on January 25, 2002, with Mr. Bryce L. Shriver and other members of your staff. A subsequent telephone conference was conducted on February 4, 2002, with Mr. Shriver and Mr. Richard J. Conte, NRC, to discuss the inadequacies found with the root cause and extent of condition review with respect to the violation.

The supplemental inspection was conducted to provide assurance that the root causes and contributing causes of the White finding were understood, to assess the extent of the condition review, and to provide assurance that the corrective actions for risk significant performance issues were sufficient to address causes, and to prevent recurrence. To accomplish these objectives, the inspectors reviewed your root cause analysis and evaluation of extent of condition and conducted an independent inspection to assess your conclusions. The NRC determined that your staff had not evaluated this issue in sufficient detail to understand common causes and performance problems in order to establish corrective actions with reasonable assurance of meeting on-shift staffing commitments as related to your E-Plan. The details are in the enclosed inspection report. To date, your staff acknowledged this observation and initiated a Condition Report to address the shortfalls in your evaluations and corrective actions. In addition, Mr. Shriver stated that another root cause team would be assembled to perform an independent assessment of this issue.

Mr. Robert G. Byram

Therefore, based upon our review, the Inspection Procedure 95001 objectives could not be achieved for assuring that the extent of condition was identified and assuring that the corrective actions for maintaining minimum on-shift staffing were sufficient to address the root and contributing causes. A subsequent supplemental inspection will be conducted upon completion of the ongoing root cause review. We would like to meet with your staff in a Regulatory Performance Review Meeting shortly after you complete your additional review, but before the supplemental inspection.

The EP baseline 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 the baseline inspection, the inspectors identified one issue of very low safety significance (Green) that was determined to involve a violation of NRC requirements. However, because of the very low safety significance and because it has been entered into your corrective action program, the NRC is treating this issue as a non-cited violation, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this non-cited violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Susquehanna Steam Electric Station.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures 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 by James C. Linville for/

Wayne D. Lanning, Director Division of Reactor Safety

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

Enclosure: Inspection Report No. 50-387/02-09, 50-388/02-09

Attachment: Supplemental Information

Mr. Robert G. Byram

- cc w/encl:
- B. L. Shriver, Vice President Nuclear Site Operations R. Anderson, General Manager - SSES Operations
 - R. L. Ceravolo, General Manager Plant Support
 - G. A. Williams, General Manager Nuclear Assurance
 - A. J. Wrape III, General Manager Nuclear Engineering
 - T. Harpster, Manager Regulatory Affairs
 - R. R. Sgarro, Supervisor, Nuclear Licensing SSES
 - C. D. Markley, Supervisor Nuclear Licensing
 - M. M. Golden, Manager Nuclear Security
 - P. Nederostek, Nuclear Services Manager, General Electric
 - D. Roth, Manager, Quality Assurance
 - H. D. Woodeshick, Special Assistant to the President
 - G. DallaPalu, PP&L Nuclear Records
 - R. W. Osborne, Vice President, Supply & Engineering Allegheny Electric Cooperative, Inc.
 - Commonwealth of Pennsylvania
 - P. Cote, Acting Regional Director, FEMA, Region III

Mr. Robert G. Byram

Distribution w/encl: H. Miller, RA J. Wiggins, DRA S. Hansell, DRP - SRI Susquehanna M. Shanbaky, DRP D. Florek, DRP J. Talieri, DRP S. Iyer, DRP R. Junod, DRP T. Milligan, NRR T. Bergman, OEDO E. Adensam, NRR D. Collins, PM, NRR T. Tate, PM, NRR (Backup) G. Vissing, PM, NRR Region I Docket Room (with concurrences) W. Lanning, DRS R. Conte, DRS

N. McNamara, DRS

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DATE	02/13/02		02/23/02		02/26/02		02/28/02		03/06/02	
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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos:	50-387, 50-388
License Nos:	NPF-14, NPF-22
Report Nos:	50-387/02-09, 50-388/02-09
Licensee:	PPL Susquehanna, LLC
Facilities:	Susquehanna Steam Electric Station, Units 1&2
Location:	Berwick, PA 18603
Dates:	January 22-January 25, 2002 (Onsite) January 28-February 4, 2002 (In-office)
Inspectors:	N. McNamara, Emergency Preparedness Inspector, DRS, RI D. Silk, Sr. Emergency Preparedness Inspector, DRS, RI
Observer:	D. Ney, Nuclear Engineering, Pennsylvania Department of Environmental Protection (DEP), Bureau of Radiological Protection (BRP)
Approved by:	Richard J. Conte, Chief Operational Safety Branch Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000387/02-09, IR 05000388/02-09; on 01/22/2002-02/04/2002; Susquehanna Steam Electric Station; Units 1&2. Alert and Notification System, Emergency Response Organization Augmentation Testing, Emergency Action Level and E-Plan Changes, and Correction of Emergency Preparedness Weaknesses and Deficiencies, Supplemental Inspection Report - Violation - White significance.

These EP baseline and supplemental inspections were performed by two region-based inspectors. The inspectors identified one Green finding that was considered a non-cited violation. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using IMC 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at http://www.nrc.gov/reactors/operating/OVERSIGHT.html.

A. Supplemental Inspection - White Performance Indicator

Cornerstone: Emergency Preparedness

This supplemental inspection was performed by the NRC using inspection procedure 95001, to assess the licensee's evaluation associated with a violation of White significance which was identified in Inspection Report 50-387/01-06, 50-388/01-06. The NRC identified that on several occasions, the licensee on-shift staffing was below the minimum requirements of the E-Plan. The NRC identified that the root cause evaluation was narrowly focused which resulted in the licensee not conducting a thorough review to understand the causal factors contributing to the violation. Therefore, it was not evident that the problems associated with this issue were sufficiently understood to provide reasonable assurance that the corrective actions would prevent recurrence. Consequently, the NRC was not able to complete the inspection objectives.

B. Baseline Inspection Findings

Cornerstone: Emergency Preparedness

• Green. The inspectors identified a non-cited violation of 10 CFR 50.54(q) because PPL made changes in the E-Plan which eliminated some on-shift emergency positions which decreased the effectiveness of the E-Plan without obtaining prior NRC approval.

The finding was of very low safety significance because the change was administrative in nature since individuals on-shift could have performed the functions of those eliminated positions had they been needed for emergency response.

Report Details

SUPPLEMENTAL INSPECTION

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

01 Inspection Scope (95001)

This supplemental inspection was performed to assess the licensee's evaluation associated with a violation of White significance which was identified in Inspection Report 50-387/01-06, 50-388/01-06. The inspectors reviewed the associated Root Cause Analysis Report (PLA-5383), condition reports (CRs), program procedures, a Collective Significance Analysis Report and the adequacy of the completed corrective actions. In addition, interviews were conducted with various EP personnel, Operations, Root Cause Analysis Team Leader, Incident Response Team Leader, training personnel and senior management involved in the generation of the Root Cause Report and its associated corrective actions. A list of documents reviewed is attached.

Background

On several occasions between 1999 and 2001, licensee on-shift staffing was below the minimum requirements as defined in your Emergency Plan. During reduced on-shift staffing levels, certain emergency preparedness functions for an emergency at the site would not be met. These functions were emergency communication, monitoring the unaffected unit for safety, and operations support center coordination duties.

02 Evaluation of Inspection Results

02.01 Problem Identification

a. Determination of who (i.e., licensee, self-revealing, or NRC) identified the issue and under what conditions.

On February 27, 2001, the NRC Resident Inspector informed Operations that the continuous on-shift staffing issues were not meeting the requirements of the licensee's E-Plan.

b. Determination of how long the issue existed, and prior opportunities for identification.

The licensee found approximately 11 CRs that documented more than 30 instances of reduced shift staffing. However, the licensee's root cause team found that prior to 2000, the licensee was not routinely documenting on-shift staffing problems in CRs. Therefore, they concluded the problem has been longstanding. In 1984, procedure NDAP-0300, "Conduct of Operations," stated there were E-Plan minimum staffing requirements but did not specify the numbers. At some point that reference was removed. In 1986, an administrative procedure, used as a guideline for developing station procedures, stated that appropriate regulatory requirements were to be referenced to ensure adherence. However, the root cause team found this was not routinely followed especially with respect to the emergency response requirements.

c. Determination of the plant-specific risk consequences (as applicable) and compliance concerns associated with the issue.

Due to the nature of this issue, this is not measurable in risk assessment terms. The failure to maintain on-shift staffing is of low to moderate safety significance because without adequate staffing the licensee may not be able to properly respond to a radiological emergency by taking initial actions to protect the public health and safety. Not having adequate numbers of staff to respond to an event has resulted in the licensee not meeting planning standard 10 CFR 10.47(b)(2) which states, in part, "that on-shift facility licensee responsibilities for emergency response are unambiguously defined, and adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, and timely augmentation of response capabilities is available."

02.02 Root Cause and Extent of Condition Evaluation

a. Evaluation of methods used to identify the root causes and contributing causes.

The licensee initiated a Root Cause Analysis Team (RCAT) which conducted an assessment of the on-shift staffing issue. The analysis was performed in accordance with an <u>Investigator's Guide</u> which provided detailed direction for applying analysis techniques and tools to assist the investigators. The RCAT used the "Why Charting" analysis method which included a causal factor review. The NRC found these methods for conducting a root cause review to be acceptable, but the scope of the root cause was shallow, resulting in a limited review.

In addition, the licensee assigned an Incident Response Team (IRT) to independently review the EP White finding. The NRC determined that the IRT: (1) did not follow Procedure NDAP-00-0706, "Process for Issues Involving Significant Regulatory Interaction" in that IRT did not conduct an independent evaluation of the information gathered by the RCAT; (2) did not use the prescribed method for conducting the root cause review; and, (3) was not able to provide the documentation or assessment necessary to support the overall conclusions and the extent of conditions in the root

cause report. The IRT subsequently became the authors of the final root cause report even though an in-depth review had not been conducted.

b. Level of detail of the root cause evaluation.

The inspectors found the scope of the root cause evaluation to be narrowly focused which resulted in the licensee not conducting a thorough review of the causal factors contributing to the violation. In addition, the licensee was not able to provide the details necessary to ensure their understanding of the root causes and causal factors related to the violation. Overall, the licensee's root cause evaluation was not sufficiently developed to allow the inspectors to complete this specific inspection objective. See additional details in 02.02.a and 02.03.a.

c. Consideration of prior occurrences of the problem and knowledge of prior operating experience.

The licensee identified prior occurrences of the problem as discussed in Section 02.01.b of this report. The recurrences reflected a corrective action problem. During NRC interviews with the Operations' staff conducted in June 2001, the inspectors determined that staff did not have prior knowledge of the E-Plan requirements for meeting minimum on-shift staffing.

d. Consideration of potential common causes and extent of condition of the problem.

As stated in Section 02.01.b, the licensee determined that a common cause was the failure to include appropriate regulatory requirements in station administrative procedures. However, the inspectors determined the licensee did not review this area from a broader perspective which resulted in missed opportunities to identify all the common causes related to this violation. The extent of condition as described in the root cause report lacked detail and appeared not to be related to the violation, in that it focused on OSC & TSC staffing and referenced CRs that had been generated.

However, it was determined through interviews that the licensee had initiated a corrective action to review other station procedures to ensure that E-Plan requirements were met. The licensee found that both the Chemistry and Health Physics staffing procedures needed to incorporate a reference to the E-Plan. The licensee was not able to demonstrate the review extended to other station departments to ensure E-Plan requirements were reflected in the procedures. The licensee informed the inspectors that a condition report was generated to review all station procedures to ensure regulatory commitments (i.e., NRC, INPO, NSAG, NQA) were referenced. However, a review of the action stated that it would be too arduous a task to review all station procedures and subsequently closed the action based on that assessment. The NRC concluded the licensee did not appropriately consider all the potential common causes and the licensee did not conduct an appropriate extent of condition. NRC staff could not complete this specific inspection objective.

02.03 Corrective Actions

a. Appropriateness of corrective actions.

The licensee took immediate corrective actions by making an administrative change to NDAP-0300, "Conduct of Operations," so that TSC Communicators could substitute as Control Room (CR) Communicators and by providing an outline describing the specific number of staff required to meet the E-Plan staffing requirements. However, the licensee had not made the appropriate changes to the E-Plan to ensure consistency between the procedure and the Plan. Therefore, at the time of this inspection, the procedure deviated from the E-Plan, but the specific function would be fulfilled. On January 9, 2002, the licensee could not staff the four PCO positions which resulted in the shift going below the E-Plan minimum staffing requirements. They would also have staffed the CR Communicator position with an individual qualified as a TSC Communicator which deviated from the E-Plan. Although the CR Communicator function was met, procedures were still inconsistent for meeting the E-Plan requirements. The corrective actions to achieve compliance were limited and did not prevent recurrence as demonstrated on January 9, 2002.

The inspectors noted that not all management expectations were documented in NDAP-0300 for ensuring continual adherence and preventing recurrence. For example, the inspectors reviewed informal written guidance initiated by Operations which advised the shift supervisor of the actions to be taken if staff vacancies could not be filled. This was not added to the administrative procedure to ensure continual adherence; and, because it was not a procedure, it could be eliminated without approval. In addition, the licensee stated that expectations were given to the Operations staff to keep the Emergency Planning Manager informed should on-shift staffing go below the minimum requirements. However, when the licensee went below on-shift staffing on January 9, 2002, the Emergency Planning Manager was not directly informed. This expectation was not documented in the procedure for ensuring continual adherence.

The root cause report identified corrective actions to prevent recurrence which appeared to be directly related to the overall improvement of the emergency planning department. While the inspectors determined the corrective actions were appropriate for improving the program, they did not encompass all the causal factors that were directly related to the violation. For example, the nature of the violation was a failure to translate E-Plan requirements into procedures and/or training at least in the Operations Department. Based on the above, procedure inconsistency still existed and there had not been an extent of condition review for other departments or for other E-Plan requirements except in Health Physics and Chemistry.

At the time of the inspection, the licensee continued to have CR staff assigned to multiple Nuclear Emergency Response Organization (NERO) positions. Although this is acceptable, the licensee was not able to always cover those positions due to staff vacancies. However, the licensee plans to make an E-Plan change to have a dedicated Fire Brigade Team Leader and CR Communicator.

Overall, the inspectors were not able to complete this specific inspection objective.

b. Prioritization of corrective actions.

The corrective actions identified in the root cause report appeared to be appropriately prioritized. However, the inspectors noted that the closed corrective actions were both narrowly focused as described in Section 02.03.a and did not prevent recurrence.

c. Establishment of a schedule for implementing and completing the corrective actions.

The licensee's schedule for implementing changes to the EP area appeared to be appropriate. Due to the limited scope of the root cause, the inspectors were not able to assess the adequacy of the schedule for completing all the corrective actions associated with the violation.

d. Establishment of quantitative or qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence.

At the time of this inspection, the only qualitative measure the licensee had established for determining success of the corrective actions was a daily tracking system to ensure emergency response positions would be filled. However, it did not prevent them from going below the E-Plan requirements for PCOs on January 9, 2002. Quantitatively, the licensee plans to increase the control room staff to compensate for absences due to personal reasons. However, the licensee acknowledges that it may take up to two years to complete that initiative. The measures put in place to address NDAP-0300, were inadequate to prevent recurrence. The inspectors determined that the licensee's efforts for establishing both quantitative and qualitative measures were minimal. Therefore, they missed opportunities to prevent recurrence.

BASELINE INSPECTION

- 1EP2 Alert and Notification System (ANS) Testing
- a. Inspection Scope

An onsite review of the licensee's ANS was conducted to ensure prompt notification of the public to take protective actions. The inspectors reviewed: (1) "Design of the Siren Alerting System for the Susquehanna Steam Electric Station: Final Report January 1982"; (2) siren testing data; and (3) maintenance records for correcting siren failures. In addition, the inspectors reviewed the following procedures: (1) "Public Notification System," EP-AD-011, Rev 3; and (2) "Public Notification System Problem Solving," EP-AD-018, Rev 2. The review was conducted in accordance with NRC Inspection Procedure 71114, Attachment 02, and the applicable planning standard, 10 CFR 50.47(b)(5) and related requirements in 10 CFR 50 Appendix E, Section IV.D were used as reference criteria.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation Testing

a. Inspection Scope

An onsite review of the licensee's NERO augmentation staffing commitments and the process for notifying the NERO was conducted to ensure the readiness of key NERO staff for responding to an event and timely facility activation. The inspectors sampled the licensee's NERO qualification records for key NERO positions, procedures for initiating NERO call-in and surveillance records of pager and tele-notification system tests. The review was conducted in accordance with NRC Inspection Procedure 71114, Attachment 03, and the applicable planning standard, 10 CFR 50.47(b)(2). Its related 10 CFR 50, Appendix E requirements were used as reference criteria.

b. Findings

No findings of significance were identified. (Refer to the supplemental inspection report details of this report which describe on-shift staffing problems identified in 2000 and 2001).

1EP4 Emergency Action Level (EAL) Revision Review

a. Inspection Scope

A regional in-office and an onsite review of revisions to the E-Plan, implementing procedures and EAL changes was performed to determine that the changes did not decrease the effectiveness of the Plan. The revisions covered the period from June 2001 through January 2002. The review was conducted in accordance with NRC Inspection Procedure 71114, Attachment 04. The applicable requirements in 10 CFR 50.54(g), 10 CFR 50.47(b), and 10 CFR 50 Appendix E were used as reference criteria.

b. Findings

During an inspection conducted in June 2001, the NRC identified an unresolved item **(URI 50-387; 50-388/01-06-03)**, in which the required documentation per 10 CFR 50.54(q) for making changes to the E-Plan (Version 4, 5, 6, and 7) was not readily available. Specifically, the licensee had eliminated NERO positions from their staffing table (Table 6.2) related to plant support positions which conflicted with licensing guidance document NUREG 0654, entitled "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." (Subsequent to the change, a footnote had been eliminated from the plan that explained that the functions performed by the eliminated positions would be performed by other on-shift personnel.) The licensee was given additional time to review their records to find the supporting documentation. However, PPL was not able to provide the required documentation to justify the changes to the previous E-Plan

versions. Without the documentation, the inspectors were not able to assess the licensee's basis for eliminating the positions and therefore the change would be a decrease in the effectiveness of the E-Plan. The licensee has made changes subsequently to their staffing table that add the missing positions and now conforms with NUREG-0654.

This is a violation of 10 CFR 50.54(q), which states that a licensee must obtain prior NRC approval if a change decreases the effectiveness of the E-Plan. The NRC was not provided any documentation justifying the changes to the staffing table. However, there was no evidence that plant support functions would not have been performed as the change was administrative in nature. Following the guidance of Inspection Manual Chapter 0610*, Appendix B, and Inspection Manual Chapter 0609, Appendix B, the finding was considered more than minor because making changes to the E-Plan without the appropriate review could result in changing regulatory commitments in the E-Plan and potentially creating an ineffective response to a radiological emergency. However, this violation was of very low safety significance because the change was administrative in nature since individuals on-shift could have performed the functions of those eliminated positions had they been needed for emergency response. The inspectors determined the licensee failed to implement a regulatory requirement which is not considered a failure to "meet" a planning standard. Therefore, this finding was determined to be of very low safety significance (Green) and was entered into the licensee's corrective action system (CR No. 70730). Accordingly, this issue is being treated as a non-cited violation consistent with Section VI.A.1 of the NRC Enforcement Policy (NUREG 1600). (NCV 50-387; 50-388/02-09-01)

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

a. Inspection Scope

The inspectors reviewed CRs and corrective actions for issues identified by the licensee in quality assurance audits, drills and exercises. CRs assigned to the EP department were also reviewed to determine the significance of the issues and to determine if repeat problems were occurring. The inspectors reviewed the quality assurance audit reports for the 2000 and 2001 to assess whether the reviews met the 10 CFR 50.54(t) requirements and if any repeat issues were identified. The reviews were conducted in accordance with Inspection Procedure 71114, Attachment 05, and the applicable requirements in 10 CFR Appendix E, Section IV.F.2.g, concerning the identification and correction of weaknesses and deficiencies.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

40A6 Meetings, including Exit

The inspectors presented the inspection results to Mr. Shriver and other licensee personnel, at the conclusion of the inspection on January 25, 2002. The licensee acknowledged the findings presented and agreed with the accuracy of the facts supporting those findings. A subsequent exit was conducted on February 4, 2002 via telephone with Mr. Shriver and the NRC to discuss the inadequacies found with the root cause and extent of condition review with respect to the violation.

The NRC noted that coupled with this inspection, the licensee letter of October 15, 2001, Reply to the Notice of Violation, reflected the shallow root cause analysis and extent of condition review of the staffing problem. A licensee representative acknowledged the problem and stated that another independent assessment would be conducted in this area.

Attachment 1

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Susquehanna Electric Steam Station

R. Ceravolo, General Manager, Plant Support

J. Grisewood, Supervisor, Nuclear Emergency Planning

J. Perry, Senior Engineer, Root Cause Team Leader

R. Tripolli, Nuclear Regulatory Affairs

T. Dalpiez, Incident Response Team Leader

R. Lengel, Sr. Emergency Planning Coordinator

<u>NRC</u>

S. Hansell Senior Resident Inspector, Susquehanna

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened/Closed:	NCV	50-387; 50-388/02-09-01	E-Plan changes Decreased the Effectiveness of the Plan
<u>Closed</u> :	URI	50-387; 50-388/01-06-03	Changes Made to Staffing Table 6.2 of E-Plan

Discussed: None

None

LIST OF DOCUMENTS REVIEWED*

Emergency Plan and Implementing Procedures:

Emergency Plan for Susquehanna Steam Electric Station, Units 1&2 EP-AD-014, Surveillance Testing of Emergency Communications Equipment, Rev. 4 EP-AD-023, Emergency Preparedness Self Evaluation Process, Rev. 0

Other Licensee Procedures:

NDAP-QA-0300, Conduct of Operations, Rev. 1 NDAP-QA-0002, Nuclear Department Procedure Writing, Rev. 14 AD-QA-103, Audit Program, Rev. 5 NDAP-QA-0010, Nuclear Department Minimum Qualifications and Training Requirements EP074, Functional Lead Training, Rev. 0 NDAP-00-0706, Process for Issues Involving Significant Regulatory Interaction, Rev. 2 NDAP-QA-0702, Action Request and Condition Report Process, Rev. 11 2

SA NEP-PER-01-003A, Performance Based Training, dated August 2001 DA-NEP-PER-01-002A, Effectiveness of New Training, dated November 2000

Miscellaneous Documents:

Evaluation and Root Cause of Minimum On-Shift Staffing Requirements (CR 338405) and Associated Attachments
Nuclear Regulatory Affairs Response to CRA 361670
PORC Committee Meeting Minutes No. 01-10-03, dated November 6, 2001
Letter dated October 15, 2001, PPL's Reply to a Notice of Violation
Letter dated November 16, 2001, PPL's EP Improvement Plan (PLA-5391)
Letter dated December 21, 2001, PPL's Requiring Prior NRC Approval (PLA-5419)
PESG EP Master Audit Plan dated January 5, 2001
Self Assessment, NEP-PER-99-004A, Management Involvement & Support of ERO
QA Assessment Report, 2001-0037, EP Interfaces with State and Local Agencies
QA Assessment Report, 2001-0341, EP Operational Status and Capabilities
QA Master Audit Plans, dated January 5, 2000 and October 26, 2001
Information Box 01-100 and 01-101dated July 2001

Condition Reports/Action Requests

CR 295233 CR 367544 CR 360838 CR 378944 CR 378918 CR 93715	Errors made in dose assessment activities during the 11/2/00 EP Drill Ongoing problems with the emergency plan radiological function PAR notification process includes two flow paths for PAR information to the state 2001 Annual Siren Maintenance not completed within the calendar year Annual siren maintenance not available for Bloomsburg and Wilkes-Barre areas The plant page system cannot be heard in any of the 4kv switchgear rooms in the U1 and U2 Rx bldgs. This is an NAS-SS surveillance finding
CR 331319	IERP Review of INPO OE12175 - weaknesses with plant paging system
CR 328333	Two recent occurrences of loss of power caused perturbations to multiple plant support facilities, systems and support processes
CR 272791	During the HP drill on 7/14/00, individuals reported not hearing the site accountability tone
CR 350041	Tele-notification system inop
CR 350601	EP beeper signal weak in the training center
CR 377835	TNS failed to activate NERO pagers during testing on 1/10/2002
CR 301977	NRC NCV, EOF was not able to assume control of the emergency within 90 minutes
	of an alert classification
CR 341832	EOF 90 minute activation requirement not met during the 6/12/2001 HP drill
CR 288518	EOF ACTIVATION took longer than 90 minutes during the 9/26/00 EP drill
CR 292146	TCS/EOF turnover during 10/19/2000 practice drill was done without an effective turnover by various EOF/TSC groups
AR 362200	The Station Public Address System Performance is degraded and is not being maintained at a level commensurate with the critical nature of day-to-day and emergency response communications

- AR 374104 Alarms and PA system cannot be heard at some locations in the reactor buildings
- AR 367141 The 11/13/01 E-PLAN drill announcements were not audible at several locations on site
- AR 372255 Two E-Plan pagers did not activate during the 12/10/01 unannounced drill
- AR 372167 Inadequate emergency plan unannounced drill response
- AR 372127 Interim recovery manager did not respond to the EOF within 90 minutes
- AR 378126 TNS activation during pager testing on a Saturday responded as it would on a weekday
- AR 367138 TNS has behaved erratically during recent operation

LIST OF ACRONYMS

- ANS Alert and Notification System
- AUS Assistant Unit Supervisor
- CFR Code of Federal Regulations
- CR Control Room
- CRs Condition Report
- EAL Emergency Action Level
- EP Emergency Preparedness
- E-Plan Emergency Plan
- ERO Emergency Response Organization
- IRT Incident Response Team
- NERO Nuclear Emergency Response Organization
- OSC Operations Center
- PCO Plant Control Operator
- RCAT Root Cause Analysis Team
- SDP Significance Determination Process

* - Does not include all procedures reviewed in preparation for the EP baseline and supplemental inspection.