UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

June 20, 1997

EA's 96-270; 96-347; & 97-054

Mr. Robert G. Byram
Senior Vice President - Nuclear
Pennsylvania Power & Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES - $210,000
(NRC Inspection Report Nos. 50-387 & 50-388/96-08; 96-09)

Dear Mr. Byram:

This letter refers to two NRC inspections conducted at Susquehanna Steam Electric Station between June 11, 1996, and September 9, 1996, as well as two investigations conducted by the NRC Office of Investigations (OI) at your Susquehanna nuclear facility. During the first inspection, four apparent violations of NRC requirements were identified, three of which related to a misalignment of an electrical breaker for the 'E' diesel generator. Those three violations involved not having the required number of operable diesel generators, inaccurate electrical distribution surveillances, and failures to implement procedures. The fourth violation related to a non-licensed operator's failure to follow your administrative procedures for controlling the status of equipment associated with the Standby Liquid Control system. During the second inspection, one apparent violation was identified involving a single Core Spray system test line containment isolation valve being opened and deactivated for 24 hours during performance of preventive maintenance, without the required actions being taken in accordance with the Technical Specifications (TSs). The OI investigations were initiated after you had conducted internal investigations of these matters that were identified by your staff. The inspection reports and the synopsis of the first OI investigation were forwarded to you previously. The synopsis of the second OI investigation is enclosed.

Based on the investigations conducted by the NRC and your staff, the NRC has concluded that a number of nuclear plant operators (NPOs), as well as licensed operators, did not perform certain activities, yet documented that the activities had been performed. As a result of these findings, a predecisional enforcement conference (conference) was conducted with you on March 21, 1997, to discuss the violations, their causes, and your corrective actions.

Based on the information developed during the inspections and investigations, the information provided during the March 21, 1997, conference, and the information provided in your supplemental letter, dated April 9, 1997, a number of violations of NRC requirements were identified. The violations are described in detail in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice).

Most of the violations are described in Section I of the enclosed Notice. Of those violations in Section I, the majority relate to an event in which one of the required four independent diesel generators was inoperable for approximately 20 days because of a circuit breaker alignment error. This inoperability was caused by the failure of a nuclear plant operator (NPO) to align the diesel generator in accordance with procedures. The supply breaker for the diesel's auxiliary equipment was removed inadvertently as a result of the operator's failure to identify the correct component before taking action while performing the alignment. Furthermore, multiple barriers that should have prevented or detected the misalignment failed. The procedure approved for use in aligning the 'E' diesel generator was inadequate in that it did not specifically require that the alignment of the supply breaker for the diesel's auxiliary equipment be independently verified. In addition, although shift supervision was informed that there was a potential breaker alignment problem, no action was taken to investigate or verify the reported condition. Finally, even though the TS surveillance (designed to verify that the safety-related electrical systems were properly aligned) was performed on three separate occasions by three different NPOs, the NPOs failed to properly complete the check of the auxiliary equipment supply breaker and the misalignment went undetected for 20 days.

The NRC is particularly concerned that even though the surveillance procedure requirement to verify the alignment of the 'E' diesel generator auxiliary equipment supply breaker was not performed, records were completed to indicate that the verification was performed. The completion of records without actually having conducted the activity documented in the record takes on greater significance after considering that on approximately 157 occasions between January 1996 and June 1996, more than half of your NPOs failed to perform a required panel alarm test, yet completed a record to indicate that the test was completed. In addition, on multiple occasions between January 1994 and June 1996, Shift Supervisors (SSs), signed a record indicating that they performed the required general station inspection which included an in-plant tour, when in fact, the in-plant tours in some cases were not conducted, in that the SSs did not leave the control room during those periods. In addition to the SSs, two Assistant Unit Supervisors (AUSs) performing Preventive Maintenance Worklist activities, signed off work as completed between January 1996 and June 1996 indicating that they had accompanied NPOs during their rounds, when, in fact, the individuals had not entered the plant areas during those periods necessary to accompany the NPOs.

These numerous examples of both licensed and non-licensed personnel not performing required activities, yet documenting on records that the activities were performed, raise serious questions regarding the adequacy of management and supervisory oversight at the station to ensure that management expectations were clearly communicated, understood and followed. In your April 9, 1997, letter to the NRC subsequent to the conference, you acknowledged that these conditions, that were identified and investigated by your staff, were serious regulatory and management issues. Even though no actual safety consequences resulted, management's failure to effectively communicate the expectation that activities be performed in accordance with procedures and with attention to detail, had the potential for significant safety consequences. Given the number of individuals involved in these activities, including licensed operators, the actual and potential impact on equipment operability, the duration of the problem, and the lack of management and supervisory oversight that resulted in the failure to detect this widespread condition; the violations in Section I are categorized in the aggregate as a Severity Level II problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600.

With respect to the violations in Section I, in accordance with the Enforcement Policy in effect at the time these violations occurred, a base civil penalty in the amount of $80,000 is considered for a Severity Level II problem. Since this issue constitutes a Severity Level II problem, the NRC would normally consider whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit would normally be warranted for both factors because you identified most of these issues during your investigations, and your corrective actions were considered prompt and comprehensive. Those corrective actions included: (1) improvements in supervisory oversight; (2) training on the event, on the 'E' diesel generator design, and on management expectations; and (3) expanded self-assessment in the Operations Department. However, this case represents particularly poor licensee performance, as evidenced by (1) the nature of the violations associated with the Severity Level II problem including the inoperability of the diesel generator for almost three weeks and the number of employees involved, (2) the extensiveness of the problem with inaccurate records; and (3) the management and supervisory failures demonstrated by these violations. Additionally, the NRC previously issued Information Notice 92-30 on April 23, 1992, and Generic Letter 93-03 on October 20, 1993, that described similar occurrences at other facilities. Your actions in response to these communications did not assure that plant personnel were properly performing their assigned duties at Susquehanna. Therefore, notwithstanding the normal civil penalty assessment outcome, I have decided, in light of this performance, to exercise discretion in accordance with Section VII.A.1 of the Enforcement Policy and propose a civil penalty at two times the base amount.

Accordingly, to emphasize the importance of performing activities as required, maintaining accurate records of such activities, and providing appropriate control and oversight of such activities, I have been authorized, after consultation with the Director, Office of Enforcement and the Deputy Executive Director for Regulatory Effectiveness, to exercise enforcement discretion and issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice) in the total amount of $160,000 for the violations in Section I.

With respect to the violation in Section II of the Notice, a containment isolation valve in a core spray system test line was opened and deactivated for 24 hours, contrary to the TSs, and operators did not initiate action in accordance with the TSs to place the unit in an operational condition in which the TS did not apply. Since the valve in the test line was the only isolation valve in the affected penetration, none of the actions specified by TSs could be taken to isolate the penetration within 4 hours as required. Instead of taking the action required when a limiting condition for operation cannot be met, you considered the closed system boundary to meet the requirement of the operable isolation valve in the system. Even though actions were taken to ensure that this boundary remained intact, none of the additional actions required by TSs to isolate the penetration were taken. This violation of your TSs is of concern because the single isolation valve in the system was open and inoperable and, based on your interpretation, could have remained in this condition with no time constraint. Therefore, this violation is classified individually at Severity Level III in accordance with the Enforcement Policy.

With respect to the violation in Section II, in accordance with the Enforcement Policy in effect at the time this violation occurred, the base civil penalty in the amount of $50,000 is considered for a Severity Level III violation. Since PP&L has been the subject of escalated enforcement action within the last 2 years[1], the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit for identification is not warranted because the violation was identified by the NRC. Credit for corrective actions is warranted because your corrective actions were considered prompt and comprehensive once the violation was identified. These actions included, but were not limited to: (1) formalizing the processes for interpretation of TSs and altering boundaries of closed systems; (2) providing training on the requirements for TS interpretations and documentation of engineering guidance; and (3) reviews to ensure that no other informal guidance was being utilized to support plant operations.

Therefore, to emphasize the importance of operating the facility in accordance with TSs, I have been authorized, after consultation with the Director, Office of Enforcement, to issue a civil penalty in the amount of $50,000.

Another violation of NRC requirements is described in Section III of the enclosed Notice and is classified individually at Severity Level IV. That violation involves a nuclear plant operator repositioning a breaker switch in a cabinet that was being controlled by a status control tag, without obtaining the permission of the individual or work group who required the tag and either Operations Shift Supervision or Operations Outage Group Supervision. This action resulted in the de-energization of heat tracing for an operable standby liquid control pump, for a period of 34 hours. At the conference, your staff indicated that the work permit indicated that there were discrepancies between the wiring diagrams and the actual wiring in the field. During a subsequent telephone conversation on April 15, 1997, Mr. J. Kenny of your staff informed Ms. T. Walker of my staff that the note indicating that there were wiring discrepancies was not added to the permit until after the event occurred. This information was considered in our assessment of this problem.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

---

[1] e.g., A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $100,000 was issued to PP&L on February 9, 1996, for a Severity Level III violation involving the discrimination of an employee who engaged in protected activities. (EA 95-250).

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be placed in the NRC Public Document Room (PDR). In addition, a summary of the conference that was conducted on March 21, 1997, including the slides that were used during the conference and a tape recording of the conference, will be placed in the PDR.

Sincerely,

Hubert J. Miller
Regional Administrator

Docket Nos. 50-387: 50-388
License Nos. NPF-14; NPF-22

Enclosures:
1. Notice of Violation and Proposed Imposition of Civil Penalties
2. Synopsis of OI Investigation Report No. 1-96-046

cc w/encls:
G. Jones, Vice President - Nuclear Operations
G. Kuczynski, Plant Manager
J. Kenny, Supervisor, Nuclear Licensing
G. Miller, Manager - Nuclear Engineering
R. Wehry, Nuclear Licensing
M. Urioste, Nuclear Services Manager, General Electric
C. Lopes, Manager - Nuclear Security
W. Burchill, Manager, Nuclear Safety Assessment
H. Woodeshick, Special Office of the President
J. Tilton, III, Allegheny Electric Cooperative, Inc.
Commonwealth of Pennsylvania

Pennsylvania Power & Light Company

DISTRIBUTION:
PUBLIC
SECY
CA
LCallan, EDO
EJordan, DEDO
JLieberman, OE
HMiller, RI
FDavis, OGC
SCollins, NRR
RZimmerman, NRR
Enforcement Coordinators
RI, RII, RIII, RIV
BBeecher, GPA/PA
GCaputo, OI
DBangart, OSP
HBell, OIG
DRoss, AEOD
OE:Chron
OE:EA
DCS
NUDOCS
DScrenci, PAO-RI
NSheehan, PAO-RI
LTremper, OC
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector - Susquehanna
Region I Docket Room (with concurrences)
CPoslusny, PM, NRR
JStolz, PDI-2, NRR

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI:ORA	RI:DRP	RI:RC	RI:RA		
NAME	TWalker/mjc	WHehl	BFewell	HMiller		
DATE	5/1/97	5/6/97	5/7/97	5/8/97		
OFFICE	OE	DEDO				
NAME	JLieberman	EJordan				
DATE	/ /97	/ /97				

OFFICIAL RECORD COPY

a:PROP-SUS.FAL

Pennsylvania Power & Light Company

DISTRIBUTION:
PUBLIC
SECY
CA
LCallan, EDO
EJordan, DEDO
JLieberman, OE
HMiller, RI
FDavis, OGC
SCollins, NRR
RZimmerman, NRR
Enforcement Coordinators
RI, RII, RIII, RIV
BBeecher, GPA/PA
GCaputo, OI
DBangart, OSP
HBell, OIG
DRoss, AEOD
OE:Chron
OE:EA
DCS
NUDOCS
DScrenci, PAO-RI
NSheehan, PAO-RI
LTremper, OC
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector - Susquehanna
Region I Docket Room (with concurrences)
CPoslusny, PM, NRR
JStolz, PDI-2, NRR

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

T. Walker

OFFICE	OE RHP	RI:RA phone	OE:D JL	DEDO	
NAME	RPedersen	HMiller	JLieberman	EJordan	
DATE	6/4/97	6/6/97	6/6/97	6/16/97	

6/17/97
JL

END