

December 12, 2000

EA-00-261

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

SUBJECT: INVESTIGATION REPORT NO(S). 1-1999-025 SUSQUEHANNA STEAM
ELECTRIC STATION

Dear Mr. Byram:

This letter refers to an investigation conducted by the NRC's Office of Investigations (OI) initiated on September 9, 1999, involving activities at the Susquehanna Steam Electric Station. The purpose of the investigation was to determine whether a supervisor at the Susquehanna Steam Electric Station, pressured subordinates into changing or falsifying condition reports. The OI investigation found that, on at least two occasions, the supervisor directed the addition of information into condition reports with the knowledge that the said information would result in the creation of condition reports that were inaccurate and misleading. A factual summary of the investigation is enclosed.

Based on our assessment of the results of the OI investigation, we identified that one of the inaccurate condition reports caused PPL to be in violation of 10 CFR 50.9(a). As such, we have identified an apparent violation and are considering enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600.

The apparent violation involved a materially inaccurate condition report generated as a result of a non-posted high radiation area found on December 15, 1998 near the gate to the regeneration waste tanks. The violation is described in the factual summary. The actions of the supervisor resulted in PPL being in violation of 10 CFR 50.9(a) since the condition report was not accurate and complete in all material aspects. Months later, in response to a subsequent condition report on high radiation levels measured in this area, your staff identified a previously unknown source of radiation which caused radiation levels in this area to rapidly change over a short period of time. It is likely that this same source of radiation occurred on December 15, 1998. The preponderance of the evidence from the investigation substantiates that the supervisor was motivated to direct employees to perform additional surveys and selectively add to the condition report only information that would not indicate a high radiation area existed. In this case, the inaccurate condition report also resulted in the failure of your staff to promptly identify a source of high radiation.

A second instance of the supervisor directing inaccurate or misleading information in a condition report is described in the factual summary. That instance did not result in PPL being in violation of 10 CFR50.9(a). Members of your staff detected the inaccurate information and properly amended the condition report prior to final approval. But for detection by your staff, a violation would have occurred.

These two examples raise questions as to whether (1) supervisors within the radiation protection organization at the Susquehanna Steam Electric Station have created an environment within the radiation protection organization that is not conducive to addressing problems and (2) that environment is being tolerated by radiation protection management. It also raises questions as to management's and supervisor's commitment to solve problems in condition reports. Our investigators noted an environment of mistrust between radiation protection employees and supervision leading to an atmosphere where employees attempt to minimize contact with this supervisor and avoid using PPL's condition report process because of the manner in which the condition reports are questioned and resolved.

Before the NRC makes its enforcement decision, we are providing you an opportunity to either (1) respond to the apparent violation addressed in the factual summary within 30 days of the date of this letter, or (2) request a predecisional enforcement conference. If a conference is held, it will be transcribed and closed to public observation. If a conference is held, the supervisor in question should attend this enforcement conference as well, in order that he might provide additional clarifying details in this matter. Please contact Mr. Curtis Cowgill at 610-337-5233 within 7 days of the date of this letter to notify the NRC of your intended response.

The decision to hold a predecisional enforcement conference or request a written response does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. The purpose of the conference or response is for the NRC to obtain information to enable it to make an enforcement decision based on a common understanding of the facts, root causes, missed opportunities to identify the apparent violation sooner, corrective actions, significance of the issues and the need for lasting and effective corrective action. In addition, this is an opportunity for you to point out any errors and for you to provide any information concerning your perspectives on 1) the severity of the violation, 2) the application of the factors that the NRC considers when it determines the amount of a civil penalty that may be assessed in accordance with Section VI.C.2 of the Enforcement Policy, and 3) any other application of the Enforcement Policy to this case, including the exercise of discretion in accordance with Section VII.

If you choose to provide a response, it should be clearly marked as a "Response to Apparent Violation Based on Office of Investigations Report Nos. 1-1999-025" and should include for the apparent violation: (1) the reason for the apparent violation, or, if contested, the basis for disputing the apparent violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that have been or will be taken to avoid further violations, and (4) the date when full compliance was or will be achieved. Your response should be submitted under oath or affirmation and may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. Where good cause is shown, an extension of time for submitting the response will be granted by the NRC.

At either the conference if one is held, or in a written response, you should also be prepared to discuss your assessment of the environment within the radiation protection group at the Susquehanna Steam Electric Station. You should also discuss any actions taken or planned to ensure that the atmosphere is conducive to discussing problems openly and resolving them.

In accordance with 10 CFR 2.790 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 Publically Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Reading Room). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the Public Document Room without redaction.

In addition, please be advised that the characterization of the apparent violation described in this letter and its enclosure may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

Please contact Mr. Curtis Cowgill of my staff at (610) 337-5233 if you have any questions in this matter. Mr. Cowgill will also contact you in the near future to finalize the date and time of the predecisional enforcement conference.

Sincerely,

/RA/

A. Randolph Blough, Director
Division of Reactor Projects

Docket Nos. 05000387 and 05000388
License Nos. NPF-14 and NPF-22

Enclosure(s): Factual Summary of OI Investigation 1-1999-025

cc w/encl:

B. L. Shriver, Vice President - Nuclear Site Operations
G. T. Jones, Vice President - Nuclear Engineering and Support
R. Ceravolo, General Manager - SSES
R. M. Peal, Manager, Nuclear Training
G. D. Miller, General Manager - Nuclear Assurance
R. R. Sgarro, Supervisor, Nuclear Licensing - SSES
M. M. Golden, Manager - Nuclear Security
P. Nederostek, Nuclear Services Manager, General Electric
J. McCarthy, Manager, Nuclear Plant Services
A. M. Male, 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

Mr. Robert G. Byram

5

Distribution w/encl: **(via ADAMS)**

Region I Docket Room (with concurrences)

S. Hansell, DRP - NRC Resident Inspector

H. Miller, RA

J. Wiggins, DRA

C. Cowgill, DRP

D. Florek, DRP

C. O'Daniell, DRP

D. Holody, EO, RI

R. Urban, ORA

J. Nick, ORA

W. Kane, NRR

B. Sheron, NRR

W. Borchardt, OE

B. Summers, OE

J. Shea, OEDO

E. Adensam, NRR

R. Schaaf, NRR

DOCUMENT NAME: C:\PPL-Hill Rev b.wpd

After declaring this document "An Official Agency Record" it **will** be released to the Public.

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/DRP		RI/DRP		RI/DRS		RI/DRS		RI/DRP	
NAME	DFlorek		CCowgill		JWhite		WLanning		ABlough	
DATE	12/04/00		12/05/00				12/06/00		12/08/00	

OFFICE	RI/OI		RI/EO		OE					
NAME	BLetts		DHolody		WBorchardt					
DATE	12/04/00		12/08/00		12/08/00		12/ /00		12/ /00	

OFFICIAL RECORD COPY

Enclosure 1

SUMMARY OF FINDINGS OF OI INVESTIGATION 1-1999-025

The Office of Investigations (OI), Region I Field Office, initiated an investigation on September 9, 1999, to determine if the Radiation Operations Supervisor (ROS) attempted to pressure subordinates into changing or falsifying condition reports), as to identifying the existence of non-posted radiation areas. The evidence developed by OI indicates that the ROS directed subordinates to add information to condition reports, on at least two occasions, with knowledge that the additional information would result in the creation of condition reports that were inaccurate and misleading.

The first occasion involved a non-posted high radiation area found by the gate to the regeneration waste tanks on December 15, 1998 at 4:30 a.m. Radiation protection technicians (RPTs) identified the area as a high radiation area based on the dose rate measurements from two different radiation survey meters (A & B). After identification, the RPTs posted the area and generated a CR (#87071) to document the finding. Later on the same day, the ROS directed a radiation protection foreman to measure dose rates in the same area in an attempt to disprove that the area required posting as a high radiation area. The foreman and an RPT, using survey meters A & C), could not duplicate the original dose rate measurements, but rather, found lower dose rates when they surveyed the area. An addendum was attached to the condition report to include the newer survey results with lower dose rates and a statement that one of the original survey meters (A) was checked and read higher than other meters used. The ROS added a statement to the condition report that the "meter in question" (A) "will be tested." The condition report also stated that two survey meters (A & B) were used for the original survey, but mentioned only one meter (A) being checked for accuracy (the meter was reading 10% high). The condition report did not indicate whether the second meter (B) was checked for accuracy and if it was reading high or low. As such, the condition report was incomplete and misleading since both survey meters (A & B) used for the original survey obtained readings that indicated a high radiation area existed, and both meters (A & C) used for the re-survey obtained readings that were also consistent with each other. The actions directed by the ROS, and the additional statement on the condition report, focused attention on the inaccuracy of only one meter (A) and ultimately resulted in the inaccurate conclusion that no 10 CFR 20 violation had occurred. The significance review section of the condition report contained a statement that "no technical specification or 10 CFR 20 violations were identified." This is inaccurate because the evidence supports that a non-posted high radiation area had existed in this case, and the existence of this specific non-posted high radiation area is a violation of 10 CFR 20. The preponderance of the evidence from the OI investigation substantiates that the ROS directed employees to add the information to the condition report regarding the accuracy of meter (A) with knowledge that such information was not complete and accurate and a regulatory violation (namely, a non-posted high radiation area) would not be documented. The ROS's actions are considered deliberate since testimony from other individuals indicated that the ROS wanted posting problems to "go away" and he wanted to avoid condition reports so that there were no negative views about the radiation protection group's performance.

The second occasion involved a bag of radioactive material found by RPTs in a non-posted radiation area on August 19, 1999. The RPTs identified that a radiation area existed based on two separate measurements of radiation dose rates from the bag. After identification, the RPTs posted the radiation area and generated a condition report (#197814). During review of the condition report, the ROS directed an independent verification survey that was performed by a radiation protection assistant foreman on August 19, 2000. That survey resulted in dose rates of 3 millirem per hour at 30 centimeters from the bag, which is less than the 5 millirem per hour dose rate for classifying an area as a radiation area. However, the assistant foreman was not authorized to document the survey due to a labor agreement. Two subsequent radiation measurements were also taken on August 19, 1999, by two additional RPTs, in the company of another assistant foreman. The additional survey verified that a radiation area existed. As directed by the ROS, the condition report was changed to reflect that a non-posted radiation area did not exist. The change to the condition report included the lower results from the foremen's independent survey (3 millirem per hour), but did not include the last two survey measurements taken by the RPTs. Based on the added information, the condition report was incomplete and inaccurate. The assistant foremen, who added the changes, stated that the ROS directed the exact changes to the condition report. Although the ROS denied directing the assistant foreman to only include the lower survey results, in testimony to the NRC, the ROS did admit that he directed the assistant foreman to specifically add the statement that a non-posted radiation area did not exist. He did this even though he was aware, at the time, that the other four survey results indicated that a radiation area existed. As such, the preponderance of the evidence from the OI report substantiates that the ROS knowingly directed the assistant foreman to add inaccurate information to the condition report. Based on questions and complaints by other licensee personnel, an addendum was subsequently added to the condition report. The addendum included all verification survey results and stated that there was a non-posted radiation area. But for this detection based on complaints from other personnel, the changes to the original condition report, as directed by the ROS, would have created a condition report that was inaccurate and incomplete (misleading).

The OI report also noted that many RPTs felt that certain radiation protection management did not want to document, in condition reports, the existence of non-posted radiation areas. The majority of the RPTs interviewed felt that this had a "chilling effect" on workers with regard to writing condition reports at the facility.

Distribution w/encl: **(via ADAMS)**

Region I Docket Room (w/concurrences)

S. Hansell, DRP - NRC Resident Inspector

H. Miller, RA

J. Wiggins, DRA

C. Cowgill, DRP

D. Florek, DRP

C. O'Daniell, DRP

D. Holody, EO, RI

R. Urban, ORA

J. Nick, ORA

W. Kane, NRR

B. Sheron, NRR

W. Borchardt, OE

B. Summers, OE

J. Shea, OEDO

E. Adensam, NRR

R. Schaaf, NRR

DOCUMENT NAME: G:\BRANCH 4\ENFORCEMENT\SUS\Susq-011.wpd

After declaring this document "An Official Agency Record" it **will** be released to the Public.

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/DRP		RI/DRP		RI/DRS		RI/DRS		RI/DRP	
NAME	DFlorek		CCowgill		JWhite		WLanning		ABlough	
DATE	12/04/00		12/05/00				12/06/00		12/08/00	

OFFICIAL RECORD COPY

OFFICE	RI/OI		RI/EO		OE					
NAME	BLetts		DHolody		WBorchardt					
DATE	12/04/00		12/08/00		12/08/00					

OFFICIAL RECORD COPY