



Pennsylvania Power & Light Company

Two North Ninth Street • Allentown, PA 18101-1179 • 215/774-5151

Harold W. Keiser
Senior Vice President-Nuclear
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MAR 27 1992

Mr. A. R. Blough, Chief
Reactor Projects Branch 2
Division of Reactor Projects
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

SUSQUEHANNA STEAM ELECTRIC STATION
REPLY TO NOTICE OF VIOLATION
(387/92-02-02 & 387/92-02-03)
PLA-3752 FILE R41-2

Docket Nos. 50-387
50-388

Dear Mr. Blough:

This letter provides Pennsylvania Power & Light Company's response to the Notice of Violation for NRC Combined Inspection Report 50-387/92-02 and 50-388/92-02 dated February 28, 1992.

The notice required submittal of a written reply within thirty (30) days of the date of the letter. We trust that the commission will find the attached response acceptable.

Very truly yours,

H. W. Keiser

cc: NRC Document Control Desk (original)
Mr. G. S. Barber, NRC Sr. Resident Inspector
Mr. J. J. Raleigh, NRC Project Manager

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REPLY TO A NOTICE OF VIOLATION

A. Violation (387/92-02-02)

Susquehanna Unit 1 Technical Specification (TS) 6.8.1 requires that written procedures be established, implemented and maintained covering activities addressed in Regulatory Guide (RG) 1.33. RG 1.33 requires administrative procedures for safe operation and shutdown. PP&L Nuclear Department Administrative Procedure, NDAP-QA-300, "Conduct of Operations," was established in accordance with this specification. Section 4.8 and 4.9 of that procedure provides requirements, responsibilities, and authorities for assuring safe operation and shutdown, including the investigation of anomalous instrumentation indications.

Contrary to the above, on January 16, an anomalous instrumentation indication involving a control room alarm annunciating high pressure in the offgas systems was not sufficiently investigated to determine cause. As a result, an apparent detonation of combustible gas (due to the accumulation of hydrogen in the common recombiner system piping) was not recognized as having occurred. Consequently, hot work on the system was allowed to continue without effecting corrective measures.

Response

1. Reason for the Violation

The reason for this violation was ineffective communications. Specifically:

- a) Operators were sent to the offgas recombiner area to investigate potential causes of the control room "SJAE Secondary Ejector Discharge Hi Pressure" alarm. The operators questioned the workers in the vicinity if they were performing any electrical work or had they bumped any instruments. The workers replied that because of the type of work being performed there was a potential that an instrument could have been bumped. The workers did not inform the operators that they had heard a bang or that they believed the bang was caused by a pipe hitting a scaffold. This information was vital for operations personnel to continue their investigation. Without this information, the operators assumed that the alarm was caused by work being performed in the area (bumped instrument) and pursued no additional investigative path, allowing the work to continue.

- b) The Unit 1 Plant Control Room Operator observed an Offgas radiation change on the back panel recorder in the control room. He made a general announcement to control room personnel that there was a "blip" on the Offgas recorder. The message was either not heard or was understood to mean the recorder had spiked/dipped and returned to normal (This type of response can be initiated by noise on a circuit or bumping a sensor, transmitter, etc.).

2. Corrective Steps Which Have Been Taken and the Results Achieved:

- a. The operators involved in this occurrence have been counseled on the importance of good communications. Areas of discussion included the proper way to give a message and ensure that the message was received. This provided immediate training to involved operators and clearly reiterated management's expectations concerning communications.
- b. The incident has been reviewed with station personnel as a part of the Unit 1 sixth refueling/inspection outage pre-briefing/training conducted by Station Management. The importance of hazard recognition and control, avoiding complacency, following up on precursors and concise communications are being stressed.

3. Corrective Steps Which Will Be Taken to Avoid Further Violations:

- a. Hot Box Training (92-13) will be conducted for all Operations shift personnel. This training reviews the 1/16/92 event and reinforces management's communication expectations. Estimated completion date for the Hot Box training is 5/1/92.
- b. This event is being incorporated into General Employee Training (Initial and Retraining) which is required annually for employees with access to Susquehanna. Employees with access to Susquehanna will have had training on this event via GET-R by July 1, 1993.

4. Date of Full Compliance:

PP&L will be in full compliance following completion of the training identified in (3) above:

- Hot Box Training for all Operations shift personnel by 5/1/92.
- Employees with access to Susquehanna will receive training on this event through GET-R by 7/1/93.

B. Violation (387/92-02-03)

Susquehanna Unit 1 Technical Specification (TS) 6.8.1 requires that written procedures be established, implemented and maintained covering activities addressed in Regulatory Guide (RG) 1.33. RG 1.33 requires maintenance procedures be established. PP&L Maintenance Procedure, AD-QA-502, "Work Authorization," (WA) specifies the implementation requirements for all maintenance activities for plant systems and components. Section 6.8.1 requires workers to sign the WA as completed on the actual completion of the activity.

Contrary to the above, on June 12, 1989, a WA (WA T73111) authorizing repair activities for the actuator and valve seat for HV-16907 was signed off as completed without actually effecting the repair of the valve seat. Consequently, though the valve was assumed to provide isolation of the common recombiner system (when closed), hydrogen gas was allowed to leak-by the impaired valve seat, accumulate in the downstream piping, and present a combustible gas hazard.

Response

1. Reason for the Violation

The reason for the violation was inadequate work practices at the time the WA was worked in that there was a failure to perform all work activities required to resolve the problem identified in the WA.

Work Authorization number T73111 identified the following problem "HV-16907 leaking by seat and has ruptured bellows". When maintenance personnel attempted to breach HV 16907 hot water and steam were encountered. In an attempt to isolate HV-16907 from system pressure additional blocking was added. The additional blocking did not remedy the problem of adequate isolation to allow the remaining valve disassembly to proceed. Therefore, only the valve actuator was reworked/reassembled, lubricated, and proper valve operation was confirmed. Post maintenance testing to "Ensure valve does not leakby" was identified on the WA however there was no documentation to assure that testing for leak-by was accomplished.

2. Corrective Steps Which Have Been Taken and the Results Achieved:

Additional controls, related to implementation of work authorizations, have been incorporated into AD-QA-502, Work Authorization System, to include:

- Foreman Reviews - Prior to closeout of WA package the responsible foreman reviews the package for completeness and technical accuracy. During this review the foreman confirms all relevant aspects of the work performed including adequate post maintenance testing completion. If open actions are identified during the post job review a new WA is initiated to capture the items.

3. Corrective Steps Which Will Be Taken to Avoid Further Violations:

- a. Maintenance supervisory personnel will be trained on the need to initiate a new WA if open items are identified during a post job review. Estimated completion date for this training is 7/01/92.
- b. An on-going Maintenance Department - Self Assessment Program has been instituted and is intended to identify improvement opportunities for meeting maintenance objectives. Recommendations based on observations of WA work instructions are one category of the self assessment and will be evaluated for incorporation into the appropriate program.

4. Date of Full Compliance:

PP&L will be in full compliance following maintenance supervisory personnel training concerning initiation of a new WA during post job reviews. This training is scheduled to be completed by 7/01/92.

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9204030139 DOC. DATE: 92/03/27 NOTARIZED: NO DOCKET #
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 AUTH. NAME AUTHOR AFFILIATION
 KEISER, H.W. Pennsylvania Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION
 BLOUGH, A.R. Region 1 (Post 820201)

SUBJECT: Responds to NRC ltr re violations noted in Insp Rept 50-387/92-02, dtd 920228. Corrective actions: operators counseled on importance of good communications & training provided to operators involved in 920116 incident.

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