# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

DOC.DATE: 88/08/15 NOTARIZED: NO DOCKET # CESSION NBR:8808230297 FACIL:50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylva 05000387 50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylva 05000388 AUTH. NAME AUTHOR AFFILIATION Pennsylvania Power & Light Co. KEISER, H.W. RECIPIENT AFFILIATION RECIP.NAME Region 1, Ofc of the Director GALLO, R.M. SUBJECT: Responds to NRC 880708 ltr re violations noted in Insp Rept R 50-388/88-10. ENCL DISTRIBUTION CODE: IE01D COPIES RECEIVED:LTR SIZE: TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response D 05000387 NOTES: LPDR 2 cys Transcripts. 05000388 S LPDR 2 cys Transcripts. COPIES RECIPIENT RECIPIENT COPIES LTTR ENCL ID CODE/NAME LTTR ENCL ID CODE/NAME 2 PD1-2 PD 1 1 THADANI, M INTERNAL: ACRS 2 **AEOD** NRR MORISSEAU, D 1 1 **DEDRO** D NRR/DLPQ/QAB 10 1 1 NRR/DLPQ/PEB 11 NRR/DREP/EPB 10 NRR/DRIS DIR 9A NRR/DOEA DIR 11 NRR/DREP/RPB 10 1 1 1 S 2 1 1 1 1 1 1 NRR/PMAS/ILRB12 NUDOCS-ABSTRACT 1 OE LIEBERMAN, J REG FILE 02 1 1 OGC/HDS2 1 RES/DSIR DEPY 02 1 1 FILE 1 1 RGN1 01 1 1 2 NRC PDR 2 EXTERNAL: LPDR 1 1 NSIC NOTES: 2 2

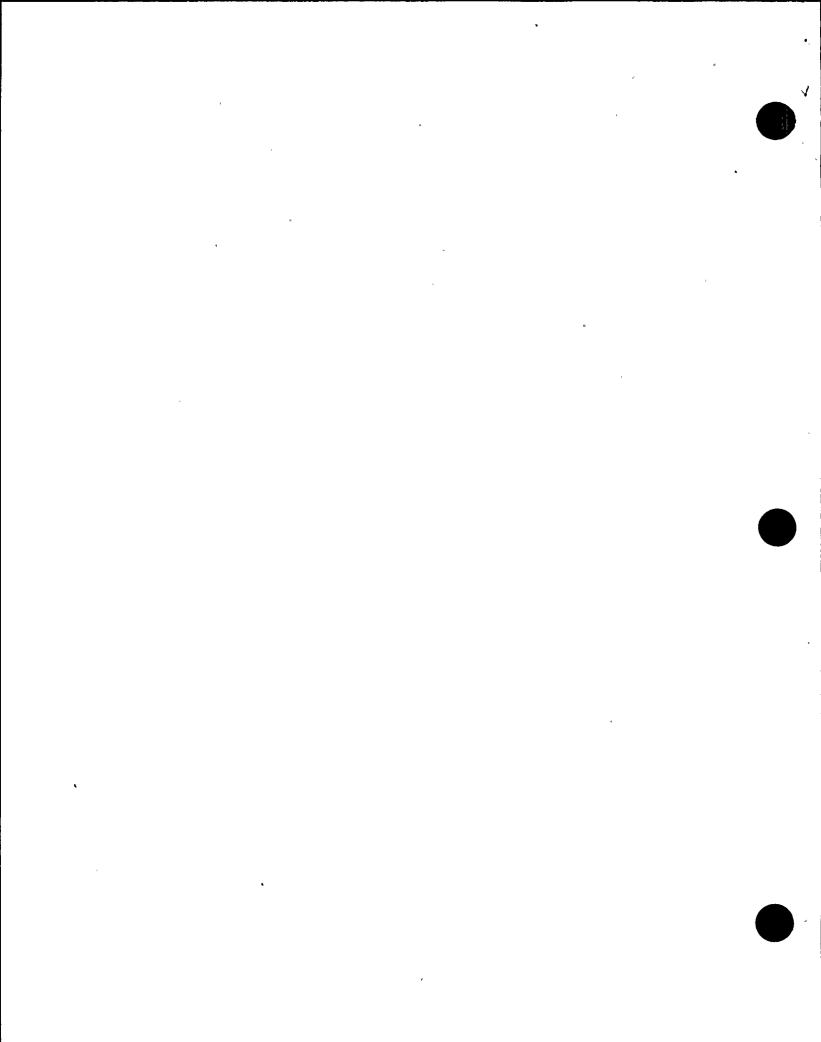
S

D.

D

28

TOTAL NUMBER OF COPIES REQUIRED: LTTR 28 ENCL





# Pennsylvania Power & Light Company

المحاجرة المؤمل معترانا

Two North Ninth Street • Allentown, PA 18101-1179 • 215/770-5151

AUG 15 1988

Harold W. Keiser Senior Vice President-Nuclear 215/770-4194

Mr. Robert M. Gallo, Chief Operations Branch Division of Reactor Safety U.S. Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia, PA 19406

SUSQUEHANNA STEAM ELECTRIC STATION NRC INSPECTION REPORT 50-388/88-10 PLA-3069 FILES R41-1C, R41-2

Docket Nos. 50-387 and 50-388

Dear Mr. Gallo:

This letter provides PP&L's response to your letter of July 8, 1988, which forwarded NRC Region I Inspection Report 50-388/88-10 with Appendix A, Notice of Violation.

The Notice advised that PP&L was to submit a written reply within thirty (30) days of the date of the letter. However, as discussed with Mr. J. T. Wiggins of NRC Region I on August 9, 1988, PP&L has been authorized to delay the response until August 15, 1988. We trust that the Commission will find the attached response acceptable.

Very truly yours,

Attachment

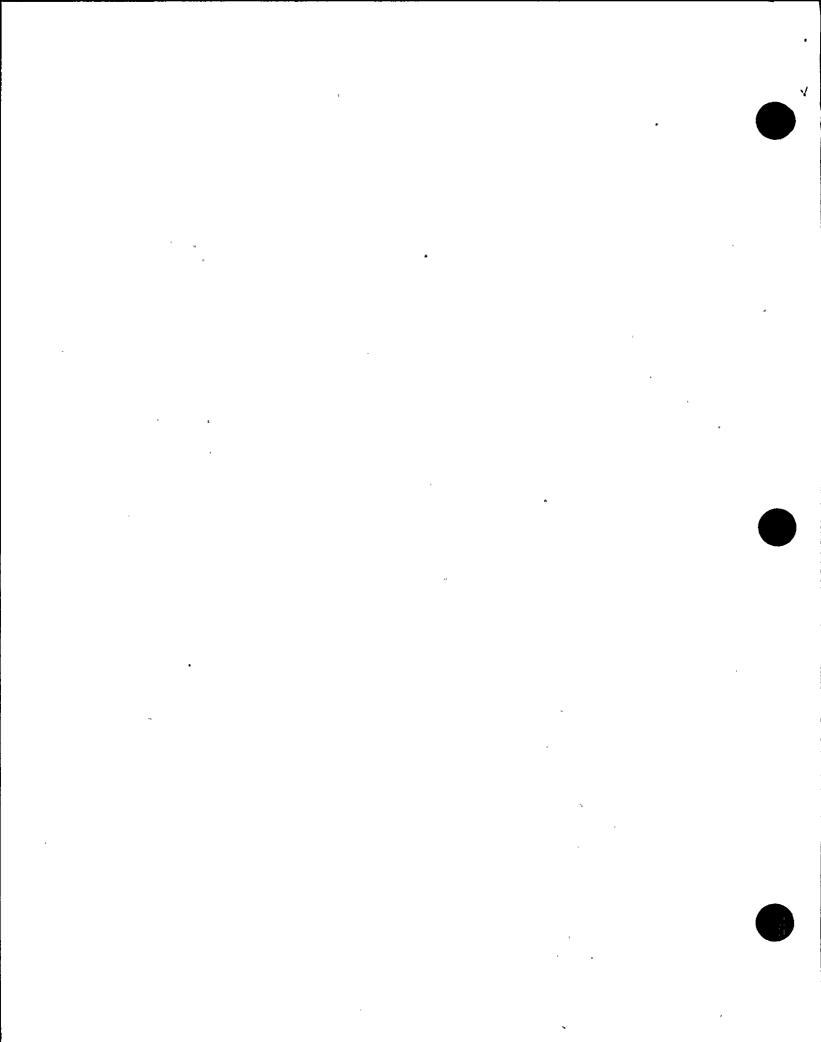
cc: NRC Document Control Desk (original)

NRC Region I

Mr. F. I. Young, NRC Sr. Resident Inspector

Mr. M. C. Thadani, NRC Project Manager

ITO!



#### RESPONSE TO NOTICE OF VIOLATION

The said a which of in with them which was a ball as

### VIOLATION A (388/88-10-01)

10CFR50, Appendix B, Criterion XVI, Corrective Action, states, in part, "Measures shall be established to assure that conditions adverse to quality, such as . . . deficiencies, deviations, and nonconformances . . . are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition . . . the cause of the condition and the corresponding action shall be documented and reported to appropriate levels of management."

The licensee's Nuclear Department Instruction NDI-QA-8.1.5, Nonconformance Control and Processing, Revision 3, requires that nonconformances be documented on a Nonconformance Report (NCR) form.

Contrary to the above, as of April 29, 1988, a condition adverse to quality was not properly identified and corrected. Specifically, a NCR had not been issued to document the cause and corrective action associated with the foreign material (small block of wood) that was found on January 25, 1988, lodged in the suction bell of Residual Heat Removal Service Water Pump 1P-506B.

#### Response:

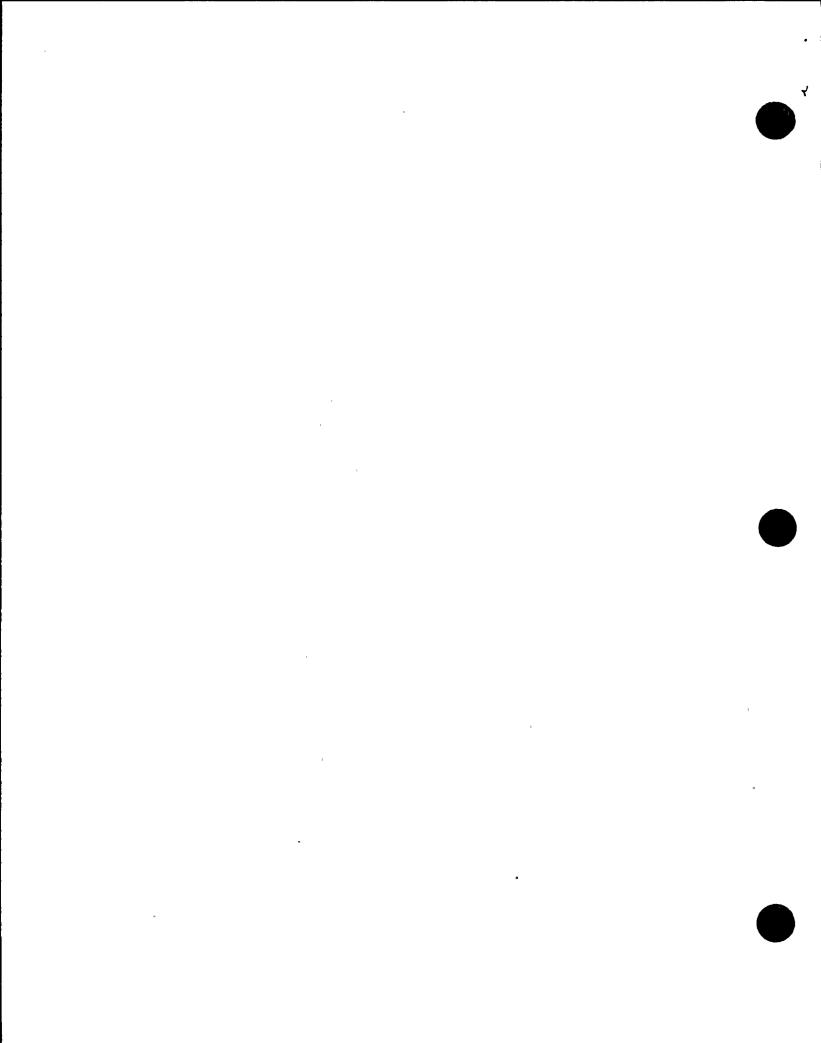
1) Corrective steps which have been taken and the results achieved:

Significant Operating Occurrence Report (SOOR) 1-88-004 was generated on January 6, 1988, to document the deficiency with the RHRSW pump (failed surveillance). Immediate actions were taken to assess the condition of the pump and system. The pump motor and system instrumentation were assessed and evaluated as acceptable. Valving was checked and evaluated as not impeding flow. A vibration spectrum analysis yielded no significant discrete frequency high amplitude spikes present, however, strong white noise was observed. Cavitation damage and imminent failure were ruled out based on the above investigations. Debris was not suspected because the suction sump is screened. Internal seal failure or bypass flow was suspected, but could not be confirmed short of opening the pump. To assure the capability of the system to perform its design function with one degraded pump, an integrated system flow test was successfully performed on January 7, 1988.

Based on the component assessment of low probability of failure and successful system flow testing, a management decision was made to increase the surveillance testing frequency and ensure system requirements were met until a full repair plan was in place to support pump disassembly. This repair commenced and was completed on January 26, 1988, with replacement of the entire pump. Upon disassembly of the old pumping element the referenced piece of wood was found.

The failure to formally document the wood block found in the pump as foreign material in the RHRSW system was a failure on the part of the work group to recognize the significance of the block of wood and to properly communicate that to the rest of the organization.

Nevertheless, during PP&L's review of the SOOR resolution the fact that a piece of wood was found was captured and additional actions to



determine why the piece of wood was present in the RHRSW system were initiated. Simple buoyancy testing showed that the piece of wood did not float, indicating it had been submersed in the pump bay for some time. A Nonconformance Report has been issued against the Unit 1 RHRSW system to document the discovery of the foreign material and to track inspections of the Emergency Service Water and RHRSW inlet screens and pump bays. Follow up bay and screen inspections will be incorporated as part of routine pump maintenance.

## 2) Corrective steps to be taken to avoid further violations:

This event and the importance of properly recognizing and reporting nonconforming conditions will be communicated to station personnel. This will be completed by September 1, 1988.

### 3) Date of full compliance:

A deficiency document (SOOR 1-88-004) was generated for the RHRSW pump failed surveillance and additional actions (associated with the SOOR) were identified and initiated (related to wood in the suction bell). Nonconformance Report 88-0560 was issued against the Unit 1 RHRSW system on August 1, 1988. As such, PP&L is in full compliance.

#### VIOLATION B (388/88-10-02)

Technical Specifications 3.11.1.1 and 4.11.1.1.1 in conjunction with the Offsite Dose Calculation Manual require that the cooling tower dilution flow be greater than 5000 gpm before radwaste liquid releases are made. Procedure AD-QA-310, Liquid Effluent Releases, Step 6.3, provides for setting the cooling tower blowdown valve position indicator in the control room to provide the required dilution flow. 10CFR Part 50, Appendix B, Criterion XII, states "Measures shall be established to assure that . . . instruments . . . are properly . . . calibrated, and adjusted at specified periods to maintain accuracy . . .

Contrary to the above, as of April 29, 1988, liquid radwaste releases have been previously made using the control room valve position indicator to establish greater than 5000 gpm flow, however, there was no periodic calibration program (flow versus valve position) for the control room valve position indicator to assure that the instrument was properly calibrated and adjusted to maintain accuracy.

#### Response:

1) Corrective steps which have been taken and the results achieved:

On April 19, 1988 a position indication loop calibration was performed on the Unit 1 cooling tower blowdown flow control valve. The as-found maximum error was found to be 6.4% in the conservative direction (actual valve position greater than indicated position). Additionally, the Unit 1 cooling tower blowdown flow element was removed from service, cleaned, force factor tested and returned to service on May 23, 1988.

The Unit 2 cooling tower blowdown flow control valve position indication loop calibration was performed on August 4, 1988. The as-found maximum error was found to be 10% in the conservative direction. Additionally, the Unit 2 cooling tower blowdown flow element was recently installed during the Unit 2 Second Refueling Outage in 1988. This flow element was removed from service, force factor tested and reinstalled.

Additionally, a review of the plant Technical Specification action statements was performed to assure that there are no other cases where instrumentation that is not in the plant calibration program is used to meet Technical Specification action statements. This review did not identify any other instrumentation of this type.

- 2) Corrective steps to be taken to avoid further violations:
  - a. Preventive Maintenance (PM) activities with a frequency of 12 months have been initiated to calibrate the Unit 1 and Unit 2 blowdown flow control valve position indication loops.
  - b. Preventive Maintenance activities with a frequency of 6 months have been initiated to remove, clean and return to service the flow elements on both units.

- c. Preventive Maintenance activities to perform force factor tests on the flow elements every 18 months have been initiated for Unit 1 and for Unit 2.
- d. The Cooling Tower Blowdown Flow Transmitters on both units will be calibrated on an 18 month frequency in accordance with existing surveillance test schedules.

# 3) Date of full compliance:

Based on the actions stated above, PP&L is in full compliance.