



Pennsylvania Power & Light Company

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

Bruce D. Kenyon  
Vice President-Nuclear Operations  
215/770-7502

**JUN 01 1984**

Mr. R. W. Starostecki, Director  
Division of Project and Resident Programs  
U.S. Nuclear Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

SUSQUEHANNA STEAM ELECTRIC STATION  
RESPONSE TO SALP - 1984  
ER 100450 FILE 841-04  
PLA-2220

Docket Nos. 50-387  
and 50-388

Dear Mr. Starostecki:

We appreciated the opportunity to meet with you and your staff on May 21 to review your assessment of PP&L's performance over the past year. While we recognize that the SALP Board Reports were generally favorable, we welcome your suggestions and will continue to seek to improve our performance in all areas.

In reviewing the reports we noted several concerns of NRC. These were discussed at the May 21 meeting and we believe these discussions were mutually beneficial. Therefore, PP&L does not plan to submit any additional comments on the report. Copies of the presentations made at the May 21 meeting are attached for your information.

Very truly yours,

B. D. Kenyon  
Vice President-Nuclear Operations

cc: Mr. R. L. Perch - USNRC Bethesda  
Mr. R. H. Jacobs - USNRC Resident

8408280231 840824  
PDR ADOCK 05000387  
G PDR

✓  
84-57

LICENSEE EVENT REPORTS

CONCERN: NOT ALL CORRECTIVE ACTIONS INCLUDED

PERFORMANCE IMPROVEMENT PLANS / ACTIONS

- 0 INCREASED MANAGEMENT ATTENTION - INCLUDES  
SUPERINTENDENT - SECTION HEAD - EVALUATOR  
REVIEW MEETING OF LER'S PRIOR TO RELEASE
- 0 LER'S WRITTEN IN ACCORDANCE WITH NUREG - 1022,  
LICENSEE EVENT REPORT SYSTEM
- 0 INCREASE LEVEL OF EXPERTISE OF EVALUATORS

## OPERATIONAL IMPROVEMENTS

- 0 STABILIZED OPERATIONS MANAGEMENT
- 0 IMPROVED SUPERVISORY CONTROL OF SHIFT TURNOVER
- 0 INTRODUCED UNIT SUPERVISOR, ASST. UNIT SUPERVISOR  
AND PCO TURNOVER SHEETS
- 0 SUPERVISOR OF OPERATIONS WEEKLY MEETING WITH  
TRAINING SHIFT.
- 0 TECHNICAL SPECIFICATION / SURVEILLANCE TASK FORCE
- 0 TECHNICAL SPECIFICATION TRAINING FOR OPERATIONS
- 0 LOGGING / REVIEWING OF PLANT ALARMS
- 0 COL VERIFICATIONS
- 0 INPO HUMAN PERFORMANCE EVALUATION SYSTEM (HPES)
- 0 OPERATIONS ENHANCEMENT PROGRAM
- 0 WATCHSTANDING STUDY

## PROCEDURES

1. ALARM RESPONSE PROCEDURES FOR LOCAL PANELS
2. GENERAL GUIDELINES FOR DAILY BUSINESS
3. NEED FOR CENTRALIZED REVIEW POINT FOR ALL PROCEDURES AND REVISIONS.
4. PROGRAM FOR PERIODIC REVIEWS
5. OFF NORMAL PROCEDURES MUST BE WRITTEN FOR RADWASTE OPERATION AND WATER MANAGEMENT
6. COL GUIDELINES AFTER EXTENDED OUTAGES
7. EMERGENCY OPERATING PROCEDURE PROGRAM

## WATCH STANDING STUDY

GOAL: TO IMPROVE AND DEFINE THE ROLE  
OF OPERATORS IN AWARENESS/CONTROL  
OF PLANT STATUS / ALARMS

- 0 ASSIGNED PLANT MANAGEMENT TO REVIEW SHIFT LOGS,  
PANELS, T / O AND PLANT STATUS
- 0 INITIATED NSAG STUDY
- 0 INITIATED INPO REVIEW
- 0 INITIATED REVIEW OF SSES WATCH STANDING PRACTICES  
BY SENIOR MANAGEMENT PERSONNEL FROM OTHER  
FACILITIES
- 0 EVALUATING MERITS OF HAVING OPERATIONS PERSONNEL  
VISIT OTHER FACILITIES TO STUDY WATCH STANDING  
PRACTICES

## RESULTS OF NSAG STUDY

STUDY CONSISTED OF ~ 142 HOURS OF CONTROL ROOM  
OBSERVATION AND ~ 44 HOURS OF IN-PLANT OBSERVATION

- SHIFT TURNOVER THOROUGH AND ADEQUATE
- CONTROL ROOM RESPONSE TO ALARMS EXCELLENT
- PLANT EVOLUTIONS WELL CONTROLLED
- LOGS MAINTAINED SATISFACTORILY
- SENIOR MANAGEMENT INVOLVEMENT ADEQUATE
- BACKGROUND NOISE IN CONTROL ROOM EXCESSIVE

OPERATIONS ENHANCEMENT PROGRAM

GOAL: TO REDUCE EVENTS THROUGH MANAGEMENT  
IMPROVEMENTS - ADMINISTRATIVE,  
TECHNICAL, AND WORK PRACTICES

0 15 - 20 PROBLEM CATEGORIES

EQUIPMENT, PROCEDURES, DELEGATION OF AUTHORITY,  
COMMUNICATIONS, OR ATMOSPHERE, TRAINING,  
EQUIPMENT STATUS, ETC.

0 EACH CATEGORY WILL BE REVIEWED, RECOMMENDATIONS  
MADE, AND SOLUTIONS IMPLEMENTED

CHEMISTRY PROGRAM ENHANCEMENTS

- 0 REORGANIZED GROUP STRUCTURE
  
- 0 PLANT-EXPERIENCED SENIOR ENGINEER  
ASSIGNED TO CHEMISTRY
  
- 0 ADDITIONAL CHEMISTS ASSIGNED
  
- 0 FULL-TIME CHEMISTRY OJT TRAINING  
COORDINATOR ON-SITE (FORMER TECHNICIAN)
  
- 0 IMPLEMENTATION OF TECHNICIAN TRAINING  
PROGRAM AT NUCLEAR TRAINING CENTER
  
- 0 DEVELOPMENT OF CHEMISTRY QA PROGRAM  
IMPLEMENTING PROCEDURES



## TER RESOLUTION IMPROVEMENTS

- I. ADMINISTRATIVE CHANGES (AD-TY-460)
  - A. NPE ROLE
    - 1. NOW PART OF THE TRC QUORUM.
    - 2. NOW RESPONSIBLE FOR OBTAINING ALL TER RESOLUTIONS.
    - 3. NOW AN INTEGRAL PART OF THE SHIFT STARTUP TEAM.
    - 4. NOW APPROVES ST ACCEPTANCE CRITERIA, TEST OBJECTIVES AND TEST METHOD.
  - B. SHIFT STARTUP TEAM CONCEPT
    - 1. DEDICATED STARTUP PERSONNEL ON SHIFT - NO CONCURRENT DUTIES DURING TESTING.
    - 2. SHIFT TEST ENGINEER - ONE PERSON ON SHIFT RESPONSIBLE FOR ON-SHIFT RELATED ACTIVITIES.
    - 3. INCREASED NUMBER OF QUALIFIED TEST DIRECTORS.
  - C. GREATER EMPHASIS PLACED ON MAINTAINING GOOD STARTUP LOG.
  - D. RE-WRITE OF TEST PROCEDURES TO INCORPORATE UNIT I LESSONS LEARNED-SHOULD REDUCE NUMBER OF TER'S. DURING OPEN VESSEL TESTING, ONLY 3 TER'S WERE WRITTEN ON UNIT 2 AS OPPOSED TO 28 ON UNIT I.

## TEST PROGRAM TRAINING

- A. ATTENDED BY STARTUP TEST DIRECTORS, STARTUP TEST ENGINEERS, SHIFT TEST ENGINEERS.
- B. CLASSROOM ADMINISTRATIVE TRAINING
  - 1. 6 HOURS, TAUGHT BY STARTUP TEST GROUP SUPERVISOR.
  - 2. DISCUSSED IN DETAIL CONTENTS OF AD-TY-460 INCLUDING:
    - A. OVERALL GOALS OF ST PROGRAM
    - B. QA REQUIREMENTS
    - C. PROCESSING OF TER'S.
- C. CLASSROOM TECHNICAL TRAINING
  - 1. TEST OBJECTIVES, ACCEPTANCE CRITERIA AND TEST METHOD OF ALL ST'S.
  - 2. REVIEW OF UNIT I PROBLEMS.
- D. SIMULATOR TECHNICAL TRAINING
  - 1. 40 HOURS ON SIMULATOR
  - 2. RAN ALL ST'S AS PRACTICABLE.
- E. OJT ADMINISTRATIVE TRAINING
  - 1. 3 HOURS
  - 2. RE-EMPHASIZED ADMIN CONTROLS, INCLUDING TER PROCESSING.

## SURVEILLANCE PROGRAM

OBJECTIVE : ASSURE THAT TECHNICAL SPECIFICATION REQUIREMENTS ARE IDENTIFIED, PROCEDURALLY ADDRESSED, AND IMPLEMENTED.

MEANS :

- SURVEILLANCE TASK FORCE
  
- COMPREHENSIVE MATRIX DEVELOPMENT
  
- COMPREHENSIVE PROCEDURE REVIEWS  
BY INDEPENDENT GROUP

SURVEILLANCE PROCEDURE REVIEW  
SCOPE OF ACTIVITY

● SURVEILLANCE PROCEDURE REVIEW

UNIT 1	586
UNIT 2	587
COMMON	<u>115</u>
TOTAL	1288

● MATRIX LINE ITEMS

UNIT 1 (INCLUDING PUMP & VALVE TEST RQMTS.)	2000 ITEMS
UNIT 2 (INCLUDING PUMP & VALVE TEST RQMTS.)	<u>2000 ITEMS</u>
TOTAL MATRIX REQUIREMENTS REVIEWED	4000 ITEMS

PROCEDURE BASIS DOCUMENTS (ONE/PROCEDURE)	1288
MULTIPLE PROCEDURE REVIEWS	<u>200</u>
TOTAL NUMBER OF BASIS DOCUMENTS TO GENERATE	1488

SURVEILLANCE PROCEDURE REVIEW  
RESOURCE EXPENDITURE

0 80 MAN-MONTHS TO DATE

0 REVIEWS ENCOMPASSED APPROXIMATELY 700 DRAWINGS AND

OTHER DOCUMENTATION INCLUDING:

- GE ELECTRICAL SCHEMATICS
- BECHTEL ELECTRICAL SCHEMATICS
- BECHTEL P&ID'S
- INSTALLATION, OPERATING & MAINTENANCE MANUALS
- FSAR

## SURVEILLANCE PROCEDURE REVIEW

### RESULTS:

- COMPLETED RESPONSE TO NSAG REPORT #5-83.
- TASK FORCE ISSUED FINAL POSITIONS ON "PHILOSOPHICAL ISSUES"
- SCHEDULING SYSTEM UNDER REVIEW.
- UNIT 1 AND UNIT 2 MATRICES REVIEW COMPLETED.
- BASES DOCUMENTS .... ESTIMATED COMPLETION 6/30/84
- IDENTIFIED 150 SURVEILLANCE ACTION ITEMS (SAI's)
- RECEIVED RESPONSES ON 117 SAI's.

QUALIFIED PERSONNEL/STAFFING LEVELS

+

RESPONSIVENESS TO REGULATORY CONCERNS

+

PRACTICE OF ESTABLISHING STRONG MANAGEMENT  
CONTROLS WITH FEEDBACK MECHANISMS

+

PRACTICE OF DEALING WITH REGULATORY  
AND PUBLIC ISSUES DIRECTLY

+

RESPONSIVE IN INITIATING CORRECTIVE ACTIONS  
WHEN WEAKNESSES ARE IDENTIFIED

=

CAPABILITY TO OPERATE/MAINTAIN  
A TWO-UNIT SSES

**COMPREHENSIVE**

**TRAINING**

**EVALUATION**



# TWO TYPES

-PROCESS-

-PRODUCT-

# PROCESS

## VALIDATION OF CURRICULUM

-JOB ANALYSIS - 1981

-CURRICULUM COMMITTEE - 1981

-SME REVIEW - 1981

-ES REVIEW - 1982

-CHANGE TRACKING - 1981 (1984)

# **PROCESS**

## **DELIVERY**

**STUDENT CRITIQUE 1977**

**INSTRUCTOR EVALUATION 1981**

**SELF**

**PEER**

**SUPERVISORY**

**OUTSIDE (PENN STATE)**

**SIMULATOR FIDELITY 1979-1984**

**PRODUCT**

**GRADE ANALYSIS 1983**

**FOLLOW-UP 1983**

**-INDIVIDUAL**



**-SUPERVISORY**