

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Report No. 88-12  
Docket No. 50-333  
License No. DPR-59  
Licensee: Power Authority of the State of New York  
P.O. Box 41  
Lycoming, New York 13093  
Facility: J.A. FitzPatrick Nuclear Power Plant  
Location: Scriba, New York  
Dates: June 18, 1988 - August 7, 1988  
Inspectors: A.J. Luptak, Senior Resident Inspector  
R.A. Plasse, Jr., Resident Inspector

Approved by: Richard Lauer for 8/17/88  
J.R. Johnson, Chief, Reactor Date  
Projects Section 2C, DRP

INSPECTION SUMMARY

Areas Inspected:

Routine and reactive inspection during day and backshift hours of plant activities, previous inspection findings, Licensee Event Reports review, operational safety verification, surveillance observations, maintenance observations, and review of periodic and special reports. This is a repeat of a violation that occurred in December 1987. This involved a total of 217 inspection hours, which included 3 hours of backshift on July 2, and 18 hours of weekend/holiday inspection coverage on June 25, 26 and August 6, 7, 1988.

Results:

During this period a violation involving the failure to complete a required Technical Specification surveillance test was identified. This test involved the monitoring of reactor coolant leakage inside primary containment (section 3a). The licensee's actions in response to a fitness for duty issue were reviewed (section 3b). The licensee's actions in response to portions of Bulletin 88-07, Power Oscillations in Boiling Water Reactors, were observed and found to be thorough.

## DETAILS

### Persons Contacted

During this inspection period, the inspector interviewed or held discussions with operators, technicians, maintenance, contractor, engineering, administrative, and supervisory personnel.

### Summary of Plant Activities

The inspection period began with the plant at full power. On June 30, power was reduced to 65% to clean main condenser water boxes. The plant returned to full power the same day.

Beginning July 11, the plant was operated at reduced power to maintain main condenser vacuum due to elevated lake inlet temperatures. Power varied throughout the remainder of the inspection period due to vacuum restraints and at the end of the period reached its lowest value of 86%.

### 3. Review of Plant Events (71707, 93702, 90712)

#### a. Failure to Calculate and Record Reactor Coolant Leakage Rate at Required Frequency

On June 27, while operating at 100% power, the Daily Surveillance and Instrument Checks (F-ST400), drywell equipment and floor drain leakage rates were not calculated and recorded between 4:00 a.m. and 12:00 p.m. as required by Technical Specification (TS). TS 4.6.D requires that reactor coolant leakage inside the primary containment shall be monitored and recorded once every four hours utilizing the Primary Containment Sump Monitoring System (equipment drain sump monitoring and floor drain sump monitoring).

This specification is met by the operator pumping down both drywell sumps and recording readings from the pump flow integrators. The leakage rate is then calculated using the integrator reading obtained and the integrator reading taken four hours previously.

The leakage rates were not taken due to a miscommunication between operating personnel. An auxiliary operator (normally assigned to another shift) only initiated action which allowed the equipment drain sump to pump down. The control room operator thought the auxiliary operator was also obtaining the integrator readings and recording the leakage rates as was the normal practice on their shift. At 12:00 p.m., the control room operator realized the previous recordings were missed. The leakage rate calculated at 12:00 p.m. indicated leakage was within the TS limit.

In addition to the manual calculation of drywell leakage rates, two drywell leakage recorders are installed in the control room. Each of these recorders monitor and record the unidentified and identified sump levels and rate of rise. Templates installed on these recorders correlate the rate of rise to a leakage rate. Also, timing circuits monitor valve cycling and pump running times and annunciate if these conditions indicate abnormal leakage. Although these instruments are available to the operator to indicate leakage, no credit has been given for them to meet the TS required surveillance.

This is a repeated violation. On December 10, 1987, this surveillance was missed during the performance of a reactor startup (Inspection Report 87-26). A Notice of Violation was not issued for this previous violation as provided for by 10 CFR Part 2, Appendix C, V.A. Corrective action at that time, provided an alarm on the plant process computer every 4 hours to remind the licensed control room operator to compute and record drywell leakage. To prevent another reoccurrence, it has been emphasized to all Operations personnel that it is the control room operator's responsibility to ensure the F-ST-40D readings are taken as required.

Additional corrective action includes the installation of a modification during the fall 1988 refueling outage (modification was a result of LER 87-022) which will no longer require actuating a relay in the relay room to pump down the sump, by the control room operator. This modification will simplify the task of obtaining the leakage rate calculation. The licensee is also considering submittal of a technical specification amendment proposal to expand the instrumentation that can be used for determining drywell leakage and increasing the surveillance frequency to be consistent with other surveillance tests of similar importance.

The failure to calculate and record drywell leakage every four hours is a violation of TS 4.6.D (333/88-12-01)

b. Fitness for Duty Event

During this inspection period the licensee informed NRC Region I of a positive drug test result of a licensee employee during a routine physical. Based on this result the individual's site access was removed. The results of a second drug test administered several days later were negative.

An evaluation of the individual conducted by the licensee's Employee Assistance Program (EAP) concluded that there was no indication that the individual used drugs. Based on this review and the licensee's evaluation of the individual's performance, site access was restored. In accordance with the licensee's EAP, the individual will be subject to random drug screening for one year.

Discussions of the licensee's actions were held between the licensee and regional management. Although the licensee did report this event to Region I, it was NRC's intent that this type of event be reported via the Emergency Notification System under the safeguards reporting requirements 73.71. The inspector notified the licensee of the NRC's position concerning reporting of this type of event.

No violations were identified. This area will be reviewed during future routine inspections.

#### 4. Previous Inspection Findings (92701)

(Closed) INSPECTION FOLLOWUP ITEM (82-15-12): Review licensee action to complete work request documentation in a more timely manner. During a review in 1982, it was noted that there existed a long list of work requests dating back to 1980 which were complete but the documentation had not received QC review. The inspector verified that completed work packages are receiving a timely review. The inspector found the licensee's tracking programs for QC review of work packages and the tracking of work packages in the work control center to be sufficient to ensure timely reviews. This item is closed.

(Closed) INSPECTION FOLLOWUP ITEM (82-28-06): Licensee to develop and implement a program for maintenance on stored items. Inspection 86-11 reviewed the licensee's receipt, storage and handling of procurement material policies. A Notice of Violation was issued concerning the care of items in storage. The licensee's response to this violation discussed a number of actions which were taken or planned to improve their program. A review of these actions will be completed prior to closing out the open item (86-11-01) associated with this violation. To avoid duplication, this item is closed.

(Closed) INSPECTION FOLLOWUP ITEM (85-22-02): Review the findings of the licensee team investigation of recent trips. The inspector reviewed the report issued by the scram review team. The report was a detailed review of six scrams which occurred during a three month period and resulted in approximately 66 specific and generic recommendations. Of these recommendations, 2 remain open which the licensee continues to track. Since the detailed scram review was conducted, the inspector has found the licensee's post trip reviews to be thorough. The licensee continues to take an active role in attempting to reduce the number of scrams. This item is closed.

(Closed) INSPECTION FOLLOWUP ITEM (85-28-02): Licensee to calibrate and review adequacy of fault sensing circuit on 345 kv output line. Calibration and testing of the fault sensing circuit did not indicate any problems with the circuit. An adjustment was made on a coupling capacitor for the carrier signal; however, it is not clear that this was the cause of the fault signal. The licensee's review has indicated that the sensing circuit is adequate to perform its function. Based upon the transient condition of the fault and the lack of clear evidence as to the cause, this item is closed.

(Closed) VIOLATION (87-21-01): Failure to follow Plant Standing Order (PSO) 51, Erection of Scaffolding Near Safety-related Equipment. The inspector has reviewed changes made to PSO 51 to that strengthened the licensee's control of scaffolding. Training was given on the revised procedure and procedural compliance in this area was emphasized. Based on the inspector's review of the construction of scaffolding in the plant since this violation, this item is closed.

5. Licensee Event Report (LER) Review (90712, 92700)

The inspector reviewed LERs to verify that the details of the events were clearly reported. The inspector determined that each report was adequate to assess the event, the cause appeared accurate and was supported by details, corrective actions appeared appropriate to correct the cause, and generic applicability to other plants was not in question.

During this inspection period, the following LERs were reviewed:

LER 88-S01, reported the loss of security computers. Details of this event are discussed in Inspection Report No. 50-333/88-11.

LER 88-05, reported the failure of check valves which supply backup cooling to the ventilation system for safety related electrical distribution systems. The failure was caused by an accumulation of mud and scale on valves.

The failure was discovered during a refueling outage in 1987, however, initial plant review determined the item to be not reportable. During NRC inspection 88-04, the licensee had no documentation to support their review. Further review by the plant architect engineer determined that the backup supply would be required to maintain temperatures during the loss of normal service water or loss of offsite power. This function had not been previously identified in the plant's Technical Specifications or Final Safety Analysis Report.

The licensee is conducting additional analysis to fully complete the design basis. This issue will be followed under the previously identified unresolved item 88-04-05.

LER 88-06, reported the failure to perform surveillance tests at the Technical Specification required frequency. This test involved calculation of primary containment leak rate every four hours. This item is discussed in section 3a above.

No violations were identified during this review.

6. Operational Safety Verification (71707, 71711)

a. Control Room Observations

Daily the inspector verified selected plant parameters and equipment availability to ensure compliance with Technical Specifications

limiting conditions for operation. Selected lit annunciators were discussed with control room operators to verify that the reasons for them were understood and corrective action, if required, was being taken. The inspector observed shift turnovers biweekly to ensure proper control room and shift manning. The inspector directly observed the operations listed below to ensure adherence to approved procedures:

- Routine power operations.
- Issuance of Radiation Work Permits and Work Request/Event/Deficiency forms.

No violations were identified.

b. Shift Logs and Operating Records

Selected shift logs and operating records were reviewed to obtain information on plant problems and operations, detect changes and trends in performance, detect possible conflicts with Technical Specifications or regulatory requirements, determine that records are being maintained and reviewed as required, and assess the effectiveness of the communications provided by the logs.

No violations were identified.

c. Plant Tours

During the inspection period, the inspector made tours of control rooms and accessible plant areas to monitor station activities and to make an independent assessment of equipment status, radiological conditions, safety and adherence to regulatory requirements.

No violations were identified.

d. Tagout Verification

The inspector reviewed the following safety-related protective tagout records (PTRs) to verify that breakers, switches and/or valves were in the required positions.

- PTR 881170 'D' Emergency Diesel Generator System.
- PTR 881213 'B' Standby Gas Treatment System.
- PTR 881276 Control Room Ventilation System.

No violations were identified.

e. Emergency System Operability; ESF System Walkdowns

The inspector verified operability of the following systems by ensuring that each accessible valve in the primary flow path was in the correct position, by confirming that power supplies and breakers were properly aligned for components that must activate upon an initiation signal, and by visual inspection of the major components which might prevent fulfillment of their functional requirements:

- 'B' Standby Gas Treatment System.
- Standby Liquid Control System.
- 'B' Residual Heat Removal (RHR) System.
- 125 v Station Batteries.

No violations were identified.

7. Surveillance Observations (61726)

The inspector observed portions of the surveillance procedures listed below to verify that the test instrumentation was properly calibrated, approved procedures were used, the work was performed by qualified personnel, limiting conditions for operations were met, and the system was correctly restored following the testing.

- F-ST-4B, High Pressure Coolant Injection Flow Rate/Pump Operability/Valve Operability Tests, Rev. 34, dated April 13, 1988, performed June 24, 1988.
- F-ST-7C, One Circuit of Standby Gas Treatment System Inoperable Test, Rev. 6, dated June 19, 1986, performed July 5, 1988.
- F-ISP64-3, Main Steam Radiation Monitor Instrument Calibration, Rev. 3, dated April 6, 1988, performed July 15, 1988.
- F-ST-2H, Low Pressure Coolant Injection Subsystem Logic System Functional Test, Rev. 19, dated March 2, 1988, performed August 4, 1988.

The inspector also witnessed all aspects of the following surveillance test to verify that the surveillance procedure conformed to specification requirements and had been properly approved, limiting conditions for operation for removing equipment from service were met, testing was performed by qualified personnel, test results met technical specification requirements, the surveillance test documentation was reviewed, and equipment was properly restored to service following the test:

- F-ISP-94, Reactor Protection System Electrical Protection Assembly Functional Test, Rev. 7, dated July 15, 1988, performed July 18, 1988.

No violations were identified.

8. Maintenance Observations Including Receipt of New Fuel Shipments (62703, 60705)

- a. The inspector observed portions of various safety-related maintenance activities to determine that redundant components were operable, that these activities did not violate the limiting conditions for operation, that required administrative approvals and tagouts were obtained prior to initiating the work, that approved procedures were used or the activity was within the "skills of the trade," that appropriate radiological controls were properly implemented, that ignition/fire prevention controls were properly implemented, and that equipment was properly tested prior to returning it to service.
- b. During this inspection period, the following activities were observed:
  - WR 08/52273, Removal of irradiated material from fuel pool.
  - WR 89/60290, Hydrogen water chemistry preoperational testing.
  - WR 00/61864, Receipt of new fuel shipments.
  - WR 10/61924, Resetting of RHR Heat Exchanger Bypass Valve torque switch.

The inspectors observed the receipt of new fuel including transport from the shipping vehicles to the refueling floor.

No violations were identified.

9. Licensee Action on NRC Bulletins and Information Notices (92703)

The inspector reviewed licensee records pertaining to the NRC Bulletins and Notices identified below to verify that the Bulletins and Notices were received and reviewed for applicability, written responses were provided, if required, and the corrective action taken was adequate.

BU88-05: Nonconforming materials supplied by Piping Supplies, Inc. and West Jersey Manufacturing Company. This bulletin was issued on May 6, 1988, and requires the licensee to submit information regarding materials supplied by the above named companies and requests licensee to take actions necessary to assure that these materials comply with ASME Code and design specifications or replace such materials. The licensee's formal response has not been submitted (and is not due until September 1988); however, the inspector received some preliminary information from the licensee representatives responsible for followup of this bulletin.

Although the documentation review is not yet complete, the licensee has identified that material was supplied by these companies. Based on a review of purchase orders of 1987 and 1988, the licensee has found a total of 10 flanges which were to be installed for a modification. These flanges are on hold. A review of purchase orders from 1976 to 1987 has determined that no direct orders were made from these companies. A review is in progress to determine if this material was supplied from any other vendors.

The inspectors will monitor licensee progress on this bulletin in subsequent inspections.

BU-88-07: Power Oscillations in Boiling Water Reactors. This bulletin was issued June 15, 1988, and requires the licensee to ensure all licensed reactor operators and shift technical advisors on shift have been thoroughly briefed regarding the LaSalle Unit 2 Loss of Recirculation Pump with Power Oscillation Event, and to complete this training within 15 days of receipt of this bulletin. A training session concerning the event was monitored by the inspector on June 29. All licensed operators were briefed within 15 days as required, with the exception of one operator who was on vacation, this individual was briefed on July 11 prior to returning to shift. In addition, the inspector discussed the event with the control room operators and verified that operations were within required flow limits during a plant power reduction.

The licensee's formal response to this bulletin is not yet submitted (and is not due until September 1988). In addition to briefing operators on the event, the licensee is to verify the adequacy of their procedures and training programs to prevent a similar occurrence of the LaSalle event. The inspectors will monitor licensee progress in this area of the bulletin in subsequent inspection.

10. Assurance of Quality (71707)

This section is included to provide assessment of the licensee's oversight and effectiveness in ensuring that activities are conducted in a manner which assures quality.

The failure to perform the reactor coolant leakage surveillance test (section 3a), although technically not a significant safety concern due to other available instrumentation, indicates the failure of the control room operator (responsible for the action) to assure that it was completed.

The licensee's actions in response to Bulletin 88-07 (section 9) were found to be extensive and beyond the bulletin requirements.

11. Review of Periodic and Special Reports (90713)

Upon receipt, the inspector reviewed periodic and special reports. The review included the following: inclusion of information required by the NRC; test results and/or supporting information consistent with design predictions and performance specifications; planned corrective action for resolution of problems, and the reportability and validity of report information. The following periodic report was reviewed:

-- June 1988, Operating Status Report, dated July 8, 1988

No unacceptable conditions were noted.

12. Exit Interview (30703)

At periodic intervals during the course of this inspection, meetings were held with senior facility management to discuss inspection scope and findings. In addition, at the end of the period, the inspector met with licensee representatives and summarized the scope and findings of the inspection as they are described in this report.

Based on the NRC Region I review of this report and discussions held with NYPA representatives during the exit meeting, it was determined that this report does not contain information subject to 10 CFR 2.790 restrictions.