

U. S. NUCLEAR REGULATORY COMMISSION  
REGION I

DCS Number  
50333-840518

Report No. 84-12  
Docket No. 50-333  
License No. DPR-59 Priority -- Category C  
Licensee: Power Authority of the State of New York  
P.O. Box 41  
Lycoming, New York 13093

Facility Name: J.A. FitzPatrick Nuclear Power Plant

Inspection At: Scriba, New York

Inspection Conducted: June 1-30, 1984

Inspectors: L.T. Doerflein 8/14/84  
L.T. Doerflein, Senior Resident Inspector date  
W.J. Lazarus 8/14/84  
W.J. Lazarus, Project Engineer date

Approved by: S.J. Collins 8/14/84  
S.J. Collins, Chief, Reactor Projects Section 2C date

Inspection Summary:

Inspection on June 1-30, 1984 (Report No. 50-333/82-12)

Areas Inspected: Routine and reactive inspection during day and backshift hours by one resident inspector and one region-based inspector (78 hours) of licensee action on previous inspection findings, licensee event report review, operational safety verification, surveillance observations, maintenance observations, follow-up on Operational Assessment Team Inspection findings, followup on a plant trip, and review of periodic and special reports.

Results: No violations were identified in the areas inspected.

## DETAILS

### 1. Persons Contacted

- R. Baker, Technical Services Superintendent
- R. Burns, Vice President, Nuclear Support-BWR
- T. Butler, Outage Coordinator
- \*V. Childs, Senior Licensing Engineer
- \*R. Converse, Superintendent of Power
- M. Curling, Training Superintendent
- W. Fernandez, Maintenance Superintendent
- \*H. Keith, Instrument and Control Superintendent
- \*D. Lindsey, Assistant Operations Superintendent
- R. Liseno, Operations Superintendent
- \*C. McNeill, Resident Manager
- \*E. Mulcahey, Radiological & Environmental Services Superintendent
- R. Patch, Quality Assurance Superintendent
- T. Teifke, Security & Safety Superintendent

The inspector also interviewed other licensee personnel during this inspection including shift supervisors, administrative, operations, health physics, security, instrument and control, maintenance and contractor personnel.

\*Denotes those present at the exit interview.

### 2. Licensee Action on Previous Inspection Findings

- a. (Closed) Inspector Followup Item (333/79-SC-06):  
The inspector reviewed surveillance procedure F-ST-9B, "EDG Full Load Test and ESW Pump Operability Test, "Revision 19, dated June 20, 1984, and verified the licensee revised the procedure to require that only one pair of Emergency Diesel Generators (EDG's) be tested at a time and that the first pair of EDG's tested be cooled down for four hours prior to testing the second pair.
- b. (Closed) Unresolved Item (333/81-15-02):  
Amendment No. 80 to the facility operating license revised Technical Specification 4.12.A.1.e.4 to permit non-sequential testing of the electric and diesel driven fire pumps.

### 3. Licensee Event Report (LER) Review

The inspector reviewed LER 84-12 to verify that the details of the event were clearly reported. The inspector also determined that: reporting requirements had been met; the report was adequate to assess the event; the cause appeared accurate and was supported by details; corrective actions appeared appropriate to correct the cause; the form was complete and generic applicability to other plants was not in question.

LER 84-12 reported that, after the Reactor Core Isolation Cooling System was made inoperable to repair a steam leak detection system thermocouple, the High Pressure Coolant Injection (HPCI) System was declared inoperable when cracks were found in the HPCI turbine stop valve stem. Details of this event are discussed in paragraph 5. of inspection report No. 50-333/84-08.

#### 4. Operational Safety Verification

##### a. Control Room Observations

Daily, the inspectors verified selected plant parameters and equipment availability to ensure compliance with limiting conditions for operation of the plant Technical Specifications. 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 inspectors observed shift turnovers biweekly to ensure proper control room and shift manning. The inspectors directly observed the operations listed below to ensure adherence to approved procedures:

- Reactor startups on June 25 and 27, 1984.
- Routine Power Operation.
- Issuance of RWP's 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 inspectors made observations and conducted tours of the plant. During the plant tours, the inspectors conducted a visual inspection of selected piping between containment and the isolation valves for leakage or leakage paths. This included verification that manual valves were shut, capped and locked when required and that motor operated valves were not mechanically blocked. The inspectors also checked fire protection, housekeeping/cleanliness, radiation protection, and physical security conditions to ensure compliance with plant procedures and regulatory requirements.

No violations were identified.

d. Tagout Verification

The inspector verified that the following safety-related protective tagout records (PTR's) were proper by observing the positions of breakers, switches and/or valves.

- PTR 840703 on the "B" Containment Oxygen Sampling System.
- PTR 840738 on Emergency Service Water to Reactor Building Closed Loop Cooling Supply Valve 46-MOV-101B.
- PTR 840742 on the "A" Emergency Service Water System and on the "A" and "C" Emergency Diesel Generators.

During the verification of PTR 840742 the inspector noted that a hold tag which was specified to be hung on valve 46-ESW-2A, the Emergency Diesel Generator (EDG)-Emergency Service Water (ESW) supply cross tie valve, was actually hung on valve 46-ESW-3A, the ESW supply valve to "A & C" EDGs. The inspector also noted that the signatures on the hold tag indicated that it's placement had been second checked by a licensed operator. The PTR called for tagging shut valve 46-ESW-2A, a normally shut valve. Since the "A & C" EDG were inoperable as a result of other portions of the PTR, the tagging shut of valve 46-ESW-3A, a normally locked open valve, had no effect on any system required to be operable.

When informed by the inspector of this event, the licensee immediately rehung the hold tag on valve 46-ESW-2A and locked open valve 46-ESW-3A. The licensee critiqued the incident and determined that the second verification of tag placement had not been performed independently. The licensee took disciplinary action against the two individuals involved in the hanging of the tags. No violation was issued for this event as it appears to be an isolated case for which the licensee took prompt and adequate corrective action and the improperly placed tag had no effect on the operability of any required system.

e. Emergency System Operability

The inspectors 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 for leakage and other conditions which might prevent fulfillment of their functional requirements.

- Standby Liquid Control System
- Standby Gas Treatment System
- Emergency Service Water System
- Reactor Core Isolation Cooling System

No violations were identified.

## 5. Surveillance Observations

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 operation were met, and the system was correctly restored following the testing:

- F-ST-9D, EDG Inoperative Test/Loss of 115 KV Reserve Power/Loss of Station Battery, Revision 7, dated May 2, 1984, performed June 12, 22, 28 and 29, 1984.
- F-ST-8D, ESW Pump Flow Rate Test, Revision 10, dated November 4, 1982, performed June 22, 1984.
- RAP 7.3.10, Control Rod Scram Time Evaluation, Revision 10, dated September 8, 1983, performed June 22, 1984.

The inspector also witnessed all aspects of the following surveillance test to verify that the surveillance procedure conformed to technical 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-75, Condensate Storage Tank Low Water Level (HPCI), Revision 5, dated October 4, 1983, performed June 5, 1984.

No violations were identified.

## 6. Maintenance Observations

- a. The inspector observed portions of various safety-related maintenance activities to determine that: redundant components were operable; these activities did not violate the limiting conditions for operation; required administrative approvals and tagouts were obtained prior to initiating the work; approved procedures were used or the activity was within the "skills of the trade;" appropriate radiological controls were properly implemented; ignition/fire prevention controls were properly implemented; and equipment was properly tested prior to returning it to service.
- b. During this inspection period, the following activities were observed:
  - WR 46/31579 on the repacking of Emergency Service Water to Reactor Building Closed Loop Cooling Supply Valve 46-MOV-101B.
  - WR 46/22812 on the overhaul of "A" Emergency Service Water Pump.

No violations were identified.

## 7. Followup on Operational Assessment Team Inspection Findings

The inspector reviewed licensee action on various commitments made in response to the Operational Assessment Team Inspection (Inspection Report No. 50-333/82-24). Based on this review the inspector closed the following item:

- D.2. The inspector reviewed the Quality Assurance Procedures (QAP) listed in Attachment A and verified that the licensee had developed a QAP for Design Control; all previously blank sections of the procedures manual were revised to include a description of QA's audit and overview function in each section; and a matrix relating QA criteria to corporate implementing procedures was developed and placed in the QAP manual.

The following item remains open for the reasons indicated:

- F.1. The inspector reviewed the corporate training procedures listed in Attachment A and noted that these procedures have been revised and that they specify methods of formalizing a training program for headquarters personnel. The inspector also reviewed the site procedures for maintenance training and based upon discussions with licensee personnel and previous observations, the inspector noted that the licensee has implemented a training program for Instrument and Control and maintenance personnel which includes fundamentals, plant specific and skills training. These portions of item F.1. are closed.

Based on discussions with licensee personnel, the inspector noted that the licensee has developed a training procedure for Technical Services Department personnel and that lesson plans for the program have been completed. However, this procedure was not yet approved nor has this program been implemented. The inspector also reviewed draft qualification standards and cards which the licensee plans on implementing by the end of this year for maintenance and Instrument and Control personnel. This item remains open pending implementation of the Technical Services Department training program and the qualification standards and cards for maintenance and Instrument and Control personnel.

## 8. Followup on a Plant Trip

During a startup on June 25, 1984, the reactor scrammed from approximately 20% power on high reactor pressure. The high pressure condition occurred when all turbine bypass valves rapidly went shut while the licensee was increasing turbine speed in preparation for placing the main generator on the line. Reactor pressure peaked at 1060 psig which is below the relief valve setpoints. Reactor vessel water level decreased to 177 inches

above the top of active fuel. There was no Emergency Core Cooling System actuation or radioactive release associated with this event.

The licensee subsequently determined the cause of the turbine bypass valve closure was clogged hydraulic fluid filters on the servoactuators for these valves. With the filters clogged, the Electro-Hydraulic Control system pressure dip caused by turbine control valve motion resulted in the bypass valve closure. Investigation by the licensee also revealed erratic operation of the servoactuators on no. 3 and 4 bypass valves. The licensee replaced all four bypass valve hydraulic filters and the two erratic servoactuators prior to the reactor startup on June 27, 1984.

During a review of the plant trip, the inspector reviewed the process computer alarm printout, the post trip log, various chart recorders, and the completed data sheets for procedure No. ODSO 23, "Post Trip Evaluation," and determined that the plant responded as designed and that the licensee's review of the trip was adequate.

9. Review of Periodic and Special Reports

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 reportability and validity of report information. The following periodic reports were reviewed:

- May 1984 Operating Status Report, dated June 8, 1984.
- Annual Summary of JAFNPP Plant Modifications, Changes and Experiments for 1983, dated June 14, 1984.

10. Exit Interview

At periodic intervals during the course of this inspection, meetings were held with senior facility management to discuss inspection scope and findings. On June 29, 1984, the inspector met with licensee representatives (denoted in paragraph 1) and summarized the scope and findings of the inspection as they are described in this report.

ATTACHMENT A

Procedures Reviewed

Quality Assurance Procedures

QAP 2.1, Quality Assurance Program Scope, Revision 4, dated February 29, 1984.

QAP 3.1, Design Control, Revision 0, dated July 14, 1983.

QAP 8.1, Identification and Control of Materials, Parts and Components, Revision 0, dated October 28, 1983.

QAP 12.1, Control of Measuring and Test Equipment, Revision 0, dated October 28, 1983.

QAP 13.1, Handling, Storage and Shipping, Revision 0, dated October 28, 1983.

QAP 14.1, Inspection, Test and Operating Status, Revision 0, dated October 28, 1983.

Corporate Training Procedures

ITP 2, Corporate Office Indoctrination and Training Procedure, Revision 4, dated June 30, 1983.

ITP 3, Specific Departmental Training, Revision 2, dated June 30, 1983.

ITP 6, Management Development for Professional and Supervisory Personnel, Revision 2, dated June 30, 1983.

Site Training Procedures

ITP 6, Training for Instrument and Control Technicians, Revision 1, dated May 4, 1983.

ITP 8, Mechanical Maintenance Training, Revision 0, dated June 9, 1983.

ITP 9, Electrical Maintenance Training, Revision 0, dated May 25, 1983.