

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

DCS Numbers

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Report No. 83-09
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: James A. FitzPatrick Nuclear Power Plant

Inspection At: Scriba, New York

Inspection Conducted: April 1-30, 1983

Inspectors: H. B. Kister
for J. C. Linville, Senior Resident Inspector
L. T. Doerflein
L. T. Doerflein, Resident Inspector

5/17/83
date

5/12/83
date

Approved by: H. B. Kister
H. B. Kister, Chief, Reactor Projects Section 1C

date
5/17/83
date

Inspection Summary:

Inspection on April 1-30, 1983 (Report No. 50-333/83-09)

Areas Inspected: Routine and reactive inspection during day and backshift hours by two resident inspectors (173 hours) of licensee action on previous inspection findings, licensee event report review, operational safety verification, surveillance observations, maintenance observations, refueling preparations, calibration, procurement, and review of periodic and special reports.

Results: No violations were observed in eight of nine areas inspected. One violation was observed in one area (Failure to control measuring and test equipment, paragraph 9).

DETAILS

1. Persons Contacted

- *R. Baker, Technical Services Superintendent
- *R. Converse, Superintendent of Power
- *M. Cosgrove, Quality Assurance Superintendent
- *M. Curling, Training Superintendent
- *W. Fernandez, Maintenance Superintendent
- *H. Keith, Instrument and Control Superintendent
- *R. Liseno, Operations Superintendent
- *C. McNeill, Resident Manager
- *E. Mulcahey, Radiological & Environmental Services Superintendent
- T. Teifke, Security & Safety Superintendent

The inspectors 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

(Closed) VIOLATION (333/82-06-04): This violation involved failure to establish controls to ensure proper valve alignment during the startup following the 1981-1982 Refueling/Modification outage. The inspector reviewed the changes in F-OP-65, Startup and Shutdown Procedure, Revision 14 and F-ST-15H, Primary Containment Integrity, Manual Isolation Valves Position Verification, Revision 4 to ensure that the breathing air and service manual containment isolation valves are checked closed just prior to startup and found them acceptable. In addition, the inspector found acceptable the changes to Operations Department Standing Order No. 18, Equipment Status Control, Revision 2, which provide more specific requirements for checking, recording and reviewing valve and breaker positions during startups following outages and during normal plant operations.

(Closed) INSPECTOR FOLLOWUP ITEM (333/82-12-04): The licensee re-labelled all valves in the Emergency Service Water (ESW) System. In addition, the licensee revised the valve lineup checklist and the drawings in the ESW System Operating Procedure so that the actual valve numbering is consistent with the valve checklist and drawings.

(Closed) INSPECTOR FOLLOWUP ITEM (333/82-01-05): The inspector reviewed the licensee's test and measurement equipment program. Details of this inspection are documented in paragraph 9 of this report. One violation for failure to properly control test and measuring equipment was identified. This followup item is closed for administrative purposes.

(Closed) INSPECTOR FOLLOWUP ITEM (333/83-04-05): The licensee has reviewed and approved changes to the Core Spray, Standby Liquid Control and Recirculation Pump Trip surveillance tests to correct the deficiencies identified during the inspection.

3. Licensee Event Report (LER) Review

The inspector reviewed LER's to verify that the details of the events were clearly reported. The inspector 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's 83-015*, 83-016, and 83-017 were reviewed.

*LER's selected for onsite followup.

LER 83-015 reported that the B Reactor Recirculation Pump Test Switch was found in the Test Mode D position rather than the normal position during the performance of surveillance test F-ST-1D, thus reducing the number of channels which can produce an Anticipated Transient Without Scram trip of B Reactor Recirculation Motor Generator set field breaker trip from two channels to one channel. As noted in paragraph 5, the inspector observed the performance of F-ST-1D but did not specifically note that the switch was out of position. The inspector reviewed the General Electric drawings to verify the switch functioned as reported by the licensee. The inspector agrees that the switch was out of position due to personnel error and will review the revisions to F-ST-1D and F-ISP-3-1 when they are received to ensure that a second verification of the switch position is now required (333/83-09-01).

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 inspector observed shift turn-overs biweekly to ensure proper control room and shift manning. The inspectors directly observed routine power operations to ensure adherence to approved procedures.

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.

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.

d. Tagout Verification

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

- PTR 830289 on the High Pressure Coolant Injection System
- PTR 830266 on the Diesel Fire Pump
- PTR 830305 on the A Standby Gas Treatment Train

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
- Emergency Service Water System
- Reactor Core Isolation Cooling System
- 125V DC Power System

No violations were observed.

5. Surveillance Observations

- a. 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-1D, MSIV's, Main Steam Line Drain Valves and Reactor Water Sample Valves Logic Functional Test, Revision 8, dated May 19, 1982, performed on April 8, 1983.
 - F-ST-1L, Main Turbine Control Valve Instrument Channel and Valve Operability Check, Revision 10, dated March 9, 1983, performed on April 1, 1983.
 - F-ST-76C, Diesel Fire Pump Operational Check, Revision 4, dated January 12, 1983, performed on April 8, 1983.
 - F-ISP-64-1, Main Steam Line (MSL) Radiation Monitor Instrument Calibration, Revision 11, dated August 27, 1982, performed on A MSL Radiation Monitor on April 20, 1983.
 - NCS-375, In Place Testing of HEPA Filters and Iodine Adsorbers, Revision 4, dated May 15, 1982, performed on April 26-29, 1983.
- b. On April 26, 1983, a Nuclear Containment System (NCS) contractor performed a freon test on the A train of the Standby Gas Treatment System (SGTS) as required by Technical Specification (TS) 4.7.B.1.b(2). The results of this test, which was performed using a prototype Freon R-11 monitor designed by NCS and identified as model LMP-10, indicated gross failure of the A SGTS. Based on the results of this test, the licensee declared A SGTS inoperable per TS 3.7.B.2.a at 5:30 p.m. on April 26, 1983 and decided to replace the charcoal in A SGTS and retest it the next day. While the charcoal replacement was in progress, the A train of the Control Room Emergency Ventilation (CREV) system also grossly failed the freon test while the Technical Support Center filter train passed the test with the same test equipment. When the A train of the SGTS failed the test again, after the charcoal had been replaced, the contractor and the licensee concluded that the new equipment was too sensitive to provide meaningful test data because of the high background in the older filter trains and the contractor redid the test with the less sensitive Freon Leak Tester identified as Halocarbon Monitor Model 1000, which had been used by NCS to perform this freon test on the charcoal filter trains since the initial operation of the facility. Another proven monitor identified as SBA N500 Portable Gas Chromatograph serial 6372 used on B SGTS and both CREV filter trains yielded satisfactory results. The contractor took a sample of the charcoal removed from the A

SGTS train and returned it to the NCS laboratory for a methyl iodide adsorption analysis to verify the conclusion that the test failure was caused by the oversensitivity of the prototype Freon R-11 monitor and not by a reduction in charcoal filter removal efficiency. The inspector will review the test and analysis reports when they are received from NCS (333/83-09-02).

- c. 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-ST-9B, EDG Full Load Test and ESW Pump Operability Test (ISI), Revision 17, dated November 4, 1982, performed on April 26, 1983.

6. Maintenance Observations

- a. The inspectors 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 76/24461 on repair of cooling water leak in the Diesel Fire Pump gear box
 - WR 71/24463 on replacement of B Station Battery Cells
 - WR 23/19467 on repacking a High Pressure Coolant Injection (HPCI) System vent valve
 - WR 23/24490 on the repair of HPCI system level switch 23LS90
 - WR 17/24482 on the troubleshooting of A Main Steam Line Radiation Monitor
 - WR 01-125/24833 on the replacement of A Standby Gas Treatment train charcoal

- c. On April 2, 1983, ground indication was received on B station battery due to leaking cells. Since the battery was able to meet the acceptance criteria of the routine surveillance tests, the licensee did not declare it inoperable. However, after careful review of IE Information Notice 83-13 regarding the seismic qualification of cracked battery cells, the licensee declared B station battery inoperable at 3:00 p.m. on April 8, 1983. Subsequently, the licensee determined that part of the ground indication was caused by a ground on High Pressure Coolant Injection System level switch 23LS90. The licensee isolated this ground and implemented periodic manual blowdowns of the steam line to compensate for the failed level switch. Detailed inspection of the bottom of the cells in the station batteries revealed that 4 cells in B battery were leaking and about one third of the 60 cells in each battery exhibited some cracking. To restore the B battery to an operable status, the licensee decided to remove the four leaking Gould NCX2250 cells and replaced two of them with cells from the A battery leaving both batteries with 58 cells, two short of the normal 60. The blank spaces in the racks were to be filled by wooden spacers. This plan was documented and justified in Nuclear Safety Evaluation JAF-SE-83-009. Work Request (WR) 71/24463 and Temporary Procedure (TP) 64 were issued to carry out the plan which was reviewed by the Plant Operations Review Committee in meeting 83-018 on April 6, 1983. Although entry into a twenty-four hour action statement normally requires a declaration of an Unusual Event under the requirements of the licensee's Emergency Plan Notification Procedures, the licensee did not consider it necessary in this case because the entry was deliberate to effect a repair. The Senior Resident Inspector and his Section Chief concurred with the licensee's assessment. The licensee did notify NRC headquarters of the situation on the Emergency Notification System on the morning of April 7, 1983 as required by 10 CFR 50.72. The plan was carried out without incident and the ground on B station battery cleared. The licensee's long range plan is to purchase sufficient cells to produce one completely new station battery and one station battery without any cracked cells during the refueling outage scheduled to start in June 1983. The inspector will review this modification by the completion of the outage in August 1983 (333/83-09-03).

7. Procurement

The inspector conducted a detailed review of the licensee's procurement program including the area of receipt, storage and handling of safety-related parts and equipment. The inspection included review of 14 Work Activity Control Procedures, Plant Standing Orders and

Quality Assurance Procedures (QAP's) associated with procurement activities; tours of storage areas including the warehouse, butler building, and store room; observation of a receipt inspection; and verification of the adequacy of procurement documents for 5 selected items in storage and for the services of the site maintenance contractor. Procedures were reviewed for conformance to the requirements of ANSI 45.2.2-1972, Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants, and ANSI 45.2.13-1974, Quality Assurance Requirements For Control of Procurement of Items and Services For Nuclear Power Plants.

Although the licensee had a qualified vendor list, the inspector found that it had not been revised for several years and was not controlled in any way. The licensee was aware of this deficiency and showed the inspector a partial draft site Quality Assurance Instruction (QAI) for Purchasing Control which was being developed to provide detailed guidance for implementation of QAP 4.1, Procurement Document Review, requirements. This QAI will provide specifics on methods of vendor qualification, control of the qualified vendor list, a QA requirement checklist to be attached to purchase requisitions, etc. The inspector will review this QAI when it is issued (333/83-09-04).

While observing the receipt inspection of reactor recirculation system piping, the inspector and the Quality Control inspector noted that Purchase Order PO 83/2565 and General Electric Specification GEP 1-2-151 called for 316K stainless steel pipe but that the pipe was marked only 316. The licensee requested additional Quality Control documentation from General Electric to resolve this discrepancy. This item is unresolved pending inspector review of this documentation and the completed documentation of the receipt inspection (333/83-09-05).

During the tours, the inspector found the warehouse and butler building in a general state of disarray with access to stored items on shelves restricted by other items stored in aisles. The licensee stated that this condition was temporary since a complete inventory was scheduled in the near future as the first step in getting better control of storage facilities. Subsequent steps will include rearrangement of stored items and a reduction in inventory of many unnecessary and unused items. This will be followed by the development and implementation of a preventive maintenance program for stored items which was documented as being nonexistent in previous open item 333/82-28-06.

When the inspector questioned the licensee about control of limited shelf life items, the licensee indicated that the only known items of that type were Control Rod Drive Hydraulic System O rings and gaskets, the expiration dates of which had been revised per a

General Electric letter dated October 6, 1982. The inspector verified that the markings on the packages of the items in stock had been revised according to the letter. At the exit meeting, the licensee stated that he plans to implement a computerized inventory system which will include provisions for controlling limited shelf life items.

8. Preparation for Refueling

The inspector reviewed procedures RAP 7.1.1, Receiving and Handling of Unirradiated Fuel, Revision 3, dated March 9, 1983 and RAP 7.1.2, Inspecting and Channeling of Unirradiated Fuel, Revision 4, dated March 9, 1983 to verify that the licensee had technically adequate and approved procedures covering the receipt, inspection and storage of new fuel. In addition, the inspector observed the inspection and storage of six new fuel bundles to verify that it was performed in accordance with these procedures. No deficiencies with the new fuel were found during the fuel inspection by the licensee.

No violations were observed.

9. Calibration and Control of Test Equipment

The inspector reviewed the licensee's program for the control of measuring and test equipment implemented by Administrative Procedure (AP) 4.2, Control of Measuring and Test Equipment, Revision 2, dated June 13, 1979 to verify the following:

- An equipment inventory list has been prepared which identifies all measuring and test equipment which will be used on safety-related systems or components and the calibration frequency for each piece of equipment;
- Maintenance of calibration records identifying standards used which have traceability to the National Bureau of Standards or other testing organizations;
- Approved calibration procedures are available for each piece of equipment calibrated on site;
- Formal requirements exist for marking the latest calibration date on each piece of equipment;
- A written requirement exists which prohibits the use of measuring and test equipment which has not been calibrated within the prescribed frequency; and
- Controls have been established to evaluate and document the acceptability of items previously measured or tested when a piece of equipment is found to be out of calibration.

During this program review, the inspector identified the following:

- The calibration records for a three eighths inch Snap-On 0-100 foot-pound torque wrench, serial number (S/N) C25556, had out of tolerance values at 60 and 100 foot-pounds when it was calibrated on January 27, 1983. These values were not identified as being out of tolerance by the licensee and the torque wrench was available for use. No log card to record usage was attached to the torque wrench so it was impossible to determine if the torque wrench had been used.
- The calibration records for a three quarter inch Sweeney 0-400 foot-pound drive beam torque wrench, S/N M-117, had out of tolerance values at 80 and 320 foot-pounds when it was calibrated on September 11, 1981. These values were not identified as being out of tolerance by the licensee and the torque wrench was available for use, however, the log card indicated that it had not been used.
- No current calibration records were available for two Snap-On torque wrenches S/N's BB24182 and 1144, although the log cards indicated they had been calibrated on January 19 and 21, 1983 respectively. In addition, the licensee was unable to locate torque wrench S/N 1144 during an inventory on April 20, 1983.
- Two torque wrenches, a Snap-On torque wrench, S/N AA01814, and a Williams torque wrench, S/N M-56, were found defective during recalibration on January 27, 1983, and no evaluation was done to determine the acceptability of items previously measured with these torque wrenches.
- Three 0-600 foot-pound Williams torque wrenches, S/N's M-60, A06254 and 180585A, were calibrated on equipment capable of measuring only up to 500 foot-pounds. There was no identification on these torque wrenches that they had only been calibrated up to 500 foot-pounds.
- No current calibration records were available for six ammeters and one megohmmeter, listed below, even though these instruments all had current calibration stickers attached and were in use.

<u>Instrument</u>	<u>S/N</u>	<u>Manufacturer</u>	<u>Date Calibrated</u>
Megohmmeter	E-571	Biddle	December 17, 1982
Ammeter	E-530	Westinghouse	December 23, 1982
Ammeter	E-550	Weston	February 25, 1983
Ammeter	E-561	Amprobe	October 15, 1982
Ammeter	E-547	Ammetek	November 23, 1982
Ammeter	E-579	Weston	February 22, 1983
Ammeter	E-549	Weston	December 17, 1982

- No evaluations were done and/or documented to determine the acceptability of items previously measured or tested with the following equipment which was found to be out of calibration.

<u>Instrument</u>	<u>S/N</u>	<u>Manufacturer</u>	<u>Date Calibrated</u>
Amneter	E-697	Pacer	October 7, 1982
Amneter	E-698	Pacer	November 19, 1981
Multimeter	E-503	Fluke	October 5, 1982
Multimeter	E-695	Fluke	September 21, 1982
Multimeter	E-693	Fluke	October 5, 1982

The inspector informed the licensee that the above examples collectively constitute a failure to properly implement or establish adequate controls for measuring and test equipment and is a violation of 10 CFR 50, Appendix B, Criterion XII, ANSI N45.2-1971, Quality Assurance Program Requirements for Nuclear Power Plants, and Administrative Procedure 4.2 which require that tools, gages, instruments and other measuring and testing devices used in activities affecting quality are properly controlled, calibrated and adjusted to maintain accuracy within necessary limits (333/83-09-06).

10. 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 report was reviewed:

- March 1983 Operating Status Report dated April 8, 1983

No violations were observed.

11. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations or deviations. The unresolved item identified during this inspection is discussed in paragraph 7.

12. 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 April 29, 1983, the inspectors met with licensee representatives (denoted in paragraph 1) and summarized the scope and findings of the inspection as they are described in this report.

New Item

Modify

Delete

OUTSTANDING ITEMS FILE
SINGLE DOCKET ENTRY FORM

Docket #

50-333

J. LINVILLE
Originator

H. KISTER
Reviewing Supervisor Name

Item Number	Type	Module #	Area	Resp	Action Due Date	Updt/Clsout Rpt #	Date (M/Clsd)
83-09-01	IFI	61726	PSC	Z/U	- - - -	- - - -	83-04-30
					YY MM DD		YY MM DD

Originator: LINVILLE
 Modifier/Closer:

Descriptive Title
 LICENSEE TO REVISE SURVEILLANCE PROCEDURES TO INCLUDE SECOND VERIFICATION OF SWITCH POSITION

Item Number	Type	Module #	Area	Resp	Action Due Date	Updt/Clsout Rpt #	Date (M/Clsd)
83-09-02	IFI	61726	OTH	Z/U	- - - -	- - - -	83-04-30
					YY MM DD		YY MM DD

Originator: LINVILLE
 Modifier/Closer:

Descriptive Title
 REVIEW METHYL IODIDE ADSORPTION ANALYSIS REPORT ON A SGT'S CHARCOAL

Item Number	Type	Module #	Area	Resp	Action Due Date	Updt/Clsout Rpt #	Date (M/Clsd)
83-09-03	IFI	62703	MNT	Z/U	- - - -	- - - -	83-04-30
					YY MM DD		YY MM DD

Originator: LINVILLE
 Modifier/Closer:

Descriptive Title
 LICENSEE TO REPLACE ONE STATION BATTERY AND ALL CRACKED CELLS IN THE OTHER BATTERY

Item Number	Type	Module #	Area	Resp	Action Due Date	Updt/Clsout Rpt #	Date (M/Clsd)
83-09-04	IFI	38700	OQA	Z/U	- - - -	- - - -	83-04-30
					YY MM DD		YY MM DD

Originator: LINVILLE
 Modifier/Closer:

Descriptive Title
 LICENSEE TO ISSUE QUALITY ASSURANCE INSTRUCTION FOR PURCHASING CONTROL

New Item

Modify

Delete

OUTSTANDING ITEMS FILE
SINGLE DOCKET ENTRY FORM

Docket #

50-333

J. LINVILLE
Originator

H. KISTER
Reviewing Supervisor Name

Item Number	Type	Module #	Area	Resp	Action Due Date	Updt/Clsout Rpt #	Date O/M/Clsd
83-09-05	UNR	38700	OQA	Z/W	- - - -	- - - -	83-09-30
					YY MM DD		YY MM DD

Originator
LINVILLE

Modifier/Closer

Descriptive Title

LICENSEE TO OBTAIN ADDITIONAL QUALITY CONTROL DOCUMENTATION TO RESOLVE DISCREPANCY WITH RECIRCULATION SYSTEM PIPING

Item Number	Type	Module #	Area	Resp	Action Due Date	Updt/Clsout Rpt #	Date O/M/Clsd
83-09-06	NCY	61724	OTH	Z/W	- - - -	- - - -	83-09-30
					YY MM DD		YY MM DD

Originator
LINVILLE

Modifier/Closer

Descriptive Title

LICENSEE FAILED TO PROPERLY CONTROL TEST AND MEASURING EQUIPMENT

Item Number	Type	Module #	Area	Resp	Action Due Date	Updt/Clsout Rpt #	Date O/M/Clsd
- - - -				Z/W	- - - -	- - - -	- - - -
					YY MM DD		YY MM DD

Originator

Modifier/Closer

Descriptive Title

Item Number	Type	Module #	Area	Resp	Action Due Date	Updt/Clsout Rpt #	Date O/M/Clsd
- - - -				Z/W	- - - -	- - - -	- - - -
					YY MM DD		YY MM DD

Originator

Modifier/Closer

Descriptive Title

