

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-333/84-13

Docket No. 50-333

License No. DPR-59

Priority --

Category C

Licensee: Power Authority of the State of New York

10 Columbus Circle

New York, New York 10019

Facility Name: James A. Fitzpatrick Nuclear Power Plant

Inspection At: Scriba, New York

Inspection Conducted: July 9-13, 1984

Inspectors: J. J. Kottan
for H. Zibulsky, Chemist

8-7-84
date

Approved by: J. J. Kottan
for J. Pasciak, Chief, Effluent
Radiation Protection Section

8-7-84
date

Inspection Summary: Inspection on July 9-13, 1984 (Report No. 50-333/84-13)

Areas Inspected: Routine, announced inspection of the licensee's nonradio-
logical chemical program. Areas reviewed include: quality control of ana-
lytical measurements, analytical procedures, staffing, and training. The
inspection involved 26 hours onsite by one region based inspector.

Results: The licensee was in compliance with NRC requirements examined during
the inspection.

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DETAILS

1. Individuals Contacted

- *C. Mc Neill, Resident Manager
- *R. Converse, Superintendent of Power
- *R. Patch, QA Superintendent
- *E. Mulcahey, Radiological and Environmental Service Superintendent
- *M. Curling, Training Superintendent
- *G. Gorman, Chemistry General Supervisor
- B. Hamblin, Chemistry/Radiochemistry Supervisor
- K. Wells, Senior Technician

*Denotes those present at the exit interview.

The inspector also interviewed other licensee employees including members of the Chemistry staff.

2. Laboratory Quality Control

The adequacy and effectiveness of the licensee's nonradiological chemistry quality control program was reviewed against the requirements of Amendment No. 17 to the license, Technical Specification 3.6 and 6.8, USNRC Regulatory Guide 1.33, Revision 2, ANSI N18.7-1976, and standard industrial practices. The licensee's performance relative to these requirements and standards was determined by review of records, discussions with licensee personnel, and observations by the inspector.

For most of the analytical procedures, calibration standards were not analyzed over the full range of operation. The lowest standards for Chloride, Silica and Boron were 100 ppb, 50 ppb, and 1 ppm, respectively. The reported values were ≤ 20 ppb, ≤ 20 ppb, and ≤ 0.1 ppm, respectively. General laboratory practice requires standard to be of similar concentrations to measured concentrations. The licensee told the inspector that standards with concentrations similar to the measured values will be developed and used.

Separate control standards were not used by the licensee for quality control. The standard used for quality control was the same as the calibration standard. The licensee also used an arbitrary $\pm 10\%$ acceptance criteria instead of a ± 2 sigma representing a 95% confidence level for the analysis. The licensee did not document or plot quality control results. The plotting of results would allow the laboratory personnel to identify the trends of the measurement systems. The inspector told the licensee that the calibration and control programs will be reviewed at a subsequent inspection. Inspector Follow-up Item (50-333/84-13-01).

No violations were identified.

3. Analytical Procedures

The inspector reviewed the licensee's analytical procedures in the water chemistry area. The procedures are required under Amendment No. 17 to the license, Technical Specification 3.6 and USNRC Regulatory Guide 1.33, Revision 2, referenced in Section 6.8 of the Technical Specifications. The inspector determined conformance to these procedures by review of licensee records and by observation of the analyses.

The analytical procedures that were observed were spectrophotometric boron, chloride, and silica. Also observed were the atomic absorption determinations of chromium, iron, nickel, and copper.

Presently, the procedures do not require calibration to extend over the concentrations of the samples typically analyzed. The licensee stated that they will change their calibration standards to encompass the full range of operation and make changes in their present procedures to accommodate the low standards.

The licensee stated that control standards will be made independent of the calibration standards. They will be analyzed and plotted on control charts showing the mean value and ± 2 sigma standard deviation as the acceptance criteria.

No violations were identified.

4. Staffing and Training

The Chemistry General Supervisor, Health Physics General Supervisor, and Radiological Engineer report to the Assistant Radiological and Environmental Service Superintendent. The Chemistry/Radiochemistry Supervisor reports to the Chemistry General Supervisor. The Senior Technician allocates the work to the Technicians and he is responsible to the C/R Supervisor.

The licensee initiated a new training program for Radiological and Environmental Services Technicians (No. ITP-7B). An apprenticeship program is awaiting approval which includes required subjects to be completed for job retention and promotion.

The licensee initiated an interlaboratory analysis program with an outside contractor for recertifying laboratory procedures and technicians.

No violations were identified.

5. Exit Interview

The inspector met with the licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on July 13, 1984. The inspector summarized the purpose and scope of the inspection and the inspector findings. At no time during the inspection was any written material provided to the licensee by the inspector.