

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-333/84-09

Docket No. 50-333

License No. DPR-59 Priority -- Category C

Licensee: Power Authority of the State of New York  
James A. FitzPatrick Nuclear Power Plant  
P.O. Box 41  
Lycoming, New York 13093

Facility Name: James A. FitzPatrick Nuclear Power Plant

Inspection At: Lycoming, New York

Inspection Conducted: May 21-25, 1984

Inspectors: *Rosemary Hogan*  
Rosemary Hogan, Radiation Specialist

7/20/84  
date

Approved by: *W. J. Pasciak*  
W. J. Pasciak, Section Chief, ERPS

7/20/84  
date

Inspection Summary: Inspection on May 21-25, 1984 Inspection Report No. 50-333/84-09

Areas Inspected: Routine, unannounced safety inspection of transportation activities including: management controls, package selection, procedures, waste classification, indoctrination and training, audit program and recordkeeping. The inspection involved 30 inspection hours on-site by one region-based inspector.

Results: One violation was identified: (Severity Level IV - failure to have written procedures for waste classification and manifest preparation - paragraph 5.

## DETAILS

### 1. Persons Contacted

- \*R. Burns, Vice President BWR Support
- W. Childs, Senior Licensing Engineer
- \*R. Converse, Superintendent of Power
- \*M. Curling, Training Superintendent
- W. Fernandez, Acting Operations Superintendent
- B. Gorman, Chemistry General Supervisor
- \*D. Lindsey, Assistant Operations Superintendent
- R. Locy, Water Systems Supervisor
- \*C. McNeill, Resident Manager
- \*E. Mulcahey, Radiological and Environmental Services Superintendent
- \*R. Patch, Quality Assurance Superintendent
- D. Robert, Radwaste Supervisor
- K. Szeluga, Radiation Protection Supervisor

### NRC

L. Doerflein, Resident Inspector

\*Indicates those present at exit interview.

### 2. Licensee Action on Previous Findings

(Closed) Violation Severity Level III (333/83-11-01) Steel box was not a strong tight package. The licensee's procedure F-OP-48B, Waste Packaging and Handling was reviewed to verify the addition of several steps to insure a strong tight package. A checkoff sheet was included in the revision.

(Closed) Inspector Followup Item (333/80-20-27) Establish and implement QA program for radwaste packaging, transportation and transfer. The inspector verified the implementation of the QA program by reviewing audit schedules, audit reports, surveillance requirements and QA personnel training records. The inspector discussed the expansion of the QA program with the Quality Assurance Superintendent.

### 3. Management Controls

The responsibility for the transportation of radioactive materials rests with the Water Systems Supervisor and the Radiological Waste Supervisor for preparing and loading radioactive material for shipment. They report to the Superintendent of Power through the Operations Superintendent and the Assistant Operations Superintendent. The radiation survey and waste manifest preparation are the responsibility of the Radiation Protection Supervisor who reports to the Superintendent of Power through the Radiological and Environmental Services (RES) Superintendent, the Assistant RES

Superintendent, and the Health Physics Manager. The licensee has documented in procedures the specific responsibilities assigned to the Operations and RES Departments.

4. Selection of Packaging

The licensee's program for selection and reuse of packages was reviewed against the requirements of 10 CFR 71. Through review of records, it was determined that the licensee's procedures for selection and reuse are adequate to assure compliance with requirements. Copies of the Certificates of Compliance and the referenced documents were available for all Type B casks in use.

No violations were identified.

5. Procedures

Procedures for carrying out the various transport activities were reviewed. Included in packaging procedures were instructions for preparing the package for use, loading its contents, closing the package, and marking the package. It was noted that the procedures had been revised to reflect the changes in 10 CFR 71 effective September 6, 1983 and the DOT regulations effective July 1, 1983.

The licensee's procedure for shipment surveys and waste manifest preparation was reviewed for adequacy. The changes in 10 CFR 61 Licensing Requirements for Land Disposal of Radioactive Waste which became effective December 27, 1983 have not been incorporated into the licensee's procedures. Changes in Part 61 relate to waste classification, waste manifests and waste shipment labeling. The licensee has been shipping radioactive material since December 27, 1983 without an operating procedure for these activities. The failure to have a written procedure for waste classification, waste manifest preparation and waste shipment labeling is a violation of the quality assurance program requirement for instructions, procedures and drawings. (84-09-01).

The inspector noted that all shipment records included a receipt from the burial site, however, there was no procedure in place to initiate an investigation after a failure to receive a receipt within the prescribed time period. The licensee stated that procedures would be revised to provide for shipment tracking, NRC notification and filing a report to the NRC when a burial site receipt is not received. The inspector stated that this item would be reviewed in a future inspection. (84-09-02).

During a review of procedure RPOP-3, Picking Up, Receiving and Opening Radioactive Packages, the inspector noted that Radiation Protection should be notified within three hours of the receipt of a radioactive package during normal working hours and within eighteen hours during off normal working hours. The inspector stated that the regulations require that

the packages should be monitored within those time periods. The licensee immediately revised the procedure to assure that Radiation Protection is notified within sufficient time to monitor the packages within the required time limits. The revision was approved and sent to the Plant Operations Review Committee for final approval.

#### 6. Waste Manifest

The inspector reviewed the licensee's waste manifest form and preparation method. Each shipment of radwaste intended for off-site disposal to a licensed land burial facility is accompanied by a shipment manifest which includes all of the required information.

#### 7. Waste Classification

The licensee's documentation of determination of scaling factors was reviewed to verify that a reasonable method was used to classify wastes. A vendor laboratory has analyzed the licensee's waste samples and determined scaling factors for all radionuclides which will be determined indirectly. The licensee uses a computer program to calculate the radionuclide concentration in the waste.

Measured dose rates are used for dry activated waste and absorbed liquids and Ge(Li) gamma analysis results are used for bead resins, evaporator bottoms and powdex/sludges. For each waste shipment, the computer program uses the dose rates or the gamma results for that shipment, except for transuranic concentration. The transuranic concentration is determined by means of predetermined scaling factors applied to the measured cerium-144 concentration. When the Ge(Li) gamma results fail to detect cerium-144 because the concentration of cerium-144 falls below the Ge(Li) system minimum detectable level, the licensee uses the concentration of cerium-144 determined by their vendor laboratory in November 1983. This method is acceptable because the minimum detectable level of the licensee's Ge(Li) system for measurement of cerium-144, when multiplied by the predetermined scaling factors, results in a value below the 10 nanocuries per gram limit specified in 10 CFR 61.55(a) for transuranic Class A waste.

#### 8. Preparation of Packages for Shipment

The inspector observed the preparation of 51 drums and two boxes of LSA material for shipment No. Wash 84-2 to the Richland, Washington burial site. The licensee stated that appropriate radiation limits and contamination limits were not exceeded. The inspector noted that the appropriate shipping paper documentation was prepared and the transport vehicle was placarded.



9. Training Program

Personnel training in transportation activities was reviewed against the criteria contained in 10 CFR 71.105(d), "Quality Assurance Program".

The licensee's performance relative to these criteria was determined by interviewing the Water Systems Supervisor and the Radiation Protection Supervisor in charge of transportation activities.

It was determined that the Radiological and Environmental Services (RES) Technicians had not been trained in the changes to Department of Transportation (DOT) regulations and the NRC regulations, Part 61 and 71 effective July, December and September 1983, respectively.

The licensee has no program for periodic retraining of these personnel. Although there is some documented training of RES technicians in the RES Technician Practical Factors, the licensee recognizes the fact that training of RES technicians in the area of radioactive shipments is not adequate. The licensee is reviewing a radioactive waste packaging and shipping training proposal from a vendor to upgrade training and establish internal retraining. The inspector stated that this area would be reviewed in a future inspection. (84-09-03)

10. Audit Program

The audit program was reviewed to assure that the program was sufficient to verify compliance with all aspects of the quality assurance program.

The inspector reviewed Audit Nos. 936 and 938 concerning Dewatered Powdex Resin Packaging and Shipping Radwaste and Documentation of Radwaste Shipments, respectively.

These audits were conducted to verify compliance with specific procedures. The licensee discussed the program appraisal in the area of transportation which is scheduled for July 1984. The scope of the appraisal will include procedure requirements, company philosophy, regulatory requirements, quality assurance program requirements and industry standards. The inspectors discussed expanding the scope of regular audits to include these requirements especially the applicable criteria of the quality assurance program. The licensee stated that the purpose of the program appraisal was to provide background information for future audits with expanded criteria elements.

11. Recordkeeping

The inspector reviewed records of radioactive shipments from Fitzpatrick from January 1983 through April 1984. Checklists were sufficient to assure that procedural and regulatory requirements were met. The shipping papers included all appropriate documents. The licensee retains all calculations made to determine waste classification. All shipping records are maintained by the licensee for a period exceeding two years.

12. Exit Interview

The inspector met with licensee representatives denoted in Paragraph 1 at the conclusion of the inspection on May 25, 1984. During these meetings the purpose and scope of the inspection were summarized and the inspection findings were discussed. At no time during this inspection was written material provided to the licensee by the inspector.