

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-333/92-26  
Docket No. 50-333  
License No. DPR-59  
Licensee: New York Power Authority  
Post Office Box 41  
Lycoming, New York 13093  
Facility Name: James A. FitzPatrick Nuclear Power Plant  
Inspection At: Lycoming, New York and at the  
JAF Environmental Laboratory, Fulton, N.Y.  
Inspection Conducted: December 7-10, 1992

Inspector:

Laurie Peluso  
Laurie A. Peluso, Radiation Specialist  
Effluents Radiation Protection Section (ERPS)  
Facilities Radiological Safety and Safeguards  
Branch (FRSSB)

12/18/92  
Date

Approved by:

for Jason C. Lang  
Marie T. Miller, Chief, ERPS, FRSSB,  
Division of Radiation Safety and  
Safeguards (DRSS)

12-18-92  
Date

Areas Inspected: Announced inspection of the Radiological Environmental Monitoring Program (REMP) including: management controls, quality assurance audits, quality assurance/quality control of measurement laboratory, surveillance procedures, meteorological monitoring program, and implementation of the Offsite Dose Calculation Manual (ODCM).

Results: Within the areas inspected, excellent implementation of the above programs by members of the Radiological Environmental Services Department in cooperation with members of the Niagara Mohawk Power Corporation's Environmental Protection Department was observed. No safety concerns or violations of regulatory requirements were identified.

## DETAILS

### 1.0 Individuals Contacted

#### 1.1 New York Power Authority (NYPA)

- N. Avrakotos, Emergency Plan Coordinator
- \* B. Barrett, General Manager - Operations
- \* B. Gorman, Environmental Laboratory Supervisor
- \* J. McCarty, Senior Quality Engineer
- \* A. McKeen, Chemistry General Supervisor
- \* H. Salmon, Resident Manager
- E. Salvetti, Chemistry/Environmental Technician
- \* A. Zaremba, Licensing Manager

#### 1.2 Niagara Mohawk Power Corporation

- \* K. Dahlberg, Plant Manager - Unit 1
- \* H. Flanagan, Environmental Protection Department, Supervisor
- T. Galletta, Environmental Protection Department Meteorological Coordinator
- \* M. McCormick, Plant Manager - Unit 2
- \* J. Pavel, Licensing Department
- \* B. Zacharek, Environmental Protection Department Radiological Coordinator

#### 1.3 Nuclear Regulatory Commission

- \* J. Tappert, Resident Inspector

- \* Denotes those present at the exit interview on December 10, 1992.
- Other licensee employees contacted and interviewed during this inspection.

### 2.0 Purpose

The purpose of this inspection was to verify the licensee's capability to implement the Radiological Environmental Monitoring Program (REMP), the Meteorological Monitoring Program, and the operations of the analytical environmental laboratory (JAF Environmental Laboratory), during normal and emergency operations.

### 3.0 Management Controls

#### 3.1 Organization

The inspector reviewed the licensee's organization of the REMP and discussed with members of the Radiological Environmental Services Department any changes made since the last inspection conducted in December 1991. There have been no changes in the organization of the REMP since the previous inspection.

#### 3.2 Quality Assurance Audits

The inspector reviewed the following Quality Assurance Audit Reports of the Radiological Environmental Monitoring Program with respect to Technical Specification requirements.

Audit No. 774, "Radiological Environmental Monitoring Program and Regulatory Guide 4.1", May 15, 1992

Audit No. 768, "Meteorological Monitoring Program and Equipment Calibration by NMPC and JAF", April 11, 1992

The audits were conducted by members of the Quality Assurance Department. Each audit covered the stated objectives, utilized a technical specialist, and was of sufficient technical depth to assess the radiological environmental monitoring and meteorological monitoring programs. No findings were reported.

#### 3.3 Review of the Annual Radiological Environmental Operating Report

The inspector reviewed the Annual Radiological Environmental Operating Report for 1991, as well as the available 1992 analytical data. The report provided a comprehensive summary of the analytical results of the REMP around the FitzPatrick and Nine Mile Point sites and met Technical Specification reporting requirements. Records of the analytical results for 1992 indicated that all samples were collected as required and the lower limits of detection specified in the licensee's Technical Specifications were met. No obvious omissions, trends, or anomalous measurements were identified.

#### 4.0 Implementation of the Radiological Environmental Monitoring Program

Members of the James A. FitzPatrick Radiological Environmental Services Department have the responsibility of implementing the REMP in cooperation with the Nine Mile Point Environmental Protection Department. Environmental samples, collected by Nine Mile Point personnel and a contractor (Ecological Analysts Science and Technology), were analyzed at the JAF Environmental Laboratory.

##### 4.1 Direct Observations

The inspector examined selected environmental sampling stations to determine whether samples were being obtained from the locations designated in the Technical Specifications and the Offsite Dose Calculation Manual (ODCM) and whether the air samplers were operable, calibrated, and maintained. These stations included air samplers for particulate and airborne iodines, composite water samplers, and a number of thermoluminescent dosimetry (TLD) stations for direct ambient radiation measurements. All the air sampling equipment were operational and the gas meters for the air samplers were calibrated at the time of the inspection. TLDs were placed at their designated locations, and the water compositor was operating and taking samples. The inspector witnessed the weekly exchange of charcoal cartridges and air particulate filters. Sample collection was performed according to the appropriate procedure.

##### 4.2 Implementation of the REMP Procedures

The inspector reviewed the following procedures as part of the examination of the implementation of the REMP as described in the Technical Specifications.

S-ENVSP-4.4, "Environmental Surface Water Sample Collection and Compositing", March 2, 1992

S-ENVSP-12, "Environmental Surveillance Program Quality Assurance/Quality Control Program", September 3, 1991

S-ENVSP-34, "Meteorological Monitoring Program Quality Assurance/Quality Control Program", February 25, 1991

S-ENVSP-37, "E.R.M.-2 Data Retrieval and Management", April 13, 1992

SOP, "Radiological Sample Collection", April 6, 1992

The above procedures included requirements for sampling techniques for various environmental sample media and sampling frequencies. The procedures were concise, reflected current sampling practices, and provided the required direction and guidance for implementing an effective program.

In addition to the procedure review, the inspector reviewed the calibration records of the gas meters for the air samplers. The calibrations were performed as scheduled by Nine Mile Point personnel and the results were within the licensee's acceptance criteria.

Based on the above procedure review and discussions with the licensee representatives, the inspector determined that the licensee implemented the REMP effectively.

#### 5.0 Quality Assurance/Quality Control of Analytical Measurements

The inspector reviewed the licensee's programs for quality assurance (QA) and quality control (QC) of analytical measurements to determine whether the licensee had adequate controls with respect to sampling, analyzing samples, and evaluating data for implementing the REMP. The QA and QC programs are conducted by members of the Radiological Environmental Services Department at the Environmental Laboratory, located in Fulton, N.Y.

The inspector visited the JAF Environmental Laboratory where the environmental samples were analyzed. The inspector reviewed the detector calibration records and QC control charts for detector efficiency and counting resolutions. The control charts for the counting equipment were within the laboratory's set criteria and calibrations were performed as scheduled. The inspector reviewed the JAF Environmental Laboratory Quality Assurance Report for 1991 which summarized the quality assurance program, including the EPA cross-check program. The results of the EPA cross-check program were within the EPA's acceptance criteria and the results of the quality assurance program were within the licensee's acceptance criteria.

The inspector noted that the licensee is in the final stages of converting from Teledyne TLDs to Panasonic TLDs. The inspector reviewed the results of various comparison tests conducted between the Panasonic and Teledyne TLDs. The results were in good comparison. Also, from October through December 1991, the Environmental Laboratory participated with the Environmental Measurements Laboratory (EML) to conduct a Quality Assurance performance test (field test) to verify the performance of the TLD systems. The inspector noted that the results of the Panasonic TLDs were within 10% of the known value, which was excellent. The inspector also reviewed a draft copy of the Environmental TLD Procedure, "Environmental TLD System-Quality Control" and determined that the procedure provided sufficient guidance to adequately implement TLD quality control.



Based on the above reviews, the inspector determined that the licensee had implemented an excellent quality assurance and quality control program for the REMP.

#### 6.0 Meteorological Monitoring Program

The inspector reviewed the licensee's meteorological monitoring program to determine whether the instrumentation and equipment were operable, calibrated, and maintained. Niagara Mohawk maintains for the Nine Mile Point/FitzPatrick site all sensors at the main, backup, and inland towers and performs the semi-annual channel calibrations as required by the Nine Mile Point Technical Specifications. The Instrument and Control Department coordinates with Nine Mile Point personnel to calibrate the strip chart recorders. The inspector reviewed the most recent calibration results for the wind speed, wind direction, and temperature instruments and the chart recorders and noted that the calibrations were performed semi-annually as required and were within the licensee's acceptance criteria. The inspector compared the wind speed, wind direction, and delta temperature outputs of the primary and backup towers to the outputs in the Technical Support Center. The results were in good agreement.

Based on the above review, the inspector determined that the licensee excellently implemented the meteorological monitoring program.

#### 7.0 Exit Interview

The inspector met with the licensee representatives denoted in Section 1.0 at the conclusion of the inspection on December 10, 1992. The inspector summarized the purpose, scope, and findings, of the inspection.