

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos. 50-220/91-27
50-410/91-27

Docket Nos. 50-220, 50-410

License Nos. DPR-63, NPF-69

Licensee: Niagra Mohawk Power Corporation
301 Plainfield Road
Syracuse, New York 13212

Facility Name: Nine Mile Point, Units 1&2

Inspection At: Scriba, New York and the JAF Environmental Laboratory
Fulton, N.Y.

Inspection Conducted: December 2-6, 1991

Inspectors: Laurie Peluso 01/07/92
Laurie A. Peluso, Radiation Specialist /date
Effluents Radiation Protection Section (ERPS)

Approved by: Robert J. Bores 01/07/92
Robert J. Bores, Chief /date
ERPS, Facilities Radiological Safety and
Safeguards Branch, Division of Radiation
Safety and Safeguards

Areas Inspected: Announced inspection of the licensee's Radiological Environmental Monitoring Program including: management controls, audits, quality assurance/quality control of measurement laboratory, surveillance procedures, the Meteorological Monitoring Program, and implementation of the above programs. The inspection included a visit to the J.A. FitzPatrick Environmental Laboratory.

Results: Within the areas inspected, the licensee effectively implemented an excellent Radiological Environmental Monitoring Program. No safety concerns or violations were identified.



DETAILS

1.0 Individuals Contacted

1.1 Niagra Mohawk Power Corporation

- *H. Flanagan, Supervisor, Environmental Protection
- *W. Allen, MATS Radiation Assessment Manager
- T. Galletta, Environmental Protection Coordinator-Meteorological
- *J. Pavel, Licensing Engineering
- *C. Sutherland, Assistant Manager Resident
- *S. Wilczek, Jr., Vice President, Nuclear Support
- B. Zacharek, Environmental Protection Coordinator-Radiological

1.2 New York Power Authority

- *R. Converse, Resident Manager
- *C. Gannon, Resident Department Manager
- *B. Gorman, Environmental Supervisor
- *W. Hamblin, Chemical/Radiochemistry Supervisor
- *D. Lindsey, General Manager, Maintenance
- *A. McKeen, Chemistry Supervisor

1.3 Nuclear Regulatory Commission

- *L. Bettenhausen, Chief, Operations Branch, Division of Reactor Safety

*Denotes those present at the exit interview on December 6, 1991.

Other licensee employees were contacted and interviewed during this inspection.

2.0 Purpose

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

3.0 Management Controls

3.1 Organization

Prior to the Fall of 1990, the Environmental Protection Coordinator reported to the Manager, Nuclear Services who reported to the Executive V.P. - Nuclear. During the Fall of 1990, Nuclear Services was transferred to Nuclear Generation and was re-named Site Services. The title of the Environmental Protection Coordinator was re-named Supervisor, Environmental Protection, who now reports to the Manager, Site Services, who, in turn, reports through the V.P. Nuclear Generation to the Executive V.P. - Nuclear.



Based on discussions with the licensee, the inspector determined that there were no significant changes in management oversight and responsibilities for the REMP remain unchanged. The transfer of the REMP from Nuclear Services to Nuclear Generation appeared to have no adverse affect on the implementation of the REMP.

3.2 Audits and Surveillances

The inspector reviewed the following licensee Quality Assurance audits and surveillance reports.

Audit No. 735, Radiological Environmental Monitoring Program,
April 12, 1991

Audit No. 737, Regulatory Guide 4.1 - Commitment Compliance,
April 17, 1991

Audit No. 740, Environmental Surveillance Procedure S-E4VSP-34, Rev. 1 and SAP-10, Meteorological Monitoring System Surveillance, Rev. 2

Surveillance Report 91-10114, Environmental Sampling Collections for Radiological Analysis (Air), June 25, 1991

Surveillance Report 91-10116, Environmental Sampling Collections for Radiological Analysis (Milk), July 1, 1991

Surveillance Report 91-10072, Fish Impingement Sampling, April 16, 1991

Surveillance Report 91-21086, Technical Specifications Surveillance Requirements, October 29, 1991

The audits were performed by the FitzPatrick Quality Assurance Department and the surveillances were conducted by the Nine Mile Point Quality Assurance Department. The inspector noted that the audit covered the stated objectives and were thorough and of good technical depth. The audit reports 735 and 740 each identified four recommendations, none of which had safety significance. Surveillance Report 91-10116 identified two open items and Surveillance Report 91-21086 identified one open item, none of which had safety significance. The inspector noted that the appropriate department responded to these items in a timely manner. No safety concerns or violations were identified.

4.0 Implementation of the Radiological Environmental Monitoring Program

The Nine Mile Point station conducts the REMP program in cooperation with the New York Power Authority's (NYPA's) James A. FitzPatrick (JAF) Generating Station. Environmental samples collected by the licensee and a contractor (Ecological Analysts Science and Technology) were analyzed by the JAF Environmental Laboratory (JAFEL).



4.1 Direct Observations

The inspector examined selected environmental sampling stations with respect to the requirements of the Technical Specifications (T.S.). These stations included all the air particulate and airborne iodine samplers, various vegetation sampling stations, a milk sampling farm and a number of thermoluminescent dosimetry (TLD) stations for direct ambient radiation measurements. The inspector witnessed the weekly exchange of charcoal cartridges and air particulate filters. All the T.S. air monitoring equipment was operable with one exception. The exception was an air pump that had failed one to two hours prior to sample exchange. The licensee immediately replaced the pump with a spare pump and, therefore, there was no significant loss of sample volume. All the air samplers were in calibration at the time of the inspection. TLDs were placed at their designated locations, and milk and vegetation samples appeared to be available at the locations specified in the Offsite Dose Calculation Manual (ODCM). Sample collection was performed according to the appropriate procedures.

4.2 Review of Annual Report

The inspector reviewed the Annual Radiological Environmental Report for 1990 as well as the available 1991 analytical data, including the results of the Land Use Census for the REMP. The report provided a comprehensive summary of the analytical results of the REMP around the Nine Mile Point and FitzPatrick sites and met Technical Specification reporting requirements. Records of the analytical results for 1991 indicated that all samples were collected as required and the lower limits of detection (LLDs) specified in the licensee's Technical Specifications were met. No obvious omissions or anomalous data were identified.

4.3 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-4.0/ESP-4, Environmental Radiation Program: Sampling,
Analysis and Monitoring

S-ENVSP-4.2/ESP-24, Environmental Air Monitoring Sample
Collection

The above procedures included requirements for sampling techniques for various environmental sample media and sampling frequencies. Maintenance and calibration records of air samplers were also reviewed. The calibrations were performed as scheduled and results were within the licensee's acceptance criteria.



Based on the above reviews and discussions with the licensee representatives, the inspector determined that the licensee's REMP procedures were concise and provided the required direction and guidance for implementing an effective program.

5.0 Quality Assurance of Analytical Measurements

The inspector visited the JAFEL where the environmental samples were analyzed. The inspector toured the facility and reviewed laboratory activities including processing, preparation, and analysis of environmental samples. The laboratory was equipped with five germanium gamma spectrometry systems, two low-level alpha/beta counters, and a liquid scintillation counter. The inspector reviewed the quality control (QC) charts including those for efficiency and resolution checks. The control charts of the counting equipment were within the JAFEL's set criteria and sample analyses were performed according to the schedule on the computer program, Environmental Laboratory Management System (ELMS).

The JAFEL participated in the EPA cross-check program and conducted an intralaboratory QC program. Upon review of the results for both programs, the inspector determined that the results were within acceptance criteria.

The licensee stated, that the JAFEL had assumed responsibility for analyzing I-131 in milk and will assume responsibility for processing the environmental TLDs in the near future. The TLDs and milk samples for radio-iodine and strontium 89/90 analyses were sent to Teledyne Isotopes for analyses. Review of these analytical results had indicated that the results were within the licensee's acceptance criteria.

Based on the above reviews, the inspector determined that the licensee was implementing an excellent program for the REMP. No safety concerns or violations were identified in this area.

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. The inspector compared the wind speed, wind direction, and delta temperature outputs at the 33-ft, 100-ft and 200-ft levels of the primary and backup towers to the control room outputs. The results of the comparisons were in good agreement. The inspector reviewed the most recent calibration results for wind speed, wind direction, temperature, and delta temperature. Calibrations were performed semiannually as required by the Technical Specifications. All calibration results were within the licensee's acceptance criteria. Based on the above reviews, the inspector determined that the licensee implemented an effective meteorological monitoring program. No violations were identified.



7.0 Exit Interview

The inspector met with the licensee representatives denoted in Section 1.0 at the conclusion of the inspection on December 6, 1991. The inspector summarized the purpose, scope, and findings of the inspection.

