

U. S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-220/84-12  
Docket No. 50-220  
License No. DPR-63 Priority -- Category C

Licensee: Niagara Mohawk Power Corporation  
300 Erie Boulevard West  
Syracuse, New York 13202

Facility Name: Nine Mile Point, Unit 1

Inspector At: Scriba, New York

Inspection Conducted: June 18-22, 1984

Inspector: *Hawey Zibulsky* 7-16-84  
H. Zibulsky date  
Chemist

Approved by *W. J. Pasciak* 7-17-84  
W. J. Pasciak, Chief, Effluent Radiation date  
Protection Section

Inspection Summary: Inspection on June 18-22, 1984 (Report No. 50-220/84-12)

Areas Inspected: Routine, unannounced inspection of the licensee's nonradio-  
logical chemistry program. Areas reviewed included: staffing and training,  
quality control of analytical measurements, and analytical procedures. The  
inspection involved 27 hours onsite by one regionally based inspector.

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

## DETAILS

### 1. Individuals Contacted

- T. Perkins, General Superintendent
- \* T. Roman, Station Superintendent
- \* J. Duell, Radiation Protection/Chemistry Supervisor
- \* J. Blasiak, Assistant Supervisor, Radiation Protection/Chemistry
- J. Boyle, Chemical Engineer, Corporate
- J. Coates, Chief Technician
- G. Corell, Training Specialist - Chemistry

\*denoted those present at the exit interview.

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

### 2. Staffing and Training

The Supervisor of Chemistry and Radiation Protection has a Chemistry Assistant Supervisor and a Radiation Protection Assistant Supervisor reporting to him. The Chemistry Chief Technician reports to the Assistant Supervisor and the Technicians report to the Chief Technician.

The training and retraining requirements for the Chemistry Technicians are included in Procedure No. APN-10J. For the newly hired, a contractor instructs the Technicians at the licensee's off-site training facility. This course is about six months. The licensee's advanced technician training is about six weeks instruction by the licensee's training staff at the off-site training facility.

The Chemistry Technicians are recertified every two years by participating in the Retraining Program. Spiked samples are analyzed periodically by the Chemistry Technicians and their results are evaluated by the QA Department and the Chemistry Supervisors.

No violations were identified.

### 3. Laboratory Quality Control

The adequacy and effectiveness of the licensee's quality control of chemical analysis was reviewed against the requirements of Amendment No. 9 to the license, Technical Specification 3.2.3 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 the calibration of the analytical procedures, the use of more than one concentration of the calibration standard was performed over the range of operation and was documented.

Except for chloride, silica, and spectrophotometric boron analyses, control standards were not used by the licensee for quality control. The licensee was using an arbitrary  $\pm 15\%$  acceptance criteria for these standards. During the inspection, the licensee plotted the control standards data, using the  $\pm 2$  sigma as the acceptance criteria. The use of control charts would alert the analyst and laboratory supervisors of the quality of the measurement and identify trends for the measurement system. The silica control chart showed a possible positive trend with the standard which means the control standard solution could be evaporating. A new standard solution will be used.

The inspector told the licensee that the control program for analyses, such as boron titration and atomic absorption of the metals will be reviewed at a subsequent inspection. Inspector Follow-up Item (50-220/84-12-01).

No violations were identified.

#### 4. Analytical Procedures

The inspector reviewed the licensee's analytical procedures. The procedures are required under Amendment No. 9 to the license and Regulatory Guide 1.33, Revision 2, referenced in Section 6.8 of the Technical Specifications. The inspector verified conformance to these procedures by review of licensee records and by observation of the analyses.

The chloride and silica control charts identified the chloride and silicon analyses as out of the 95% confidence level parameter. The glassware used in the chloride analysis was washed in nitric acid instead of the chromate-sulfuric acid solution. The analysis was rerun and the chloride fell within the  $\pm 2$  sigma parameter. The silica analysis was rerun and the results also fell within the accepted  $\pm 2$  sigma. It was identified that the control standard was, for a period of time, at the high range of the accepted parameter. Control standards were not run for the boron titration and the heavy metal analyses.

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 June 22, 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.