

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-220/88-31
50-410/88-31

Docket No. 50-220
50-410

License No. DPR-63 Priority - Category C
NPF-54

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

Facility Name: Nine Mile Point Units 1 and 2

Inspection At: Oswego, New York

Inspection Conducted: October 3-7, 1988

Inspectors: *R. Loesch* 11/3/88
R. Loesch, Radiation Specialist date

Approved by: *M. Shanbaky* 11/3/88
M.M. Shanbaky, Chief, Facilities Radiation Protection Section date

Inspection Summary: Inspection conducted on October 3-7, 1988 (Combined
Inspection Report No. 50-220/88-31; 50-410/88-31)

Areas Inspected: Routine, unannounced Radiological Controls Inspection at Unit 2 during outage conditions. Areas reviewed included: training and qualifications, internal and external exposure controls, ALARA, and radioactive material and contamination controls.

Results: No violations were identified.



DETAILS

1.0 Individuals Contacted

1.1 Niagara Mohawk

R. Abbott	Station Superintendent - Unit 2
P. Volza	Radiation Protection Manager
E. Gordon	Supervisor, Radiological Support
D. Barcomb	Radiation Protection Supervisor - Unit 2
A. Curran	Generation Specialist
K. Murray	ALARA - Unit 2

1.2 Others

P. MacEwan New York State Electric and Gas

The above individuals attended the exit meeting on October 7, 1988.

The inspector also contacted other licensee personnel during the course of this inspection.

2.0 Purpose and Scope of Inspection

This inspection was a routine, unannounced Radiological Controls inspection associated with the current Unit 2 outage. The following areas were reviewed:

- Training and Qualifications;
- Internal and External Exposure Controls;
- ALARA; and
- Radioactive Material and Contamination Controls.

3.0 Training and Qualifications

The inspector reviewed the training and qualifications of selected contract Radiation Protection (RP) personnel. The review considered criteria contained in Technical Specifications, licensee procedures and 10 CFR 19.12, "Instructions to Workers."

Evaluation of licensee performance in the area was based on:

- discussions with cognizant personnel; and
- review of selected resumes.



Within the scope of this inspection, no violations were identified. Contract Radiation Protection technicians were found to have received adequate training and were qualified for the duties assigned.

Within the scope of this review, the inspector made the following observations:

- previous work experience, as indicated on resumes, was verified by contacting past employers;
- an entrance exam was used to identify those individuals with a weak technical background; and
- all contract technicians received additional site specific training and had demonstrated the necessary skills for the duties assigned.

4.0 Internal and External Exposure Controls

The licensee's program for internal and external exposure controls was reviewed against the applicable regulatory requirements and current industry practices.

The licensee's performance related to the above criteria was determined by:

- Review of Nonconformance Event Transmittals (NETs), and Radiological Incident Reports (RIRs);
- Review of applicable plant procedures;
- Review of Radiation Work Permits (RWPs) and Time and Exposure Logs (TELs) for radiological work;
- Observations of the placement and use of personnel dosimetry;
- Performance of independent radiation surveys by the inspector during plant tours; and
- Posting and barricading of high radiation areas.

Within the scope of this review, no violations were identified. The licensee's program for internal and external exposure controls appeared adequate to support radiological work associated with the current outage.

During this review, the inspector noted the following two examples of a licensee identified violation of Technical Specification 6.12.2:

- On August 4, 1988, the licensee found the door to the 'B' Feedwater Bay (a locked High Radiation Area) propped open with a tool cart. Occurrence Report (OR) 88-115, NET N2-88-11 and RIR N2-88-02 were issued in response to the incident. The individuals involved, Mechanical Maintenance, were



counseled on August 5. To prevent recurrence, a Training Modification Request (TMR) 88-33 was issued to include a description of the incident in future training sessions. Mechanical Maintenance received the modified training on August 12.

- On August 30, 1988, door TB-277-3 to the Condenser Bay (a locked High Radiation Area) was found unsecured. The locking mechanism was later determined to be defective. Upon investigation of the incident, it was noted by the licensee that an operator (the last individual to enter the area) had not properly signed out his keys in the Control Room. However, the licensee stated that since the Station Shift Supervisor (SSS) had authorized the operator to use the keys for the purpose of routine rounds, administrative control of the keys had been maintained. The licensee did agree, however, that the keys should have been properly signed out. An emergency work request was immediately issued for repair of the door. OR 88-129, NET N2-88-13 and RIR N2-88-03 were also issued. The operator was counseled and a department memo was issued to all operators stressing the importance of the key sign out procedure. The licensee stated that the incident will be included in future operator training.

The inspector reviewed the administrative ORs, NETs and RIRs that had been generated along with the licensee's short term and long term corrective actions. Licensee followup actions were both adequate and timely. Because the NRC would like to encourage and support licensee initiative for self identification and correction of problems, the NRC may exercise discretion in the issuance of a Notice of Violation when the following five criteria are met (10 CFR 2, Appendix C):

1. It was identified by the licensee;
2. It fits in Severity Level IV or V;
3. It was reported, if required;
4. It was or will be corrected, including measures to prevent recurrence, within a reasonable time; and
5. It was not a violation that could reasonably be expected to have been prevented by the licensee's corrective action for a previous violation.

The inspector noted, after careful review, that the above mentioned violation of Technical Specification 6.12.2 meets the above five criteria. Therefore, no Notice of Violation will be issued.

During a tour of the facility, the inspector noted poor housekeeping practices in the Unit 1 Equipment Decon Rooms. Bags of trash were piled inside the door to the large decon room and the room appeared to also serve as a storage location for various items, some with appreciable dose rates. The pump impeller from Unit 2, currently awaiting decontamination, was reading 2.5 R/hr at contact with the lead shielding and 600 mr/hr at one foot. In addition, recent routine surveys of the small decontamination room



documented measurements of the floor drains and sink bottoms in mrads/hr, indicating high internal contamination levels of the facilities. When the situation was brought to the licensee's attention, the licensee stated that they would review the need to improve housekeeping in this area.

5.0 ALARA

The inspector reviewed the adequacy and effectiveness of selected aspects of the ALARA Program. Particular emphasis was placed on the review of work planned for the outage. The review considered criteria contained in applicable licensee procedures and regulatory guidance.

Evaluation of licensee performance in the area was based upon review of ongoing work, discussions with cognizant personnel, and review of documentation.

Within the scope of this review, no violations were identified. The following observations were noted:

- The Chemistry and Rad Engineering departments are evaluating the circumstances surrounding the Hope Creek crud burst (both facilities utilize zinc injection). Since the facility has yet to experience their first refueling outage, preventing the activated zinc layer from mobilizing is of primary concern.
- Extensive wear ring modifications of the recirculating pumps, a dose intensive job, is planned for the 1989 refueling outage. The licensee is sending key individuals to LaSalle, who previously performed the modification, to take advantage of their experience. In addition, dose tracking and survey data has been obtained from LaSalle, along with a video tape of a similar modification performed at Hanford. This advanced planning should allow the licensee to effectively reduce total man-rem for this modification.
- Until recently, the Site ALARA Coordinator also had responsibilities in Internal Dosimetry, Respiratory Protection and Industrial Safety. Due to this broad scope of responsibilities along with an increasing emphasis in Industrial Safety, the licensee has initiated a reorganization in this area. The ALARA responsibilities have been broken out and an outside consultant has been brought in as a temporary Site ALARA Coordinator. His mandate is to review the overall ALARA program, from integration within the site organization, to implementing procedures. In addition, the current Unit 1 ALARA Specialist will be trained and evaluated to eventually take on the responsibilities as the new Site ALARA Coordinator. These efforts in the ALARA area will be reviewed in a future inspection.



- The Chemistry department is relaxing their requirement for the mandatory use of Seal Temp as a protective layer between bare stainless steel piping and lead blankets, which contain Polyvinyl Chlorides (PVCs). The ALARA group had expressed concerns about the additional man-rem expenditures this requirement would impose unless the precaution was absolutely necessary in preventing Intergranular Chloride Stress Corrosion. Chemistry has indicated that with the appropriate controls on the placement and removal of temporary shielding prior to startup, the use of a Seal Temp prewrap may not be required except under certain circumstances (i.e. welding on shielded piping).

6.0 Radioactive Material and Contamination Control

The inspector reviewed licensee radioactive and contaminated material controls. The review considered criteria contained in applicable licensee procedures and regulatory requirements.

Evaluation of licensee performance in this area was based upon the review of ongoing work, review of material labeling and area postings, and discussions with personnel.

Within the scope of this review, no violations were identified. Posting, labeling, and control of radioactive and contaminated material was in accordance with regulatory requirements.

Within the scope of this review, the following observation was made and discussed with licensee personnel:

- Rather than post the entire Reactor Building as a Radiation Area, the licensee in turn posts each area individually. The inspector noted during independent measurements performed on a tour of the facility, that a Reactor Building Floor Drain Line was reading approximately 5 mr/hr at one foot. Licensee procedures define a Radiation Area as any area where dose rates equal or exceed 5 mr/hr at one foot. The drain line runs vertically through multiple floors within the Reactor Building. At all levels, the drain line was posted as a Radiation Area except on the 175' and 215' elevations. The inspector brought the situation to the licensee's attention and upon verification of the dose rates, the two additional locations were properly posted. The licensee stated that the dose rates were due to migrating resin from a phase separator room flushing operation and that recent surveys had shown dose rates slightly below the posting requirement. In addition, the licensee stated that movement of resin within the pipe may be increasing the local dose rates. As a precaution, the licensee initiated a comprehensive resurvey of the floor drain line.



7.0 Exit Meeting

The inspector met with licensee representatives (denoted in Section 1 of this report) on October 7, 1988. The inspector summarized the purpose, scope and findings of the inspection. No written material was provided to the licensee.

