

U.S. NUCLEAR REGULATORY COMMISSION

Region I

Report No. 82-17

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 Nuclear Station, Unit 1

Inspection at: Scriba, New York

Inspection conducted: September 1-30, 1982

Inspectors: S. D. Hudson 10/14/82
S. D. Hudson, Senior Resident Inspector date signed

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Approved by: H. B. Kister 10/18/82
H. B. Kister, Chief, Reactor Projects date signed
Section 1C

Inspection Summary:

Inspection on September 1, 1982 to October 1, 1982 (Report No. 50-220/82-17)

Areas Inspected: Routine, onsite regular and backshift inspections by the resident inspector (87 hours). Areas inspected included: licensee action on previous inspection findings, plant tours, observation of physical security, plant maintenance, operator requal training, IE Circulars, review of LER's, and review of periodic reports.

Results: No violations were identified in the areas inspected.

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DETAILS

1. Persons Contacted

J. Aldrich, Supervisor, Operations
K. Dahlberg, Site Maintenance Superintendent
W. Drews, Technical Superintendent
J. Duell, Supervisor, Chemistry and Radiation Protection
G. Gresock, Safe End Project Manager
F. Hawksley, Supervisor, Mech. Maintenance
E. Leach, Superintendent of Chemistry and Radiation Management
T. Perkins, General Superintendent, Nuclear Generation
T. Roman, Station Superintendent
T. Wood, Supervisor, Training
K. Zollitsch, Superintendent, Training

The inspector also interviewed other licensee personnel during the course of the inspection including shift supervisors, administrative, operations, health physics, security, instrument and control, and contractor personnel.

2. Licensee Action on Previous Inspection Findings

(Closed) VIOLATION (79-20-01): Radiation exposure greater than 3 Rem. The inspector reviewed the licensee's report of the overexposure dated June 15, 1979. The report meets the requirements of 10 CFR 20.405. The inspector also verified that the licensee has instituted the Problem Exposure Report. This computer generated report automatically flags the names of individuals for whom the difference in the pocket dosimeter readings and thermoluminescent dosimeter (TLD) readings exceeds 100 mrem or the accumulative pocket dosimeter readings exceed the assigned administrative quarterly limit. A full time staff member is assigned to review these daily reports and ensure that discrepancies are promptly corrected.

(Closed) VIOLATION (79-20-03): Failure to follow Radiation Protection procedures. (a) The licensee has established a Radiation Work Permit (RWP) audit program to ensure compliance with Radiation Protection procedures. Approximately 6 to 10 RWP's are examined each day. Recently, the audit program was expanded to cover both day and night shifts. (b) The inspector examined the methods used after laundrying to measure for fixed contamination. The instruments were found to be in calibration and the method appeared to be adequate. The inspector measured the fixed contamination on several items of protective clothing that were distributed for use. All items were within the limit specified in the Radiation Protection procedure.

(Closed) INSPECTOR FOLLOWUP ITEM (82-02-03): Revise procedure for backwashing filters. The inspector reviewed OP-3, "Reactor Clean-up System," Revision 10, dated June 11, 1982 and OP-6, "Fuel Pool Filtering and Cooling System," Revision 5, dated March 22, 1982. Each has been revised to require that the filter sludge tank is pumped down prior to backwashing either the clean-up or fuel pool cooling filter. This will ensure that sufficient room is available in the filter sludge tank to accept the water from the backwashing operation.

(Closed) VIOLATION (82-09-01): Failure to maintain a fire watch. The welding in progress was immediately stopped until a fire watch was assigned. Through the review of training records of the contractors involved in welding and burning operations, the inspector determined that they have been trained in the requirements for and the duties of a fire watch. The licensee has also established a log of outstanding welding and burning permits so that members of the onsite fire department can more closely monitor these operations.

(Closed) VIOLATION (82-10-03): Failure to obtain SORC approval for recirc piping replacement Controlled Work Instructions (CWI). The inspector reviewed CWI-1399-K-S020, "NNI Interface for Controlled Documents to NMPC for Review and Approval," Revision C, dated August 18, 1982. It has been revised to require that CWI's, which control major work for the recirc piping replacement in the drywell, receive approval by the Site Operations Review Committee (SORC). The inspector also reviewed SORC meeting minutes #82-49, 82-53, 82-59, 82-63, 82-66, 82-69 and 82-71 to determine that the CWI-1399-K-1 and K-2 series have received SORC approval for the portions of each procedure that have been performed or will be performed shortly. Additional steps that may be added to the CWI's will receive SORC approval prior to implementation.

(Closed) INSPECTOR FOLLOW ITEM (82-12-02): Review licensee followup on Nonconformance Report NR# 82-33. The inspector reviewed Surveillance Report #SR 82-036 performed by the licensee's Quality Assurance Department on August 20, 1982. The licensee adequately verified that the corrective actions specified on the NR had been completed.

(Closed) VIOLATION (80-05-02): Failure to follow administrative controls for procedures. (a) The inspector verified that Standing Order #18, "Recirculation Pump Operation," was reviewed by the Site Operations Review Committee and that Standing Order #22, "Valve Monitoring System," had been cancelled and incorporated into Operating Procedure OP-1, "Nuclear Steam Supply System." (b) The inspector reviewed controlled copy #3 of the Administrative Procedures to verify that it contained the latest revision of each administrative procedure. (c) The inspector reviewed Surveillance Test ST-Q6 performed on January 26, 1979 and the attached calibration records and determined that both the pressure gauges and flowmeters were calibrated prior to use.

3. Plant Tours

(1) During the inspection period, the inspector made multiple tours of plant areas to make an independent assessment of equipment conditions, radiological conditions, safety and adherence to regulatory requirements. The following areas were among those inspected:

- Control Room
- Turbine Building
- Auxiliary Control Room
- Vital Switchgear Rooms

- Yard Areas
- Radwaste Area
- Diesel Generator Rooms
- Screen House
- Reactor Building
- Drywell

(2) The following items were observed or verified:

(a) Radiation Protection:

- Personnel monitoring was properly conducted.
- Randomly selected radiation protection instruments were calibrated and operable.
- Area surveys were properly conducted and the Radiation Work Permits were appropriate for the as-found conditions.
- Radiation Work Permit requirements were being followed.
- The inspector examined the Person-Rem Summary Reports dated September 16, 1982 and September 29, 1982 to verify that the licensee is monitoring personnel exposure and that it is less than the current estimated exposure during the recirculation replacement.

(b) Fire Protection:

- Randomly selected fire extinguishers were accessible and inspected on schedule.
- Fire doors were unobstructed and in their proper position.
- Ignition sources and combustible materials were controlled in accordance with the licensee's approved procedures.
- Fire watches were posted during periods when smoke detection equipment was out of service.

(c) Equipment Controls:

- Jumpers and equipment tagouts did not conflict with Technical Specification requirements.
- The inspector independently verified that the following tagouts had been properly conducted by observing the position of breaks and/or valves:

BMU #68855 on the Fire Detection System

- The inspector independently verified that BMU #68850 and 68861 had been properly cleared and the Fire Detection System for the Emergency Diesel Generators was returned to its normal standby condition.

(d) Radioactive Waste System Controls:

- The inspector examined radioactive waste shipment #NMP-HW-0982-3 prior to its departure from the site. The shipment consisted of compacted contaminated trash and scrap recirculation piping. The shipment was in an exclusive-use van and the wooden boxes inside the van appeared to be adequately braced. The van was properly labelled. The inspector reviewed the Radioactive Shipment Record and Radiation Survey Log #68922 and determined that applicable radiation and contamination limits were not exceeded.

(e) Review of Logs and Operating Records:

The inspector reviewed the following logs and instructions for the period September 1, 1982 through October 1, 1982:

- Control Room Log Book
- Station Shift Supervisor's Log Book
- Station Shift Supervisor's Instructions
- Safe End Project Log

The logs and instructions were reviewed to:

- Obtain information on plant problems and operation;
- Detect changes and trends in performance;
- Detect possible conflicts with technical specifications or regulatory requirements;
- Determine that records are being maintained and reviewed as required, and
- Determine that the reporting requirements of technical specifications are met.

No violations were identified.

4. Observation of Physical Security

The inspector made observations and verified during regular and off-shift hours that selected aspects of the plants physical security system were in accordance with regulatory requirements, physical security plan and approved procedures. The following observations relating to the physical security plan were made:

- The security force on both regular and off-shifts were properly manned and appeared capable of performing their assigned functions.
- Protected area barriers were intact - gates and doors closed and locked if not attended.
- Isolation zones were free of visual obstructions and objects that could aid an intruder in penetrating the protected area.
- Persons and packages were checked prior to entry into the protected area.
- Vehicles were properly authorized, searched and escorted or controlled within the protected area.
- Compensatory measures were implemented during periods of equipment failure.
- Persons within the protected area displayed photo-identification badges, persons in vital areas were properly authorized, and persons requiring an escort were properly escorted.

No violations were identified.

5. Plant Maintenance

The inspector examined portions of various safety related maintenance activities. Through direct observation and review of records, he determined that:

- These activities did not violate the limiting conditions for operation.
- Required administrative approvals and tagouts were obtained prior to initiating the work.
- Approved procedures were used or the activity was within the "skills of the trade."
- Appropriate radiological controls were properly implemented.
- Equipment was properly tested prior to returning it to service.
- Quality Control hold points were observed.

- Ignition/fire prevention controls are appropriate.

During this inspection period, the following maintenance activities were examined:

- Dye penetrant examination of #14 recirc suction safe end to nozzle weld and the inside diameter of #15 recirc suction nozzle.
- Safe end to nozzle cut on #14 recirc discharge nozzle.
- Weld prep cut on #14 recirc discharge nozzle.
- Macro etching measurements on #13 recirc discharge nozzle.
- Installation of shielding in #15 recirc discharge nozzle.

No violations were identified.

6. Licensee Action on IE Circulars

The inspector reviewed the IE Circulars listed below to verify that the Circulars were received by licensee management, that a review for applicability was performed, and that appropriate corrective action has been taken or is planned.

- IEC 80-04, "Securing of Threaded Locking Devices on Safety-Related Devices." The licensee's review indicated three of the components addressed in this Circular are not used at Nine Mile Point, Unit 1. The licensee has requested the manufacturer supply the torque value for the stem nut used on the scram inlet and outlet valves.
- IEC 80-05, "Emergency Diesel Generator Lubricating Oil Addition and Onsite Supply." The inspector reviewed OP-45, "Emergency Diesel Generators," Revision 6, dated June 26, 1981 to verify that the procedure included the steps necessary for adding lube oil to the engine while it is running. The capacity of the lube oil sump (350 gallons) is adequate to meet the expected consumption at rated load.
- IEC 80-11, "Emergency Diesel Generator Lube Oil Cooler Failure." The licensee stated the corrosion inhibitor used in the cooling water system is the type recommended by the engine manufacturer. No further action is required.
- IEC 80-12, "Valve Shaft-to-Actuators Keys May Fall Out of Place." The licensee stated that all safety-related Bettis Robot Aim actuators are mounted in the vertical axis such that the actuator key will not accidentally fall out of place. No further action is required.

- IEC 80-21, "Regulation of Refueling Crews." The inspector reviewed Fuel Handling Procedure FHP-27, "Whole Core Off Load-Reload," Revision 5, and verified that the requirement for a Senior Reactor Operator to supervise all fuel moves over the vessel is specified in the licensee's procedures.
- IEC 80-23, "Potential Defects in Beloit Power Systems Emergency Generators." The licensee's review indicated that Beloit Power Systems Emergency Generators are not used at Nine Mile Point, Unit 1. No further action is required.
- IEC 81-02, "Performance of NRC-Licensed Individuals While on Duty." The inspector reviewed Administrative Procedure APN-2A, "Conduct of Operations and Composition and Responsibilities of Station or Unit Organization," Revision 6, dated June 7, 1982 and verified that the recommended actions of this Circular have been incorporated into the licensee's procedure.
- IEC 81-08, "Foundation Materials." Applicability to construction permit holders only.
- IEC 81-05, "Self-Aligning Rod End Bushings for Pipe Supports." The inspector verified that the requirements for visually inspecting all safety-related hydraulic snubbers are already addressed in the licensee's Technical Specifications. This inspection includes the proper linkage to the piping and anchor point.
- IEC 81-09, "Containment Effluent Water that Bypasses Radioactivity Monitor." The licensee's review indicated that a potential leakage path existed in the event of a tube failure in a Containment Spray heat exchanger and leakage past a check valve on the discharge of the Containment Spray Raw Water pump. The inspector reviewed Operating Procedure OP-14, "Containment Spray System," Revision 13, dated July 1, 1982 and that the procedure specified the actions necessary to isolate the Containment Spray heat exchanger in the event of a tube failure.

The above Circulars are closed.

The inspector also asked about the status of the remaining outstanding 1980 Circulars. The Circulars listed below remain open pending completion of engineering review by the licensee.

- IEC-80-02, "Protection from Toxic Gas Hazards"
- IEC 80-08, "RPS Response Time"
- IEC 80-09, "Plant Internal Communication Systems"
- IEC 80-10, "Failure to Maintain Environmental Qualification of Equipment"

- IEC 80-14, "Radioactive Contamination of Plant Demineralized Water System"
- IEC 80-18, "10 CFR 50.59 Safety Evaluations"
- IEC 80-22, "Confirmation of Employee Qualifications"

7. Operator Requalification Training Program

Program Review

The inspector reviewed the licensee's training requirements of Administrative Procedure APN-10B, "Licensed NRC Operator Retraining," Revision 3, dated June 24, 1982. 10 CFR 55 requires that if a licensee has not been actively performing the functions of an operator or senior operator for a period of four months or longer, he shall, prior to resuming licensed activities, demonstrate to the Commission that his knowledge and understanding of facility operation and administration are satisfactory. The licensee's program addresses the requirements necessary to demonstrate this knowledge but does not specify what actions are necessary to "actively perform the function of an operator or senior operator." Specifically, the inspector questioned the active involvement in Unit 1 plant operations of 8 supervisors assigned to Unit 2 who are licensed as senior reactor operators (SRO) for Unit 1 and 6 operators assigned to Unit 2 and a corporate office staff engineer who are licensed as reactor operators (RO) for Unit 1. This item remains unresolved pending review by the Office of Nuclear Reactor Regulation. (50-220/82-17-01)

The training program requires an annual oral examination for each RO and SRO by the Station Superintendent or his appointed representative. For the 1981 oral exam, 12 individuals licensed as SRO's were designated to administer the oral examination for the Station Superintendent. However, these 12 individuals were never given an oral examination. Similarly, 2 individuals prepared and 3 individuals reviewed the annual written exam. In accordance with the licensee's procedures, they were therefore exempt from taking the written exam. APN-10B states that those licensed staff members who are actively engaged in the implementation of the requalification program and other training programs will not be required to complete those sections of the program for which they serve an active function. The inspector questioned the use of these exemptions for annual oral and written examinations. This item remains unresolved pending review by the Office of Nuclear Reactor Regulation. (50-220/82-17-02)

Program Implementation

To verify implementation of the program, the inspector reviewed the schedule of required lectures and simulator training for 1982. The inspector reviewed lesson plans in areas of reactor vessel and internals, recirculation system, and thermodynamics to ensure that they adequately describe the scope and depth of the lectures.

Through discussions with licensee personnel, the inspector determined that 3 individuals had received less than 80% in one section of the annual examination. The inspector reviewed the training records of 2 of the individuals to determine that they had completed a requalification program and passed another written examination addressing the area of weakness prior to resuming licensed duties.

The inspector reviewed the training records of one SRO and RO to verify that they contained the following:

- A copy of the most recent annual written examination and the individuals responses.
- Documentation of attendance at all required lectures.
- Documentation of the required control manipulations.
- The results of the performance evaluation.

No violations were identified.

8. Review of Licensee Event Reports (LER's)

LER's submitted to NRC, Region I were reviewed to verify that the details were clearly reported, including accuracy of the description of the cause and adequacy of the corrective action. The inspector determined whether further information was required from the licensee, whether generic implications were indicated, and whether the event warranted onsite followup. The following LER's were reviewed:

<u>LER No.</u>	<u>Event Date</u>	<u>Subject</u>
82-12	August 31, 1982	Failure to meet detection sensitivity limit for fish samples

No violations were identified.

9. Review of Periodic Reports

The following report was reviewed to determine that the reporting requirements of Technical Specifications are being met and that plant operations are accurately reported:

- Monthly Operating Report, August 1982

No violations were identified.

10. Unresolved Items

An unresolved item is an item which requires further review to determine its acceptability. Paragraph 7 contains two unresolved items.

11. Exit Interview

At periodic intervals during the course of the inspection, meetings were held with senior station management to discuss the inspection scope and findings.