

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-220/86-24

Docket No. 50-220

License No. DPR-63

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: November 3-7, 1986

Inspectors: *P. Bissett* 12/5/86  
P. Bissett, Reactor Engineer date

*D. Wallace* 12/5/86  
D. Wallace, Reactor Engineer date

Approved by: *J. Johnson* 12/5/86  
for J. Johnson, Chief, Operational Programs date  
Section, OB, DRS

Inspection Summary: Routine unannounced inspection on November 3-7, 1986  
(Report No. 50-220/86-24)

Areas Inspected: Routine unannounced inspection by two region-based inspectors of the maintenance program and associated maintenance activities.

Results: No violations were identified.

## DETAILS

### 1. Persons Contacted

#### Niagara Mohawk Personnel

*Barrett, H.T.,	Assistant Operations Superintendent
Benzing, J.,	Assistant Nuclear Maintenance Supervisor
*Dahlberg, K.A.,	Site Superintendent Maintenance
*Falise, M.J.	Superintendent Mechanical Maintenance
Longo, R.,	Supervisor Mechanical Maintenance
Merritt, M.	Mechanical Generation Engineer
*Roman, T.,	Station Superintendent Unit-1
*Spadafore, J.R.	Acting Instrumentation and Controls Superintendent
*Sweet, K.,	Electrical Maintenance Superintendent

#### United States Nuclear Regulatory Commission

*Cook, W.,	Senior Resident Inspector
*Marschall, C.S.	Resident Inspector

The inspectors also held discussions with other licensee employees during the course of the inspection.

\*Denotes those present at the exit meeting on November 7, 1986.

### 2.0 Licensee Action On Previous Inspection Findings

(Closed) Inspector Follow-Up Item 84-11-01: Main Steam Relief Pilot Valves require mechanical cleaning of the guide openings, in place of vacuum cleaning. The licensee has revised procedure NI-NMP-3.3, "Removal, Overhaul, and Replacement of Main Steam Electrometric Relief Valves and Associated Pilot Valves", to specify mechanical cleaning of the guide openings. Based upon this review, this item is closed.

(Closed) Inspector Follow-Up Item 83-30-01: Licensee to revise procedure NI-MMP-6.4, "Overhaul of CRD Hydraulic Control Unit 1", to reference General Electric Service Manual GEI-92807A which replaced the previous manual (GEI-92806) in its entirety. The inspector verified that the procedure had been updated to designate the required vendor service manual. Based upon this review, this item is closed.

(Closed) Inspector Followup Item (84-19-01): Operations Department lubrication schedule did not specify Mobil DTE Extra Heavy Oil in the upper reservoir of the core spray pump motor, as specified by the manufacturer and listed in the licensee's Lubrication Manual. The licensee subsequently revised the lubrication schedule to specify Mobil DTE Extra Heavy Oil. The inspector reviewed the licensee's lubrication schedule to verify that the necessary schedule change had been completed. Based upon this review, this item is closed.

### 3. Maintenance Organization

Maintenance activities are controlled and conducted by the Maintenance and Instrument and Control (I&C) departments at Nine Mile Point, Unit 1 (NMP-1). The mechanical and electrical groups make up the Maintenance Department with the I&C Department constituting a separate entity. Both departments ultimately report to the General Superintendent, Nuclear who has the overall responsibility for the conduct of maintenance activities at the site.

### 4. Maintenance Activities

#### 4.1 Administrative Control

Administrative controls were reviewed to evaluate the licensee's program for implementing requirements associated with preventive and corrective safety-related maintenance activities. The objectives were to assure that the licensee programs were consistent with the Technical Specifications, Regulatory Guide 1.33, ANSI N18.7 and Appendix B of 10 CFR 50. Documents reviewed are listed in Appendix 1.

#### 4.2 Program Review/Implementation

The inspector held discussions with Maintenance and I&C Department personnel to evaluate the controls in place used to identify, schedule, track, perform and document both preventive and corrective maintenance activities. Preventive maintenance (PM) at NMP-1 is controlled by Administrative Procedure 8.1, "Preventive Maintenance". The procedure designates when a Preventive Maintenance Work Request (PMWR) is needed, and when the preventive maintenance procedure is, in itself, sufficient to control the work. Corrective Maintenance (CM) is controlled by Administrative Procedure 5.0, "Procedure for Repair," which gives directions for utilizing the Work Request Form (WR) which necessary for all corrective maintenance. Maintenance information from both PM and CM is entered into the Work Tracking System (WTS) which is used for trend identification.

The inspector reviewed the records of randomly selected maintenance activities performed on safety-related equipment (listed in Appendix I) to verify the following.

- ° Required administrative approvals were obtained prior to initiation of work.
- ° Appropriate approved procedures, instructions and drawings were used.
- ° Appropriate post maintenance testing was completed prior to returning equipment to operation.
- ° Hold points were identified and completed.

- Qualified test equipment and tools were used and appropriately identified.
- Procedures and appropriate data sheets were properly identified
- Acceptance criteria were met.
- Records were assembled, stored, and retrievable as part of the maintenance history
- Appropriate reviews were completed as required.

#### Observed Maintenance Activities

The inspector observed safety-related preventive maintenance on Reactor Building Closed-Loop Cooling Heat Exchanger No. 70-13. The PM procedure was verified to contain the latest revision, and had the proper prerequisites signed off by the lead mechanic. The inspector verified that the mark-up used to isolate the heat exchanger was sufficient for the work being done (clean and inspect) and was in accordance with the PM procedure. The inspector observed that the radiological control required by Radiation Work Request No. 3509 were adhered to by the mechanics, and that the general area was free of debris. The mechanic in charge of the work was thoroughly familiar with the PM procedure, and provided sufficient oversight for the secondary mechanic on the job. The inspector verified that adequate post maintenance testing was specified and was to be documented in the procedure by sign off.

#### 4.3 Findings

The inspector observed preparation for Work Request No. 105575 which would repair a nitrogen leak at the foot valve for CRD Accumulator No. 22-15. Work was to be accomplished per procedure NI-MMP-6.4, Rev. 0, "Overhaul of Hydraulic Control Units," and General Electric Service Manual 6EI-92807A. The inspector reviewed the GE manual and the Materials Management System printout for the foot valve to verify that proper replacement parts and tools were used by the maintenance personnel. The inspector observed that a special packing tool required by the station procedure and the GE manual was not available at the work site for use by the maintenance mechanics. In response to the inspector's question regarding the unavailability of the special packing tool, the licensee representatives stated that although, the tool was required by procedures and the GE manual, it had not been commonly used for maintenance activities. Also, the station procedure required Mark-up (tagging out) of the equipment before and during maintenance and the station practice was to utilize a station operator at the work site in place of the "Mark-up" (tag out) of the equipment; this action was not authorized by this procedure.

The inspector expressed concern over the station practice of performing maintenance activities without the specified tool and unauthorized use of operators in place of equipment "Mark-up" (tag out).

The licensee subsequently revised the procedure to reflect the station practice. The licensee's practice of carrying out maintenance activities that do not conform to the approved procedure is a concern, especially, in view of prior NRC findings in this area. This item is unresolved pending further inspection.  
(50-270/86-24-01)

#### 5. Measuring And Test Equipment

The inspector verified that a random sampling of mechanical instruments were controlled and calibrated per Administrative Procedure 8.4. These instruments included:

Snap On Torquewrench	22-1008, Calib	10/24/86,	Due 4/24/87
Snap On Torquewrench	22-163, Calib	10/21/85,	Due 4/21/87
STARRET Vernier	011001, Calib	03/03/86,	Due 3/07/87
STARRETT Test Indicator	03-720, Calib	09/11/86,	Due 9/11/87
Webber Gage Blocks	06/003, Calib	07/18/83,	Due 7/18/88

The licensee maintains a folder for each instrument that contains applicable calibration records. Each of the folder for the instruments listed above was verified to be complete and up to date. The licensee also maintains a binder entitled "Calibrated Tool Index Log" which has a listing of all calibrated instruments pertaining to mechanical maintenance and the status of each. The inspector checked to see if instruments found in a drawer designated for defective tools were indicated as defective in the Index Log. Several of these defective instruments were not recorded in the log but were shown to be defective in the "Inactive File" kept with the individual instrument folder. The inspector raised a concern with the Site Maintenance Superintendent of being consistent in keeping the Index Log up to date. The Site Maintenance Superintendent agreed with the concern and would stress consistency in keeping the log up to date with his staff.

The inspectors had no further questions.

No violations were identified.

#### 6. Quality Assurance/Quality Control (QA/QC) Interface

QA department personnel were interviewed to ascertain the extent of their involvement with maintenance activities. QA/QC is represented on site in addition to the corporate QA group at Syracuse, thus enabling this independent group to actively monitor daily station activities. QA

personnel routinely review maintenance work requests prior to initiation of work and upon final completion of the work activity. In addition to QC's involvement at designated hold points, QA also performs surveillances of selected maintenance activities. The inspector's review of completed surveillances conducted during 1986 indicates that QA is actively involved in the performance of electrical, mechanical and I&C maintenance activities. The inspector noted that surveillances performed were thorough and covered such areas as control rod drive overhauls, calibrations of measuring and test equipment, and limiter torque inspections.

The inspector was also informed of a QA reorganization that occurred on November 1, 1986. A Quality Program Manager's position was created to essentially coordinate the overall efforts of the Quality Control, Quality Engineering and Operations Surveillance Groups.

The Quality Program Manager reports directly to the Nuclear QA Operations Manager. A similar position was also created for Unit 2. The inspectors had no further questions in this area.

7. Root Cause Evaluation Program

The inspector reviewed procedure S-SUP-1, Root Cause Evaluation Program. The program is intended to ensure that adequate root cause analysis is performed for Licensee Event Reports, Violations and other significant incidents. The Manager of Fuels and Plant Productivity will assign an Incident Analysis Coordinator (IAC) to review all Problem Reports, Occurrence Reports and Work Request. The IAC will determine if a Root Cause Analysis is necessary and assign a cognizant group to conduct an evaluation. The IAC ensures the review is complete and then subsequently initiates a Site Operations Review Committee (SORC) review to close the item. This SORC review encompasses the identified root cause, the frequency of previous occurrences, and any recommended corrective actions.

No concerns were identified in this area.

8. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable, a violation. An unresolved item is discussed in paragraph 4.3.

9. Management Meeting

The inspector met with licensee representatives (denoted in paragraph 1) on November 7, 1986 to summarize the purpose, scope and findings of the inspection.

At no time during the inspection was written material provided to the licensee by the inspector.

APPENDIX I  
DOCUMENTS REVIEWED

Procedures

- NI-MMP-6.4, Overhaul of CRD Hydraulic Control Unit 1, Rev 1
- NI-PI-2.0, Surveillance Test/Preventive Maintenance Scheduling and Tracking Program (SURTEST), DRAFT
- General Electric Service Manual GEI-92807A
- S-Sup-1, Root Cause Analysis Procedure, Rev. 0
- NI-MMP-3.3; Removal Overhaul and Replacement of Main Steam Electrometric Relief Valves and Associated Pilot Valves, Rev. 5
- NI-MPM-SAL, Instrument Air Compressor Semi-Annual Inspection, Rev. 3
- NI-MPM-C16, PM FOR Main Steam Outside Isolation Valve Air Operators, Rev. 0
- NI-MPM-CS, Inspection of Electric Driven Feedwater Pumps, Rev. 3
- NI-MPM-C20, Preventive Maintenance for RBCLC Water Heat Exchangers, Rev. 0

Work Request Packages

- WR 10554 - Feedwater isolation (FW) valve repair
- WR 10559 - FW Pump repair
- WR 011363 - FW Check valve leak
- WR 014116 - Snubber rebuild
- WR 10059 - Reactor Vessel Level repair
- WR 014235 - Foot Valve Repair of CRD Accumulator 42-11

Other work request packages - WR-10100, 10778, 11550, 11560, 13658, 14445, 16296, 10444.

QA Surveillances

- IC-SR-86.20036 - Type B Leak Rate Test for Drywell Flange Leak
- IC-SR-75.20079 - Primary Containment Isolation Leak Rate Tests
- IC-SR-86.20240 - Source Range Mount or Instrument Surveillance
- MP-SR-86.2005 - Calibration of Snap-On Torque Wrench
- MP-SR-86.20064 - Snubber Visual Inspection
- MP-SR-86.20097 - Snubber Functional Test
- MP-SR-86.20114 - Limitorque Valve and Breaker Inspection of AC Motor Type Limitorque
- MP-SR-86.20121 - Overhaul of Control Rod Drive