U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-220/84-16

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: July 30 - August 31, 1984

Inspectors: _____ for _____ 9/18/84
S. D. Hudson, Senior Resident Inspector Date

_____ _____

_____ _____

Approved by: _____ 9/19/84
S. J. Collins, Chief, Reactor Project Date
Section No. 2C DPRP

Inspection Summary:

Inspection on July 30 to August 31, 1984 (Report No. 50-220/84-_)

Areas Inspected: Routine, inspection by the resident inspector (53 hours). Areas inspected included: licensee action on previous inspection findings, operational safety verification, physical security, plant tours, surveillance testing, safety system verification.

Results: No violations were identified in the areas examined.

DETAILS

1. Persons Contacted

J. Aldrich, Supervisor, Operations
W. Connolly, Supervisor, Q.A. Operations
K. Dahlberg, Site Maintenance Superintendent
W. Drews, Technical Superintendent
F. Hawksley, Inservice Inspection Superintendent
E. Leach, Superintendent of Chemistry and Radiation Management
T. Perkins, General Superintendent, Nuclear Generation
R. Raymond, Supervisor, Fire Protection
T. Roman, Station Superintendent
B. Taylor, Supervisor, Instrument and Control

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. Summary of Plant Activities

The plant operated at nearly full power throughout the inspection period. Slight power reductions were occasionally required to maintain condenser vacuum due to high lake temperature.

3. Licensee Action on Previous Inspection Findings

(Closed) INSPECTOR FOLLOWUP ITEM (84-02-03): Licensee to replace Emergency Ventilation Rubber Couplings. The inspector examined both Emergency Ventilation fans and verified that each of the rubber couplings has been replaced.

(Closed) VIOLATION (83-09-02): Failure to control tools over the open reactor vessel. The inspector reviewed Maintenance Procedure M.P.-1.2, "Removal of Reactor Vessel Head", Revision 6 and verified that a precaution had been added to the procedure to ensure that the tape used to install the vessel flange protector is included on the tool inventory list. As the results of a second violation in April 1984, the licensee revised Fuel Handling Procedure FHP-2A, "Reactor Building Clean Room Work and Tool Control" to strengthen the administrative controls in this area. The inspector verified that they were properly implemented during the recent refueling outage.

(Closed) VIOLATION (79-21-07): Revise valve line-up. The inspector reviewed Operating Procedure OP-14, "Containment Spray System", Revision 21 and verified that the eight containment spray drain valves (CTN-SP-743 to 750) have been added to the valve check-off list. The inspector also noted that the licensee has completed a comprehensive review of each operating procedure to ensure its accuracy and a field check including

valve line-up completeness and labeling of all valves listed on the valve check-off lists. These measures appear to be adequate to prevent recurrence of this type of violation.

(Closed) INSPECTOR FOLLOWUP ITEM (84-02-02): Evaluate the need for repair of stub tubes. During the 1984 refueling outage, the licensee discovered leaks near the control rod drive (CRD) stub tube to housing weld on several CRDs. The licensee proposed to repair the leaks by rolling the CRD housing into the reactor vessel head. The Office of Nuclear Reactor Regulation evaluated the effects of the cracking on the stub tubes and the repair method used. In their Safety Evaluation dated June 29, 1984, they concluded that rolling was an adequate repair technique and that the plant could be operated safely.

(Open) INSPECTOR FOLLOWUP ITEM (81-01-01): Licensee to control the use of "information" tags. Operating precautions are often placed on control room panels as a warning or aid to the control room operators. They are usually small white information tags and are not used to take the place of the equipment mark-up system when equipment or personnel safety is involved.

The licensee is in the process of establishing formal administrative controls for the use of those operator aids.

The inspector reviewed Standing Order 32, "Control of Operator Aids". This procedure is in draft form. When issued it will require formal approval before an information tag is issued and periodic review of all outstanding tags. The licensee expects to have the system fully implemented by December 31, 1984.

(Closed) CIRCULAR (IEC 79-04): Loose Locking Nut on Limitorque Valve Operators. The inspector reviewed Maintenance Procedure EMP-44.18, "Limitorque Dissassembly and Assembly of Type SMB and SB Series", Revision 1 and verified that the requirements for staking of the stem locking nut have been included.

(Closed) CIRCULAR (IEC 79-05): Moisture Leakage in Stranded Wire Conductors. The inspector reviewed a licensee memo dated February 11, 1984 on this subject and determined that the licensee is addressing this concern as part of his program for environmental qualification of electrical equipment.

(Closed) BULLETIN (IEB 79-12): Short Period Scrams at BWR Facilities. The inspector reviewed Operating Procedures OP-43, "Startup and Shutdown Procedure", Revision 25 and verified that it contained the requirement for single notch step withdrawal of control rods between notches 00 to 30. This requirement may be bypassed at the advice of the reactor analyst under special core conditions but must be reinstated well before the estimated critical position is reached.

4. Operational Safety Verification

a. Control Room Observation

Routinely throughout the inspection period, the inspector independently verified plant parameters and equipment availability of engineered safeguard features. The following items were observed:

-- Proper control room manning and access control;

-- Adherence to approved procedures for ongoing activities;

-- Proper valve and breaker alignment of safety systems and emergency power sources;

-- Reactor control panel instrumentation and recorder traces;

-- Reactor protection system instruments to determine that the required channels were operable;

-- Stack gas monitor recorder traces;

-- Core thermal limits;

-- Shift turnover.

b. Review of Logs and Operating Records

The inspector reviewed the following logs and instructions for the period July 30 to August 31, 1984:

-- Control Room Log Book

-- Station Shift Supervisor's Log Book

-- Station Shift Supervisor's Instructions

-- Reactor Operating Log Book

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;

-- Assess the effectiveness of the communications provided by the logs and instructions; and

-- Determine that the reporting requirements of Technical Specifications were met.

No violations were identified.

5. Observation of Physical Security

The inspector made observations to verify that selected aspects of the plant's physical security system were in accordance with regulatory requirements, physical security plan and approved procedures. The following observations relating to physical security were made:

-- The security force was 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 ares.

-- 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.

-- Persons within the protected area displayed photo badges, persons in vital areas were authorized, and persons requiring an escort were properly escorted.

-- Compensatory measures were implemented during periods of equipment failure.

On August 13, the inspector noticed a security picture badge inside an unoccupied, locked car in the licensees parking lot. The inspector informed the security department who contacted the individual and requested that the badge be returned to security.

Inspector followup determined that the individual had lost the badge while working onsite and had been issued a new badge about 2 weeks earlier. The lost badge was found and returned to the individual but he failed to promptly return it to security. The inspector verified that the old badge had been removed from the security computer therefore, no unauthorized access to the site was possible. The individual was also reminded of proper procedures for handling lost badges.

No violations were identified.

6. Plant Tours

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

-- Turbine Building

-- Auxiliary Control Room

-- Vital Switchgear Rooms

-- Radwaste Area

-- Diesel Generator Rooms

-- Reactor Building

The following items were observed or verified:

a. Radiation Protection:

-- Personnel monitoring was properly conducted.

-- Randomly selected radiation protection instruments were calibrated and operable.

-- On August 3, the inspector noticed that the frisker in the change area at Reactor Building elevation 237' was indicating a higher than normal background level (approx. 800 cpm). The inspector informed the Radiation Protection foreman who had the area examined by a technician. A piece of contaminated protection clothing was found near the detector. When it was removed, the background reading returned to normal. This instrument is used to detect gross personnel contamination after working in a contaminated areas. As all personnel are required to make a final check for contamination with another frisker prior to leaving the restricted area, the inspector had no further questions in this area.

-- Radiation Work Permit requirements were being followed.

-- Area surveys were properly conducted and the Radiation Work Permits were appropriate for the as-found conditions.

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.

-- Appropriate fire watches or fire patrols were stationed when equipment was out of service.

c. Equipment Controls:

-- Jumper and equipment mark-ups did not conflict with Technical Specification requirments.

-- Conditions requiring the use of jumpers received prompt licensee attention.

-- Administrative controls for the use of jumpers and equipment mark-ups were properly implemented.

d. Vital Instrumentation

-- Selected instruments appeared functional and demonstrated parameters within Technical Specification Limiting Conditions for Operation.

e. Radioactive Waste System Controls:

-- Gaseous releases were monitored and recorded.

-- No unexpected gaseous releases occurred.

f. Housekeeping:

-- Plant housekeeping and cleanliness were in accordance with approved licensee programs.

7. Surveillance Testing

The inspector witnessed the performance of selected surveillance tests to verify that:

-- Surveillance procedures conform to technical specification requirements and had been properly approved.

-- Test instrumentation was calibrated.

-- Limiting conditions for operations for removing equipment from service was met.

-- Testing was performed by qualified personnel.

-- Surveillance schedule was met.

-- Test results met technical specification requirements.

-- Appropriate corrective action was initiated, if necessary.

-- Equipment was properly restored to service following the test.

The following tests were included in this review:

-- ISP-RPS-TP, "Reactor Protection System - Auto Trip System Instrument Channel Test," Revision 11 performed on main steam line break detection instruments 01-26 G&H on August 17, 1984.

-- ICP-48, "Control Rod Drive Accumulator Pressure and Level," Revision 5 performed on CRD accumulator 10-43 on August 17, 1984.

-- ISP-02-13, "Turbine Anticipatory Trip - Bypass Reactor Scram Instrument Channel Calibration," Revision 6 performed on instruments 02-13 C and D on August 31, 1984.

No violations were identified.

8. Safety System Operability Verification

On a sampling basis, the inspector directly examined selected safety system trains to verify that the systems were properly aligned in the standby mode. This examination included:

-- Verification that each accessible valve in the flow path was in the correct position by either visual observation of the valve or remote position indication.

-- Verification that power supply breakers were aligned for components that must actuate upon receipt of an initiation signal.

-- Visual inspection of the major components for leakage, proper lubrication, cooling water supply, and other general conditions that might prevent fulfillment of their functional requirements.

-- Verification by observation that instrumentation essential to system actuation or performance was operational.

During this inspection period, the following systems were examined:

-- Containment Spray System

-- Liquid Poison System

-- Emergency Diesel Generators

No violations were identified.

9. Maintenance Activities

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 implemented.

-- Quality control inspections were conducted.

-- Post maintenance testing was performed.

During this inspection period, the following activities were examined:

-- Disassembly of CRD #71-361.

-- Overhaul of Core Spray Topping Pump #12.

9. Exit Interview

At periodic intervals throughout the reporting period, the inspector met with senior management to discuss the inspection scope and findings.