



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION I
 631 PARK AVENUE
 KING OF PRUSSIA, PENNSYLVANIA 19406

IE FILE COPY

Docket No. 50-220

JUN 04 1981

Niagara Mohawk Power Corporation
 ATTN: Mr. T. E. Lempges
 Vice President
 Nuclear Generation
 300 Erie Boulevard West
 Syracuse, New York 13202



Gentlemen:

Subject: Inspection No. 50-220/81-03

This refers to the routine, safety inspection conducted by Mr. S. Hudson of this office on February 17, 1981 to March 31, 1981, at Nine Mile Point, Unit 1, Scriba, New York of activities authorized by NRC License No. DPR-63 and to the discussions of our findings held by Mr. S. Hudson with Mr. T. Roman of your staff at the conclusion of the inspection.

Areas examined during this inspection are described in the Office of Inspection and Enforcement Inspection Report which is enclosed with this letter. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, measurements made by the inspector, and observations by the inspector.

Within the scope of this inspection, no items of noncompliance were observed.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractors) believe to be exempt from disclosure under 10 CFR 9.5(a)(4), it is necessary that you (a) notify this office by telephone within ten (10) days from the date of this letter of your intention to file a request for withholding; and (b) submit within 25 days from the date of this letter a written application to this office to withhold such information. Consistent with section 2.790(b)(1), any such application must be accompanied by an affidavit executed by the owner of the information which identifies the document or part sought to be withheld, and which contains a full statement of the reasons on the basis which it is claimed that the information should be withheld from public disclosure. This section further requires the statement to address with specificity the considerations listed in 10 CFR 2.790(b)(4). The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit.

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If we do not hear from you in this regard within the specified periods noted above, the report will be placed in the Public Document Room. The telephone notification of your intent to request withholding, or any request for an extension of the 10 day period which you believe necessary, should be made to the Supervisor, Files, Mail and Records, USNRC Region I, at (215) 337-5223.

No reply to this letter is required; however, if you should have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,



Eldon J. Brunner, Chief,
Projects Branch #1, Division of
Resident and Project Inspection

Enclosure:
Office of Inspection and Enforcement Inspection
Report Number 50-220/81-03

cc w/encl:
T. Perkins, General Superintendent, Nuclear Generation
T. Roman, Station Superintendent
R. Abbott, Operations Supervisor
E. B. Thomas, Jr., Esquire



U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

DCN 50220-810303
50220-810312

Region I

Report No. 50-220/81-03
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: February 17, 1981 - March 31, 1981

Inspectors: S. D. Hudson 5/27/81
S. D. Hudson, Resident Inspector date signed

_____ date signed

_____ date signed

Approved by: H. B. Kister, Chief, Reactor Projects 6/2/81
Section 1C date signed

Inspection Summary:

Inspection on February 17 to March 31, 1981 (Inspection Report No. 50-220/81-03)

Areas Inspected: Routine, onsite, regular and backshift inspections by the resident inspector (119 hours). Areas inspected included: action taken on previous inspection findings, operational safety verification, physical security, plant tours, follow-up on significant events, surveillance testing, plant maintenance, refueling operations, licensee action on TMI Action Plan items, and review of document transmittal verification procedures.

Results: No items of noncompliance were identified.



DETAILS

1. Persons Contacted

R. Abbott, Supervisor, Operations
W. D'Angelo, Manager, Generation Engineering
W. Drews, Superintendent of Technical Services
J. Duell, Supervisor, Chemistry & Radiation Protection
P. Harrison, Senior Technical Assistant
E. Leach, Superintendent of Chemistry & Radiation Management
C. Mangan, Manager, Staff Engineering
T. Perkins, General Superintendent, Nuclear Generation
T. Roman, Station Superintendent
M. Silliman, Acting General Superintendent, Nuclear Generation
B. Taylor, Supervisor, Instrument and Control
S. Wilczek, Jr., Lead Nuclear Engineer

The inspector also interviewed and talked with 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 Actions on Previous Inspection Findings

(Closed) UNRESOLVED ITEM (80-02-01): The inspector verified Special Procedure No. N1-SOP-29, "Pipe Break Inside Drywell," Revision 1, dated March 11, 1980 and Special Procedure No. N1-SOP-30, "Pipe Break Outside Primary Containment," Revision 1, dated March 11, 1980 had been revised to include a caution to depressurize the reactor if isolated when suppression pool temperature reached 120°F. This item is considered resolved.

3. 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 against a plant specific checklist to ensure compliance with the limiting conditions for operation (LCO's).

The plant specific checklist has been developed to assist the inspector in ensuring the following items are observed during control room tours:

- Switch and valve position required to satisfy the LCO's
- Alarms or absence of alarms
- Meter indications and recorder values
- Status lights and power available lights
- Front panel bypass switches
- Computer print-outs
- Comparisons of redundant readings
- Mode switch in the proper position



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Selected lit annunciators were discussed with control room operators to verify that the reasons for them were understood and corrective action, if required, was being taken.

Shift turnovers were observed to ensure proper control room and shift manning on both day and back shifts. Shift turnover checklists and log review by the oncoming and off-going shifts were observed by the inspector.

The inspector also independently verified that selected jumpers and lifted leads had been correctly installed and removed.

On March 6, 1981, the plant shutdown to begin a scheduled maintenance and refueling outage. The resident inspector witnessed portions of the reactor cooldown to verify that the limiting conditions for operation for this evolution were not exceeded.

No items of noncompliance were identified.

b. Review of Logs and Operating Records

The inspector reviewed the following logs and instructions for the period February 17 through March 31, 1981:

- Control Room Log Book
- Station Shift Supervisor's Log Book
- Station Shift Supervisor's Instructions
- Licensee Event Report Log
- Jumper and Lifted Leads 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;
- Determine that records are being reviewed as required;
- Assess the effectiveness of the communications provided by the logs and instructions;
- Determine that the reporting requirements of technical specifications are met.

No items of noncompliance were identified.

4. Observation of Physical Security

The inspector made observations and verified during regular and off-shift hours, 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 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 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.
- Persons within the protected area displayed photo-identification badges, persons in vital areas were properly authorized, and persons requiring escort were properly escorted.
- Compensatory measures were implemented during periods of equipment failure.

No items of noncompliance were identified.

5. Plant Tours

a. Scope

During the course of the report 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:

- Turbine Building
- Auxiliary Control Room
- Vital Switchgear Rooms
- Yard Areas
- Radwaste Area
- Diesel Generator Rooms
- Screen House
- Reactor Building
- Refueling Area
- Drywell

b. Findings

The following determinations were made:

- (1) Monitoring instrumentation: The inspector verified that selected instruments were functional and demonstrated parameters within Technical Specification limits, and that stack gas and building ventilation monitors were calibrated.



- (2) Radiation protection controls: The inspector verified that the licensee's Radiation Protection procedures were adhered to at the time of observations in the following areas:
- (a) Access control including tagging, posting and maintenance of step-off pads.
 - (b) Confirmation of licensee survey results by independent measurements.
 - (c) Verification that requirements of Radiation Work Permits are appropriate and are being followed.
- (3) Plant housekeeping: Observations relating to plant housekeeping identified no unsatisfactory conditions.
- (4) Fluid leaks: No significant fluid leaks were observed.
- (5) Fire protection: The inspector verified that selected fire extinguishers were accessible and inspected on schedule, that fire doors were unobstructed and that adequate controls over ignition sources and fire hazards were maintained.

The inspector had no further questions in the areas examined.

6. Followup On Significant Licensee Events

- a. At 10:00 p.m. on March 3, 1981, a safety valve on the shell side of the regenerative heat exchanger in the Reactor Water Cleanup System began to leak by. The valve discharges to the Reactor Building Equipment Drain Tank (RBEDT). Some of the contaminated water overflowed to the floor of the Reactor Building (elevation 198') to a depth of about one inch. The Reactor Water Cleanup System was isolated and the leak stopped at 6:35 a.m. on March 4, 1981.

Through direct observation, a review of plant records and discussion with licensee personnel, the inspector determined that:

- The stack monitor showed no increase in the offsite release rate.
- There was no release of contaminated water from the restricted area.
- The Limiting Condition for Operation limit for reactor water conductivity was not exceeded during the period when the Reactor Water Cleanup System was isolated.
- The event was not reportable in accordance with Technical Specifications.
- There was no change in reactor vessel level as the leak was well within the capacity of the feedwater system.

No items of noncompliance were identified.

A NRC radiation specialist was on site on March 4, 1981 and reviewed the radiological exposure to station employees. The results of his review are documented in Inspection and Enforcement Report Number 50-220/81-04.



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b. At 2:41 p.m. on March 12, 1981, a brief electrical fire occurred in the No. 11 Turbine Building exhaust fan motor. The fire was quickly extinguished by the station fire brigade. No outside assistance was required. Through direct observation and discussion with licensee personnel, the inspector determined:

- The licensee's response was in accordance with approved procedures.
- A "hot line" call to the NRC Operations Center was made. This is the correct notification for this type of event.
- There were no personnel injuries.
- There was no radioactivity involved.
- There was no safety-related equipment involved.

No items of noncompliance were identified.

7. Inspector Witnessing of Surveillance Tests

The inspector witnessed the performance of the following surveillance tests:

- On March 6, 1981, "Intermediate Range Monitor Instrument Channel Calibration," IMP-NEU-2, Revision 1, dated October 31, 1980
- On March 13, 1981, "Core Spray and Containment Spray Operability During Control Rod Drive Maintenance With The Suppression Chamber Dewatered," ST-V2, Revision 2, dated February 23, 1979
- On March 17, 1981, "Core Spray System Operability Using Demineralized Water," ST-9W, Revision 1, dated September 13, 1978
- On March 25, 1981, "Anticipated Transient Without Scram Instrument Channel Test/Calibration," ISP-ATWS, Revision 1, dated March 3, 1981

Observations were made to verify that:

- Surveillance procedures conform to technical specification requirements and have been properly approved.
- Test instrumentation is calibrated.
- Limiting conditions for operations for removing equipment from service are met.
- Testing is performed by qualified personnel.
- Surveillance schedule is met.
- Test results met technical specification requirements.
- Equipment is properly restored to service following the test.

No items of noncompliance were identified.

8. Plant Maintenance

During the inspection period, the inspector observed various maintenance activities. The inspector reviewed these activities to verify that:



- Technical Specification requirements for removal of equipment from service are met.
- Appropriate radiological controls were established and properly implemented.
- Required equipment mark-ups are obtained.
- Work is performed in accordance with approved procedures.

The following activities were included during this review:

- Replace journal bearing on #15 Recirculation Pump
- Control Rod Drive leak rate testing
- Control Rod Drive replacement

No items of noncompliance were identified.

9. Refueling Operations

The inspector reviewed the licensee's refueling procedures to ensure that the refueling would be conducted in accordance with an approved and technically acceptable procedure. The following procedures were included:

- Fuel Handling Procedure No. FHP-25, "General Description of Fuel Moves," Revision 2, dated September 11, 1979
- Fuel Handling Procedure No. FHP-27, "Whole Core Off Load-Reload," Revision 1, dated March 2, 1981
- Instrument Maintenance Procedure No. IMP-44.1, "One Rod Permissive Rod Block Removal," Revision 2, dated February 24, 1981
- Special Procedure For Dewatering Torus, Revision 1, dated March 6, 1980

The inspector witnessed portions of the core off loading operations to verify compliance with technical specifications and the applicable procedures including:

- The control room and refuel floor were properly manned.
- Continuous communications were maintained between the control room and the refuel floor.
- Fuel movement was conducted by a licensed reactor operator.
- Fuel moves within the core were directly monitored by a member of the reactor analyst group.
- The refueling platform radiation monitor was operable.
- The mode switch was in the REFUEL position.
- The source range monitoring instruments were operable.

The inspector also witnessed portions of the installation of jumpers to bypass the input from each control rod to the refueling interlocks. This was done after the fuel bundles in the cell controlled by that control rod had been removed from the core. The licensee uses a two man verification



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that the cell is empty prior to installation of the jumpers.

No items of noncompliance were identified.

10. Licensee Action On TMI Action Plan Items

The inspector reviewed the implementation of several TMI Action Plan Items against licensee commitments and the criteria in NUREG 0737, "Clarification of TMI Action Plan Requirements," dated November 1980. The licensee had committed to completing all of the below items by January 1, 1981. The item numbers correspond to those assigned in the TMI Action Plan.

a. Item I.A.1.1(4) - Description of Log Term Program for Shift Technical Advisors

The licensee stated in his letter, Disc to Eisenhut, dated December 31, 1980, that it is their intention that all Assistant Shift Supervisors (Shift Technical Advisors) obtain NRC Senior Reactor Operator Licenses as they meet the eligibility requirements. This appears to meet the requirements of NUREG 0737 for a description of the long term STA program.

b. Item I.A.1.1(3) - Shift Technical Advisor's Training

The inspector verified that each shift technical advisor has received a certification of qualification to conduct his accident assessment responsibilities. This certification is based on successful completion of a 17 week training program, simulator training, RO and SRO level written examination and walk-through (oral) evaluation. A comparison of the STA training program with the guidelines proposed by the Institute of Nuclear Power Operations (INPO) is also included in the licensee letter, Disc to Eisenhut, dated December 31, 1980. This training program appears to satisfy the requirements of NUREG 0737.

c. Item I.A.1.3(1) - Limit Overtime

The inspector reviewed Administrative Procedure No. APN-2A, "Conduct of Operations and Composition and Responsibilities of Station or Unit Organization," Revision 5, dated February 20, 1981. This procedure appears to meet the requirements of NUREG 0737. Revision 3 of the above procedure was found to be in effect on November 1, 1980 and contained overtime limitations in accordance with the NRC letter, Eisenhut to All Operating Plants dated July 31, 1980.

d. Item I.C.5 - Feedback of Operating Experience

The inspector reviewed Administrative Procedure No. APN-3A, "Operations Experience Assessment," Revision 1, dated December 17, 1980. Preliminary screening of information on significant events occurring



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at other nuclear power plants is performed by the training department. Applicable reports are forwarded to the respective station supervisors. In addition, significant events are covered in the next operator qualification presentation. A separate station supervisor is responsible for dissemination of Inspection and Enforcement Bulletins, Circulars, and Notices, and other industry assessments of operating experience to the appropriate station supervisors. They, in turn, are responsible for passing the information on to personnel in their departments. This is often accomplished by the use of written "night orders".

The special Site Operations Review Committee meeting is held at least every two months to review and approve the proposed actions as a result of information obtained from operations experience assessment. The inspector reviewed the minutes of the report of operations experience assessment submitted on January 23, 1981.

The licensee has committed that the Safety Review and Audit Board will conduct annual audits to assure that the feedback program functions effectively at all levels.

The licensee's program appears to satisfy the requirements of NUREG 0737.

e. Item I.C.6 - Procedures for Verifying Correct Performance of Operating Activities

The inspector reviewed Administrative Procedure No. APN-7, "Procedure for Control of Equipment Markups, Etc.," Revision 4, dated February 23, 1981 and Administrative Procedure No. APN-7A, "Placement of Jumpers, Blocks, or Lifting of Leads," Revision 5, dated March 7, 1981. These procedures appear to meet the requirements of NUREG 0737. The inspector observed examples of equipment markups, surveillance test and jumper installation and removal to ensure that the procedures were correctly implemented. Through discussions with several reactor operators and instrument and control technicians, the inspector determined that they were aware of the independent verification requirements of these procedures.

The installation of jumpers or blocks or the lifting of leads is normally performed by an instrument and control technician. Verification is performed by another individual with at least two years of experience from the same department. NUREG 0737 states that "qualified" person is a licensed operator possessing knowledge of the systems involved and the relationship of the systems to plant safety. This item is unresolved pending further review by the NRC (50-220/81-03-01).

The inspector also noted that when one of the containment spray pumps is used in the torus cooling mode or for pumping the torus water to the radwaste system its' return to the normal stand-by condition is not independently verified by another "qualified" person:



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The containment spray pump does not automatically return to its stand-by condition in the event of a loss of coolant accident.

The licensee acknowledged the inspector's comments and is reviewing the applicability of the NUREG requirements to this situation. This item is unresolved pending further review of the licensee's actions by the NRC (50-220/81-03-02).

11. Review of Document Transmittal Verification Procedures

An Order of Modification of License issued November 26, 1980 required that:

"Procedures shall be implemented by January 5, 1981 to ensure that managers at all levels of the Licensee's organization provide full, accurate, and timely information to higher management and to the Nuclear Regulatory Commission, when such information is provided thereto."

The licensee's response from W. J. Donlon to S. J. Chilk, dated January 3, 1981 addressed two such procedures: (a) Nuclear Generation Staff Procedure, "Preparation of NRC Submittals for Nine Mile Point, Unit 1," dated December 31, 1980 and (b) Nine Mile Point Nuclear Station Site Administrative Procedure No. APN-16, "Production, Distribution, and Maintenance of Operating Reports and Responses to NRC Requests," Revision 6, dated December 31, 1980. The first procedure is used for correspondence drafted at the corporate office while the second is used for correspondence drafted at the site. The inspector reviewed each of the above procedures and supporting licensee documentation to determine that the procedures are being correctly implemented.

At the time of the review, the procedure used at the corporate office required that a memorandum be written and attached to the draft of the correspondence prior to routing to appropriate management personnel. The inspector reviewed a draft engineering procedure, "Verification of Submittals to the NRC," This procedure contains a form for documenting the level of verification that was conducted. This should simplify the documentation of such verification.

The inspector reviewed the following licensee correspondence and the attached memos at the corporate office to determine that they conformed to the licensee procedure:

- Letter from T. Lempges to D. Eisenhut dated January 30, 1981
- Letter from D. Dise to D. Eisenhut dated January 30, 1981
- Letter from T. Lempges to B. Grier dated February 2, 1981
- Letter from D. Dise to D. Eisenhut dated March 31, 1981



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Although a independent verification is not performed in every case, the source of the information is stated in the memorandum so that the corporate official signing the letter will be reasonably confident that the information is correct. In some cases, independent verification may be performed after the letter is submitted to the NRC.

The inspector reviewed the following correspondence prepared at the site for submittal to the NRC:

- Letter from T. Lempges to B. Grier dated January 6, 1981
- Licensee Event Report #80-32 dated January 13, 1981
- Letter from T. Lempges to B. Grier dated January 30, 1981
- Licensee Event Report #81-05 dated March 4, 1981 and #81-08 dated March 30, 1981

A copy of the Document Transmittal and Verification Form from APN-16 was found for each of the above correspondence. The individual preparing the response usually obtains his initial information from the respective department head, then independently verifies that statements concerning procedure changes and work requests are correct. The entire draft is reviewed by several station supervisors. In the samples examined, each had been reviewed by at least three individuals.

The inspector had no further questions at this time.

12. Unresolved Items

Unresolved items are matters about which more information is required to clarify whether they are acceptable, items of noncompliance, or deviations. Two unresolved items were identified and detailed in paragraph 10e.

13. Exit Interview

At periodic intervals during the course of this inspection, meetings were held with senior facility management to discuss the inspector scope and findings. Additionally, the resident inspector attended the entrance and exit interviews of three separate regional-based inspectors.

