

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-220/84-06

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 1

Inspection At: Scriba, New York

Inspection Conducted: April 24-27, 1984

Inspectors: *S. V. Pullani*
S. V. Pullani, Fire Protection Engineer

5/29/84
date

A. Krasopoulos
A. G. Krasopoulos, Reactor Engineer

5/29/84
date

Approved by: *Clifford J. Anderson*
C. J. Anderson, Chief, Plant Systems Section

5/29/84
date

Inspection Summary: Inspection on April 24-27, 1984 (Report No. 50-220/84-06)

Areas Inspected: Routine unannounced inspection of the Fire Protection/Prevention Program including: program administration and organization, administrative control of combustibles; administrative control of ignition sources; other administrative controls; equipment maintenance, inspection and tests; fire brigade training; periodic inspections and quality assurance audits; and facility tour. The inspection involved 60 inspector-hours on site and 10 inspector-hours in office by two region based inspectors.

Results: Of the eight areas inspected, no violations were identified.

DETAILS

1.0 Persons Contacted

1.1 Niagara Mohawk Corporation (NMPC)

- *M. Bayle, Nuclear Compliance and Verification
- *W. Connolly, Supervisor - QA Nuclear Operations
- *W. Drews, Technical Superintendent
- *M. Kammer, Assistant Supervisor - Fire Protection
- J. Pavel, Assistant Supervisor - Training
- *T. Perkins, General Superintendent
- *R. Raymond, Supervisor - Fire Protection
- *T. Roman, Station Superintendent
- *J. Scofield, Fire Protection Training Specialist
- *G. Van Gelder, Assistant Supervisor - Fire Protection

1.2 Nuclear Regulatory Commission (NRC)

S. Hudson, Senior Resident Inspector

*Denotes those present at the exit interview.

2.0 Followup of Previous Inspection Findings

(Open) Unresolved Item (50-220/81-15-01) Fire Detectors Installation Near Ventilation Fans Does Not Conform to NFPA Guidelines

The licensee agreed to relocate the detectors in question and reinstall same in accordance with NFPA 72F. Niagara Mohawk Power internal memorandum from J. Corcoran to R. Raymond dated April 25, 1984 subject NMP 1 smoke detection system states: "... immediate steps be taken by the Engineering Department to deal with this open item".

This item is unresolved pending relocation of fire detectors.

(Closed) Unresolved Item (50-220/81-15-03) Additional Emergency Lighting to be Installed for Safe Shutdown Equipment Requiring Manual Operations

The licensee installed 70 emergency lights in order to comply with 10 CFR 50, Appendix R, Section J. The adequacy of this lighting will be verified in a future safe shut down inspection.

This item is resolved.

(Closed) Unresolved Item (50-220/81-29-01) Inadequate Fire Brigade Member Training - Quarterly Training Sessions Not Scheduled Regularly

The inspector reviewed the current training and meeting schedule and determined that the members of the fire brigade meet regularly to review changes in the fire protection program and other pertinent subjects as necessary.

This item is resolved.

(Closed) Unresolved Item (50-220/82-09-01) Need to Prepare Adequate Fire Fighting Preplans and Provide Related Training to Fire Brigade Members

The inspector reviewed the following documents associated with the fire fighting preplans and fire brigade training and determined that the licensee complies with the applicable regulatory requirements:

- Lesson Plan - Strategy and Tactics (Preplans), Revision 0
- Site Administrative Procedure APN-10P; Nuclear Fire Chief, Nuclear Fire Fighter and Fire Protection Staff Training Program; Revision 1
- Lesson Plan - Fire Fighters - Safety Systems and Electrical Distribution, Revision 0.
- Emergency Plan Implementing Procedures EPP-2; Fire Fighting; Revision 9
- Fire Prevention Procedure NI-FP-14, Fire Strategies - Safety Related Areas, Revision 0

This item is resolved.

(Closed) Violation (50-220/82-09-02) Inadequate Administrative Procedures to Control Combustibles

The licensee's corrective actions were stated in a letter to NRC, T. E. Lempges to T. T. Martin, dated August, 1982. In addition, the licensee has revised the applicable administrative combustibles control procedures to further ensure compliance with the regulatory requirements. The inspector reviewed the corrective actions and the revised administrative controls procedures and determined that they were adequate.

The procedures reviewed are as follows:

- Fire Department Procedure NI-FDP-2; Cutting, Welding and Grinding Permit; Revision 0

- Fire Department Procedure N1-FDP-1, Supervisory weekly plant tour, Revision 1
- Fire Department Procedure N1-FDP-7, Combustible Materials Storage, Revision 1.
- Site Administrative Procedure APN-11, Housekeeping and Cleanliness Control, Revision 3
- Fire Prevention Procedure N1-FP-3, Contractors and Subcontractors Revision 2

This item is resolved.

(Open) Unresolved Item (50-220/82-09-03) Exemption request for fire brigade composition required and additional brigade training required

The licensee has completed plant systems training for fire brigade members.

This item is unresolved pending further action by the licensee for the required exemption and its review by NRC.

(Closed) Unresolved Item (50-220/82-09-05) Due to the fire pumps running above the stated design pressure of 145 psig, the fire pump test result acceptance criteria are questionable.

The licensee has reset relief valves PSV-100-88 and PSV-100-07 on the fire pumps to open between 140 and 145 psi and revised fire pump test procedure NI-ST-W14 (Revision 8). The revised procedure has a data sheet that identifies all parameters necessary for acceptance. The inspector reviewed the revised procedure and found that the acceptance criteria are acceptable.

(Closed) Unresolved Item (50-220/82-09-09) Failure to hydrostatically test fire hoses on an annual basis as required by licensee's procedure NI-FST-A1

The licensee stated that the reason this procedure was not followed was due to the reorganization of the fire brigade and other changes to the fire protection procedures. To prevent recurrence, the licensee has streamlined the existing procedure and also is making use of a computer planning scheduling program "fire tests - fire protection test schedule" that identifies and tracks all the tasks the fire brigade members must perform routinely.

This item is resolved.

(Closed) Unresolved Item (50-220/82-09-10) The distance between sprinkler heads outside the battery board room is greater than the normal spacing

The licensee evaluated the spacing and found that it provided inadequate coverage. The licensee installed additional sprinkler heads to provide adequate coverage.

This item is resolved.

3.0 Fire Protection/Prevention Program

The inspector reviewed several documents in the following areas of the program to verify that the licensee had developed and implemented adequate procedures consistent with the Fire Hazard Analysis (FHA), Final Safety Analysis Report (FSAR), and Technical Specifications (TS). The documents reviewed, the scope of review, and the inspection findings for each area of the program are described in the following sections.

3.1 Program Administration and Organization

The inspector reviewed the following licensee documents:

- Technical Specifications, Section 6, Administrative Controls
- Site Administrative Procedure APN-2, Composition and Responsibilities of Site Organization, Revision 6
- Site Administration Procedure APN-20, Station Fire Protection Program, Revision 4

The scope of review was to ascertain that:

- a. Personnel were designated for implementing the program at site; and
- b. Qualifications were delineated for personnel designated to implement the program

No unacceptable conditions were identified.

3.2 Administrative Control of Combustibles

The inspector reviewed the following licensee document:

- Fire Department Procedure N1-FDP-1, Supervisory Weekly Plant Tour, Revision 1
- Fire Department Procedure N1-FDP-7, Combustible Materials Storage Procedure, Revision 1

- Fire Department Procedure N1-FDP-12, Control of Combustibles and Flammable Materials, Revision 0
- Site Administrative Procedure APN-11, Housekeeping and Cleanliness Control, Revision 3

The scope of review was to verify that the licensee had developed administrative controls which included:

- a. Special authorization for the use of combustible, flammable or explosive hazardous material in safety-related areas;
- b. Prohibition on the storage of combustible, flammable or explosive hazardous material in safety-related areas;
- c. The removal of all wastes, debris, rags, oil spills or other combustible materials resulting from the work activity or at the end of each work shift, whichever is sooner;
- d. All wood used in safety-related areas to be treated with flame retardant;
- e. Periodic inspection for accumulation of combustibles;
- f. Transient combustibles to be restricted and controlled in safety-related areas; and
- g. Housekeeping to be properly maintained in areas containing safety-related equipment and components.

No unacceptable conditions were identified.

3.3 Administrative Control of Ignition Sources

The inspector reviewed the following licensee documents:

- Fire Department Procedure N1-FDP-2, Cutting - Welding - Grinding Permit, Revision 0
- Radiation Protection and General Employee Training, Revision 0
- Radiation Protection Procedure RP-1, Access and Radiological Control, Revision 4

The scope of review was to verify that the licensee had developed administrative controls which included:

- a. Requirements for special authorization (work permit) for activities involving welding, cutting, grinding, open flame or other ignition sources and that they are properly safeguarded in areas containing safety-related equipment and components; and
- b. Prohibition on smoking in safety-related areas, except where "smoking permitted" areas had been specifically designated by plant management.

No unacceptable conditions were identified.

3.4 Other Administrative Controls

The inspector reviewed the following licensee documents:

- Technical Specifications, Section 6, Administrative Controls
- Site Administrative Procedure APN-9, Procedure for Station Permanent and Temporary Modifications and Replacements, Revision 3
- Radiation Protection and General Employee Training, Revision 0
- Emergency Plan Implementing Procedure EPP-2, Fire Fighting, Revision 9
- Fire Protection Quality Assurance Program, June 25, 1979

The scope of review was to verify that the licensee had developed administrative controls which require that:

- a. Work authorization, construction permit or similar arrangement is provided for review and approval of modification, construction and maintenance activities which could adversely affect the safety of the facility;
- b. Fire brigade organization and qualifications of brigade members are delineated;
- c. Fire reporting instructions for general plant personnel are developed;
- d. Periodic audits are to be conducted on the entire fire protection program; and
- e. Fire protection/prevention program is included in the licensee's QA Program.

No unacceptable conditions were identified.

3.5 Equipment Maintenance, Inspection and Test:

The inspector reviewed the following randomly selected documents to determine whether the licensee had developed adequate procedures which established maintenance, inspection, and testing requirements for the plant fire protection equipment:

- N1-FST-A1, Fire Hose Hydrostatic Test, Revision 7
- *-- N1-FST-A2, Hose Station Valve Operability Test, Revision 1
- *-- N1-FST-A4, Annual Valve Cycling for Fire Protection Systems, Revision 2
- N1-FST-C4, Puff Test of Halon Hazards, Revision 1
- *-- N1-FST-D1, Fire Door Inspection, Revision 6
- *-- N1-FST-Q1, Emergency Lighting Quarterly Test, Revision 6
- *-- N1-FST-SA6, Diesel Fire Pump, Revision 1
- N1-FST-W1, Weekly Fire System Valve Checkoff, Revision 5
- N1-FST-W2, Suppression Gas Readings, Revision 1

In addition to reviewing the above documents, the inspector reviewed the maintenance/inspection/test records of the items identified by an asterisk (*) to verify compliance with Technical Specifications and established procedures.

No unacceptable conditions were identified.

3.6 Fire Brigade Training

3.6.1 Procedure Review

The inspector reviewed the following licensee procedures:

- Site Administrative Procedure APN-10P; Nuclear Fire Chief, Nuclear Fire Fighter and Fire Protection Staff Training Program, Revision 1
- Emergency Plan Implementing Procedure EPP-2, Fire Fighting, Revision 9

The scope of review was to verify that the licensee had developed administrative procedures which included:

- a. Requirements for announced and unannounced drills;
- b. Requirements for fire brigade training and retraining at prescribed frequencies;
- c. Requirements for at least one drill per year to be performed on a "back shift" for each brigade;
- d. Requirements for local fire department coordination and training; and

e. Requirements for maintenance of training records.

No unacceptable conditions were identified except as follows:

Fire Brigade Quarterly Meetings

10 CFR 50, Appendix R, Paragraph III.I.1.d, states that regular planned meetings shall be held at least every 3 months for all fire brigade members to review changes in fire protection program and other subjects as necessary. The licensee stated and the inspector verified that such meetings are held monthly. However, the above requirement is not reflected in any of the licensee's administrative procedures. The licensee stated that Site Administrative Procedure APN-10P would be revised to satisfy this requirement. This is an Unresolved Item pending the licensee action (50-220/84-06-01).

3.6.2 Records Review

The inspector reviewed training records of fire brigade members for calendar years 1983 and 1984 to ascertain that they had successfully completed the required quarterly training/meeting, semiannual drill, and yearly hands-on fire extinguishing practice.

No unacceptable conditions were identified.

3.7 Periodic Inspections and Quality Assurance Audits

3.7.1 Annual Audit

The inspector reviewed reports of the following annual audits of the Fire Protection and Loss Prevention Program:

- Audit conducted by off-site licensee Quality Assurance (QA) organization on December 13-17, 1982 and January 3-7, 1983
- *-- Audit conducted by a team consisting of offsite licensee personnel and Fire Protection Engineers (FPE) (an outside fire consultant) on September 16, 1983. (The scope of this audit included annual, biennial and triennial audits discussed in this section and Sections 3.7.2 and 3.7.3)

The scope of review was to ascertain that the audits were conducted in accordance with Technical Specification 6.14.1 and audit findings were being resolved in a timely and satisfactory manner.

No unacceptable conditions were identified.

3.7.2 Biennial Audit

The inspector reviewed reports of the following biennial audits of Fire Protection Program and implementing procedure:

- Audit conducted by the licensee's Safety Review and Audit Board (SRAB) on November 9, 10, 12 and 13, 1981
- Audit indicated by the asterisk (*) in section 3.7.1

The scope of review was to ascertain that the audits were conducted in accordance with Technical Specification 6.5.2.8.g and findings were resolved in a timely and satisfactory manner.

No unacceptable conditions were identified.

3.7.3 Triennial Audit

The inspector reviewed reports of the following triennial audits:

- Audit conducted by FPE during November 1980
- Audit indicated by the asterisk (*) in Section 3.7.1

The scope of audit was to ascertain that the audits were conducted in accordance with Technical Specification 6.14.2 and audit findings were being resolved in a timely and satisfactory manner.

No unacceptable conditions were identified.

3.8 Facility Tour

The inspector examined fire protection water systems, including fire pumps, fire water piping and distribution systems, post indicator valves, hydrants and contents of hose houses. The inspector toured accessible vital and nonvital plant areas and examined fire detection and alarm systems, automatic and manual fixed suppression systems, interior hose stations, fire barrier penetration seals and fire doors. The inspector observed general plant housekeeping conditions and randomly checked tags of portable extinguishers for evidence of periodic inspections. No deterioration of equipment was noted. The inspection tags attached to extinguishers indicated that monthly inspections were performed.

No unacceptable conditions were identified except as follows:

3.8.1 In Leakage of Air in Protected Southeast Stairwell of Turbine Building

The protected southeast stairwell of the Turbine Building is the means of egress in the event of fire or accident (see Operating License Amendment 33 dated July 26, 1979, Section 4.12). The inspector while touring the facility noted that the firewall enclosing this stairwell was not of continuous construction. That is, steel members would run inside the length of the wall at various elevations to provide support. At the top most course of the concrete block at elevation 277' there is a large opening between the steel member and the block wall and there was a draft of air blowing into the stairwell. If there was a fire outside of this wall, smoke and other products of combustion could fill this stairwell and render it unusable as a means of egress.

The licensee agreed to fix this condition and survey the plant for similar conditions elsewhere. This is an Unresolved Item pending licensee's corrective action and its review by NRC (50-220/84-06-02).

4.0 Unresolved Items

Unresolved items are matters about which more information is required to ascertain whether they are acceptable items, violations or deviations. Unresolved items disclosed during the inspection are discussed in Sections 3.6.1 and 3.8.

5.0 Exit Interview

The inspector met with licensee management representatives (see Section 1.0 for attendees) at the conclusion of the inspection on April 27, 1984. The inspector summarized the scope and findings of the inspection at that time.

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