

U. S. Nuclear Regulatory Commission
Region I

Docket/Report: 50-220/92-10 and 50-410/92-12

License: DPR-63 and NPF-69

Licensee: Niagara Mohawk Power Corporation
Post Office Box 63, Lake Road
Lycoming, New York 13093

Facility Name: Nine Mile Point Nuclear Station (NMPNS), Units 1 and 2

Inspection: April 6-9, 1992

Inspection At: Scriba, New York

Inspectors: Lanny Eckert 5/13/92
L. Eckert, Emergency Preparedness Section date
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Approved: E. McCabe 5/18/92
E. McCabe, Chief, Emergency Preparedness Section, Division of Radiation Safety date
and Safeguards

Areas Inspected

NMPNS emergency preparedness (EP), including: program changes; emergency facilities; equipment, instrumentation, and supplies; organization and management control; emergency response organization (ERO) training; staff knowledge and performance of duties; and independent reviews/audits.

Results

The EP program was maintained in a state of operational readiness. Concerns were identified with the licensee's ability to meet commitments made following the 1988 Emergency Response Facility appraisal and in the method to achieve initial accountability following activation of the Emergency Plan.



DETAILS

1.0 Persons Contacted

The following licensee personnel were contacted during the inspection.

- * C. Boniti, Senior Instructor, EP Training
- * B. Burch, Manager, Nuclear Communications and Public Affairs
- * P. Carroll, General Supervisor, Nuclear Security
- * G. Corell, Manager, Chemistry, Unit 1
- * A. DeGracia, Manager, Operations, Unit 2
- * P. Hartnett, Program Director, EP Projects
- * D. Howes, Supervisor, Emergency Facilities
- * J. Jones, Program Director, Radiological
- * J. Kaminski, Program Director, Drills and Exercises
- * M. McCormick, Unit 2 Plant Manager
- * A. Salemi, Director, Emergency Preparedness
- * R. Smith, Training Supervisor
- * J. Spadafore, Program Director, Engineering, Unit 1
- * K. Sweet, Manager, Maintenance, Unit 1
- * W. Wambsgan, Supervisor, QA Audits
- * C. Ware, General Supervisor, Technical Training
- * S. Wilczek, Vice President, Nuclear Support

* Denotes attendance at the exit meeting held on April 9, 1992.

The inspectors also interviewed and observed the actions of other licensee personnel.

2.0 Operational Status of the Emergency Preparedness (EP) Program

2.1 Changes to the EP Program

The inspectors reviewed changes to the Nine Mile Point Site Emergency Plan (SEP) and its implementing procedures (EIPs) since the last EP inspection to determine if they adversely affected the licensee's overall state of EP and whether the changes had been properly reviewed, approved, and distributed. Several procedural changes were initiated in response to areas needing improvement from the 8/13/91 Site Area Emergency. In particular, S-EPP-5 Revision 13, 12/1/91, "Station Evacuation" and S-EPP-19 Revision 8, 12/1/91, "Site Evacuation Procedure" were changed to place the responsibility for accountability from with the Nuclear Security Department. S-EPP-20 Revision 14, 8/26/91, "Emergency Notifications" was changed to clarify the process for activating the Community Alert Network (CAN). These procedures received a 50.54(q) review, a safety review, and a Site Operating Review Committee (SORC) review prior to being issued. No changes in EP were expected as a result of licensee identified items in need of corrective action from the recently declared Alert. NRC review concluded that changes made since the last inspection have not decreased program effectiveness.



Since the last inspection, the licensee used the simulator to conduct drills and planned to use it to conduct the 1992 annual exercise.

The new Evacuation Time Estimates (ETEs) from the 1990 census were completed. The licensee was currently assisting in the evaluation of necessary changes to the New York State Emergency Plan including re-evaluation of siren coverage within the EPZ and upgrade of evacuation routes due to high tourist population during selected summer months. The impact of changes to the State Emergency Plan will be evaluated in a future inspection.

Another change in the EP Branch related to evaluation of SEP and EPIP revisions to determine whether there was a decrease in program effectiveness due to such changes. In response to an NRC area for improvement, the licensee modified the process so that all changes received a formal 50.54(q) review, a safety review, and final SORC approval prior to being implemented. This change adequately addressed the NRC concern and Item Nos. 50-220/91-03 and 50-410/91-03 are closed.

This program area was assessed as being effectively implemented.

2.2 Emergency Response Facilities (ERFs), Equipment, Instrumentation, and Supplies

The inspectors toured the Unit 1 Control Room (CR), Operations Support Center (OSC), Technical Support Center (TSC), Emergency Operations Facility (EOF), and the Alternate Emergency Operations Facility (AEOF) to assess whether these facilities, equipment, instruments, supplies, and procedures were adequately maintained.

Facilities were well maintained and ready for emergency use. The inspectors sampled communications equipment, computer terminals, and survey equipment to determine operability and calibration. The inspectors found that all sampled equipment was functional and calibrated.

Review of the licensee's facility surveillance reports and discrepancy corrective action reports for 1991 and first quarter 1992 found them an effective means of insuring readiness. The inspectors reviewed communication test reports and found them acceptable. Corrective actions for discrepancies were resolved promptly.

Since the last inspection, the Operations Support Center (OSC) was designated a dedicated emergency response facility. The OSC was effectively used to support response activities during the August 1991 Site Area Emergency. Another ERF upgrade was completed in 1991 to the AEOF, in which two commercial telephone lines were added for the NRC's Emergency Notification System and Health Physics Network. That was completed in June of 1991.

EOF and TSC ventilation systems were functionally tested on a quarterly basis. The HEPA filters were tested every eighteen months with dioctyl phthalate (DOP). To readily determine EOF habitability, a display panel provided indication for damper position, fan operation (normal and emergency line-ups), and positive pressure.



This program area was assessed as being effectively implemented.

2.3 Organization and Management Control

The EP program was reviewed, personnel were interviewed, and activities evaluated to determine whether the licensee was maintaining and controlling an adequate EP program required by NRC regulations.

Since the last inspection, there have been no organizational changes to the program. The EP Branch is one of six units of the Nuclear Support Group. The Director, EP Branch continues to report directly to the Vice President, Nuclear Support.

There was a staff reduction in the EP Branch from ten to eight individuals. The rotational Station Shift Supervisor (SSS) who was responsible for operations data for scenarios and EAL implementation, was eliminated. The EP branch relied upon assistance from other groups concerning scenario development. The licensee planned to reduce further the EP Branch by two positions in the future. Section 8.1.2c of the Site Emergency Plan required that each drill/exercise scenario follow the guidelines set forth in Emergency Plan Maintenance Procedure (EPMP) 4. That procedure dictated that the Plant Manager was responsible for providing resources from various site departments for drill/exercise scenario development. At the time of the inspection, the inspectors noted that no resources outside the EP Branch were being used in the scenario development process. At the time of the inspection, there were no personnel within the EP Branch with the proper background in Health Physics to prepare radiological portions of scenarios. Previously, the EP Branch had relied upon contractor and/or site HP support to assist in scenario development. This observation was brought to the attention of the Vice President, Nuclear Support who stated the intention to address this matter.

The EP staff backgrounds were diverse. There was an ex-SRO qualified individual within the EP Branch who was assigned to scenario development. Another individual was responsible for drill/exercise coordination. Individuals were assigned to communications testing and commitment tracking, procedures and the Emergency Response Organization (ERO) database, and ERF management.

The inspectors selected records maintained for the ERO to ensure they were trained and qualified to fill their prospective positions, and to ensure that the training dates current. The training due dates for ERO members ranged from 5/92 to 4/93. Individuals were required to receive all training every twelve months, plus or minus three months. If training was not completed by this time, that person was removed from the ERO qualification roster. The inspectors noted that there were no personnel who had gone beyond their grace period for qualification. The ERO was fully staffed. The licensee goal was to maintain at least three or four qualified personnel in all positions. The inspectors found this goal was achieved, with 4-6 personnel qualified in most ERO positions. Due to a reduction in station staffing, lists of qualified ERO individuals contained in the EPIPs were undergoing revision.

Interviews conducted with senior management staff indicated good involvement in EP program administration and in their ability to perform response activities. The Vice



President, Nuclear Support maintained close interface with the Director, EP and was kept apprised of program status. Site Emergency Directors assumed both SED and support roles during the response to the August 1991 Site Area Emergency and March 1992 Alert.

2.4 Knowledge and Performance of Duties (Training)

The inspectors reviewed selected training records of ERO personnel to ensure that the records were being maintained and that lesson plans were current and appropriate for designated positions.

Lesson plans (LP) were revised and approved by the Director, EP in 1990. Also, during the training sessions, the instructors covered Licensee Event Reports (LER) and experiences gained from real events. EP training staff prepared a new booklet which provided an overview of the EP program. This booklet was used in EP training classes and General Employee Training.

Also reviewed were class evaluation sheets to determine whether comments provided by attendees were considered by training staff in their LP reviews. The inspectors found that such comments were included in LPs and provided instructors with ideas for better class presentations. Most ERO training was given in the classroom. The EP training instructors were switching to performance based training by providing demonstrations in the ERFs. EP instructors stated that changes in ERO training were expected by a shift toward a performance-oriented structure.

Training Change Orders (TCOs) were used to make corrections and changes to lesson plans. As a result of the concern identified in communications capability during the August 1991 Site Area Emergency, TCOs for communicators were put in place to stress the importance of following notification procedures in proper sequence.

The inspectors performed walk-through scenarios with Health Physics (HP) and Chemistry technicians to examine the effectiveness of training for those individuals responsible for performing on-shift dose assessment. Two Dose Assessment teams consisting of an HP and a Chemistry technician were chosen. The teams performed well on both scenarios and were able to develop appropriate Protective Action Recommendations for the Shift Supervisor to consider.

This program area was assessed as being effectively implemented.

2.5 Independent Reviews/Audits

An independent review is required at least every 12 months by 10 CFR 50.54(t) and included an evaluation of the adequacy of the off-site interface. To determine if requirements were met, the inspectors reviewed the licensee's Technical Specifications, Quality Assurance Procedures (QAP), interviewed Quality Assurance (QA) auditors, reviewed the Audit Scoping Plan and Audit checklists, and reviewed final QA reports for 1991.



Technical Specification Section 6.5.3.8 for each Nine Mile Point unit required an independent annual review/audit by the Safety Review and Audit Board (SRAB). This requirement was met through QAP 18.10, Revision 13, 1/13/92 "Quality Assurance Department Nuclear Audit Program". To avoid duplication of resources, the annual audit and the 10 CFR 50.54(t) review were combined. Significant items, or those not adequately addressed, were included in a Deviation Event Report (DER) (Report Detail 2.6). QAP 18.10 directed the Supervisor, Quality Assurance Audits provide standard Audit Scoping Sheets for each required audit. The inspector reviewed the Emergency Preparedness Scoping Sheet and noted that it did not contain specific direction as to the evaluation of the adequacy of off-site interface per 10 CFR 50.54(t) and discussed this as an area for improvement. The Supervisor QA audits was reviewing the EP QA Scoping Sheet for improvement and stated the intention to address this area for improvement.

Overall, audits and surveillances conducted by the Site QA Department since the last inspection conformed to QA procedures. No recurring items were noted. The inspectors reviewed audit plans and found them effective. Audit reports were submitted to the Director, EP and senior licensee management.

The inspectors reviewed the April 3, 1991 QA report and concluded that the report conformed to Quality Assurance Procedures. A team of three auditors assessed the effectiveness of a drill conducted on February 26, 1991. Eight drill/exercise observations were identified, of which three were noted as recurring items. These recurring concerns were elevated to DER and involved dispatch of emergency repair teams (ERTs) from the OSC, failure to provide appropriate notification from the TSC within 15 minutes, and failure to dispatch ERTs in a timely manner. To resolve these concerns, additional training was given to affected personnel. The audit team concluded that the ERO was effective in implementing the SEP.

The inspectors also reviewed audit No. 91011-RG/IN performed under the SRAB. The audit included an assessment of: organization and administration, plan and procedures, training, drill, facilities and equipment, assessment and notification, public information, coordination with off-site agencies, and corrective action. Seven observations and one DER were issued. The DER was identified in the August 1, 1991 drill and related to the failure to make an off-site notification within 15 minutes of declaring an emergency. Overall, the audit team concluded that an effective emergency preparedness program was being implemented. Copies of this audit report were sent to the New York State Radiological Emergency Preparedness Group and the Oswego County Emergency Management Office as required.

The inspectors also reviewed six QA surveillance audits and found them effective in augmenting the annual audit/review. An independent EP audit conducted by a contractor to provide another view of the commitment control process found no program concerns.

This program area was assessed as being effectively implemented.



2.6 Commitment Tracking

The inspector reviewed the systems by which corrective actions were tracked. Items requiring corrective actions were maintained on three systems: Noncompliance tracking system (NCTS), Quality Assurance Database, and EP Work Track.

Since the last inspection, NCTS became the exclusive station corrective action tracking system for NRC identified concerns. NCTS reports were sent monthly to the Plant Managers and the Vice Presidents. NCTS items were prioritized with assigned commitment dates. Additionally, the EP section developed their own commitment tracking system called EP Work Tracking.

The system used to issue Corrective Action Recommendations was eliminated and replaced with Deviation Event Reports to track program weaknesses. Audit Observations that were not adequately resolved become DERs. The QA database included DERs and was maintained in accordance with QAP 15.03 "Deviation/Event Reports". DER disposition due dates were assigned by the Plant Manager with input from the Director, EP.

EP Work Tracking included all items in the other two tracking systems. Each week the EP Department held a staff meeting in which items were reviewed, due dates assigned/negotiated, and resources committed to item resolution. The Director, EP was responsible for the closeout of items solely within this system.

It was noted that the licensee had no means of tracking procurement items (needed as corrective actions to ERF surveillances) that may be open for extended periods of time due to ordering, manufacturing, or work order delays to closure. EP Work Tracking had no provisions for categorization of items to facilitate root cause analysis. The inspectors discussed this with the Director, EP as a possible area for improvement. This item, along with a determination on the effectiveness of changes to the commitment tracking system will be followed up in a future inspection.

2.7 Drill and Exercise Program

The Emergency plan Section 8.3 and EPMP-4 established guidance and responsibilities for drills and exercises. These included drill development, management and referees, scheduling, approvals, corrective actions and objectives. A change in conduct of the annual exercise from contractor to site resources will be made for 1992. As a result of this change, the inspectors discussed areas to improve administration of the drill/exercise program with EP staff. The inspectors also found that there was no formal system for tracking drill/exercise objectives except to review demonstrations in scenarios conducted throughout the previous year. Also, this was noted in Audit Report No. 91011-RG/IN as an opportunity for improvement. At the time of the inspection, the Program Director, Drills and Exercises was formulating a scenario development committee to prepare the 1992 scenario. Adequacy of drill/exercise program administration and review of the 1992 scenario will be performed during the next scheduled inspection.



All drills were approved by senior management in accordance with EPMP-4. Emergency Plan requirements for 1991 drill activities were met. Two full station drills were held during 1991 and included responses to a variety of different events and initiating conditions. Drill packages were timely, complete, and distributed to management. All reports included an overall summary, strengths and weaknesses for each facility, whether objectives were met, and recommended corrective actions.

This program area was assessed as good.

2.8 Public Information

To determine adequacy of the public information program, the inspectors interviewed the licensee's Public Affairs Director.

After the 1991 Site Area Emergency, public affairs and other licensee representatives met with local media staff to discuss possible areas for improvement in media relations. During the annual media training session, the licensee held a walk-through drill at the Oswego EOC where the news media personnel participated as EOC officials. In addition, the licensee conducted a seminar with the media given by the Executive Vice President - Nuclear and the Vice President-Nuclear Support on waste transportation.

This program area was assessed as being effectively implemented.

3.0 Licensee Action on Previously Identified Items

In 1988, the NRC performed an appraisal of the licensee's emergency response facilities to determine how each facility met NUREG-0737, Supplement 1 criteria. Findings were documented in Inspection Report Nos. 50-220/88-25 and 50-410/88-24. Short-term items were adequately addressed and resolved and the licensee had been working toward completing long-term commitments. The inspectors reviewed the licensee's progress in meeting outstanding open items from the appraisal. The status of each item is as follows.

CLOSED (IFI 50-220/88-25-04 and 50-410/88-25-04) Verify and validate dose projection software.

The licensee completed the verification and validation for the dose projection software and issued results in a report dated April 4, 1992. The inspectors reviewed the report and found it extensive and thorough. This item is closed.

CLOSED (IFI 50-220/88-25-09 and 50-410/88-25-09) Unit 1 event historical capabilities in need of upgrade.

The licensee has adequately increased Unit 1 event historical capability to be consistent with Unit 2. This item is closed.



CLOSED (IFI 50-220/88-25-07 and 50-410/88-25-07) Verification of plant sensor data. The inspectors reviewed licensee records of Unit 2 computer point verifications conducted during 1990 and 1991 and determined that identified inconsistencies and errors were corrected. This item is closed.

OPEN (IFI 50-220/88-25-05 and 50-410/88-25-05) Review adequacy of safety parameter signal isolation. Completion was scheduled for September 1992 following the refueling outage.

OPEN (IFI 50-220/88-25-06 and 50-410/88-25-06) Plant computer system had no reserve for heavy use periods. The licensee will upgrade the plant computer system. This upgrade was scheduled to begin September 1992.

The inspector reviewed the licensee's actions to the above two items and found that unnecessary applications were removed from the computer and supplementary core memory added. However, at the time of the inspection, installation and testing of the new plant computer system was not completed. These items will remain open until an assessment of the new system can be made.

OPEN (URI 50-220/88-25-08 and 50-410/88-25-08) A protection factor of five was not attainable at the double exit doors to the Emergency Operations Facility (EOF).

EOF habitability is determined during emergencies by radiation surveys and air sampling of the general area throughout the facility. To address the protection factor issue, the licensee committed to perform an evaluation of EOF shielding with a due date of 12/31/91 for the evaluation. At the time of the inspection this analysis was not initiated. Discussions with the licensee personnel indicated that the evaluation was expected to be complete by 12/31/92. This item remains open until the licensee provides the evaluation.

In addition, the inspectors followed-up NRC identified concerns (NRC Inspection Report Nos. 50-220/91-19 and 50-410/91-19) resulting from the licensee's response during the August 1991 Site Area Emergency. The status of each item is as follows.

CLOSED (NCV 50-220/91-19-01 and 50-410/91-19-01) The licensee failed to notify the ERO via the CAN in a timely manner.

Additional training of Control Room communicators was immediately provided with emphasis on making notifications in proper sequence. Although additional training is sufficient to close the item, performance of communicators will be evaluated during the 1992 annual exercise.

OPEN (URI 50-220/91-19-02 and 50-410/91-19-02) Oswego County "Green Cards" to expedite ERO personnel through off-site roadblocks were not carried by all members of the ERO.

The Director, EP issued a memorandum to all ERO members which reinforced the need for personnel to carry their Green Cards. The inspectors noted that additional reminder



signs and posters were located throughout the site. QA Surveillance conducted an unannounced audit by requesting a demonstration of Green Card possession and found that a significant number of individuals had failed to carry their cards on their person. Many of these individuals had left their cards within their vehicles. Another memorandum was issued to stress the importance of carrying the Green Card at all times. At the time of the inspection, additional surveillances had not been conducted. This item remains open pending further review.

OPEN (URI 50-220/91-19-03 and 50-410/91-19-03) Accountability of personnel within the protected area was not completed within 30 minutes of the Site Area Emergency classification.

The NRC identified two concerns associated with this item. The first related to the overall responsibility for accountability being shared among the Maintenance, Security, and Operations departments. The licensee revised the accountability procedure so that the Security staff now controls the accountability of personnel during emergency events. The inspectors noted this change as a noteworthy enhancement to the process. The second concern, however, was associated with the licensee's ability to meet the NRC's guidance to perform an initial accountability within the protected area in about 30 minutes. The changes made in procedure and responsibility appear to address continuous accountability only, and it remains unclear how initial accountability will be achieved.

CLOSED (URI 50-220/91-19-04 and 50-410/91-19-04) Adequacy of the licensee's resolution of Action Plan items.

Following the event, a comprehensive list of items for possible corrective action was compiled and prioritized by the EP staff. The inspectors reviewed the status of implementation of the high priority items and noted that good progress was being made. This item is closed.

4.0 Exit Meeting

The inspectors met with the licensee personnel denoted in Detail 1 at the conclusion of the inspection to discuss the inspection scope and findings. The licensee acknowledged the findings and stated their intention to evaluate them and institute corrective actions as appropriate.

