U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Report Nos.:	94-23 94-27
Docket Nos.:	50-220 50-410
License Nos.:	DPR-63 NPF-69
Licensee:	Niagara Mohawk Power Corporation P. O. Box 63 Lycoming, NY 13093
Faciiity:	Nine Mile Point, Units 1 and 2
Location:	Scriba, New York
Dates:	November 14 through November 18, 1994
Inspectors:	L. Briggs, Senior Resident Inspector (Oyster Creek) R. Fuhrmeister, Project Engineer W. Mattingly, Resident Inspector

Approved by: Lawrence T. Doerflein 12/20/94

Lawrence T. Doerflein, Chief — Date
Reactor Projects Section No. 1A
Division of Reactor Projects

Scope: Announced inspection to perform an evaluation of licensee systems designed to ensure that problems/conditions that are or have the potential to be adverse to quality or to plant safety are identified, raised to the proper level of management, assessed, and corrected. The inspection focused on the areas of plant operations and maintenance.

Results: Refer to the executive summary.

EXECUTIVE SUMMARY
Nine Mile Point Units 1 and 2
50-220/94-23 & 50-410/94-27

The objective of this inspection was to evaluate the effectiveness of facility programs to identify, raise to the proper management level, resolve, and prevent problems and conditions that are adverse to quality or safe operation of the facilities. The inspectors concluded that both units had effective programs for identifying, evaluating, and correcting problems, and that management of these activities was good.

The deficiency/event report (DER) is the primary means for the identification, documentation, notification, evaluation, correction, trending, and reporting of conditions, events, activities, and concerns that have the potential for affecting safe and reliable station operations. The inspectors concluded that it was an effective process and that all levels of the organization did an excellent job of identifying problems and initiating a DER when necessary. DER disposition was generally good. Unit 2 Operations Branch dispositions were noted to be excellent, and Unit 1 Maintenance Branch is working to resolve self-identified issues with their process.

Quality Assurance (QA) audits were determined to be good quality and sufficiently indepth to identify problems and comply with requirements. A weakness in the followup of findings such as management or process improvement issues that did not meet the threshold for DER initiation was noted and appears to be corrected in the recently issued Revision 5 of the "Nuclear Audit Program" procedure.

A review of the various safety committee meeting minutes and observation of one safety review committee meeting (Unit 2 SORC) indicated that they performed high quality, indepth reviews and evaluations of various plant activities and reports. Members displayed a questioning attitude and a strong consideration for resolution of safety concerns and for the accuracy of information submitted to the NRC.

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DETAILS

1.0 INSPECTION OBJECTIVE AND SCOPE (40500)

The objective of the inspection was to conduct an evaluation of licensee management systems in place to ensure that issues, problems, and/or conditions potentially adverse to quality or plant safety are identified, raised to the proper level of management attention, assessed and corrected. The scope of the inspection focused on the maintenance and operations branch's self assessment program and activities.

The inspectors used the guidance in the core inspection procedure 40500, "Effectiveness of Licensee Controls in Identifying, Resolving, and Preventing Problems," to conduct the inspection. The inspection focused on licensee's identification of issues and the effectiveness of corrective actions rather than on the program procedures. The primary system for the identification, resolution, and trending of deficiencies at Nine Mile Point units 1 and 2 is the Deviation/Event Report (DER) system. Other activities are conducted by the licensee to oversee and evaluate the effectiveness of the DER system and make recommendations to improve safe operations. They include audits by the Quality Assurance Branch, the Independent Safety Engineering Group (ISEG) Unit 2 only, the Station Operations Review Committee (SORC), and Safety Review and Audit Board (SRAB). During the conduct of the inspection the inspectors reviewed records of the above activities, interviewed staff and management personnel, and observed portions of activities being conducted when possible.

2.0 DEFICIENCY/EVENT REPORT PROGRAM

The deviation/event report (DER) is NMPC's program for the identification, documentation, notification, evaluation, correction, trending, and reporting of conditions, events, activities, and concerns that have the potential for affecting safe and reliable station operations. Known or suspected structure, system or component problems that do not meet the DER threshold are initially evaluated by the station shift supervisors and then dispositioned by the problem identification (PI) and work order systems.

This inspection focused on the identification, evaluation, and correction aspects of the DER program for the operation and maintenance branches at both units. The inspectors reviewed about 40 safety significant DERs to assess the adequacy of the evaluations, root cause analyses, and corrective action recommendations. DERs were selected to evaluate the following areas: operational events, testing, or maintenance activities; deficiencies or modifications requiring safety evaluations or operability determinations; procedural adherence deficiencies; QA audits and self-assessments findings; repetitive equipment deficiencies; and other events or issues that could indicate weaknesses. In addition to the DER review, independent inspections of selected corrective actions, observations of several root cause determination and corrective action meetings, and follow-up interviews to evaluate various aspects of the DER process were performed.

The inspectors concluded that the DER is an effective process for identifying significant issues and the threshold for initiating DERs was appropriate to capture these issues for further evaluation. All levels of the organization

did an excellent job of identifying problems and initiating DERs when necessary. The management team for each unit then promptly reviewed and appropriately prioritized each new DER.

The quality of the DER dispositions (which included apparent or root cause evaluations, corrective, and preventive actions) overall were very good, especially for the more safety significant issues. Root cause evaluations were properly conducted for all significant events that met the established threshold criteria or as directed by the plant managers. Also, the depth of the evaluation varied appropriately with the significance of the issue. The use of lessons learned transmittals and department stand downs or night notes for the dissemination of important lessons or actions resulting from the DER process was a noted strength. In general, the DERs dispositioned by the Unit 1 maintenance department lacked the depth and detail demonstrated by the other departments and several DERs did not fully address the initial problem or had corrective actions that were symptom-oriented and failed to address the possible causes. These problems were acknowledged by the Unit 1 maintenance manager who had previously identified similar problems and was taking appropriate actions to improve his department's implementation of the DER program. The DER dispositions performed by the Unit 2 operations department were consistently excellent.

The DER backlog is satisfactorily managed at both units. Several thousand DERs are initiated and dispositioned each year. The unit management teams periodically review the DER backlog to ensure that DERs are dispositioned promptly and have established two performance indicators in the Nuclear Business Plan to monitor the timeliness of DER dispositioning. Appropriate prioritization and periodic review of the DER backlog ensured that significant safety issues were promptly dispositioned.

The DER program trends the conditions that led to initiation of the DER using industry established causal factor codes. This data is periodically evaluated by the quality assurance (QA) department and presented to the branch managers to assess performance trends. The third quarter DER trend summary concluded that the most prevalent causal factors continue to be work practice failures, i.e., documents not followed correctly and poor self-checking. Additionally, the QA department evaluates individual department corrective and preventive actions as documented in the DER dispositions. The last two quarterly assessments identified the need to further improve the quality of apparent and root cause determinations because some did not adequately account for human performance or process factors and thus provide preventive actions that are insufficient to prevent recurrence of the event. The inspectors agreed with these QA department findings, discussed their implications with several department managers, and considered the trending and assessment processes satisfactory.

In summary, the inspectors concluded that NMPC effectively performed the following with few exceptions:

- initial identification and characterization of problems;

- elevation of problems to the proper level of management for resolution;
- disposition of any operability/reportability issues;
- implementation of corrective actions including evaluation of repetitive conditions;
- and expansion of the scope of corrective actions to include applicable related systems, equipment, procedures, and personnel actions.

3.0 QUALITY ASSURANCE AUDITS

The inspectors reviewed selected audits performed by and for the Nuclear Quality Assurance Branch during calendar year 1994. The Deficiency/Event Reports (DER) which resulted from those audits were also reviewed. The QA audit reports were reviewed for conformance to the requirements of the governing procedure, QAP-ASU-18.10, "Nuclear Audit Program", and for their technical adequacy.

The following audit reports were reviewed:

94003	Snubber Incident Management Assessment Recommendation #5
94016	Unit 2 Procedures Upgrade Audit
94017	1994 Combined Utility Group Assessment of NMPC Quality Assurance Program
94019	Rosemount Pressure Transmitters (Unit 1&2)
94026	Operations/Surveillance & Test

The audits were of good quality and of sufficient depth to identify both failures to comply with applicable requirements, and areas for improvement of both the process and management oversight of the process.

A weakness was identified in the audit program in that once an issue was identified on a DER, QA personnel review and followup of corrective actions was not required until the next QA audit in that area. These audits are scheduled on a two year cycle, so followup might be delayed as long as two years. In addition, when issues were identified in the areas of management or process improvement and did not meet threshold for initiating a DER, there was no formal followup of the finding.

This weakness appears to have been satisfactorily addressed with the issuance of Revision 5 to QAP-ASU-18.10, "Nuclear Audit Program", on November 3, 1994. Revision 5 requires the audit team to meet at the end of the audit to analyze the findings to identify any other DERs, management issues or audit conclusions not already documented. In addition, Rev. 5 added the requirement for the Supervisor, QA Audits, to assure timely followup of DERs issued as a result of the audit, and to assure that management issues identified are tracked and reevaluated by the Audit Group to determine if further action is warranted. These followup activities are to be documented in QA surveillances, or in supplemental audits.

The following DERs were reviewed for clarity of the findings, and adequacy of the completed or proposed corrective actions:

2-94-0634	IST Computer Software not in compliance with NDD-NCS
1-94-0762	Past Independent Verification of Control Rod Scram Insertion data method did not meet Managers' expectation
2-94-1452	System Operating Procedures (SOPs) procedural discrepancies
C-94-1323	Requirements not specified for Rosemount Transmitter enhanced surveillance program
C-94-1324	Maintenance software for Rosemount transmitter trending does not meet NDD-NCS
C-94-1294	Inadequate corrective action for stored Rosemount transmitters (NRC Bulletin 90-01 Supplement 1)
2-94-1922	Procedure for Stuck Control Rod not in compliance with SIL 139
1-94-1976	Equipment Preconditioning concern with NI-ST-Q24
2-94-1979	Storage of EOP Validation and Verification Documentation
1-94-1981	Discrepancy between P&ID and Field Condition of locked valves
2-94-2019	CSO not logging shift and daily checks in Control Room Log
1-94-2024	CSO not logging the performance of all surveillance testing
2-94-2027	Discrepancy Between P&ID and Field Condition of Locked Valves
C-94-2041	Inadequate Key Control Procedure requirements specified in GAP-OPS-01 and implementation deficiencies
2-94-2100	Unsatisfactory progress with Upgrade of Operating Procedures (OPs)

These DERs initiated by QA during the conduct of audits exhibited good descriptions with examples documented. The audit findings were well developed and the completed corrective actions (and proposed corrective actions for those DERs which had been dispositioned but were still open) appeared to be

well thought out and directed at causes rather than symptoms. In addition, the corrective actions, if carried out consistently, should prevent recurrence of the identified problems.

Since formal tracking and followup of management and process improvement issues had not been procedurally required, a review of these audit findings was not conducted.

In conclusion, the QA audit program is being used to identify problems and potential problems and initiate corrective actions. In addition, station management is using the QA Audit program to gain insights for improvements in station operation by requesting audits of specific areas in operations and maintenance.

4.0 ONSITE AND OFFSITE SAFETY REVIEW COMMITTEE ACTIVITIES

4.1 Review of Various Safety Committee Meeting Minutes

Nine Mile Point Unit 2 has three safety review organizations that conduct routine formal meetings to evaluate plant activities. Nine Mile Point unit 1 has two safety review organizations. The organizations are the Independent Safety Engineering Group (ISEG), (Unit 2 only), the Station Operations Review Committee (SORC), and the Safety Review and Audit Board (SRAB). The inspector reviewed the minutes of 25 meetings of the various groups to determine the depth and thoroughness of their review, recommendations made, and followup and tracking of recommendations and open items. Items that were not satisfactorily resolved during the meeting or required further action were identified as open items and entered into the computer tracking systems by the committee secretaries. The open items are assigned to individuals to ensure action is taken for prompt closure and they are discussed in subsequent meetings to ensure appropriate action was taken prior to closing the item.

The inspector determined that the safety review groups meeting minutes indicated that they performed high quality, in-depth reviews of a considerable number of plant activities and reports such as, DERs, licensee event reports, safety evaluations and proposed modifications, industry events, NRC information notices, bulletins, and inspection reports, quality assurance audit reports, and other licensee generated reports. The review activities and the final recommendations were well documented.

4.2 Unit 2 Station Operations Review Committee (SORC) Meeting

The inspector attended a portion the Unit 2 SORC meeting held on November 17, 1994. During the meeting the members discussed information to be sent to the NRC to address a NRC request for additional information. The additional information request concerned the licensee's submittal requesting a power upgrade of 4.2 percent. The members exhibited good questioning attitude and concern for safe plant operations. One question was asked concerning the means to control and ensure that any plant changes or modifications made in the interim period before the power upgrade was approved would not change plant configuration and affect the submittal to the NRC. This resulted in a SORC open action item to resolve the concern.

The inspector determined that the committee conducted a thorough and detailed evaluation of the additional information to be submitted. The questions indicated a strong consideration for unreviewed safety concerns and accuracy of submitted information. No other safety committee meetings were conducted during the inspection.

5.0 EXIT MEETING

At the conclusion of the inspection on November 18, 1994, the inspectors met with the Nine Mile Point Units 1 and 2 representatives listed in attachment 1. The inspectors discussed the inspection scope and findings at the meeting as detailed in this report. No proprietary material was reviewed by the inspectors during the inspection.

ATTACHMENT 1

ATTENDEES AT THE NOVEMBER 18, 1994 EXIT MEETING

R. Abbott, Plant Manager, Unit 1
J. Aldrich, Maintenance, Unit 1
W. Baker, Licensing
C. Beckham, Quality Assurance
J. Blusiak, Chemistry Manager, Unit 2
J. Conway, Operations Manager, Unit 2
K. Dahlberg, Plant Manager, Unit 2
G. Doyle, Quality Assurance Supervisor
E. Lighthall, Lead Engineer, Site Engineering, Unit 1
M. McCormick, Vice President, NSAS
M. Meehan, Technical Support
R. Randall, Technical Support, Unit 2
N. Rademacher, Operations Manager, Unit 1
M. Shanbhag, Materials
P. Swafford, Maintenance Manager, Unit 2
G. Wierzbowski, Lead System Engineer, Unit 1
A. Zallnich, Licensing