

September 8, 2000

Mr. John H. Mueller
Chief Nuclear Officer
Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
Operations Building, 2nd Floor
P.O. Box 63
Lycoming, NY 13093

SUBJECT: NRC's NINE MILE POINT INSPECTION REPORT 05000220/2000-005,
05000410/2000-005

Dear Mr. Mueller:

On August 12, 2000, the NRC completed an inspection of your Nine Mile Point Nuclear Station, Units 1 and 2. The enclosed report presents the results of that inspection. Preliminary results were discussed with Mr. J. Conway and other members of your staff on August 24, 2000.

NRC inspectors examined numerous activities as they related to reactor safety and compliance with the Commission's rules and regulations and with the conditions of your operating license. The inspection consisted of a selected examination of procedures and records, observations of activities, and interviews with personnel. There were no findings identified.

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Sincerely,

/RA/

Michele G. Evans, Chief
Projects Branch 1
Division of Reactor Projects

Docket Nos. 05000220, 05000410
License Nos. DPR-63, NPF-69

Enclosure: NRC's Nine Mile Point Inspection Report 05000220/2000-005, 05000410/2000-005

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REGION I

Docket Nos: 050000220, 050000410
License Nos: DPR-63, NPF-69

Report No: 050000220/20000-005, 050000410/2000-005

Licensee: Niagara Mohawk Power Corporation (NMPC)

Facility: Nine Mile Point, Units 1 and 2

Location: P. O. Box 63
Lycoming, NY 13093

Dates: July 2, 2000 - August 12, 2000

Inspectors: G. Hunegs, Senior Resident Inspector
R. Fernandes, Resident Inspector
B. Fuller, Resident Inspector
J. Noggle, Senior Health Physicist
N. Perry, Senior Project Engineer
L. Scholl, Team Leader

Approved by: Michele G. Evans, Chief
Projects Branch 1
Division of Reactor Projects

Summary of Findings
Nine Mile Point, Units 1 & 2
NRC Inspection Report 05000220/2000-005, 05000410/2000-005

IR 05000220/2000-005, 05000410/2000-005; on 07/02-08/12/2000; Niagara Mohawk Power Corporation (NMPC); Nine Mile Point Unit 1 and Unit 2.

The inspection was conducted by the resident inspectors and three region based inspectors. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process described in Inspection Manual Chapter 0609.

There were no findings identified.

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Report Details

SUMMARY OF PLANT STATUS

Nine Mile Point Unit 1 (Unit 1) began this inspection report period at 100 percent power and remained there throughout the end of the inspection period.

Nine Mile Point Unit 2 (Unit 2) began this inspection report period at 100 percent power and remained there throughout the end of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignment

a. Inspection Scope

The inspectors conducted equipment alignment partial walkdowns primarily to evaluate the operability of selected trains or backup systems, with the redundant train or system inoperable or out of service. Walkdowns were also conducted on equipment recently realigned due to outage activities and surveillance testing. The walkdowns included, as appropriate, consideration of plant procedures and reviews of documents to determine correct system lineups, and verification of critical components to identify any discrepancies which could affect operability of the redundant train or backup system.

The inspectors performed the following partial system walkdowns:

- Automatic depressurization system (Unit 2)
- Containment spray 111 (Unit 1)

b. Issues and Findings

There were no findings identified.

1R05 Fire Protection

a. Inspection Scope

The inspector conducted walk-downs of designated fire areas to determine if there was adequate control of transient combustibles and ignition sources. The condition of fire detection devices, the readiness of the sprinkler fire suppression system and the fire doors were also inspected. In addition, the passive fire protection features were inspected, including the ventilation system fire dampers, structural steel fire proofing and electrical penetration seals. The inspectors also reviewed fire detection test procedure N2-FSP-FPM-A001-3, Revision 2. The following plant areas were inspected:

- Reactor core isolation cooling (RCIC) room, fire zone 204SW (Unit 2)
- High pressure core spray (HPCS) room, fire zone 205NZ (Unit 2)

- Emergency diesel generator and switchgear rooms (Unit 1)
- Turbine building (Unit 1)
- Reactor building (Unit 1)

b. Issues and Findings

There were no findings identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed performance based problems involving selected in-scope structures, systems, and components (SSCs) to assess the effectiveness of the maintenance program. Reviews focused on: (1) proper maintenance rule scoping, in accordance with 10 CFR 50.65; (2) characterization of failed SSCs; (3) safety significance classifications; (4) 10 CFR 50.65 (a)(1) and (a)(2) classifications; and, (5) the appropriateness of performance criteria for SSCs classified as (a)(2), and goals and corrective actions for SSCs classified as (a)(1). The inspectors reviewed the licensee's system scoping documents and system health reports. The following deviation/event reports (DERs) were reviewed:

- DER 2-2000-2524, Reactor water cleanup valve 2WCS*MOV102 failed type C local leak rate test (LLRT) (Unit 2)
- DER 1-2000-2572, Containment spray 122 breaker failure (Unit 1)

b. Issues and Findings

There were no findings identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

For the selected maintenance work orders (WOs) listed below, the inspectors evaluated: (1) the effectiveness of the risk assessments performed before the maintenance activities were conducted; (2) risk management control activities; (3) the necessary steps taken to plan and control resultant emergent work tasks; and, (4) the overall adequacy of identification and resolution of emergent work and the associated maintenance risk assessments.

- WO-00-07491-00 Troubleshoot emergency condenser isolation valve control circuit (Unit 1)
- WO-00-09501-01 Perform service water strainer preventive maintenance per N2-MPM-SWP-A513 due to shear pin breaking (Unit 2)

- WO-00-07504-00 Add quench gas to generator output breaker R925 to return gas pressure to design levels (Unit 1)
- WO-00-10314 Division I emergency diesel generator ventilation damper repair (Unit 2)

b. Issues and Findings

There were no findings identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed selected operability evaluations affecting risk significant mitigating systems, to assess: (1) the technical adequacy of the evaluations; (2) whether continued system operability evaluation was warranted; (3) whether other existing degraded systems adversely impacted the affected system or compensatory measures; (4) where compensatory measures were used, whether the measures were appropriate and properly controlled; and, (5) degraded system impact on TS limiting condition for operations and the risks significance in accordance with the significance determination process (SDP). The following DERs were reviewed:

- DER 2-2000-2325: Drywell vacuum breaker position indication failure. (Unit 2)
- DER 2-2000-1738: Containment isolation valve 2-CPS*AOV107 failed to meet the allowed leakage value during leak rate surveillance test. Engineering support analysis ESA-2-M00-04, Rev 1, provided justification for utilizing a manual isolation valve to maintain containment integrity until the penetration isolation valve can be repaired. (Unit 2)
- DER 1-2000-1927: Off-gas system flow rate greater than design values. (Unit 1)
- DER 1-2000-2614: Refurbished 4160 volt breakers. (Unit 1)

b. Issues and Findings

There were no findings identified.

1R19 Post-Maintenance Testinga. Inspection Scope

The inspectors reviewed post-maintenance testing (PMT) procedures and associated testing activities for selected risk significant mitigating systems to assess whether: (1) the effect of testing on the plant had been adequately addressed by control room and engineering personnel; (2) testing was adequate for the maintenance performed; (3) acceptance criteria were clear and adequately demonstrated operational readiness, consistent with the design and licensing basis documents; (4) test instrumentation had current calibrations, range, and accuracy for the application; (5) tests were performed, as written, with applicable prerequisites satisfied; (6) jumpers installed or leads lifted were properly controlled; (7) test equipment was removed following testing; and, (8) equipment was returned to the status required to perform its safety function.

- WO-00-07721-00 Reactor water clean up heat exchanger relief valve testing after temporary modification installation (Unit 2)
- WO-98-02324-17 Core spray pump 111 breaker (Unit 1)

b. Observations and Findings

There were no findings identified.

1R22 Surveillance Testinga. Inspection Scope

The inspectors witnessed performance of surveillance test procedures and reviewed test data of selected risk significant SSCs to assess whether the SSCs satisfied Technical Specification (TS), Updated Final Safety Analysis Report, and licensee procedure requirements; and to determine if the testing appropriately demonstrated that the SSCs were operationally ready and capable of performing their intended safety functions. The following tests were witnessed:

- N1-ST-Q3, High Pressure Coolant Injection Pump and Check Valve Operability Test. (Unit 1)
- N1-ISP-036-003, High/Low Reactor Water Level Instrument Test/Calibration. (Unit 1)
- N2-ESP-ENS-Q731, Quarterly Channel Functional Test Low Pressure Core Spray/Low Pressure Coolant Injection Pumps Auto Start Time Delay Relay. (Unit 2)

b. Issues and Findings

There were no findings identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

OS2 As Low As Reasonably Achievable (ALARA) Planning and Controls

a. Inspection Scope

The effectiveness of ALARA planning was reviewed with respect to online maintenance planning at Unit 1 and preparations for the March, 2001, Unit 1 refueling outage. Specific inspection activities included attendance at the August 1, 2000, outage planning meeting. Interviews with the Unit 1 ALARA Supervisor were conducted with respect to the methodology for exposure estimating and tracking, Unit 1 ALARA initiatives and currently planned outage shielding packages. Two radiation protection planners were interviewed and the following procedures were reviewed to determine the effectiveness of incorporating exposure reduction initiatives into the work order packages.

- Work Control, GAP-PSH-01, Rev. 21
- Control of On-Line Work, GAP-PSH-03, Rev. 2
- On-Line Work Management Process Guideline, Rev. 0

The Unit 1 radiological source-term trend data was reviewed to assess licensee procedures and plans for source-term control. A corporate health physicist was also interviewed with regard to corporate ALARA planning. Plant walkdowns were conducted to survey/identify exposure significant radiation sources within accessible plant process buildings during plant operating conditions. Eighty-eight radiation protection related DERs from July, 1999 through July, 2000, were reviewed with nine DERs reviewed in detail.

b. Issues and Findings

There were no findings identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Process Review

a. Inspection Scope

Occupational radiation safety performance indicator screening procedures were reviewed along with screening results from the second calendar quarter of 2000 using NRC Temporary Instruction (TI) 2515/144 as guidance. Interviews were conducted with the Unit 1 and Unit 2 ALARA Supervisors.

b. Issues and Findings

There were no findings identified.

4OA5 Other

- .1 (Closed) Licensee Event Report (LER) 05000410/2000-008: Unanalyzed Environmental Qualification Areas. On April 18, NMPC identified that as part of a 1995 modification to the containment atmospheric monitoring system, the licensee staff failed to evaluate the impact on environmental qualification of equipment in the vicinity of the system. Stand-pipes were installed in containment to remove excess moisture from the sample lines. NMPC determined that following a loss of coolant accident, these stand-pipes could fill with reactor coolant and adversely impact the radiation doses in the area. Subsequent evaluation by NMPC determined that the increase in radiation levels did not affect the operability of any equipment and had no impact on the environmentally qualified equipment in the area. The cause was determined to be inadequate change management during modification development and inadequate independent reviews of the modification. This LER is closed.
- .2 (Closed) Inspector Followup Item (IFI) 05000410/1999-009-01: Use of the process computer to determine control rod position. The inspector reviewed NMPC's evaluation of the acceptability of using the process computer to determine the position of control rods when the 4-rod display and/or the full core display are not available. The inspector noted that the evaluation applied only to determining control rod positions and that plant procedures require the 4-rod display to be available when moving control rods. Based on this review, the inspector found that NMPC's conclusion that the use of the process computer was an acceptable method for determining control rod position was appropriate. The inspector also noted that NMPC has submitted a license amendment to convert to the improved technical specification (ITS) format. The NMPC position regarding the use of the process computer for determining control rod positions is consistent with the associated ITS requirements that address the ability to determine control rod positions.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. J. Conway, Vice President, Nuclear Generation and other members of licensee management at the conclusion of the inspection on August 24, 2000. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTEDLicensee

R. Abbott, VP Nuclear Engineering
D. Barcomb, Unit 2 Radiation Protection Manager
J. Conway, VP Nuclear Generation
R. Dean, Unit 2 Technical Support Manager
S. Doty, Unit 1 Maintenance Manager
L. Hopkins, Unit 1 Plant Manager
P. Mazzaferro, Unit 1 Technical Support Manager
J. Mueller, Senior VP and Chief Nuclear Officer
L. Newman, Unit 2 Operations Manager
M. Peckham, Unit 2 Plant Manager
L. Pisano, Training Manager
V. Schuman, Unit 1 Radiation Protection Manager
C. Terry, VP Quality Assurance Nuclear
D. Topley, Unit 1 Operations Manager
D. Willis, Unit 2 Maintenance Manager

ITEMS OPENED, CLOSED, AND DISCUSSEDItems Closed

05000410/2000-008	LER	Unanalyzed Environmental Qualification Areas.
05000410/1999-009-01	IFI	Use of the process computer to determine control rod position.

LIST OF ACRONYMS USED

ALARA	As Low As Reasonably Achievable
DER	Deviation/ Event Report
HPCS	High Pressure Core Spray
IFI	Inspector Followup Item
ITS	Improved Technical Specifications
LER	Licensee Event Report
NMPC	Niagara Mohawk Power Corporation
PMT	Post-Maintenance Testing
RCIC	Reactor Core Isolation Cooling
SDP	Significance Determination Process
SSC	Structures, Systems and Components
TI	Temporary Instruction
TS	Technical Specification
Unit 1	Nine Mile Point Unit 1
Unit 2	Nine Mile Point Unit 2
WO	Work Order

ATTACHMENT 1

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
<ul style="list-style-type: none"> ● Initiating Events ● Mitigating Systems ● Barrier Integrity ● Emergency Preparedness 	<ul style="list-style-type: none"> ● Occupational ● Public 	<ul style="list-style-type: none"> ● Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.