

December 6, 2001

Mr. John T. Conway  
Site Vice President  
Nine Mile Point Nuclear Station, L.L.C.  
P.O. Box 63  
Lycoming, NY 13093

SUBJECT: NINE MILE POINT NUCLEAR STATION - NRC INSPECTION REPORT  
50-220/01-08, 50-410/01-08

Dear Mr. Conway:

On November 10, 2001, the NRC completed an inspection of your Nine Mile Point Nuclear Station, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on November 16, 2001, with Mr. M. Peckham and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based upon the results of this inspection, the inspectors identified an issue of very low safety significance (GREEN). The issue was determined to involve a violation of NRC requirements. However, because of the very low safety significance and because the issue was entered into your corrective action program, the NRC is treating this issue as a Non-cited Violation (NCV), consistent with Section VI.A.1 of the NRC Enforcement Policy, issued on May 1, 2000, (65FR25368). If you contest the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Resident Inspector at the Nine Mile Point Nuclear Station.

Since September 11, 2001, Nine Mile Point Nuclear Station has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access of personnel and vehicles to the site.

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The NRC continues to interact with the Intelligence Community and to communicate information to Niagara Mohawk Power Corporation. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document management system (ADAMS). ADAMS is accessible from the NRC web site in the Public Electronic Reading Room, <http://www.nrc.gov/reading-rm.html>.

Sincerely,

/RA/

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

Docket Nos. 50-220  
50-410  
License Nos. DPR-63  
NPF-69

Enclosure: Inspection Report 50-220/01-08, 50-410/01-08

Attachment 1 - Supplemental Information

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**U.S. NUCLEAR REGULATORY COMMISSION  
REGION I**

Docket Nos: 50-220, 50-410

License Nos: DPR-63, NPF-69

Report Nos: 50-220/01-08, 50-410/01-08

Licensee: Nine Mile Point Nuclear Station, LLC (NMPNS)

Facility: Nine Mile Point, Units 1 and 2

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

Dates: September 30, 2001 - November 10, 2001

Inspectors: G. Hunegs, Senior Resident Inspector  
B. Fuller, Resident Inspector  
R. Fernandes, Resident Inspector

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

## Summary of Findings

IR 05000220-01-08, IR 05000410-01-08, on 09/30-11/10/2001; Nine Mile Point Nuclear Station, LLC; Nine Mile Point, Units 1 & 2. Surveillance Testing.

The inspection was conducted by resident inspectors. This inspection identified one Green finding which was characterized as a Non-cited Violation. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using IMC 0609, "Significance Determination Process," (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation.

### A. Inspector Identified Findings

#### **Cornerstone: Initiating Events**

**Green.** The inspector identified a Non-cited Violation for an inadequate surveillance procedure, which resulted in the inadvertent closure of the main steam isolation valves and a reactor scram.

This finding was of very low safety significance based on the change in core damage frequency associated with a reactor trip. (Section 1R22 and 1R14)

### B. Licensee Identified Violations

Violations of very low significance which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in section 4OA7 of this report.

## Report Details

### **SUMMARY OF PLANT STATUS**

Nine Mile Point Unit 1 (Unit 1) operated at 100 percent power throughout the inspection period.

Nine Mile Point Unit 2 (Unit 2) began the inspection period at 100 percent power. On October 15, Unit 2 scrambled due to the inadvertent closure of the main steam isolation valves. Unit 2 was started up on October 17 and returned to full power on October 20 and remained there through the end of the inspection period.

#### **1. REACTOR SAFETY**

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

##### 1R05 Fire Protection

###### a. Inspection Scope

The inspectors conducted walkdowns of the 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 systems and the fire doors were also inspected against industry standards. In addition, the passive fire protection features were inspected, including the ventilation system fire dampers, structural steel fire proofing, and electrical penetration seals. The following plant areas were inspected:

Turbine Building 250 and 261 foot elevations (Unit 1)  
Reactor Building 261 foot elevation (Unit 1)

###### b. Findings

No findings of significance were identified.

##### 1R11 Licensed Operator Requalification

###### a. Inspection Scope

The inspectors reviewed the licensed operator requalification training activities to assess the licensee's training program effectiveness. The inspectors observed Unit 2 licensed operator simulator training on October 26. The inspectors reviewed performance in the areas of procedure use, self and peer-checking, completion of critical tasks, and training performance objectives. Following the simulator exercise, the inspectors observed the crew debrief and critique and reviewed simulator fidelity through a sampling process.

b. Findings

No findings of significance were 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 DERs were reviewed:

- DER 1-2001-4952 Containment Spray 122 Pump Motor High Vibrations (Unit 1)
- DER 1-2001-4744 Emergency Cooling System 11 Eagle Timers (Unit 1)

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

For selected maintenance work orders (WOs), 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. The following WOs were reviewed:

- N2-ISP-MSS-R102, Operating Cycle Channel Calibration of Main Steam Line High Flow Instrument Channels (Unit 2)
- N1-ISP-036-008, Reactor High Pressure Emergency Condenser Instrument Test and Calibration (Emergent Work) (Unit 1)
- Transversing In-core Probe Troubleshooting (Unit 1)
- Removal of Diesel Fire Pump and Service Water work from weekly schedule due to heightened security concerns (Unit 1)

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-Routine Plant Evolutions and Events

.1 Reactor Scram Due to Main Steam Isolation Valve Closure (Unit 2)

a. Inspection Scope

At 0959, on October 15, Unit 2 scrambled from full power after a fast closure of all main steam isolation valves. A calibration was in progress on main steam line flow instruments which results in a half isolation signal. While restoring a main steam flow transmitter, the main steam isolation valves closed which initiated a reactor scram. The cause was a pressure perturbation in the common sensing line for the transmitters causing the MSIV fast closure. All control rods fully inserted. Operators controlled level using the reactor feedwater pumps and control rod drive (CRD) systems and controlled pressure using safety relief valves (SRVs). After the scram, operators were challenged during control of reactor water level. Level fluctuations from cycling the SRVs caused high reactor water level trips of the feed pump and a low level initiation of high pressure core spray and RCIC. The inspectors reviewed the decisions and operator approach to controlling reactor water level. Although level control problems were encountered, operators followed procedures and eventually stabilized reactor water level.

The inspectors observed how control room personnel responded to the event. The inspectors arrived in the control room shortly after the scram and observed the follow-up actions of licensed operators, including operator briefings, actions required by the emergency operating procedures, and monitoring of plant conditions. As part of the follow up to this event, the inspectors reviewed plant chart recorders, compared procedure requirements to observations of operator performance, and held discussions with plant personnel regarding operator control of critical plant parameters. In addition, the inspectors reviewed activities associated with the main steam line flow calibration, including the calibration procedure, N2-ISP-MSS-R102, Operating Cycle Channel Calibration of Main Steam Line High Flow Instrument Channels.

The inspectors reviewed compensatory actions taken prior to startup and the treatment of other personnel performance and equipment deficiencies.

b. Findings

Green. A non-cited violation of Technical Specification 5.4.1 for an inadequate surveillance procedure, which resulted in the inadvertent closure of the main steam isolation valves and a reactor scram.

The licensee's investigation determined the cause to be an inadequate surveillance test in that the procedure testing methodology did not sufficiently provide for positive venting of the transmitter nor provide for pressurizing the transmitter piping prior to restoration. The licensee did not adequately identify and resolve the risk associated with the testing.



The performance deficiency associated with this event is an inadequate procedure, which during performance caused a reactor scram. The finding was greater than minor because it had an actual impact of causing a reactor scram. The event was of very low safety significance based on the risk associated with a reactor trip as determined by a phase 3 significance determination process risk assessment. Technical Specification 5.4.1.a requires that written procedures be established, implemented, and maintained covering the activities specified in Regulatory Guide 1.33, Appendix A. Regulatory Guide 1.33, Appendix A, Item 8.b requires procedures for the surveillance tests listed in the Technical Specifications. Contrary to TS 5.4.1.a, Surveillance Procedure N2-ISP-MSS-R102, Operating Cycle Channel Calibration of Main Steam Line High Flow Instrument Channels, was not maintained. However, because of the very low safety significance and because the issue is in the licensee's corrective action program, it is being treated as a non-cited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy (**NCV 50-410/2001-008-01**). This is in the licensee's corrective action program under DER 2001-4830.

#### 1R15 Operability Evaluations

##### a. Inspection Scope

The inspectors reviewed operability evaluations affecting risk significant mitigating systems, to assess: (1) the technical adequacy of the evaluation; (2) whether continued system operability evaluations were 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) the degraded systems impact on TS limiting condition for operations. The following licensee documents were reviewed:

- DER 2001-4835 Reactor Core Isolation Cooling flow oscillations (Unit 2)
- DER 1-2001-4952 Containment Spray Pump 122 High Vibrations (Unit 1)
- DER 1-2001-4744 Reactor Protection System channel 11 Emergency Cooling (Unit 1)

##### b. Findings

No findings of significance were 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. The following tests and activities were reviewed:

N1-ISP-036-008      Reactor High Pressure Emergency Cooling Instrument  
Test/Calibration (Unit 1)

b. Findings

No findings of significance were 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 Specifications, Updated Final Safety Analysis Report (UFSAR), 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:

- N2-OSP-CSH@002, High pressure core spray pump and valve operation and system integrity test (Unit 2)
- N1-ST-M4A, Emergency Diesel Generator 102 and Power Board 102 Operability Test (Unit 1)
- N1-ST-Q6C, Containment Spray System Loop 112 Quarterly Operability Test (Unit 1)
- N2-1SP-MSS-R102, Operating Cycle Channel Calibration of Main Steam Line High Flow Instrument Channels. (Unit 2) (Concerns associated with this surveillance are discussed in Section 1R14 of this report.)

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES (OA)**4OA5 Other

On November 7, the operating licenses for Units 1 and 2 were transferred from Niagara Mohawk to Constellation Nuclear.

4OA6 Management Meetings.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. M. Peckham, Unit 2 Plant Manager, and other members of licensee management at the conclusion of the inspection on November 16, 2001. 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.

.2 NRC/NMPC Management Meeting

On October 11, 2001, Commissioner Merrifield conducted a tour of the Nine Mile Point facility and met with senior plant managers and station personnel.

4OA7 Licensee Identified Violations:

The following findings of very low significance were identified by the licensee and are violations of NRC requirements which met the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as Non-cited Violations.

NCV Tracking Number

05000410/2001-008-02

Requirement Licensee Failed to Meet

The licensee did not properly maintain a high radiation area locked as required by TS 5.7.2.

**ATTACHMENT 1**a. Key Points of ContactLicensee

J. Conway, Site Vice President  
 L. Hopkins, Unit 1 Plant General Manager  
 M. Peckham, Unit 2 Plant General Manager  
 D. Wolniak, Manager, Licensing

NRC

A. Blamey, Reactor Engineer  
 James Trapp, Senior Risk Analyst  
 Eugene Cobey, Senior Risk Analyst

b. List of Items Opened, Closed and DiscussedOpened and Closed:

50-410/2001-008-01	NCV	Violation of TS 5.4.1 for an inadequate surveillance procedure, which resulted in the inadvertent closure of the main steam isolation valves and a reactor scram.
50-410/2001-008-02	NCV	The licensee did not properly maintain a high radiation area locked as required by TS 5.7.2.

c. List of Acronyms

CRD	Control Rod Drive
DER	Deficiency/Event Report
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
PARS	Publically Available Records
PMT	Post Maintenance Test
RCIC	Reactor Core Isolation Cooling
SDP	Significance Determination Process
SRV	Safety Relief Valve
SSC	Structures, Systems, and Components
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report
Unit 1	Nine Mile Point Unit 1
Unit 2	Nine Mile Point Unit 2
WO	Work Order