May 5, 2004

Mr. James A. Spina
Vice President Nine Mile Point
Nine Mile Point Nuclear Station, LLC
P.O. Box 63
Lycoming, NY 13093

SUBJECT: NINE MILE POINT NUCLEAR STATION - NRC INTEGRATED INSPECTION REPORT 05000220/2004002 and 05000410/2004002

Dear Mr. Spina:

On March 31, 2004, the US Nuclear Regulatory Commission (NRC) completed an inspection at Nine Mile Point Nuclear Station, Units 1 and 2. The enclosed integrated inspection report (IR) documents the inspection findings which were discussed on April 16, 2004, with Mr. Larry Hopkins and other members of your staff.

This 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.

This report documents one NRC-identified and three self-revealing findings of very low safety significance (Green), all of which were determined to involve violations of NRC requirements. However, because of the very low safety significance and because the violations were entered into your corrective action program, the NRC is treating these violations as non-cited violations (NCVs) consistent with Section VI.A of the NRC Enforcement Policy. Additionally, two licensee-identified violations which were determined to be of very low safety significance are listed in this report. If you contest any findings in this report, 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, D.C. 20555-0001; with copies to the Regional Administrator Region I, the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at Nine Mile Point.

Since the terrorist attacks on September 11, 2001, the NRC has issued five Orders and several threat advisories to licensees of commercial power reactors to strengthen licensee capabilities, improve security force readiness, and enhance controls over access authorization. In addition to applicable baseline inspections, the NRC issued Temporary Instruction 2515/148, “Inspection of Nuclear Reactor Safeguards Interim Compensatory Measures,” and its subsequent revision, to audit and inspect licensee implementation of the interim compensatory measures required by the order. Phase 1 of TI 2515/148 was completed at all commercial nuclear power plants during calendar year 2002, and the remaining inspection activities for Nine Mile Point were completed in May 2003. The NRC will continue to monitor overall safeguards and security controls at
Nine Mile Point.

In accordance with 10 CFR 2.390 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 Publically Available Records (PARS) component of NRC’s document management system (ADAMS). ADAMS is accessible from the NRC web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

James M. Trapp, Chief
Projects Branch 1
Division of Reactor Projects

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

Enclosure: Inspection Report 05000220/2004002 and 05000410/2004002
w/Attachment: 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 No.:	05000220/2004002 and 05000410/2004002
Licensee:	Nine Mile Point Nuclear Station, LLC (NMPNS)
Facility:	Nine Mile Point, Units 1 and 2
Location:	348 Lake Road Oswego, NY 13126
Dates:	January 1, 2004 - March 31, 2004
Inspectors:	G. Hunegs, Senior Resident Inspector B. Fuller, Resident Inspector E. Knutson, Resident Inspector G. Bowman, Reactor Inspector T. Burns, Reactor Inspector J. Furia, Senior Health Physicist S. Pindale, Senior Reactor Inspector V. Rodriguez, Reactor Engineer D. Silk, Senior Emergency Preparedness Inspector
Approved by:	James M. Trapp, Chief Projects Branch 1 Division of Reactor Projects

TABLE OF CONTENTS

SUMMARY OF FINDINGS

IR 05000220/2004002, 05000410/2004002; 01/01/2004 - 03/31/2004; Nine Mile Point, Units 1 and 2; Fire Protection, Operator Performance During Non-routine Evaluations and Events, Surveillance Testing, and Event Follow-up.

This report covered a 13-week period of inspection by resident inspectors, and announced inspections and one in-office review by six region-based inspectors. Four Green non-cited violation (NCVs) were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Initiating Events

- Green. A self-revealing Green non-cited violation (NCV) of Technical Specification (TS) 6.4, "Procedures," was identified concerning an inadequate procedure for cold weather operation of the circulating water system which resulted in a transient intake forebay water level decrease and prompted an emergency power reduction to 90 percent at Unit 1. The performance deficiency associated with this finding is procedural inadequacy, in that the procedure for operation of the circulating water system did not provide adequate direction for management of the lake water intake and discharge flow paths during periods of cold weather. The finding is greater than minor because it could reasonably be viewed as a precursor to a significant event; in this case, a reactor scram precipitated by a loss of the circulating water system. The finding is of very low safety significance because it did not contribute to the likelihood of a primary or secondary system loss of coolant accident, did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, and did not increase the likelihood of a fire or internal/external flood. (Section 1R14)

Cornerstone: Mitigating Systems

- Green. The inspectors identified a Green non-cited violation (NCV) of Facility Operating License DPR-63, 2.D(7), "Fire Protection," concerning two degraded fire doors in fire barriers that separate the two Unit 1 emergency diesel generators (EDG) and the two associated power board rooms. The performance deficiency associated with this finding is inadequate control of activities that affect the operability of fire barriers. The finding is greater than minor because it is associated with the protection against the external factors attribute, and affects the mitigating systems cornerstone objective of ensuring the availability of systems that respond to initiating events. The finding is of very low safety significance in accordance with Phase 2 of the Fire Protection Significance

Determination Process (SDP) because there is no realistic scenario by which a fire on one side of the barrier could propagate through either degraded fire door to the other side of the barrier. The failure to maintain barrier breach permits while the two fire doors were degraded is an example of a cross-cutting issue in the area of human performance. (Section 1R05)

- Green. A self-revealing Green non-cited violation (NCV) of Unit 1 TS 6.4, "Procedures," was identified concerning the specification of limitations on the parameters being controlled by procedure N1-ST-V19, "Emergency Cooling System Heat Removal Capability Test at High Power." The procedure did not provide operators with comprehensive and appropriate limitations concerning reactor response upon initiation of the emergency condenser (EC) system with the reactor at high power. The performance deficiency associated with this finding is a failure to provide adequate precautions and limitations to the operator performing the tasks in surveillance procedure N1-ST-V19. The finding is greater than minor because it is associated with the Mitigating Systems Cornerstone attribute of procedure quality and affects the associated cornerstone objective of ensuring the capability of the emergency condenser system, a core decay heat removal system, to respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance because it was not a design or qualification deficiency and it did not represent an actual loss of the emergency condenser system safety function. (Section 1R22)

Cornerstone: Emergency Preparedness

- Green. A self-revealing Green non-cited violation (NCV) of 10 CFR 50.54(q), 50.47(b)(4), and Section 6.2 of the Nine Mile Point Site Emergency Plan, was identified concerning a failure to promptly classify an Unusual Event (UE) at Unit 1 in accordance with emergency procedures. The performance deficiency associated with this finding is failure to implement the emergency classification and action level scheme in a timely manner. The finding is greater than minor because it is associated with the emergency response organization performance attribute of the Emergency Preparedness Cornerstone and affects the cornerstone objective of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The finding is of very low safety significance because Unit 1 failed to implement a risk significant planning standard (RSPS) during an actual UE. The failure to promptly classify a UE is an example of a cross-cutting issue in the area of human performance. (Section 4OA3)

B. Licensee-Identified Violations

Violations of very low safety significance, which were identified by the licensee, have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective actions are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Nine Mile Point Unit 1 (Unit 1) began the inspection period at 100 percent power. On January 8, power was reduced to 95 percent to support planned turbine valve testing. On January 10, 2004, Unit 1 was removed from service for a scheduled maintenance outage to replace the 15 reactor recirculation pump motor. On January 21, Unit 1 was returned to service, and following testing reached 100 percent on January 23. On January 26, 31, and February 5, power was reduced to 90 percent to facilitate switching the lake water supply system from reverse flow to normal flow. Unit 1 operated at 100 percent power for the remainder of the inspection period.

Nine Mile Point Unit 2 (Unit 2) began the inspection period at 100 percent power. Unit 2 commenced coastdown on January 18, 2004, when reactor recirculation flow was raised to the maximum allowable value with all operable control rods fully withdrawn. Unit 2 was shut down to commence refueling outage RF09 on March 23. Unit 2 remained shut down for refueling at the end of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems and Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope (71111.01 - 3 Samples)

The inspectors examined one Unit 1 and two Unit 2 risk significant areas to verify that design features and operating procedures support operation of the associated systems during periods of cold weather. Unit 1 documents reviewed included the Unit 1 Final Safety Analysis Report (FSAR), the Unit 1 Individual Plant Examination for External Events, N1-OP-64, “Meteorological Monitoring,” N1-PM-A5, “Cold Weather Preparation and Operation,” and EPIP-EPP-26, “Natural Hazard Preparation and Recovery.” Unit 2 documents reviewed included the Unit 2 Updated Safety Analysis Report (USAR), the Unit 2 Individual Plant Examination for External Events and N2-OP-102, “Meteorological Monitoring.”

- Unit 1 EDG room exhaust dampers
- Unit 2 Control Building
- Unit 2 EDG Building

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

Partial System Walkdown. (71111.04Q - 4 Samples)

The inspectors performed partial system walkdowns to verify system and component alignment and to note any discrepancies that would impact system operability.

- On January 13, the inspector selected the Unit 1 service water system to conduct a partial walkdown after a recent realignment in preparation for the planned outage. The walkdown included the control room switch verification, physical inspection, and verification of the system lineup. N1-OP-18, Revision 23, “Service Water System,” was used for this review.

- On February 12, the inspector selected the Unit 1 emergency condenser (EC) loop 12 to conduct a partial system walkdown based on safety significance. The walkdown included the control room switch verification, physical inspection, and partial verification of the system lineup. N1-OP-13, Revision 32, “EC System,” and drawing C-18017-C were used for this review.

- On March 16, the inspector selected the Unit 2 emergency electrical distribution system to conduct a partial system walkdown after switchyard manipulations to establish 115 kV off-site power line 6 out of service for switchyard work. The walkdown included the control room switch verification and physical inspection. N2-OP-72, Revision 11, ”Standby and Emergency AC Distribution System,” was used for this review.

- On March 16, the inspector selected the Unit 2 shutdown cooling mode of the “B” residual heat removal system to conduct a partial system walkdown after the system was placed in service. The walkdown included the control room switch verification and physical inspection. N2-OP-31, Revision 15, “Residual Heat Removal System,” was used for this review.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope (71111.05Q - 10 Samples)

The inspectors walked down accessible portions of fire areas described below to assess the licensee’s control of transient combustible material and ignition sources, fire detection and suppression capabilities, fire barriers and any related compensatory measures. 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 fire protection features were inspected, including the ventilation system fire dampers, structural steel fire proofing, and electrical penetration seals. Reference material reviewed for installed features included the Unit 1 FSAR and the Unit 2 USAR.

- Unit 1 Condenser Bay
- Unit 1 Cable Spreading Room
- Unit 1 Reactor Building 261 ft elevation
- Unit 1 Emergency Diesel Generator Rooms
- Unit 1 Core Spray Corner Rooms
- Unit 2 Steam Tunnel
- Unit 2 Turbine Building 250 ft elevation
- Unit 2 Radwaste Building
- Unit 2 Feedwater Heater Rooms
- Unit 2 Steam Tunnel

b. Findings

Introduction. A Green NCV was identified for failure to adequately control maintenance that resulted in the premature clearance of barrier breach permits for two inoperable fire barriers that separate Unit 1 equipment required for safe shutdown.

Description. During the month of February, work was performed in the EDG and associated switchgear rooms which required the access doors between these rooms to be blocked open. As part of this activity, the door sweeps (bottom extension of the doors) were removed. Barrier breach permits were issued in accordance with procedure GAP-FFP-03, “Breach Permit,” to establish compensatory measures, as required by FSAR, Appendix 10A, Section 2.4.1.10.b, while these fire doors were breached. On February 25, the inspector identified that the sweeps for fire doors D-108, access door between EDG 102 and EDG 103, and D-84, access door between the EDG 102 and 103 power board rooms, were still removed, but that the barrier breach permits had been cleared on February 24. The sweeps were required for door operability as fire barriers. The two fire doors were declared inoperable and compensatory measures were established in accordance with FSAR, Appendix 10A, Section 2.4.1.10.b.

Analysis. The performance deficiency associated with this finding is inadequate control of activities that affect the operability of fire barriers. In this case, removal of the door sweeps had not been specified in the work authorization, so it was not recognized that they were still removed when the barrier breach permits were cleared. The finding was greater than minor because it is associated with the protection against external factors attribute and affects the mitigating systems cornerstone objective of ensuring the availability of systems that respond to initiating events. A Significance Determination Process (SDP) Phase 1 screening directed that a Phase 2 analysis be performed. The finding was determined to be of very low safety significance (Green) in accordance with Phase 2 of the Fire Protection SDP because there is no realistic scenario by which a fire on one side of either barrier could propagate through the associated inoperable fire door to the other side of the barrier. The failure to maintain barrier breach permits while the

two fire doors were degraded was an example of a cross-cutting issue in the area of human performance.

Enforcement. Facility Operating License DPR-63, 2.D(7), Fire Protection, states that Nine Mile Point Unit 1 shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the FSAR. The FSAR, Appendix 10A, Section 2.4.1.10, Fire Barriers/Penetrations, states that fire barriers, including fire doors, shall be intact. Contrary to the above, on February 25, 2004, fire doors D-108 and D-84 were not maintained intact in that their sweeps had been removed. The failure to maintain the fire door configuration is of very low safety significance and has been entered into the corrective action program as DER 2004-739. This violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000220/2004002-01, Barrier Breach Permits Cleared while Associated Fire Doors were Still Inoperable.

1R06 Flood Protection Measures

a. Inspection Scope (71111.06 - 1 Sample)

The inspectors examined the Unit 2 service water pipe tunnels for their susceptibility to internal flooding. The inspection included a walkdown of the areas to examine structure/system configurations and equipment material conditions. Documents reviewed during this inspection included the Unit 2 USAR and the Unit 2 Individual Plant Examination.

b. Findings

No findings of significance were identified.

1R08 Inservice Inspection Activities

a. Inspection Scope (71111.08 - 5 Samples)

The purpose of this inspection was to assess the effectiveness of the licensee's program for monitoring degradation of the reactor coolant system boundary, risk significant piping system boundaries, and the containment boundary. The inspector assessed the Inservice Inspection (ISI) activities using the criteria specified in the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI.

The inspector observed a sample of Unit 2 nondestructive examination activities in process. Also, the inspector performed a documentation review of selected additional samples of nondestructive evaluation (NDE) and repair/replacement activities. The sample selection was based on the inspection procedure objectives and risk priority of those components and systems where degradation would result in a significant increase in risk of core damage. The observation and documentation review was performed to verify the activities were performed in accordance with the ASME Boiler and Pressure

Vessel Code requirements. The inspector reviewed a sample of inspection reports and deviation reports initiated as a result of problems identified during ISI examinations. Also, the inspector evaluated effectiveness in the resolution and corrective action of problems identified during ISI activities for selected samples.

The inspector observed the performance of one NDE activity in process and reviewed documentation and examination reports for an additional five NDE activities. The activities included volumetric and surface examinations. The inspector reviewed two samples of welding activities on a pressure boundary and, reviewed one ASME replacement performed during the previous operating cycle. There were no indications identified during the last outage which were accepted for continued operation without repair. Therefore, the inspector selected one sample of a volumetric examination performed during refueling outage seven which resulted in the acceptance of indications for continued operation without repair.

The inspector observed manual ultrasonic testing activities and reviewed radiographic testing, magnetic particle (MP), liquid penetrant (LP) and visual examination inspection reports to verify effectiveness of these processes in identifying degradation of risk significant systems, structures and components and to evaluate the activities for compliance with the requirements of ASME Section XI of the Boiler and Pressure Vessel Code. The inspector reviewed the licensee's evaluation and corrective action of non-conforming conditions identified during ISI activities. The inspector observed the manual ultrasonic test performed on butt weld FW008 (pipe to motor operated valve 121) in the reactor core isolation cooling (RCIC) system and reviewed the inspection reports of the LP test of field weld 2CSL-MOV112 in the low pressure core spray system and the MP test of welds FW 410 and 414 in the RCIC system. In addition, the inspector reviewed the radiographs and interpretation of test results of butt welds (FW 410 and FW414) and the ultrasonic test results of the H4 (horizontal) weld in the core shroud.

The inspector reviewed a sample of video recordings of the remote in-vessel visual inspection (IVVI,VT-1) of the steam dryer. The inspector reviewed the video recordings to confirm the test conditions enabled the performance of an adequate VT-1 examination of the steam dryer base material and welds in the dryer hoods and tie bars. Also, the inspector confirmed that for the recordings evaluated, the visual examination was in compliance with the requirements of ASME Section XI. The inspector also reviewed a sample of examination reports documenting the results of the visual inspection performed of the steam dryer during this outage. Also, visual examination results of the drywell liner examination were reviewed for compliance with the requirements of ASME Section XI, IWE (requirements for class MC and Metallic Liners of Class CC components).

The inspector reviewed welding activities associated with the repair and replacement of selected components to verify the activities were performed in accordance with the requirements of ASME Section IX and XI. The inspector reviewed completed work order, 99-15686-00 (installation of valves AOV156 and 157) in the RCIC system. The inspector reviewed the identification, removal, and repair of an indication located in

FW410 during the pre-service ultrasonic test. The inspector reviewed welding procedure specification 1-1-BA-101, Revision 16, and the procedure qualification record (PQR) N177 for compliance with the qualification requirements of ASME Section IX. Also, the inspector verified that the welders completing welds FW410 and FW 414 were qualified for this welding in accordance with the requirements of ASME Section IX.

The inspector interviewed the licensee's radiographic personnel responsible for the review and approval of test results. Radiographs of welding activities were reviewed to ensure proper identification, characterization and size of indications for welds FW410 and FW414 (completed in RFO 8) in the RCIC system.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program

a. Inspection Scope (71111.11Q - 2 Samples)

Resident Inspector Quarterly Review. The inspectors reviewed two licensed operator requalification training activities which included procedure 71114.06, "Drill Evaluation," simulator-based training evolution, to assess the licensee's training program effectiveness. The inspectors observed Unit 1 licensed operator simulator training on March 2, and Unit 2 on March 3, 2004. 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 training the inspectors reviewed simulator fidelity through a sampling process. The inspectors evaluated emergency response organization performance regarding initial and subsequent actions by licensed operators. This inspection activity also met the objectives of and therefore represented two samples for Drill Evaluation (71114.06).

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope (71111.12Q - 2 Samples)

The inspectors reviewed two performance-based problems during this inspection period involving selected structures, systems, and components (SSCs) to assess the effectiveness of the maintenance program. Reviews focused on: proper maintenance rule scoping, in accordance with 10 CFR 50.65; characterization of failed SSCs; safety significance classifications; 10 CFR 50.65 (a)(1) and (a)(2) classifications; and, 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, system health reports and corrective action program documents.

- Unit 1 primary containment vacuum relief
- Unit 2 control room ventilation / control room envelope

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope (71111.13 - 6 Samples)

The inspectors reviewed six risk assessments and emergent work activities during this inspection period. For selected maintenance, work items or work orders (WOs) the inspectors evaluated: the effectiveness of the risk assessments performed before the maintenance activities were conducted; risk management control activities; the necessary steps taken to plan and control resultant emergent work tasks; and the overall adequacy of identification and resolution of emergent work and the associated maintenance risk assessments. The documents used for this review are located under List of Documents Reviewed (A-2).

- Failure of a Unit 1 automatic instrument air (IA) compressor blowdown valve which led to flooding out an IA dryer and possible introduction of water into the safety-related portion of the IA system, DER NM-2004-884
- Unit 2 RCIC MOV-121 steam leak
- Unit 2 division II EDG ventilation exhaust motor operated damper
- Compensatory actions required with the Unit 2 Division II unit cooler out of service
- Replacement of the Unit 2 full core display power supply PSI-2RDSN05 under WO 03-04017
- Unit 1 high pressure coolant injection low pressure header switch replacement under WO 04-04515

b. Findings

No findings of significance were identified.

1R14 Operator Performance During Non-routine Evolutions and Events

a. Inspection Scope (71111.14 - 4 Samples)

The inspectors reviewed personnel performance for the following transient/non-routine operations. The inspectors compared operator response to that required by procedures and training and reviewed the plans for the evolutions.

- Unit 1 emergency condenser capacity test on January 21
- Unit 1 single control rod scram time testing on January 21
- Unit 1 emergency power reduction to 90 percent in response to lowering lake intake forebay water level on January 26
- Unit 2 shutdown for refueling outage 09 on March 15

b. Findings

Introduction. A Green NCV was identified for an inadequate procedure for cold weather operation of the circulating water system which resulted in a transient intake forebay water level decrease due to icing and prompted an emergency power reduction to 90 percent.

Description. Lake water is supplied to the plant through an intake tunnel that extends approximately 1200 feet from the shore. The intake structure, which is the inlet to the tunnel, is at a depth of approximately 14 feet. Water from the intake tunnel enters the intake forebay, which serves as the water supply for the main circulating water pumps, service water (SW) and emergency service water (ESW) pumps, containment spray raw water pumps, EDG raw water pumps and fire pumps. Water is returned to the lake through a common discharge tunnel that extends approximately 600 feet from the shore. The discharge structure is at a depth of approximately 8.5 feet.

A pair of cross-connect tunnels connect the discharge tunnel to the forebay and the intake tunnel to the discharge tunnel. This arrangement, along with a system of shutoff gates, allows the inlet and return flow paths to be reversed (that is, the discharge tunnel becomes the water inlet, supplying the forebay through the cross-connect tunnel, and the intake tunnel becomes the return via the cross-connect to the discharge tunnel). Reverse flow is used during periods of cold weather to prevent intake structure icing, which could restrict flow to the forebay. Alignment of the lake water inlet and discharge is controlled by operating procedure N1-OP-19, “Circulating Water System.”

On January 26, while operating in reverse flow, control room operators were alerted to indications of lake water system blockage due to icing; specifically, high differential pressure (d/p) across the trash rake and traveling water screen, and high d/p between the intake and discharge tunnels. Approximately one minute later, annunciator H2-1-3, “Circulating Water Pump Intake Level Low,” alarmed, indicating that water level in the forebay had decreased to 238.8 feet; according to EPMP-EPP-0101, “Unit 1 Emergency

Classification Technical Bases," this is the minimum intake water level for operability of ESW, containment spray raw water, EDG raw water, and the fire pumps. An emergency power reduction to 90 percent was commenced in preparation for returning to normal flow operation. Approximately two minutes later, the circulating water pump intake level low alarm cleared. Forebay water level returned to normal following lake water system realignment to normal flow operation. Operators observed that all parameters associated with the operating raw water pumps during the event had remained normal. This indicated that the safety-related raw water pumps would have been capable of performing their design functions, despite being technically inoperable. Operators noted large quantities of ice in the forebay, suggesting that surface ice, as well as ice on the discharge structure, had contributed to the problem.

The emergency preparedness aspects of this event are discussed in section 4OA3 of this report.

Analysis. The performance deficiency associated with this finding is procedural inadequacy, in that the procedure for operation of the circulating water system did not provide adequate direction for management of the lake water intake and discharge flow paths during periods of cold weather. The strategy for managing lake water system icing at Unit 1 is dependent on the use of heated discharge water from the circulating water system. Therefore, when operated for long periods in reverse flow, the discharge structure (functioning as the water intake) is susceptible to icing. Moreover, the close proximity to shore and shallower depth of the discharge structure make it more susceptible to ingestion of surface ice due to wave action and ice accumulation. However, the operating procedure did not address this vulnerability and provided no guidance on how long the system should be operated in reverse flow. In this case, the system had been operating in reverse flow for more than two days prior to the icing event.

The finding was greater than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, a more severe icing event could result in operator action per N1-SOP-7, "Service Water Failure/Low Intake Level," to secure the circulating water pumps due to low forebay water level, and the resultant turbine trip/reactor scram. The finding was evaluated in accordance with Phase 1 of the Significance Determination Process (SDP) for Reactor Inspection Findings for At-Power Situations to determine whether more than one cornerstone was degraded. The event had caused forebay water level to decrease below the level required for operability of safety-related raw water system pumps, and therefore appeared to affect the Mitigating Systems cornerstone. However, the initiating event (loss of the circulating water pumps) for a more significant event would result in a rapid recovery of forebay water level, and therefore would not threaten the long term operability of safety-related raw water pumps. Therefore, the inspectors concluded that the Mitigating Systems cornerstone was not degraded and that the only cornerstone that was degraded was Initiating Events. The finding was determined to be of very low safety significance (Green) in accordance with Phase 1 of the Reactor Safety SDP because it did not contribute to the likelihood of a primary or secondary system loss of coolant accident, did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would

not be available, and did not increase the likelihood of a fire or internal/external flood. The issue was entered NMP's corrective action program as DER NM-2004-385.

Enforcement. TS 6.4, "Procedures," states, in part, that, "Written procedures . . . shall be established . . . that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANSI N18.7-1972 and cover . . . the applicable procedures recommended in Regulatory Guide 1.33, Appendix A, November 3, 1972 . . ." ANSI N18.7-1972, Section 5.3.2.5, "Precautions," states, in part, "Precautions should be established to alert the individual performing the task to those situations in which important measures should be taken early . . . to avoid an abnormal or emergency situation." Regulatory Guide 1.33 (then Safety Guide 33), Appendix A, November 3, 1972, Item D, "Procedures for Startup, Operation, and Shutdown of Safety-Related BWR Systems," lists the circulating water system as one of the applicable systems. Contrary to the above, Unit 1 Operating Procedure N1-OP-19, "Circulating Water System," Revision 26, did not establish precautions to avoid discharge structure icing by limiting the amount of time that the lake water system is operated in reverse flow. Discharge structure icing due to prolonged operation in reverse flow resulted in the low forebay water level event of January 26, which led operators to perform an emergency power reduction to 90 percent. Because the inadequate procedure is of very low safety significance and has been entered into the corrective action program (DER NM-2004-385), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000220/2004002-02, Inadequate Procedure for Cold Weather Operation of the Circulating Water System.

1R15 Operability Evaluations

a. Inspection Scope (71111.15 - 10 Samples)

The inspectors reviewed operability evaluations during this inspection period, which affected risk significant mitigating systems, assessing: the technical adequacy of the evaluation; whether other existing degraded systems adversely impacted the affected system or compensatory measures; where compensatory measures were used, whether the measures were appropriate and properly controlled, and that the degraded systems remained operable. The documents used for this review are listed in Attachment A-2.

- Examined the basis for proceeding with a Unit 1 startup with post-maintenance testing outstanding on two electromatic relief valves
- Examined operability and reportability aspects of a Unit 1 surveillance test which had identified that the feedwater flow transmitters that input to the core thermal power calculation were non-conservatively out of calibration, DER NM-2004-673
- Unit 1 emergency condenser shell makeup inadequate during the emergency condenser capacity test DER-NM-2004-338
- Unit 1 EDG ventilation exhaust damper blocked by snow and ice, DER NM-2004-493
- Examined the operability determination relating to apparent shell side leakage from the Unit 1 emergency condenser heat exchangers that resulted in frequent filling of the makeup tanks, DER NM-2004-736

- Unit 1 control room in-leakage determined to be 50 percent above the design basis value, DER NM-2004-856
- Unit 2 air start system compressor air leak, DER NM-2004-834
- Unit 2 residual heat removal system minimum flow valve found shut, DER NM-2004-846
- Unit 1 reactor building closed loop cooling system leakage from the threaded connections on the first union off the motor cooler on the 14 recirculation pump inlet, DER NM-2004-135
- Unit 1 electromatic relief valve has a high tailpipe temperature, DER NM-2004-320

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope (71111.19 - 3 Samples)

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

- Local leak rate test of Unit 1 vacuum breaker BV-68-03 shaft seal per N1-ISP-TYB, “Type ‘B’ Leak Rate Test.”
- N2-OP-36A/N2-OSP-SLS-Q002, Unit 2 Standby Liquid Control System Relief Valve
- N2-ESP-ENS-Q731, Unit 2 LOOP/LOCA testing

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities

a. Inspection Scope (71111.20 - 1 Sample)

The inspectors reviewed the following activities related to the Unit 1 mid-cycle outage for conformance to the applicable procedure and witnessed selected activities associated with each evolution. Surveillance tests were reviewed to verify TS were satisfied.

Inspections were focused on reactor decay heat removal, inventory control, power availability, and secondary containment. The inspectors reviewed the outage plan and outage risk mitigation strategies and evaluations. Portions of the shutdown and cool down processes were observed. The following outage activities were observed:

- Shutdown cooling system operation
- Reactor pressure test
- Plant startup

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope (71111.22 - 8 Samples)

The inspectors witnessed performance of surveillance test procedures and reviewed test data of selected risk significant SSC's to assess whether the SSC's satisfied TS, FSAR/USAR, and licensee procedure requirements and to determine if the testing appropriately demonstrated that the SSC's were operationally ready and capable of performing their intended safety functions.

- N1-ST-V19, Unit 1 Emergency Condenser Capacity Test
- N1-ST-Q6D, Containment Spray System Loop 122 Quarterly Operability Test (Unit 1)
- N1-ST-Q1A, CS 111 Pump, Valve and SDC Water Seal Check Valve Operability Test (Unit 1)
- N2-OSP-EGS-M@002, Diesel Generator and Diesel Air Start Valve Operability Test - Division III (Unit 2)
- N2-OSP-EGS-M@001, Diesel Generator and Diesel Air Start Valve Operability Test Division II (Unit 2)
- N2-OSP-ENS-R@002, Functional Test of EDG Load Shedding Circuit Division II (Unit 2)
- N2-ESP-BYS-W675, 125 Volts DC Weekly Battery Surveillance Division III (Unit 2)
- N2-ISP-LRT-R@058, Type "C" Containment Isolation Valve Leak Rate Test, 2 ICS*V156, 2ICS*MOV126, 2ICS*V288 (Unit 2)

b. Findings

Introduction. A Green NCV of Unit 1 TS 6.4.1.a, was identified concerning the specification of limitations on the parameters being controlled by the operating procedure. Specifically, Unit 1 procedure N1-ST-V19, "EC System Heat Removal Capability Test at High Power," Revision 0, did not provide operators with comprehensive and appropriate limitations concerning reactor response upon initiation of the EC system with the reactor at high power.

Description. EC System Heat Removal Capability Test, N1-ST-V16, was performed on April 24, 2003. The test results were satisfactory, but were identified by engineering personnel to be unexpectedly different from the previous test. Unit 1 subsequently developed a new surveillance test procedure, N1-ST-V19, to be performed at higher reactor power, which was intended to provide a more accurate determination of heat exchanger capacity.

N1-ST-V19, Revision 0 was performed on January 9, 2004. The test was aborted after approximately three minutes due to multiple unexpected plant responses including: average power range monitor (APRM) channels 12 and 16 increased approximately 17 percent which resulted in momentary rod blocks on both channels; and indicated thermal power as read on the specified computer point increased 30 to 40 megawatt thermal (MW_{th}).

The EC test methodology initiated one loop of EC flow by opening the condensate return line to the reactor vessel with the reactor at power between 60 and 70 percent of rated thermal power. EC initiation caused an influx of cold water into the reactor inlet plenum, resulting in an increase in reactor power due to the negative temperature coefficient of reactivity.

The procedure precautions and limitations provided test abort criteria, specifying that if, after the EC loop was placed in service, the rise in reactor thermal power exceeded 20 MW_{th} (approximately one percent of rated thermal power) then the test should be aborted. The "calculated thermal power" computer point specified to monitor the power rise was known to be unreliable under the postulated test conditions of rapid changes in feedwater flow. This was the only abort criteria based on reactor power for a test that would insert positive reactivity into the core.

Engineering personnel possessed plant response data that was not incorporated into the test procedure. This response data included that reactor neutron flux as indicated on the APRM's was expected to increase 10 to 12 percent, with a worst case increase of 15 percent, when the test was initiated.

Analysis. The performance deficiency was a failure to provide adequate precautions and limitations to the operator performing the tasks in surveillance procedure N1-ST-V19. Specifically, the parameters provided as abort criteria for the test were not adequate and comprehensive in that a limit for APRM power increase was not specified and the operators were not able to accurately determine "calculated thermal power."

The performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and affected the associated cornerstone objective of ensuring the capability of the emergency condenser system, a core decay heat removal system, to respond to initiating events to prevent undesirable consequences. Using Phase I of the Reactor Safety SDP the finding was determined to be of very low safety significance (Green), because it was not a design or qualification deficiency and it did not represent an actual loss of the emergency

condenser system safety function, and was not potentially risk significant due to seismic, flood, fire or weather related initiating events.

Enforcement. Unit 1 TS 6.4.1a requires, in part, that written procedures shall be established, implemented and maintained that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANSI N18.7-1972 and cover applicable procedures recommended in Regulatory Guide 1.33, Appendix A, November 3, 1972. ANSI N18.7-1972 Section 5.3, Operating and Maintenance Procedures, requires that nuclear power plants be operated in accordance with written procedures. Subsection 5.3.2.5, Precautions, recommends that precautions be established in written procedures to alert the individual performing the task to those situations in which important measures should be taken early or where extreme care should be used to protect equipment and personnel. Regulatory Guide 1.33, Appendix A, November 3, 1972, H.2.b (17) recommends that procedures be written for surveillance tests of the emergency condenser system. Contrary to the above on April 24, 2003, Nine Mile Point Unit 1 surveillance test procedure N1-ST-V19, “EC System - Heat Removal Capacity Test at High Power,” did not provide adequate precautions to the operator performing the task in that abort criteria were not specified for APRM flux increases and the computer point specified for thermal power monitoring was inaccurate under the test conditions. However, because of the very low safety significance and because the corrective actions taken through DER NM-2004-87 appeared to be reasonable, the issue is being treated as a non-cited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy: NCV 05000220/2004002-03, Failure to Provide Adequate Precautions in Surveillance Procedure N1-ST-V19.

1R23 Temporary Plant Modifications

a. Inspection Scope (71111.23 - 1 Sample)

The inspectors reviewed one temporary plant modification to the Unit 2 main steam line drain valves automatic opening function. The modification allowed control room operators to override the automatic open signal to these valves following a turbine trip to provide additional control of the plant cooldown rate. The modification had been installed per procedure following the August 14, 2003, reactor scram but was not removed after the outage. The inspector reviewed this modification to determine whether the change had adversely affected system or support system operability or adversely affected a function important to plant safety.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope (71114.04 - 1 Sample)

An in-office inspection to review recent changes to the emergency plan and implementing procedures was conducted on January 30, 2004. A thorough review was conducted for documents related to the risk significant planning standards (RSPS) and a general review was completed for non-RSPS documents. The review verified the changes satisfied the standards of 10 CFR 50.54(q), 10 CFR 50.47(b), the requirements of 10 CFR 50 Appendix E, the intent of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," and that the changes did not decrease the effectiveness of the plan. These changes are subject to future NRC inspections to ensure that as a result of these changes the emergency plan continues to meet NRC regulations.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety and Public Radiation Safety

2OS1 Access Control To Radiologically Significant Areas

a. Inspection Scope (71121.01 - 5 Samples)

The inspector identified two exposure significant work areas within radiation areas, high radiation areas (<1 R/hr), or airborne radioactivity areas in the plant and reviewed associated licensee controls and surveys of these areas to determine if the controls (e.g., surveys, postings, barricades) were acceptable. The areas reviewed were the drywell and refueling floor.

The inspector walked down these areas and their perimeters to determine: whether prescribed RWP, procedure, and engineering controls were in place, whether licensee surveys and postings were complete and accurate, and whether air samplers were properly located. The controls implemented were compared to those required under plant technical specifications (TS 5.7) and 10 CFR 20, Subpart G, for control of access to high and locked high radiation areas.

The inspector reviewed RWPs used to access these and other high radiation areas and identify what work control instructions or control barriers have been specified. The inspector reviewed electronic personal dosimeter alarm setpoints (both integrated dose and dose rate) for conformity with survey indications and plant policy.

The inspector reviewed RWPs for airborne radioactivity areas with the potential for individual worker internal exposures of >50 millirem CEDE (Committed Effective Dose Equivalent) (20 DAC-hrs). The inspector verified barrier integrity and engineering controls performance (e.g., High-Efficiency Particulate Air (HEPA) ventilation system operation).

The inspector observed radiation worker performance with respect to stated radiation protection (RP) work requirements. The inspector determined that they were aware of the significant radiological conditions in their workplace, and the RWP controls/limits in place, and that their performance took into consideration the level of radiological hazards present.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls

a. Inspection Scope (71121.02 - 5 Samples)

The inspector obtained from the licensee a list of work activities ranked by actual/estimated exposure that will be in progress during 2RF09, and selected 2 of the work activities of highest exposure significance (drywell in-service inspection and undervessel work, including control rod drive replacement).

The inspector reviewed the As Low As Is Reasonably Achievable (ALARA) work activity evaluations, exposure estimates, and exposure mitigation requirements. The inspector determined that the licensee has established procedures, engineering and work controls, based on sound RP principles, to achieve occupational exposures that are ALARA.

The inspector compared the results achieved (dose rate reductions, person-rem used) with the intended dose established in the licensee's ALARA planning for these work activities.

Based on scheduled work activities and associated exposure estimates, the inspector selected two work activities, listed above, in radiation areas, airborne radioactivity areas, or high radiation areas for observation. The inspector evaluated the licensee's use of ALARA controls for these work activities by evaluating the licensee's use of engineering controls to achieve dose reductions; evaluating procedures and controls for consistency with the licensee's ALARA reviews; determined if sufficient shielding of radiation sources was provided for; and determined if dose expended to install/remove the shielding exceed the dose reduction benefits afforded by the shielding.

The inspector observed radiation worker and RP technician performance during work activities being performed in radiation areas, airborne radioactivity areas, or high radiation areas. The inspector determined that workers demonstrated the ALARA philosophy in practice. The inspector also observed radiation worker performance to determine whether the training/skill level was sufficient with respect to the radiological hazards and the work involved.

The inspector reviewed the 2004 Unit 2 refueling outage (2RF09) exposure goals. The licensee established an outage goal of 320 person-rem, which includes exposure goals of: drywell in-service inspection (42.940 person-rem); undervessel work (30.083 person-rem); refueling floor work (24.752 person-rem); drywell valve work (14.424 person-rem); and safety relief valve work (10.545 person-rem).

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation and Protective Equipment

a. Inspection Scope (71121.03 - 2 Samples)

The inspector identified the types of portable radiation detection instrumentation used for job coverage of high radiation area work, other temporary area radiation monitors currently used in the plant, and continuous air monitors associated with jobs with the potential for workers to receive 50 millirem CEDE.

The inspector conducted a review of selected RP instruments located in the RCA. Items reviewed were: verification of proper function; certification of appropriate source checks; and, calibration for those instruments used to ensure that occupational exposures were maintained in accordance with 10 CFR 20.1201.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems

a. Inspection Scope

Annual Sample Review (71152 - 1 Sample)

The inspectors reviewed the licensee's corrective actions for service water system fouling on Unit 1. The inspectors determined that silt and biological fouling have resulted in clogging of small bore piping in the service water system, particularly in area coolers and the system radiation monitor. The inspectors reviewed DERs, various corrective action documents, and conducted interviews and a walk-down of the service water system with plant personnel. The inspectors verified that the safety-related portions of the service water system were less susceptible to fouling, as were other safety-related systems using Lake Ontario as a heat sink. The inspectors also reviewed DERs and conducted interviews with station personnel to assess the susceptibility of Unit 2 to service water fouling. The inspectors evaluated the licensee's corrective actions against the requirements of 10 CFR 50.65 (Maintenance Rule) and 10 CFR 50, Appendix B, Criterion XVI (Corrective Action).

Problem Identification and Resolution (71152)

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered in the licensee's corrective action program. This review was accomplished by reviewing a hard copy of each condition report.

Inservice Inspection (71152)

The inspector reviewed a sample of DERs shown in Attachment 1, which identified flaws and other nonconforming conditions discovered during this and the previous outage. The inspector verified that the nonconforming conditions identified were reported, characterized, evaluated and appropriately dispositioned and entered into the corrective action program.

Radiation Protection Program (71152)

The inspector reviewed DER number 2-2004-1102 related to the problems identified in the RP program, including root cause analysis, extent of condition, corrective actions proposed, and effectiveness of corrective actions.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

1. Unit 1 Lake Water Intake Forebay Low Level Due to Icing

a. Inspection Scope

The inspectors reviewed the implementation of the site's emergency plan in response to the low intake forebay water level event at Unit 1 on January 26. The operational aspects of this event are discussed in section 1R14 of this report.

b. Findings

Introduction. A self-revealing finding was identified that Unit 1 failed to promptly classify an unusual event (UE) in accordance with emergency procedures. This finding was determined to be of very low safety significance (Green) and was characterized as an NCV of 10 CFR 50.54(q), 50.47(b)(4), and Section 6.2 of the Nine Mile Point Site Emergency Plan.

Description. At 9:40 a.m. on January 26, Unit 1 experienced rapidly lowering lake water intake forebay water level due to icing of the lake water inlet structure and ingestion of surface ice. At 9:41 a.m., control room annunciator H2-1-3, "Circulating Water Pump

Intake Level Low," alarmed, indicating that water level in the forebay had decreased to 238.8 feet. Operators initiated action to restore normal forebay water level, and the Circulating Water Pump Intake Level Low alarm cleared at 9:43 a.m.

The Nine Mile Point Site Emergency Plan (NMPSEP), Section 6.1, "Initiation of Emergency Actions," states, in part, that, "Emergency actions are initiated primarily in response to alarmed instrumentation . . . The affected unit Chief Shift Operator performs the necessary immediate actions to contend with the off-normal situation in accordance with instrument alarm response procedures . . ." The alarm response procedure for annunciator H2-1-3, contained in N1-ARP-H2, "Control Room Panel H2," includes an operator action to, "Notify SSS to ascertain the need to activate the Emergency Plan in accordance with EPIP-EPP-18, 'Activation and Direction of the Emergency Plan.'" The first action step in EPIP-EPP-18 is for the Station Shift Supervisor (SSS) to classify and declare the emergency per EPIP-EPP-01. The entry criterion for EPIP-EPP-01 Attachment 1, "Emergency Action Level (EAL) Matrix / Unit 1," EAL 8.4.3 is, "Forebay water level less than 238.8 feet." EAL 8.4.3 is an entry condition for an emergency classification of UE. Approximately one hour after the low forebay water level event, the Unit 1 SSS recognized that conditions for declaration of a UE had existed. At 10:41 a.m., a UE was declared and exited. Following the declaration, operators notified state agencies within 15 minutes.

EPIP-EPP-01 Section 3.0.2, states that, "The SSS/ED (Emergency Director) should not delay actions that would mitigate or prevent an emergency or off-normal condition, to classify an event. However, all events should be classified in accordance with this procedure no later than 15 minutes after indications are available in the Control Room that an EAL has been exceeded." In this event, plant conditions were relatively stable by 9:52 a.m. (11 minutes after the EAL had been exceeded), when the emergency power reduction and lake water system realignment were completed. The inspectors concluded that, in this event, classifying the event one hour after indication was available in the Control Room that the low intake forebay level EAL had been exceeded did not meet the timeliness requirement of EPIP-EPP-01. This untimely event classification also constitutes a missed classification opportunity for the emergency preparedness, "Drill/Exercise Performance," performance indicator.

Analysis. The inspectors determined that the failure to implement an emergency classification and action level scheme in a timely manner as required by EPIP-EPP-01 was a performance deficiency. Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements or Unit 1 procedures.

The finding was more than minor because it was associated with the emergency response organization performance attribute of the Emergency Preparedness Cornerstone and affected the cornerstone objective of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency.

The finding was determined to be associated with an actual event implementation problem, and its significance was assessed using Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process (SDP)." Using the Emergency Preparedness SDP Sheet 2, "Actual Event Implementation Problem," the inspectors determined the finding was of very low safety significance (Green) because Unit 1 failed to implement an RSPS (10 CFR 50.47(b)(4)) during an actual UE. This finding, which involved operators failure to implement a procedure, was associated with the cross cutting area of human performance.

Enforcement. 10 CFR 50.54(q) requires, in part, that a licensee shall follow and maintain in effect emergency plans which meet the standards in 10 CFR 50.47(b). 10 CFR 50.47(b)(4) requires, in part, that a standard emergency classification and action level scheme is used. The NMPSEP sets forth, among other things, on-shift facility licensee responsibilities for emergency response and delineates the standard emergency classification and action level scheme used by the licensee (in accordance with 10 CFR 50.47(b)(4)). Section 6.1 of the NMPSEP states, in part, that, "Emergency actions are initiated primarily in response to alarmed instrumentation . . . [The] SSS assesses the situation and, if necessary declares the emergency." The licensee's EALs are contained in EPIP-EPP-01 Attachment 1, "EAL Matrix / Unit 1." EAL 8.4.3 in EPIP-EPP-01 Attachment 1 states, "Forebay water level less than 238.8 feet." The bases for that EAL states that, "The low level is based on intake forebay level and corresponds to the minimum intake water level for operability of Emergency Service Water, EDG cooling water, Containment Spray Raw Water, and Diesel and Electric Fire Pump." Contrary to the above, on January 26, 2004, Unit 1 did not follow the NMPSEP Section 6.1 in that, upon receiving indication at 9:41 a.m. of water level in the intake forebay of less than 238.8 feet, a UE was not declared within 15 minutes. The classification/declaration was not timely and eventually was made at 10:41 a.m. Because this finding is of very low safety significance and has been entered into the licensee's corrective action program (DER NM-2004-387), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000220/2004002-04, Untimely Declaration of a UE Caused by Low Water Level in the Intake Forebay.

2. (Closed) LER 50-220/2003-002 and -002 supplement 1, Reactor Scram due to Electric Grid Disturbance

On August 14, 2003, Unit 1 automatically scrammed from 100 percent power due to a load rejection main turbine trip that was caused by a large disturbance on the northeast United States electric grid. The EDGs automatically started and supplied the emergency busses, and plant conditions were stabilized using the electromatic relief valves, the emergency condensers, and the control rod drive hydraulic system. A UE emergency classification was declared based on continuing grid instability, which was viewed as satisfying the EALs for a sustained loss of off-site power. The UE was exited approximately nine hours later, after the grid had been determined to be stable and plant electrical loads had been transferred from the EDGs to off-site power.

Supplement 1 addressed loss of the condensate system during the event, which resulted in a loss of the core spray keep-fill system. The licensee concluded that core spray system operability had not been affected.

The LER and its supplement were reviewed by the inspectors and no findings of significance were identified. This event did not constitute a violation of NRC requirements. LER 50-220/2003-002 and supplement 1 are closed.

4OA4 Cross Cutting Aspects of Findings

Sections 1R05 and 4OA3 describe operator performance deficiencies that were contributing causes to findings. In section 1R05, operators failed to maintain barrier breach permits while two fire doors were degraded due to incomplete maintenance. In section 4OA3, operators failed to implement the emergency classification and action level scheme in a timely manner.

4OA5 Other Activities

a. Inspection Scope (2515/TI-154)

Temporary Instruction 2515/TI-154, "Spent Fuel Material Control and Accounting at Nuclear Power Plants." Phase I and Phase II of the inspection was completed for Unit 1 and Phase I was completed for Unit 2 during this inspection period. Appropriate documentation was provided to NRC management as required.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On April 16, 2004, the inspectors presented the inspection results to Mr. Larry Hopkins, Plant General Manager, Nine Mile Point, and other members of licensee management. The licensee acknowledged the findings and confirmed that proprietary information was not provided during the inspection.

4OA7 Licensee-Identified Violations

The following two violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as Non-Cited Violations (NCVs).

Unit 2 TS 5.7 requires that areas having dose rates in excess of 100 millirem per hour measured 30 centimeters from the source of radiation be posted, barricaded and access controlled as a high radiation area. Access to, and the activities in, each such area shall be controlled by means of an RWP that includes specification of the radiation dose rates in the immediate work area.

- On March 19, 2004, the licensee determined that a scaffold being constructed above the Unit 2 suppression pool had dose rates at one end in excess of 100 millirem per hour measured 30 centimeters from the source of radiation, but the scaffold was not posted or controlled as a high radiation area, nor was the area barricaded. This event is documented in the licensee's corrective action program as DER-NM-2004-1149.

- On March 24, 2004, two workers entered a posted high radiation area off of the 198 feet elevation of the Unit 2 reactor building. Neither worker had been briefed on the radiological conditions in this area, nor were they logged in on an RWP which allowed for access to high radiation areas. This event is documented in the licensee's corrective action program as DER-NM-2004-1309.

These findings are of only very low safety significance because they did not involve a locked high or very high radiation area or personnel over-exposure.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

G. Detter, Manager, Support Services
L. Hopkins, Plant General Manager
J. Jones, Supervisor, Emergency Preparedness
R. Godley, Manager, Operations
B. Holston, Manager, Engineering Services
W. Paulhardt, Radiation Protection Manager
A. Shiever, Manager, Nuclear Training

NRC Personnel

W. Schmidt, Senior Reactor Analyst

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000220/2004002-01	NCV	Barrier Breach Permits Cleared while Associated Fire Doors were Still Inoperable.
05000220/2004002-02	NCV	Inadequate Procedure for Cold Weather Operation of the Circulating Water System.
05000220/2004002-03	NCV	Failure to Provide Adequate Precautions in Surveillance Procedure N1-ST-V19.
05000220/2004002-04	NCV	Untimely Declaration of an Unusual Event Caused by Low Water Level in the Intake Forebay.

Closed

05000220/2003002 and Supp. 1	LER	Reactor Scram Due to Electric Grid Disturbance

Discussed

NONE

LIST OF DOCUMENTS REVIEWED

Section 1R08: Inservice Inspection Activities

Drawing Review

0005321122089, Gate Valves Pressure Seal Forged Motor Operator
ISI-57-09,ISI Weld & Pipe Support Identification Drawing

Radiograph Review

99-15687-11, Field Welds 410 and 414, ICS System (Ten Film Strips)

NDT Examination Reports

2-3.00-03-0007, Liquid Penetrant Examination, 2CSL-MOV112
2-4.00-03-0008, Magnetic Particle Examination, 2CSL-MOV112
2-3.00-04-0008, Liquid Penetrant Examination of MSS-FW 021
2-2.05-00-59, 74, 75, Visual Examination of Containment Liner (IWE)

NDT Examination Procedures

NDEP-UT-6.23, Revision 6, Ultrasonic Examination of Ferritic Piping Welds
NMP2-CISI-001, Revision 0, Containment Inservice Inspection Examination Acceptance Criteria
NDEP-VT-2.01, Revision 17, ASME Section XI Visual Examination
NDEP-RT-5.00, Revision 8, Radiographic Examination
NDEP-VT-2.06, Revision 1, In-vessel Inspection of Core Shroud Repair Assemblies
NDEP-VT-2.07, Revision 3, In-vessel Visual Inspection
NDEP-MT-4.00, Revision 14, Magnetic Particle Examination
NDEP-PT-3.00, Revision 14, Liquid Penetrant Examination
NMP2-CISI-006, Revision 0, Containment Inservice Inspection Program

In Vessel Remote Visual Examination

VT-1, Visual Examination of Steam Dryer

Miscellaneous

WO 99-15686-00, Replace Check Valves AOV156 and AOV157 (RCIC)
DDC 2M11902C, Design Document Change for Valve Replacement V156 and 157
DDC 2M11980, Revision of Standard Welding Specification 367M

Weld Procedure Specification and Qualifications

1-1-BA-101, Revision 16, WPS for Welding P1 to P1 using GTAW and SMAW
PQR N177, Weld Procedure Qualification Record for BA-101
Welder DO, Welder Performance Qualification Record for BA-101
Welder MD, Welder Performance Qualification Record for BA-101

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

GAP-MAI-01, Conduct of Maintenance, Revision 3
GAP-PSH-01, Work Control, Revision 27
NEG-CA-010, Online Configuration Risk Management Guidance

Section 1R15: Operability Evaluations

NIP-ECA -01, Deviation / Event Reports
GAP-OPS-02, Administration of Operations, Revision 19
S-ODP-OPS-0116, Operability Determinations

Section 1EP4: Emergency Action Level and Emergency Plan Changes

Site Emergency Plan, Revision 49
EPIP-EPP-15, Emergency Health Physics Procedure, Revision 6
EPIP-EPP-20, Emergency Notifications, Revision 17
EPIP-EPP-30, Prompt Notification System Problem Response, Revision 5
EPMP-EPP-02, Emergency Equipment Inventories and Checklists, Revision 28

Section 4OA2: Problem Identification and Resolution

Deviation/Event Reports
DER-NM-2001-1526
DER-NM-2001-3320
DER-NM-2001-3898
DER-NM-2001-4353
DER-NM-2002-231
DER-NM-2002-2185
DER-NM-2002-3229
DER-NM-2002-4308
DER-NM-2002-4678
DER-NM-2004-1245
DER-NM-2004-1113
DER-NM-2000-1012
DER-NM-2000-963
DER-NM-2002-1443

Procedures
N1-MPM-070-409, Revision 2, “RBCLC Water Heat Exchanger 70-13R, 70-14R, 70-15R”
N1-TTP-033, Revision 2, “Reactor Building Closed Loop Cooling Heat Exchanger Performance

Corrective Action Documents
10 CFR 50.65 (a)(1), Report for SW Radiation Monitor sample piping
SL-11237-017, Dec. 2003, “Evaluation of Alternatives for Addressing RAW Water Piping Degradation at Nine Mile Point Unit 1"

Drawings
C-18027-C, Unit 1, Service Water to Reactor Building P&ID, Sheet 2
C-18022-C, Unit 1, Service Water to Reactor and Turbine Buildings P&ID, Sheet 1
C-18012-C, Unit 1, Reactor Containment Spray Raw Water System P&ID, Sheet 1
C-18026-C, Unit 1, EDG #102 Starting Air, Cooling Water, Lube Oil, and Fuel P&ID, Sheet 1

LIST OF ACRONYMS

ADAMS	agencywide documents access and management system
ALARA	as low as is reasonably achievable
APRM	average power range monitor
ASME	American Society of Mechanical Engineers
CFR	Code of Federal Regulations
CS	core spray
DER	deviation event report
D/P	differential pressure
EAL	emergency action level
EC	emergency cooling
EDG	emergency diesel generator
ESW	emergency service water
FSAR	final safety analysis report
HEPA	high-efficiency particulate air
IA	instrument air
IR	inspection report
ISI	inservice inspection
IVVI	in-vessel visual inspection
LER	licensee event report
LP	liquid penetrant
LOCA	loss of coolant accident
LOOP	loss of off-site power
MOV	motor operated valve
MP	magnetic particle
MW_{th}	megawatt thermal
NCV	non-cited violation
NDE	nondestructive evaluation
NMP1	Nine Mile Point Unit 1
NMP2	Nine Mile Point Unit 2
NMPNS	Nine Mile Point Nuclear Station
NMPSEP	Nine Mile Point Site Emergency Plan

NRC	U.S. Nuclear Regulatory Commission
PMT	Post-Maintanace Testing
PQR	procedure qualification record
RCIC	reactor core isolation cooling
R/hr	rem per hour
RP	radiation protection
RSPS	risk significant planning standard
RWP	radiation work permit
SDC	shutdown cooling
SDP	significance determination process
SSCs	structures, systems, and components
SSS	station shift supervisor
SW	service water
TI	temporary instruction
TS	technical specification
UE	unusual event
USAR	updated safety analysis report
VE	visual examination
WO	work order