



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406

November 7, 2007

Mr. Keith J. Polson
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 05000220/2007004 and 05000410/2007004**

Dear Mr. Polson:

On September 30, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Nine Mile Point Nuclear Power Plant Unit 1 and Unit 2. The enclosed integrated inspection report documents the inspection results discussed on October 12, 2007, with Mr. Douglas Bauder 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.

This report documents two self-revealing findings of very low safety significance (Green). Both of these findings were determined to involve violations of NRC requirements. Additionally, a licensee-identified violation which was determined to be of very low safety significance is listed in this report. However, because of their very low safety significance and because they were entered into your corrective action program, the NRC is treating these findings as non-cited violations in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you contest the non-cited violations noted in this report, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, 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; U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-001; and the NRC Senior Resident Inspector at Nine Mile Point Nuclear Station.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the

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Sincerely,

/RA/

Glenn T. Dentel, Chief
Projects Branch 1
Division of Reactor Projects

Docket No.: 50-220, 50-410
License No.: DPR-63, NPF-69

Enclosure: Inspection Report 05000220/2007004 and 05000410/2007004
w/Attachment: Supplemental Information

cc w/encl:

M. J. Wallace, President, Constellation Generation
J.M. Heffley, Senior Vice President and Chief Nuclear Officer
C. W. Fleming, Esquire, Senior Counsel, Constellation Energy Group, LLC
M. J. Wetterhahn, Esquire, Winston and Strawn
P. Tonko, President and CEO, New York State Energy Research and Development Authority
J. Spath, Program Director, New York State Energy Research and Development Authority
P. D. Eddy, Electric Division, NYS Department of Public Service
C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law
Supervisor, Town of Scriba
T. Judson, Central NY Citizens Awareness Network
D. Katz, Citizens Awareness Network
C. Adrienne Rhodes, Chairman and Executive Director,
State Consumer Protection Board
S. Kempf, Regional Director, DHS, Region II

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DATE	11/06/07	11/06/07	11/06/07				

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K. Kolek, DRP, OA

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-220, 50-410

License No.: DPR-63, NPF-69

Report No.: 05000220/2007004 and 05000410/2007004

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

Facility: Nine Mile Point, Units 1 and 2

Location: Lake Road
Oswego, NY

Dates: July 1, 2007 through September 30, 2007

Inspectors: E. Knutson, Senior Resident Inspector
D. Dempsey, Resident Inspector
L. Cline, Senior Project Engineer
J. Furia, Senior Health Physicist
D. Johnson, Reactor Inspector
J. Kulp, Reactor Inspector
B. Norris, Senior Project Engineer
A. Rosebrook, Project Engineer
J. Schoppy, Senior Reactor Inspector
D. Tift, Reactor Inspector

Approved by: Glenn T. Dentel, Chief
Projects Branch 1
Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000220/2007004, 05000410/2007004; 07/01/07 - 09/30/07; Nine Mile Point Nuclear Power Station, Units 1 and 2; Event Followup.

The report covered a three-month period of inspection by resident inspectors and regional specialist inspectors. Two Green non-cited violations (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 4, dated December 2006.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Initiating Events

- Green. A self-revealing Green NCV of Unit 2 Technical Specification (TS) 5.4, "Procedures," occurred when an inadequate procedure was used to vent the reactor building closed loop cooling water (CCP) system which resulted in tripping both CCP pumps on low suction pressure. NMPNS determined that the main CCP pumps tripped due to introduction of air into the CCP system when restoring the 1A spent fuel pool cooling (SFC) heat exchanger to its normal alignment. The procedure was not maintained to ensure proper CCP system venting when the 1A SFC heat exchanger supply water was shifted to CCP from service water. Operators restored one main CCP pump to service to stabilize conditions while the procedure was modified to recover normal CCP system configuration. The issue was entered into the corrective action program (CAP) as condition report (CR) NM 2007-4299. Corrective actions were to develop a procedure change to vent the SFC heat exchangers when shifting to CCP from service water, and to further evaluate the fill and vent requirements for the closed loop cooling systems.

The finding is greater than minor because it is associated with the equipment performance attribute of the Initiating Events cornerstone and adversely affects the cornerstone's objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions. The inspectors determined the finding to be of very low safety significance based on an SDP Phase 2 analysis using the pre-solved table for the NMPNS Unit 2 Site Specific Risk-Informed Inspection Notebook. This finding has a cross-cutting aspect in the area of human performance because NMPNS failed to maintain procedure accuracy when revising the CCP operating procedure (H.2.c per IMC 0305). (Section 4OA3)

Cornerstone: Mitigating Systems

- Green. A self-revealing Green NCV of Unit 2 TS 5.4, "Procedures," occurred when an inadequate procedure was used for installation of a fire protection modification. Specifically, the installation procedure enabled plant technicians to establish an electrical circuit that initiated an unanticipated CO2 suppression system discharge

into the Division 3 switchgear room. An Alert was declared in accordance with NMPNS' emergency plan based on the presence of a toxic gas in an area required for safe shutdown. Operators took immediate corrective actions and isolated the CO2 supply to the suppression system using manually operated valves, and implemented compensatory measures for the suppression system isolation. NMPNS planned to develop additional corrective actions after completion of the root cause analysis of this event under CR NM-2007-5538.

The finding is greater than minor because it is associated with the external factors attribute of the Mitigating Systems cornerstone and adversely affects the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix F, "Fire Protection Significance Determination Process," because the performance and reliability of the suppression system would be minimally impacted by the inspection finding; specifically, action to manually unisolate the system would be required before the system could be used. This finding has a cross-cutting aspect in the area of human performance because NMPNS failed to develop an accurate work package for implementation of the fire protection system design change (H.2.c per IMC 0305). (Section 4OA3)

B. Licensee-Identified Violations

A violation of very low safety significance that was identified by NMPNS has been reviewed by the inspectors. Corrective actions taken or planned by NMPNS have been entered into NMPNS' corrective action program (CAP). The violation is listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Nine Mile Point Unit 1 began the inspection period at full rated thermal power (RTP). On September 15, 2007, power was reduced to 68 percent in response to loss of the 12 feedwater (FW) heater string (one of three series-connected combinations of four low pressure FW heaters) as a result of the 122 FW heater level control valve failing closed. On September 20, the 12 FW heater string was returned to service, and the 11 FW heater string was removed from service to repair a leak on the 114 FW heater. The 11 FW heater string was returned to service and power was restored to full RTP the following day. On September 22, power was reduced to 70 percent in response to a loss of the 12 FW heater string as a result of the 124 FW heater level control valve failing open. After repairs on the 124 FW heater level control valve were completed, the 12 FW heater string was returned to service the following day and power was restored to full RTP on September 24, where it remained for the rest of the inspection period.

Nine Mile Point Unit 2 began the inspection period at full RTP. On August 16, 2007, power was reduced to 90 percent due to a step increase in off-gas radiation levels which was attributed to early indications of a fuel defect. On August 17, power was further reduced to approximately 65 percent to perform power suppression testing to determine the location of the fuel defect. After testing was completed and control rod 34-11 was inserted to suppress the fuel defect, power was restored to full RTP on August 21. On September 29, power was reduced to 87 percent to perform turbine valve testing and a control rod pattern adjustment. Power was restored to full RTP later that day and remained there for the rest of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R02 Evaluation of Changes, Tests or Experiments (71111.02 - 24 samples)

a. Inspection Scope

The inspectors reviewed three safety evaluations (SEs), all of which were either issued during the past two years or associated with plant modifications that were completed during the past two years. The SEs reviewed were in the Initiating Event, Mitigating Systems, and Barrier Integrity cornerstones. The selected SEs were reviewed to verify that changes to the facility or procedures as described in the Updated Final Safety Analysis Reports (UFSAR) were reviewed and documented in accordance with 10 CFR 50.59, and that the safety issues pertinent to the changes were properly resolved or adequately addressed. The reviews also included the verification that NMPNS had appropriately concluded that the changes and tests could be accomplished without obtaining license amendments.

The inspectors also reviewed 21 screened-out evaluations for changes, tests and experiments and equivalency reviews for which NMPNS determined that SEs were not required. This review was performed to verify that NMPNS' threshold for performing SEs was consistent with 10 CFR 50.59.

Enclosure

The inspectors reviewed the administrative procedures that were used to control the screening, preparation, and issuance of the SEs to ensure that the procedure adequately covered the requirements of 10 CFR 50.59.

The inspectors reviewed condition reports (CRs) associated with 10 CFR 50.59 issues to ensure that NMPNS was identifying, evaluating, and correcting problems associated with these areas and that the planned or completed corrective actions for the issues were appropriate. The inspectors also reviewed three self-assessments related to 10 CFR 50.59 SEs and plant modification activities at NMPNS.

A listing of the SEs and screened-out evaluations reviewed is provided in the Attachment.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 Partial System Walkdown (71111.04 - Four samples)

a. Inspection Scope

The inspectors performed partial system walkdowns to verify risk-significant systems were properly aligned for operation. The inspectors verified the operability and alignment of these risk-significant systems while their redundant trains or systems were inoperable or out of service for maintenance. The inspectors also performed a partial walkdown of a single train system due to its risk significance. The inspectors compared system lineups to operating procedures (OPs), drawings, and the applicable chapters in the UFSAR. The inspectors verified the operability of critical system components by observing component material condition during the system walkdown. Documents reviewed during this inspection are listed in the Attachment. The inspectors performed partial walkdowns of the following systems:

- Unit 1 core spray system 11 on August 24, 2007, during maintenance on core spray system 12;
- Unit 1 emergency diesel generator (EDG) 102 on August 28, 2007, during maintenance on EDG 103;
- Unit 2 reactor core isolation cooling (RCIC) system (a risk-significant single train system) on August 2, 2007; and
- Unit 2 'A' residual heat removal system on September 6, 2007, after maintenance on the system.

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown (71111.04S - One sample)

a. Inspection Scope

The inspectors performed a complete walkdown of the Unit 2, Division 2 EDG auxiliary systems (starting air, service water (SW), jacket water cooling, fuel oil transfer, and lube oil) to identify discrepancies between the existing equipment configuration and that specified in the design documents. During the walkdown, system drawings and OPs were used to determine the proper equipment alignment and operational status. The inspectors reviewed the open maintenance work orders (WOs) that could affect the ability of the systems to perform their functions. Documentation associated with temporary modifications (TMs), operator workarounds, and items tracked by plant engineering were also reviewed to assess their collective impact on system operation. In addition, the inspectors reviewed the CR database to verify that equipment alignment problems were being identified and appropriately resolved. Documents reviewed during this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q - 15 samples)

a. Inspection Scope

The inspectors completed 15 quarterly fire protection inspection samples. The inspectors toured 15 areas important to reactor safety at NMPNS to evaluate the station's control of transient combustibles and ignition sources, and to examine the material condition, operational status, and operational lineup of fire protection systems including detection, suppression, and fire barriers. Documents reviewed for this inspection are listed in the Attachment. The areas inspected included:

- Unit 1 screen and pump house;
- Unit 1 diesel fire pump room;
- Unit 1 Division 1 EDG room, turbine building (TB) 261 foot elevation;
- Unit 1 Division 2 EDG room, TB 261 foot elevation;
- Unit 1 refuel floor, reactor building (RB) 340 foot elevation;
- Unit 1 11 containment spray pump room, RB 198 foot elevation;
- Unit 1 cable spreading room, TB 250 foot elevation;
- Unit 2 Division 1 SW pump room;
- Unit 2 Division 2 SW pump room;
- Unit 2 Division 1 cable routing area, control building (CB) 237 foot elevation;
- Unit 2 Division 2 cable routing area, CB 237 foot elevation;
- Unit 2 high pressure core spray cable routing area, CB 237 foot elevation;
- Unit 2 relay room, CB 288 foot elevation;
- Unit 2 battery room 2BYS-BAT1C, CB 214 foot elevation; and
- Unit 2 south electrical tunnel, CB 214 foot elevation.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07A - One sample)

a. Inspection Scope

The inspectors reviewed the testing and results for the 121 containment spray heat exchanger 80-33, performed in accordance with procedure N1-TTP-CTNSP-V001B, "Containment Spray Heat Exchanger HTX-80-33 (#121) Heat Removal Capacity Test." The inspectors reviewed performance data to verify that heat exchanger operation was consistent with its design basis. The inspectors conducted interviews with design and system engineers to ensure the test was controlled properly and to verify the overall condition of the heat exchanger. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11Q - Two samples)

a. Inspection Scope

The inspectors completed two licensed operator requalification training (LORT) program inspection samples. The inspectors assessed the clarity and effectiveness of communications, the implementation of appropriate actions in response to alarms, the performance of timely control board operation, and the oversight and direction provided by the shift manager. During the scenarios, the inspectors verified the operators used the applicable emergency operating procedures (EOPs), special operating procedures, alarm response procedures, the system OPs, and the emergency plan implementing procedures. Inspectors also compared simulator performance with actual plant performance in the control room. Documents reviewed for this inspection are listed in the Attachment. The following scenarios were observed:

- On July 25, 2007, the inspectors observed Unit 2 LORT to assess the performance of senior reactor operators (SROs) during a simulator period when they were required to demonstrate their knowledge and ability as a reactor operator. The scenarios involved a leak from the RB closed loop cooling system into the drywell; a loss of the TB closed loop cooling system, which resulted in a turbine runback and a reactor scram; a loss of the 'B' 125 VDC bus; and a malfunction of the feedwater control system which resulted in a reactor scram.

Additionally, the inspectors observed the performance of SROs during job performance measures (JPMs) involving emergency classifications. The inspectors evaluated the performance of the SROs in determining the appropriate EAL to

properly classify the simulated event, and completing the appropriate notification forms.

- On August 2, 2007, the inspectors observed Unit 1 licensed and non-licensed operators as part of an Emergency Preparedness exercise, to assess operator performance during a scenario involving a leak at the hydrogen tank farm, a seismic event, a loss of one of the off-site power lines, and a reactor coolant leak in the drywell.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12Q - One sample)

a. Inspection Scope

The inspectors reviewed performance-based problems and the performance and condition history of the Unit 2 standby gas treatment system to assess the effectiveness of the maintenance program. The inspectors reviewed the system to ensure that the station's review focused on proper maintenance rule scoping in accordance with 10 CFR Part 50.65, characterization of reliability issues, tracking system and component unavailability, and 10 CFR Part 50.65 (a)(1) and (a)(2) classification. In addition, the inspectors reviewed the site's ability to identify and address common cause failures and to trend key parameters. The inspectors reviewed the system health report, maintenance backlog, and maintenance rule basis documents. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 - Seven samples)

a. Inspection Scope

The inspectors evaluated the effectiveness of NMPNS' maintenance risk assessments required by paragraph a(4) of 10 CFR Part 50.65. The inspectors discussed with control room operators and scheduling department personnel the use of the station's online risk monitoring software. The inspectors reviewed equipment logs, work schedules, and performed plant tours to gain assurance that actual plant configuration matched the assessed configuration. Additionally, the inspectors verified that risk management actions for both planned and/or emergent work were consistent with those described in station procedures. Documents reviewed are listed in the Attachment. The inspectors reviewed risk assessments for the activities listed below.

Unit 1

- Week of July 30, 2007, that included planned maintenance on the 12 liquid poison system and surveillance testing for the liquid poison and emergency SW systems.
- Week of August 20, 2007, that included planned maintenance on the 111 and 121 core spray systems, 11 control rod drive pump, and intermediate range neutron monitor trip relay replacements, and surveillance testing for the 102 EDG.
- Week of August 27, 2007, that included emergent work on the EDG 103 cooling water system that affected emergency power availability.
- Week of September 10, 2007, that included planned maintenance on the 122 core spray system, surveillance testing for the 112 and 122 core spray systems, turbine valve testing, and an emergent FW heater level control issue that led to isolation of the 12 FW heater string and a power reduction to 72 percent.

Unit 2

- Week of July 16, 2007, that included planned maintenance on the Division 1 SW system, pump and valve testing on 'A' residual heat removal system, and secondary containment integrity testing.
- Week of August 13, 2007, that included planned maintenance on the Division 1 control room chiller, surveillance testing for the Division 1 EDG and SW systems, and emergent power suppression testing as a result of indications of reactor fuel leakage.
- Week of September 10, 2007, that included planned maintenance on the Division 1 reactor protection system motor-generator and an emergent issue in which a half scram could not be reset due to an equipment malfunction.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 - Six samples)a. Inspection Scope

The inspectors evaluated the acceptability of operability evaluations, the use and control of compensatory measures, and the compliance with TSs. The evaluations were reviewed using criteria specified in NRC Regulatory Issue Summary 2005-20, "Revision to Guidance formerly contained in NRC Generic Letter 91-18, Information to Licensees Regarding two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability" and Inspection Manual Part 9900, "Operability Determinations and Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety." The inspectors' review

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included verification that the operability determinations were completed as specified by Procedure S-ODP-OPS-0116, "Operability Determinations." The technical adequacy of the determinations was reviewed and compared to the TSs, UFSAR, and associated design basis documents (DBDs). Documents reviewed for the inspection are listed in the Attachment. The following six evaluations were reviewed:

- CR-2007-4732 concerning failure of an open limit switch for Unit 1 RB-to-torus vacuum relief valve 68-06;
- CR-2007-4958 concerning Unit 1 EDG 103 cooling water low flow identified during quarterly inservice testing;
- CR-2007-5086 concerning two unexpected half-scrams on Unit 1 average power range monitor 11;
- CR-2007-4118 concerning the Unit 2 B-standby gas treatment system while the air operating system had a broken rupture disk and a relief valve with excessive blowdown;
- CR-2007-4663 concerning a leak repair of a Unit 2 safety-related RB unit cooler; and
- CR-2007-4897 concerning the coincident failure of multiple Unit 2 Division 1 EDG annunciators.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications

.1 Biennial Inspection (71111.17B - Ten samples)

The inspectors reviewed ten risk-significant plant modification packages selected from the design changes that were completed within the past two years. The review was performed to verify that the design bases, licensing bases, and performance capabilities of risk significant structures, systems, and components had not been degraded through the modifications. The modifications reviewed are listed in the Attachment.

The selected plant modifications were distributed among the Initiating Event, Mitigating Systems, and Barrier Integrity cornerstones. For the modifications reviewed, the inspectors verified that selected attributes were consistent with the design and licensing bases. These attributes included component safety classification, energy requirements supplied by supporting systems, instrument setpoints, and supporting electrical and mechanical calculations and analyses. The inspectors also reviewed the design inputs and assumptions to verify that they were technically appropriate and consistent with the UFSAR. In addition, the inspectors reviewed the post-modification testing, functional testing, and instrument and relay calibration records to determine readiness for operation. Finally, the inspectors reviewed the affected procedures, drawings, DBDs and UFSAR sections to verify that the affected documents were appropriately updated.

For the accessible components associated with the modifications, the inspectors walked down the systems to detect possible abnormal installation conditions. The inspectors

also reviewed field change notices that were issued during installation to confirm that the problems associated with installation were adequately resolved.

The inspectors reviewed CRs associated with plant modification issues to ensure that Constellation was identifying, evaluating, and correcting problems associated with these areas and that the planned or completed corrective actions for the issues were appropriate. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

.2 Annual Inspection (71111.17A - One sample)

a. Inspection Scope

The inspectors reviewed design change package DCP N2-05-042, "Provide Alternate Dedicated Power to RCIC Loads During SBO Event with UPS 2VBA*UPS2S Inverter Out-of-Service." The purpose of this change was to ensure that the RCIC system was capable of manual initiation and operation during a station blackout (SBO) event. The inspectors verified the adequacy of the modification package and verified that margins to the design and licensing bases requirements of the affected systems were not degraded. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing (71111.19 - Five samples)

a. Inspection Scope

The inspectors reviewed the post-maintenance tests listed below to verify that procedures and test activities ensured system operability and functional capability. The inspectors reviewed the test procedure to verify that the procedure adequately tested the safety functions that may have been affected by the maintenance activity, that the acceptance criteria in the procedure were consistent with information in the applicable licensing basis and/or design basis documents, and that the procedure had been properly reviewed and approved. The inspectors also witnessed the test or reviewed test data, to verify that the test results adequately demonstrated restoration of the affected safety functions. The post-maintenance testing was reviewed for the activities listed below.

- Unit 1, WO 06-13403-00 that performed preventive maintenance on the 121 core spray pump motor. The retest was performed in accordance with N1-ST-Q1B, "Core Spray 121 Pump, Valve and Shutdown Cooling Water Seal Check Valve Operability Test."

- Unit 1, WO 07-03587-00 that hydrolased EDG 103 cooling water supply piping. The retest was performed in accordance with N1-ST-Q25, "Emergency Diesel Generator Cooling Water Quarterly Test."
- Unit 1, WO 06-04613-00 that performed maintenance on and diagnostically tested isolation valve 80-15. The retest was performed in accordance with N1-ST-Q6B, "Containment Spray System Loop 121 Quarterly Operability Test."
- Unit 2, action request 07-04321 that performed corrective maintenance on the RCIC pump minimum flow valve, 2ICS*MOV143, which had failed to open during testing. The retest was performed in accordance with N2-OSP-ICS-Q001, "RCIC Valve Operability Test."
- Unit 2, WO 06-13676-00 that performed planned maintenance on the Division 2 control room air conditioning system. The retest was performed in accordance with N2-OSP-HVK-Q001, "Control Building Chilled Water Loop 'A' and 'B' Pump and Valve Operability Test," and N2-OSP-SWP-Q@003, "Control Building Chiller Condensing Water Pump Operability Test."

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 - Eight samples)

a. Inspection Scope

The inspectors witnessed performance of and/or reviewed test data for eight risk-significant surveillance tests (STs) to assess whether the components and systems tested satisfied design and licensing basis requirements. The inspectors verified that test acceptance criteria were clear, demonstrated operational readiness and were consistent with the DBDs; that test instrumentation had current calibrations and the range and accuracy for the application; and that tests were performed, as written, with applicable prerequisites satisfied. Upon test completion, the inspectors verified that equipment was returned to the status specified to perform its safety function. Documents reviewed for this inspection are listed in the Attachment. The following eight STs were reviewed:

- N1-ST-Q6C, "Containment Spray System Loop 112 Quarterly Operability Test;"
- N1-ST-Q3, "High Pressure Coolant Injection Pump and Check Valve Operability Test;"
- N1-ST-M1B, "Liquid Poison Pump 12 Operability Test;"
- N2-OSP-EGF-Q@001, "D. G. Fuel Oil Transfer Pump and Valve Operability Test and ASME XI Functional Pressure Test;"
- N2-OSP-RHS-Q@001, "Residual Heat Removal System Loop A Valve Operability Test and Partial ASME XI Pressure Test;"
- N2-OSP-RHS-Q@004, "Residual Heat Removal System Loop A Pump and Valve Operability Test and System Integrity Test and ASME XI Pressure Test;"

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- N2-OSP-EGS-M@001, “Diesel Generator and Diesel Air Start Valve Operability Test – Division I and II,” for the Division I EDG; and
- N2-OSP-CSH-Q@002, “HPCS Pump and Valve Operability and System Integrity Test.”

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23 - One sample)

a. Inspection Scope

The inspectors reviewed temporary modification TCP No. N1-07-075, “Clamp Repair of Operating Vent Line for FW heater No. 122,” to verify that the system was maintained within the design basis and system established criteria. The inspectors reviewed the associated 10 CFR 50.59 evaluation against the system design bases information, including the UFSAR and TS. The inspectors verified that the modification did not affect the operators’ response to abnormal or emergency conditions. The inspectors verified that post-installation testing was adequate. In addition, the inspectors verified that NMPNS controlled the modification in accordance with their station procedures and all drawings and procedures were updated as applicable.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems
(71122.01 - 11 samples)

a. Inspection Scope

The inspectors reviewed the most current Radiological Effluent Release Report to verify that the program was implemented as described in Radiological Effluent Technical Specification/Offsite Dose Calculation Manual (RETS/ODCM); reviewed the report for significant changes to the ODCM and to radioactive waste system design and operation; determined whether the changes to the ODCM were made in accordance with Regulatory Guide 1.109 and NUREG-0133 and were technically justified and documented; determined whether the modifications made to radioactive waste system design and operation changed the dose consequence to the public; verified that technical and/or 10 CFR Part 50.59 reviews were performed when required; and, determined whether radioactive liquid and gaseous effluent radiation monitor setpoint calculation methodology changed since completion of the modifications. The inspectors reviewed RETS/ODCM to identify the effluent radiation monitoring systems (RMS) and

its flow measurement devices; reviewed effluent radiological occurrence performance indicator (PI) incidents for onsite follow-up; reviewed licensee self-assessments, audits, and licensee event reports (LERs) that involved unanticipated offsite releases of radioactive material; and, reviewed the UFSAR description of all radioactive waste systems. The inspectors reviewed NMPNS' RETS/ODCM to identify the station's program for identifying potential contaminated spills and leakage and process for control and assessment.

The inspectors walked down the major components of the gaseous and liquid release systems (e.g., radiation and flow monitors, demineralizers, filters, tanks, and vessels) to observe current system configuration with respect to the description in the UFSAR, ongoing activities, and equipment material condition.

The inspectors reviewed several radioactive liquid and gaseous waste release permits, including the projected doses to members of the public.

The inspectors reviewed the records of any abnormal releases or releases made with inoperable effluent radiation monitors and reviewed NMPNS' actions for these releases to ensure an adequate defense-in-depth was maintained against an unmonitored, unanticipated release of radioactive material to the environment. For unmonitored releases, the inspectors reviewed NMPNS' evaluation of the type and amount of radioactive material that was released and the associated projected doses to members of the public. Additionally, for any areas where spills, leaks, or other unusual occurrences have occurred, the inspectors verified that these areas have been properly documented in the site's decommissioning file, as required.

The inspectors assessed NMPNS' understanding of the location and construction of underground pipes and tanks, and storage pools that contain radioactive contaminated liquids. The inspectors evaluated if there may have potential unmonitored leakage of contaminated fluids to the groundwater as a result of degrading material conditions or aging of facilities. The inspectors assessed the station's capabilities of detecting spills or leaks and of identifying groundwater radiological contamination both on site and beyond the owner controlled area. The inspectors reviewed NMPNS' technical bases for its onsite groundwater monitoring program. The inspectors discussed with station personnel its understanding of groundwater flow patterns for the site, and in the event of a spill or leak of radioactive material, verified the staff can estimate the pathway of a plume of contaminated fluid both on site and beyond the owner controlled area.

The inspectors reviewed changes made by NMPNS to the ODCM as well as to the liquid or gaseous radioactive waste system design, procedures, or operation since the last inspection. For each system modification and each ODCM revision that impacted effluent monitoring or release controls, the inspectors reviewed the technical justification to determine whether the changes affected the station's ability to maintain effluents as low as reasonably achievable (ALARA) and whether changes made to monitoring instrumentation resulted in a non-representative monitoring of effluents.

The inspectors reviewed a selection of monthly, quarterly, and annual dose calculations to ensure that NMPNS had properly calculated the offsite dose from radiological effluent

releases and to determine if any annual RETS/ODCM (i.e., Appendix I to 10 CFR Part 50 values) were exceeded and, if appropriate, issued a PI report if any quarterly values were exceeded.

The inspectors reviewed air cleaning system test results and licensee specific methodology to ensure that the system is operating within acceptance criteria. The inspectors also reviewed test results and methodology used to determine the stack and vent flow rates and verified that the flow rates were consistent with RETS/ODCM or UFSAR values.

The inspectors reviewed records of RMS instrument calibrations performed since the last inspection for each point of discharge effluent radiation monitor and flow measurement device and reviewed any completed system modifications and the current effluent radiation monitor alarm setpoint value for agreement with RETS/ODCM requirements. The inspectors also reviewed calibration records of radiation measurement (i.e., counting room) instrumentation associated with effluent monitoring and release activities and reviewed quality control records for the radiation measurement instruments.

The inspectors reviewed the results of the interlaboratory comparison program to verify the quality of radioactive effluent sample analyses performed by NMPNS; reviewed NMPNS' quality control evaluation of the interlaboratory comparison test and associated corrective actions for any deficiencies identified; and reviewed the results from quality assurance audits to determine if NMPNS met the requirements of the RETS/ODCM.

The inspectors reviewed LERs, Special Reports, audits, and self-assessments related to the RETS/ODCM program performed since the last inspection. The inspectors determined that identified problems were entered into the corrective action program (CAP) for resolution. The inspector also reviewed problem notifications affecting RETS/ODCM.

The inspectors evaluated NMPNS performance against the requirements contained in: Unit 1 Technical Specification (TS) 6.6.3; Unit 2 TSs 6.9.1.8 and 6.14; and 10 CFR Part 50.36a and 10 CFR Part 50, Appendix B, section IV.B.1.

The inspectors reviewed the training and qualifications of 20 chemistry technicians against the requirements contained in TS 6.3 and ANSI Standard N18.1-1971 for initial and continuing training. The inspectors also verified the basis for any training or qualification waivers issued to the chemistry technicians.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151 - Eight samples)

a. Inspection Scope

The inspectors sampled NMPNS' submittals for the performance indicators (PIs) listed below. To verify the accuracy of the PI data reported during that period, the PI definition guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Indicator Guideline," Revision 4, was used to verify the basis in reporting for each data element.

Cornerstone: Initiating Events

The inspectors reviewed LERs and operator logs to determine whether NMPNS accurately reported the number of unplanned scrams at Unit 1 and Unit 2 from April 2006 to June 2007.

- Unplanned Scrams per 7000 Critical Hours
- Unplanned Scrams with a Loss of Normal Heat Removal

Cornerstone: Mitigating Systems

The inspectors completed a review of Mitigating Systems Performance Index (MSPI) data including a review of train/system unavailability data, monitored component demands, and demand failure data. Changes to the MSPI basis document were reviewed. The inspectors also reviewed out-of-service logs, operating logs, and maintenance rule information to determine the accuracy and completeness of the reported unavailability data. Operating data from July 2006 to June 2007 were reviewed to complete this inspection. The MSPIs reviewed were:

- Unit 1 emergency AC power system
- Unit 1 high pressure safety injection system

Cornerstone: Barrier Integrity

The inspectors reviewed operator logs, plant computer data, and daily sampling and surveillance procedure results to verify the accuracy of the reported maximum reactor coolant system specific activity from April 2006 to June 2007.

- Unit 1 reactor coolant system specific activity

Cornerstone: Public Radiation Safety

The inspectors reviewed a listing of licensee action reports for the period January 1, 2006 through November 13, 2006 for issues related to the public radiation safety PI, which measures radiological effluent release occurrences per site that exceed 1.5 mrem/qtr whole body or 5 mrem/qtr organ dose for liquid effluents; or 5 mrad/qtr

gamma air dose, 10 mrads/qtr beta air dose; or 7.5 mrems/qtr organ doses from I-131, I-133, H-3 and particulates for gaseous effluents.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152 - Two samples)

.1 Review of Items Entered into the Corrective Action Program (CAP)

a. Inspection Scope

As specified 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 into Nine Mile Point's CAP. In accordance with the baseline inspection modules, the inspectors also identified selected CAP items across the initiating events, mitigating systems, and barrier integrity cornerstones for additional follow-up and review. The inspectors assessed Constellation's threshold for problem identification, the adequacy of the cause analyses, extent of condition review, operability determinations, and the timeliness of the specified corrective actions.

b. Findings

No findings of significance were identified.

.2 Annual Sample - Review of Quality and Performance Assessment Staffing Study Enablers to Support Staffing Reductions

a. Inspection Scope

The inspectors reviewed NMPNS' actions in response to CRs generated as a result of issues associated with a staff reduction in August 2006. The inspectors verified that minimum staffing requirements were met and that various departments were staffed with qualified individuals. In addition, the inspectors reviewed how the station's corrective action process addressed each issue. The inspector's review of the issue also included interviews of NMPNS' staff.

b. Assessment and Observations

No findings of significance were identified. The inspectors reviewed several CRs documenting issues related to the staffing reduction that took place in August 2006. In each case, the actions taken to address the issues were appropriate. The inspectors verified that the site has qualified individuals in place to meet the minimum requirements for staffing the fire brigade. In addition, the inspectors noted that a staffing plan has been developed to maintain a qualified staff of operators.

.3 Annual Sample - Operating Experience Related to Diesel Generator Relays

a. Inspection Scope

The inspectors selected CR 2006-4612 for detailed review. The CR was associated with a recent failure of an EDG at the Palo Verde Nuclear Generating Station. The failure involved the EDG failing to obtain an output voltage during surveillance testing because of a faulty K-1 relay operation. It was identified that NMPNS Unit 2 EDG's K-1 relays are the same as Palo Verde's. The inspectors reviewed NMPNS' actions in response to this operating experience to prevent a similar failure of the Unit 2 EDG K-1 relays.

b. Assessment and Observations

No findings of significance were identified. The inspectors determined that NMPNS performed a thorough review of the issue and took timely and appropriate actions to prevent similar failures from occurring at NMPNS. These actions included walking down relays installed in the field and stored in the warehouse, determining failure history of the relays, and verifying that maintenance and installation procedures for these relays were adequate.

4OA3 Event Followup (71153 – Three samples)

.1 Inadequate CCP system venting procedure resulted in loss of main CCP pumps

a. Inspection Scope

On July 13, 2007, while operators were aligning the reactor building CCP system to the 1A SFC heat exchanger, the two operating CCP main pumps tripped. The standby pump automatically started, but then immediately tripped. After about 20 minutes, operators were successful in restoring one main CCP pump to service. The temperatures of CCP-cooled components stabilized and no affected components were required to be removed from service due to high temperature. The inspectors reviewed the circumstances surrounding this event and observed restoration of the normal CCP system lineup.

b. Findings

Introduction. A self-revealing Green NCV of Unit 2 TS 5.4, "Procedures," occurred when an inadequate procedure was used to vent the CCP system following maintenance. Specifically, an adequate procedure was not maintained for venting the CCP system and resulted in a low suction pressure trip of the main CCP pumps tripping following SW isolation valve maintenance.

Description. The CCP system is an intermediate fresh water cooling system that transfers heat from various reactor plant systems to the SW system. The system includes three main pumps and three booster pumps. The booster pumps are required to provide adequate suction pressure to the main pumps.

The system normally operates with two main pumps and two booster pumps in service, and the remaining two pumps in automatic standby.

On July 12, 2007, operators performed testing on a SW system isolation valve to the 1A SFC heat exchanger. The SFC system is normally cooled by the CCP system, with SW available as a backup. Because the testing could introduce SW into the CCP system, the heat exchanger was isolated prior to the maintenance, and then drained and flushed prior to being realigned to the CCP system. This was performed in accordance with system OP N2-OP-13, "Reactor Building Closed Loop Cooling System," section H.6, "Off-Normal Operations, Shifting Spent Fuel Pool Heat Exchanger 1A (B) Cooling Supply From SW to CCP." The following day, when operators performed the procedure step to reestablish CCP flow through the heat exchanger, the two operating main CCP pumps tripped. The standby main pump automatically started, but immediately tripped. The two running CCP booster pumps were not affected and continued to operate.

Operators entered special OP N2-SOP-13, "Loss or Degraded CCP System." The subsequent receipt of high temperature alarms associated with the 'B' reactor recirculation pump caused them to also enter N2-SOP-29.1, "Recirc Pump Failures." Over the next 22 minutes, operators made several attempts to restore two main CCP pumps to service; however, starting the second pump resulted in both pumps tripping. Ultimately, operators placed a single main pump in service without attempting to start a second. This configuration provided adequate CCP flow to maintain all served systems in operation.

NMPNS determined that the cause of low suction pressure trips of the main CCP pumps had been introduction of air into the CCP system when restoring the 1A SFC heat exchanger to its normal alignment.

The inspectors determined that a procedure change had been made, approximately six months before the event, to vent the SFC heat exchangers after flushing by using 2SFC*V272A and B. The procedure was subsequently revised (Revision 7), however, this change was not incorporated in the revision. On July 13, 2007, when operators used the off-normal operations portion of N2-OP-13 revision 7 for shifting SFC heat exchanger 1A cooling supply from SW to CCP, this resulted in the heat exchanger not being adequately vented, and caused the loss of both running main CCP pumps.

The inspectors determined the performance deficiency was NMPNS' failure to ensure a proper venting procedure was maintained for the CCP system. The issue was entered into the CAP as CR NM 2007-4299. Corrective actions were to develop a procedure change to vent the SFC heat exchangers when shifting to CCP from service water, and to further evaluate the fill and vent requirements for the closed loop cooling systems.

Analysis. The finding was greater than minor because it was associated with the equipment performance attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions. The finding was evaluated in accordance with IMC 0609, Appendix A, and the SDP Phase one determination indicated that a Phase two analysis was required because the finding contributed to both the likelihood

of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Using the pre-solved table for the NMPNS Unit 2 Site Specific Risk-Informed Inspection Notebook, the finding was determined to be of very low safety significance (Green). The dominant core damage sequence was a loss of reactor building closed loop cooling with a loss of containment heat removal and venting, and subsequent injection failure. However, operators restored CCP cooling in a short period of time and there was no challenge to containment heat removal.

This finding had a cross-cutting aspect in the area of human performance because NMPNS failed to maintain procedure accuracy when developing revision 7 to N2-OP-13, in that the procedure step to vent the SFC heat exchanger when shifting the cooling supply from SW to CCP, as specified in revision 6, was omitted from revision 7 (H.2.c per IMC 0305).

Enforcement. TS 5.4, "Procedures," states, in part, that, "Written procedures shall be established, implemented, and maintained covering . . . the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978." Regulatory Guide 1.33 includes procedures and instructions for venting systems such as the reactor building closed cooling water system. Contrary to the above, on July 13, 2007, Unit 2 OP N2-OP-13, "Reactor Building Closed Cooling Water System," revision 7, did not include instructions for adequately venting SFC heat exchanger 1A prior to aligning it to the RB closed cooling water system after flushing, which resulted in the tripping of all main CCP pumps. Because this procedural deficiency is of very low safety significance and has been entered into the CAP (CR NM-2007-4299), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: **NCV 05000410/2007004-01, Inadequate CCP system venting procedure resulted in loss of main CCP pumps.**

.2 Inadvertent CO2 Fire Suppression System Discharge at Unit 2

a. Inspection Scope

On September 19, at 2:54 p.m., a fire alarm for the Division 3 electrical switchgear room was received in the Unit 2 control room. Operators also received indications that the associated carbon dioxide (CO2) suppression system had discharged, despite its having been aligned for manual initiation only. Operators entered emergency plan implementing procedure (EPIP)-EPP-28, "Fire Fighting." The NMPNS fire brigade verified that a CO2 discharge had occurred, and confirmed that there were no personnel in the Division 3 switchgear room. There was no indication of fire in the area. The Unit 2 Shift Manager declared an Alert in accordance with NMPNS' emergency plan at 3:04 p.m., based on the presence of a toxic gas in an area that is required for safe shutdown. The affected and adjacent spaces were ventilated and verified to contain acceptable oxygen levels. After the CO2 supply had been manually isolated from the suppression systems, NMPNS terminated the Alert at 9:47 p.m.

The inspectors responded to the control room, technical support center, and emergency operating facility, and observed Constellation's response to the event. The inspectors verified that operators responded in accordance with the emergency plan and that the

event classification was appropriate. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

Introduction. A self-revealing Green NCV of Unit 2 TS 5.4, "Procedures," occurred when an inadequate procedure was used for installation of a fire protection modification. Specifically, the installation procedure enabled plant technicians to establish an electrical circuit that initiated an unanticipated CO2 suppression system discharge into the Division 3 switchgear room.

Description. An extensive fire protection system modification was in progress at Unit 2, to improve the reliability and maintainability of the detection, suppression, and alarm systems. The modification was being performed under multiple design change packages (DCPs); one of these, DCP N2-06-088, "Nine Mile Point Unit 2 Fire Protection Improvement Project, Fire Alarm Network and Workstations Installation Section," was being performed on September 19. N2-06-088 was to non-intrusively install portions of the modification, for tie-in to the existing active fire protection system under a different DCP at a later date. As such, no fire protection system isolations (i.e., electrical deenergization or isolation of fire suppression process fluid) were considered necessary for performance of the work.

The work being performed on September 19 was in local fire control panel 2FPM-PNL128, which is associated with CO2 suppression for the Division 3 switchgear room. New wiring connections were being made to, what was depicted in #N2-06-088 to be, a spare terminal strip. In actuality, the referenced terminal strip already had live wiring attached, associated with the existing fire protection system. Despite the discrepancy between the anticipated and actual conditions of the terminal strip, the technicians proceeded with the modification installation. The resulting wiring terminations established a circuit that was functionally equivalent to the manual initiation switch for the Division 3 switchgear room CO2 suppression system. The loose ends of two of these terminated wires came into contact during the course of work, which then completed the electrical circuit and discharged the CO2 suppression system for the Division 3 switchgear room.

The performance deficiency is that NMPNS failed to establish adequate procedures that led to an inadvertent discharge of CO2 into a Division 3 switchgear room. During the event investigation and implementation of corrective actions, NMPNS manually isolated CO2 to the suppression system using manually operated valves. As such, the system remained available, with additional operator action to unisolate the CO2 being required before the system could actually be used. NMPNS planned to develop additional corrective actions after completion of the root cause analysis of this event under CR NM-2007-5538.

Analysis. The finding was greater than minor because it was associated with the external factors attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was

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evaluated in accordance with IMC 0609, Appendix A, and a Phase one SDP directed that the finding be evaluated in accordance with Appendix F, "Fire Protection Significance Determination Process," because the finding degraded a fire suppression system. The finding was assigned a LOW degradation rating because the performance and reliability of the suppression system was minimally impacted by the inspection finding; specifically, action to manually unisolate the system would be required before the system could be used. Therefore, the finding was determined to be of very low safety significance (Green).

This finding had a cross-cutting aspect in the area of human performance because NMPNS failed to develop an accurate work package for implementation of the fire protection system design change (H.2.c per IMC 0305).

Enforcement. Unit 2 TS 5.4, "Procedures," states, in part, that, "Written procedures shall be established, implemented, and maintained covering . . . Fire Protection Program implementation." Unit 2 UFSAR, Appendix 9A, defines the fire protection program, in part, as, "The components, procedures, and personnel utilized in carrying out all activities of fire protection . . . including . . . maintenance . . ." Contrary to the above, on September 19, 2007, NMPNS did not establish an adequate procedure to install DCP N2-06-088, "Nine Mile Point Unit 2 Fire Protection Improvement Project, Fire Alarm Network and Workstations Installation Section," which resulted in an inadvertent discharge of CO₂ in the Division 3 switchgear room and subsequently degraded the availability of the CO₂ suppression system. Because this procedural deficiency is of very low safety significance and has been entered into the corrective action program (CR NM-2007-5538), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: **NCV 05000410/2007004-02, Inadequate Procedure for Installation of a Design Change Resulted in Inadvertent Discharge of the CO₂ Suppression System.**

.3 Feedwater Heater Issues at Unit 1

a. Inspection Scope

Unit 1 has three strings of low pressure feedwater heaters (11, 12, and 13), each consisting of four heaters. On September 15, 2007, the 12 low pressure heater string tripped due to the 122 feedwater heater level control valve (LCV) failing closed. Operators entered Special Operating Procedure N1-SOP-1.1, "Emergency Power Reduction," and lowered power to approximately 70 percent due to the resultant reduction in feedwater temperature. During subsequent investigation in the 12 heater bay, a steam leak was identified from an elbow in the 122 feedwater heater vent line to the main condenser. It was later determined that the leak was probably due to a water hammer that occurred in the line when the 12 low pressure heater string tripped. The leak was repaired by encasing the elbow in a shell that was then welded to the vent line. The cause of the 12 low pressure heater string trip was determined to be binding of the 122 feedwater heater LCV actuator.

During an extent of condition inspection of the other two heater bays, a steam leak was identified from the end bell-to-shell weld on the 114 feedwater heater. The cause of this

leak was determined to be a manufacturing defect. On September 20, after the 12 low pressure heater string had been repaired and returned to service, the 11 low pressure heater string was removed from service. The cracked weld on the 114 feedwater heater was repaired and the heater string was returned to service. Power was restored to full RTP on September 21.

On September 22, the 12 low pressure heater string again tripped, this time due to the 124 feedwater heater level control valve (LCV) failing open. Operators entered Special Operating Procedure N1-SOP-1.1, "Emergency Power Reduction," and lowered power to approximately 70 percent. The cause of the LCV failure was determined to be binding of the actuator.

The inspectors reviewed these issues, including operator responses to the resultant plant transients, and corrective maintenance activities. The inspectors reviewed plant logs, interviewed operators, attended maintenance planning meetings, assessed the adequacy of NMPNS' extent of condition examinations, evaluated proposed leak repair techniques, and reviewed NMPNS' cause determination for the LCV actuator failures.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

The inspectors presented the inspection results to Mr. Douglas Bauder and other members of NMPNS management on October 12, 2007. NMPNS acknowledged that no proprietary information was involved.

4OA7 Licensee-identified Violations

The following violation of very low safety significance was identified by NMPNS and is a violation of NRC requirements that meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as an NCV.

10 CFR Part 50.65(a)(4) requires that, before performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. Contrary to the above, on September 24, 2007, NMPNS did not assess and manage the increase in risk that resulted from performing surveillance on the 102 EDG concurrent with maintenance on the Unit 1 diesel fire pump. In accordance with IMC 0609, Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," the inspectors determined the finding to be of very low safety significance due to the short time period in which the EDG was unavailable. This event is documented in NMPNS' corrective action program as CR 2007-5627.

ATTACHMENT: SUPPLEMENTAL INFORMATION

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SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

K. Polson, Vice President
N. Conicella, Manager, Operations
R. Dean, Director, Quality and Performance Assessment
K. Englemann, Senior Engineering Analyst
M. Faivus, General Supervisor, Chemistry
J. Gerber, General Supervisor, Radiation Protection
E. Hafner, Senior Operations Instructor
J. Kaminski, Senior Emergency Preparedness Analyst
J. Krakuszeksi, Unit 1 General Supervisor Shift Operations
G. Laughlin, Manager, Engineering Services
D. Newman, Supervisor Continuing Training
J. Oxford, Fire Marshall
R. Slade, Unit 2 General Supervisor Shift Operations
J. Snizek, Supervisor, I&C Maintenance
K. Stoffle, Principle Engineer - Environmental
T. Syrell, Director, Licensing
S. Tanner, Senior Technical Instructor

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000410/2007004-01	NCV	Inadequate CCP system venting procedure resulted in loss of main CCP pumps (Section 4OA3)
05000410/2007004-02	NCV	Inadequate Procedure for Installation of a Design Change Resulted in Inadvertent Discharge of the CO2 Suppression System (Section 4OA3)

LIST OF DOCUMENTS REVIEWED

Section 1R02: Evaluation of Changes, Tests, or Experiments

Safety Evaluations

50.59 Evaluation No. 2006-01, "Unit 2 ECCS Closed Loop Designation"
50.59 Evaluation GENE-0000-0059-5404, "Safety Evaluation Shroud Repair Modification Nine Mile Point 1"

50.59 Evaluation No 2001-066, "Phase II Spent Fuel Pool Rack Installation" (Used for DCP N2-06-002)

Screens

DCP 2-04-TRM-003, "TLCO 3.3.9 and 3.7.1 Applicability/Action/Bases Update to Maintain Consistency with TS"
EE 01321, "Replace the Voltage Suppression Resistors and Capacitors for Relays in the Reactor Recirculation System with Diodes (MOD N2-05-140)"
EE 01355, "Recirculation System Discharge Valve 2RCS*MOV 18B Replacement (MOD N2-06-029)"
N1-05-132, "Modification to Jockey Pump Suction and Discharge Piping"
N1-05-141, "Permanent Installation of RFP Seal Injection Pump"
N1-05-184, "Weld Overlay on Service Water Pipe"
N1-06-019, "Reactor Feedwater GEMAC Master Controller Replacement"
N1-06-027, "Increase Reactor Building Scram Header Area Temperature Alarm Setpoint"
N1-06-098, "Reconstitute the Setpoint for PS-63-141 & PS-63-142"
N1-06-099, "Improve Margin on Battery 11"
N1-07-025, "Replace MSIV Limit Switches"
N1-07-051, "Drywell Water Leak Detection System Nuisance Alarm"
N2-05-065, "Reload10/Cycle 11 Fuel Design"
N2-05-081, "NMP Unit 2 3D MONICORE system upgrade"
N2-05-120, "NMP Unit 2 MSIV Pomona Test Jacks Modification"
N2-05-136, "Westinghouse CR 82M-1 and CR99 Control Rods"
N2-06-017, "Unit 2 Screenwell Building Truck Bay North Wall Penetrations"
N2-06-020, "Unit 2 Jet Pump Hold-Down Beam Assemblies"
N2-06-027, "ECCS Suction Strainer Debris Loading"
N2-06-087, "Install Universal Hydrolazing Taps in RHR Lines"
TCP#N1-05-143, "Add Temporary Pump to System 51 for Added Seal Water Supply"

Evaluations

EDC 2F01149, "SWP Strainer Leakage Containment Relief"
EDC 2S10645, "RHR Snubber Removal"
EE-00703, "Replacement of CLOW Tricentric Butterfly Valve 2SWP*MOV74B (Mod N2-02-122)"
EE 01124, "Standby Diesel Shutdown Air Control System Check Valve replacement (Mod N2-05-002)"
EE-01256, "Division I and Division II Emergency DC Distribution 125V Battery Charger (Mod N2-02-152)"
EE 01307, "Removing SOV-39 11C&D, 12 C&D, 13 C&D, and 14 C&D from EQ Program"
EE 01333, "Alternate Hoses for Unit 2 Diesel Fuel (Mod N2-06-005)"
EE 01337, "Unit 2 Spent Fuel Pool Pressure Transmitters 2 SFC*PT3A and 3B" (Mod N2-06-008)
EE-01369, "Reactor Feedwater GEMAC Master Controller Replacement"
EE-01391, "Pressure Relief Valve #PSV-91.1-18"
EE-01458, "NMP1 Spent Fuel Pool Differential Pressure Transmitters" (Mod N1-07-008)
EE-01472, "Replace MSIV Limit Switches"

EE-01488, "Drywell Water Leak Detection System Nuisance Alarm"

NMP-2007-28 TRR: N1-06-099, "Improve Margin on Safety Related 125VDC Battery 11," dated 01/12/2007

PCE 73113, "Change to Procedure N2-PM-@026," dated 2/15/07

Section 1R04: Equipment Alignment

12177-PID-104-1, "Standby Diesel Generator System Fundamental"

N2-OP-100A, "Standby Diesel Generators"

N2-OSP-EGA-Q001, "Diesel Generator Air Start-Up System Valve Operability Test"

N2-OSP-EGF-Q@001, "Fuel Oil Transfer Pump and Valve Operability Test" and "ASME XI Functional Pressure Test"

N2-OSP-EGS-M@001, "Diesel Generator and Diesel Air Start Valve Operability Test Division I and II"

N2-OSP-EGS-R001, "Diesel Generator ECCS Start Division 1 and 2"

N2-OSP-EGS-R002, "Operating Cycle Diesel Generator 24 Hour Run and Load Rejection Division I and II"

N2-OSP-EGS-R003, "Diesel Generator Loss of Offsite Power with No ECCS Division I and II"

N2-OSP-EGS-R004, "Operating Cycle Diesel Generator Simulated Loss of Offsite Power with ECCS Division I and II"

N2-SOP-03, "Loss of AC Power"

N2-VLU-01, "Walkdown Order Valve Lineup and Valve Operations," Attachment 100A, "N2-OP-100A Walkdown Valve Lineup"

P&ID-011L-22, "SW System"

P&ID-104A-21, "Standby Diesel Generator System"

P&ID-104D-6, "Jacket Water Standby Diesel Generator System"

P&ID-104E-7, "Lube Oil Standby Diesel Generator System"

P&ID-104F-4, "Fuel Oil Schematic Standby Diesel Generator System"

N2-OP-35, "Reactor Core Isolation Cooling"

N2-VLU-01, "Walkdown Order Valve Lineup and Valve Operations," Attachment 35, "N2-OP-35 Walkdown Valve Lineup"

P&ID-35, "Reactor Core Isolation Cooling"

N2-OP-31, "Residual Heat Removal System"

N2-VLU-01, "Walkdown Order Valve Lineup and Valve Operations," Attachment 31, "N2-OP-31 Walkdown Valve Lineup"

Section 1R05: Fire Protection

NMPNS Unit 1 UFSAR, Appendix 10A, "Fire Hazards Analysis"

NMPNS Unit 2 UFSAR, Appendix 9A, "Degree of Compliance with Branch Technical Position CMEB 9.5-1"

NMPNS Unit 2 UFSAR, Appendix 9B, "Safe Shutdown Evaluation"

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N2-FPI-PFP-0201, "Pre-Fire Plans"

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Section 1R07: Heat Sink Performance

S14-93HX10, "Unit 1 Containment Spray Heat Exchanger Performance Test Determination of Test Uncertainty"
S14-93HX07, "Determine Allowable Fouling Factor Based on K-Value Used in Torus Heatup Analysis With 84 F SW Temperature"
S14-93HX09, "Containment Spray Heat Exchanger Performance Model"
S0-TORUS-M009, "NMP-1 Torus Pool Heat Up Analysis," Revision 3, Disposition 3A
NER-1M-097, "Evaluation of Revision of the TS Ultimate Heat Sink Temperature Limit to 83 Degrees"
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N1-MPM-080-410, "Containment Spray Heat Exchanger PM (HTX-80-13, HTX-80-14, HTX-80-33. And HTX-80-34)"

Section 1R11: Licensed Operator Regualification Program

EPIP-EPP-20, "Emergency Notifications"
EPIP-EPP-01-EAL, "Emergency Action Level Matrix Unit 1"
EPIP-EPP-02-EAL, "Emergency Action Level Matrix Unit 2"
EPIP-EPP-01, "Classification of Emergency Conditions at Unit 1"
EPIP-EPP-02, "Classification of Emergency Conditions at Unit 2"
EPIP-EPP-11, "Hazardous Material Incident Response"
GAP-OPS-01, "Administration of Operations"
N1-EOP-2, "RPV Control Flowchart"
N1-EOP-4, "Primary Containment Control Flowchart"
N1-EOP-5, "Secondary Containment Control Flowchart"
N1-OP-1, "Nuclear Steam Supply System"
N1-OP-43C, "Plant Shutdown"
N1-SOP-1.2, "Reactor Recirculation Pump Seal Failure"
N1-SOP-21.1, "Fire in Plant"
N1-SOP-28, "Seismic Event"
N2-ARP-01, "Control Room Alarm Response Procedures"
N2-EOP-RPV, "RPV Control Flowchart"
N2-OP-101D, "Power Changes"
N2-SOP-04, "Loss of DC Power"
N2-SOP-06, "Feed Water Failures"
N2-SOP-13, "Loss or Degraded CCP System"
N2-SOP-14, "Loss or Degraded CCS System"
N2-SOP-68, "Generator Auxiliaries Failures"
NIP-PRO-01, "Use of Procedures"
PWM-PRO-0303, "Alarm Response Procedures"
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Section 1R12: Maintenance Effectiveness

10CFR50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"
GAP-PSH-03, "Control of On-line Work Activities"
N2-OP-61B, "Standby Gas Treatment System"
NIP-REL-01, "Maintenance Rule"
P&ID-61-2, "Primary Containment Purge & Stand-By Gas Treatment Fundamental"
P&ID-61A-13, "Primary Containment Purge & Stand-By Gas Treatment"
P&ID-61B-21, "Primary Containment Purge & Stand-By Gas Treatment"
P&ID-61C-6, "Stand-By Gas"
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S-MRM-REL-0104, "Maintenance Rule Scope"
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Unit 2 High Safety Significant Functions and Related Key Safety Functions Matrix
Unit 2 System Matrix Grid Report
Unit 2 System Health Report for Standby Gas Treatment
Unit 2 Maintenance Rule Function Report for Standby Gas Treatment

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

GAP-OPS-117, "Integrated Risk Management"
GAP-PSH-03, "Control of On-line Work Activities"
NAI-PSH-03, "On-line Work Management Process"
WO 06-11967-00, "Perform N2-OSP-RHS-Q@004 (24 month walkdown)"
WO 06-11966-00, "Perform N2-OSP-RHS-Q@001, observe 2RHS*MOV2A for leakage during stroking"
N2-OSP-RHS-Q@001, "Residual Heat Removal System Loop 'A' Valve Operability Test and Partial ASME XI Pressure Test"
N2-OSP-RHS-Q@004, "RHR System Loop 'A' Pump and Valve Operability Test and System Integrity Test and ASME XI Pressure Test"
N2-OSP-ICS-M001, "RCIC System Piping Fill and Valve Lineup Verification Test"

Section 1R15: Operability Evaluations

N20870.2, NC62800GENERA003, "Entronic Control System Operating & Maintenance Manual Standby Diesel Generator System"
N2-OP-100A, "Standby Diesel Generators"
N2-ARP-02, "In-Plant Alarm Response Procedures"
G5-553-133-G1, "Control Schematic Shutdown and Alarm Systems"
G5-553-133-G2, "Control Schematic Shutdown and Alarm Systems"
D-1019-464, "Schematic & Assembly Dual Module"
S15-72-F003, "IST Approved Pump Curves Emergency Diesel Generator Cooling Water"
WO 05-15298-00

Section 1R17: Permanent Plant Modifications

DCP N2-05-042, "Provide Alternate Dedicated Power to RCIC Loads During SBO Event with UPS 2VBA*UPS2S Inverter Out-of-Service"

WO 05-07828-00, "Uninterruptible Power Supply, including Regulating Transformer and Manual Bypass Switch"

Modifications

N1-05-141, "Permanent Installation of RFP Seal Injection Pump"

N1-05-184, "Weld Overlay of Service Water Pipe"

N1-06-027, "Increase Scram Header Area Temperature Alarm Setpoint"

N1-06-090, "Modify Core Shroud Tie Rod Upper Support Assemblies"

N1-06-099, "Improve Margin on Battery 11"

N2-02-122, "NMP2 CLOW Tricentric Butterfly Valve 2SWP*MOV74B Replacement," dated 3/29/06

N2-02-152, "Division I and Division II Emergency DC Distribution 125V Battery Charger Replacement"

N2-05-002, "Division I and Division II Generator Emergency (EGS) System Standby Diesel Generators Shutdown Air control System Check Valve Replacement"

N2-05-081, "NMP Unit 2 3D MONICORE system upgrade"

N2-06-002, "NMP Unit 2 Spent Fuel Pool Re-Rack-South End"

Design and Licensing Basis

License Amendment Request Pursuant to 10 CFR Part 50.90: "Revision to Standby Liquid Control Pump Discharge Pressure Surveillance Requirement - TS 3.1.7," dated 5/11/06

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NRC Generic Letter 83-11, Supplement 1, "Licensee Qualification For Performing Safety Analyses," dated 6/24/99

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SDBD-806, "125VDC Electrical Distribution System"

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N1-OP-16, "Feedwater System Booster Pump to Reactor"

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N1-ARP-K1, "Procedure Change Evaluation," dated 06/15/2007

N1-OP-30, "Procedure Change Evaluation"

N1-OP-30, "4.16, KV 600V and 480V House Service"

N2-PM-@026, "Diesel Generator Start Following Maintenance - Division I and II"

NAI-CON-02, "Design and Configuration Control Resource Manual"

NAI-DSE-01, "10 CFR Part 50.59 Resource Manual"

NDD-DSE, "10 CFR Part 50.59 Applicability Determinations, Screens and Evaluations"

NIP-CON-01, "Design and Configuration Control Process"

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ARP K1-1-1, "Rx Bldg Area Temp High"
ARP H2-4-7, "Alarm Response Procedure: Drywell Water Leak Detection System"
ARP H3-3-8, "Alarm Response Procedure: Reactor FW Shaft P 13 Aux System"

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Q&PA Assessment Report 07-038, "Assessment of Unit 2 BOP Optimization," dated 5/17/07

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125VDC-SYSTEM-CASEB, "125VDC System FSAR Case B Battery Sizing"
125VDCSYSTEMSBO, "125VDC System SBO Battery Size"
AX-071P, "Pipe Stress Calc. for RHS Pipe From P1B & P1C Discharge to E1B, SV34B, SV62B, PV21B and 008-34-2"
C058-TAB012, "Design of Sill Detail for Termination Cabinet Control Bldg. Floors"
EC-032, "Diesel Generator Loading"
EC-043, "Verification of Adequacy of Division II Battery 2BYS*BAT2B and Battery Chargers 2BYS*BAT2B1 & 2B2"
EC-049, "Direct Current Short Circuit"
EC-100, "DC Cable Sizing"
EC-130, "Cable Verification of 'L' Level Power Cable for 600 VAC and Below System"
EC-151, "Auxiliary System Performance Using ELMS-AC"
EC-28, "Control Building Electrical Heat Release"
EC-42, "Verification of Adequacy of Division I Battery 2BYS*BAT2A and Battery Chargers 2BYS*BAT2A1 & 2A2"
ELMSAC-DEGVOLT-STUDY, "Degraded Voltage Analysis"
ES-285, "Closed Loop System Estimated Air-to-Water Leakage Correlation"
NIMO-ELMS-AC01, "Performance of the Electrical Auxiliary System"
S12-51P008, "Design of Piping and Support Configuration Associated with FW Booster Pump - Seal Water Aux Booster Pump"

Completed Surveillances

N2-ESP-BYS-R682, "Division I/II/III Battery Charger Load Test," performed 12/15/05, 11/4/05, 11/18/05, and 12/9/05
N2-OSP-CSH-Q@002, "HPCS Pump and Valve Operability and System Integrity Test," performed 7/27/07
N2-OSP-EGS-M@001, "Diesel Generator and Diesel Air Start Valve Operability Test - Division I and II," performed 8/18/07
N2-OSP-RHS-0@004, "RHR System Loop A Pump & Valve Operability Test and System Integrity Test and ASME XI Pressure Test," performed 7/19/07
N2-OSP-SWP-Q004, "Division 2 Service Water Operability Test," performed 8/28/07

Drawings

0001.540-030-002, "Outline 300 AMP Battery Charger Front Panels"
0001.540-030-004, "Schematic 300 Amp Battery Charger Alarms 25VDC"

- 0001040209047, "Diesel Generator Div I/Div II Air Start Control"
- 0001040209048, "Control Diagram Shutdown System"
- 12177-BZ-71ADN-3, "Pipe Support Detail Residual heat Removal PP South Aux Bay"
- C-18003-C, "Condensate Flow P & I Diagram"
- C-18005-C, "Feed Water Flow High Pressure P & I Diagram"
- C-18022-C Sh. 1, "Service Water Reactor and Turbine Buildings"
- C-18289-C, "Service Water System Isometric Drawings"
- C-18317-C Sh. 15, "Service Water Detail"
- C-19534-C Sh. 1, "Lighting Plan and Wiring Control Room"
- C-19534-C Sh. 2, "Lighting Plan and Wiring Control Room"
- C-19534-C Sh. 3, "Lighting Plan and Wiring Control Room"
- C-19604-C, "One Line Diagram 480 Volt Power Boards H11 & H111 Electrical Heating & Mercury Lighting"
- C-19839-C Sh. 2, "One Line Diagram 125 VDC Control Bus"
- C-19839-C Sheet 1, "One Line Diagram 125VDC Control Bus"
- C-19839-C Sheet 2, "One Line Diagram 125VDC Control Bus (Battery Board #12)"
- C-19839-C Sheet 3, "One Line Diagram 125VDC Control Bus (Battery Board #13)"
- EM-008A, "Machine Location Screenwell Building, Water Treatment Area, and Service Water Pump Room"
- F-45821-C, "Turbine Building Feedwater Booster Pump Seal Water Auxiliary Pump Mounting Plate and Pipe Supports"
- F-45844-CRFP, "Seal Injection Pump Turbine Building Elevation 261' 0" Isometric," Revision 0
- N2-06-017, "Construction Sketch"
- N2-06-017, "Location Sketch"
- PID-11A-16, "Piping & Instrumentation Diagram Service Water System"
- PID-31E-20, "Piping & Instrumentation Diagram Residual heat Removal"
- PID-33A-17, "Piping & Instrumentation Diagram High Pressure Core Spray System"
- PID-33B-14, "Piping & Instrumentation Diagram High Pressure Core Spray System"
- PID-35A-15, "Piping & Instrumentation Diagram Reactor Core Isolation Cooling"
- PID-35D-12, "Piping & Instrumentation Diagram Reactor Core Isolation Cooling"
- PID-4A-10, "Piping & Instrumentation Diagram Condensate Storage and Transfer"
- PID-66D-12, "Piping & Instrumentation Diagram Miscellaneous Drains"

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03-11380	05-07467	06-19985
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03-11382	05-12772	07-02410
04-14883	06-04878	07-08895

Action Requests

07-00344	07-04963	07-05001
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07-04951	04-04974	07-05004
07-04954	07-04998	

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E-167, "Drywell Equipment & Floor Drain Tank Excess Leakage Programmable Logic Controller Software Specification (GE FANUC)"
N1101259001C01, "Student Guide for Feedwater, HPCI & HWC Systems"
TCO NMP-IL-2006-22, "Update FW Lesson Plan to incorporate Seal Injection Mod and Design Change," 03/07/2007
TCO NMP-OPS1-2006-53, "Perform Needs Analysis for TRR 2006-396," 07/03/2007
2SWP*MOV74B, "Motor-Operated Valve Setup Data Specification (MOVSDS)"
Nine Mile Point Master Equipment List, dated 9/10/07
Engineering Specification NMP2-P301F, "Field Fabrication and Erection of Pipe Supports ASME III Code Classes 1, 2, 3, and ANSI B31.1"
SPDS 2HVY-TS04, "Temperature Control of Condensate Storage Building Unit Heaters 2HVY-UHE881, 882, 883, 884, 885, 886"
800 Series Electric Indicating Temperature Controllers and Thermometers Installation and Maintenance Instructions
Service Water System Health Report (Q3 - 2007)
Emergency Diesel Generator System Health Report (Q3 -2007)
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Engineering Specification E-183, "Procurement Specification for Static Battery Chargers"
N MPC Vendor Technical Manual Number N2S25000BATTERY002, "Instruction and Operating Manual with Drawings - 300 AMP Battery Charger," dated 11/8/05
GE SC05-02, "Potential Spurious Recirculation Pump Trips or Downshifts from High to Low Speed; High Level Optical Isolator Cards," dated 3/29/05
FAC Component Evaluation Sheet Unit 1 Service Water System, dated 4/5/07
IST Program data for SOV 39-11C and SOV 39-11D
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Nine Mile Point - Nuclear Safety Review Board (NSRB) Meeting Minutes 06-02, dated 7/26/06
Nine Mile Point Unit Minutes of the Meeting Station Operations Review Committee, dated 3/21/06
Nine Mile Point Nuclear Station Tier 3 - Plant Performance Temporary Alteration backlog July 2007
Nine Mile Point System Engineer Walkdown Report, Unit 2 High Pressure Core Spray, dated 9/12/07
Risk-Informed Inspection Notebook for Nine Mile Point Nuclear Station Unit 2, Revision 2.1 Regulatory Guide 1.187; Guidance for Implementation of 10 CFR Part 50.59, Changes, Tests, and Experiments; dated November 2000

Section 1R19: Post Maintenance Testing

N1-ST-Q1B, "Core Spray 121 Pump, Valve and Shutdown Cooling Water Seal Check Valve Operability Test"
N1-ST-Q25, "Emergency Diesel Generator Cooling Water Quarterly Test"
N1-ST-Q6B, "Containment Spray System Loop 121 Quarterly Operability Test"
N2-OSP-ICS-Q001, "RCIC Valve Operability Test"
N2-OSP-HVK-Q001, "Control Building Chilled Water Loop 'A' and 'B' Pump and Valve Operability Test"

N2-OSP-SWP-Q@003, "Control Building Chiller Condensing Water Pump Operability Test"
WO 06-13403-00
WO 07-03587-00
WO 06-04613-00
WO 06-13676-00
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Section 1R22: Surveillance Testing

CNG-HU-1.01, "Human Performance Program"
CNG-HU-1.01-1000, "Human Performance"
CNG-HU-1.01-1001, "Human Performance Tools and Verification Practices"
GAP-SAT-01, "ST Program"
CNG-HU-1.01-1002, "Pre-Job Briefings and Post-Job Critiques"
GAP-OPS-117, "Integrated Risk Management"
Unit 1 TS
Unit 2 TS
N1-ST-Q6C, "Containment Spray System Loop 112 Quarterly Operability Test"
N1-ST-Q3, "High Pressure Coolant Injection Pump and Check Valve Operability Test"
N1-ST-M1B, "Liquid Poison Pump 12 Operability Test"
N2-OSP-EGF-Q@001, "D. G. Fuel Oil Transfer Pump and Valve Operability Test and ASME XI
Functional Pressure Test"
N2-OSP-RHS-Q@001, "Residual Heat Removal System Loop 'A' Valve Operability Test and
Partial ASME XI Pressure Test"
N2-OSP-RHS-Q@004, "Residual Heat Removal System Loop 'A' Pump and Valve Operability
Test and System Integrity Test and ASME XI Pressure Test"
N2-OSP-EGS-M@001, "Diesel Generator and Diesel Air Start Valve Operability Test – Division
I and II"
N2-OSP-CSH-Q@002, "HPCS Pump and Valve Operability and System Integrity Test"
P&ID C-18012-C, Sheet 1, "Reactor Containment Spray Raw Water System"
P&ID C-18012-C, Sheet 2, "Reactor Containment Spray System"
P&ID-104F-4, "Fuel Oil Schematic Standby Diesel Generator System"
CR 2007-4423

**Section 2PS1: Radioactive Gaseous and Liquid Effluent Treatment and Monitoring
Systems**

NMPNS Unit 1 Radioactive Effluent Release Report - 2006
NMPNS Unit 2 Radioactive Effluent Release Report - 2006
NMPNS Unit 1 Offsite Dose Calculation Manual
NMPNS Unit 2 Offsite Dose Calculation Manual
NMPNS Administrative Procedure NMP-TR-1.01-201, "Chemistry Technician Training Program"
NCS Corporation Radioiodine Retention/Penetration/Efficiency Test Reports: 20322, 20330,
19931, 19846, 19763, 18978, 18981, 19613

NMPNS Unit 1 Procedures:

N1-TTP-040, "Circulating Water Pump Performance Test"
N1-RSP-14A, "Liquid Rad Waste Monitor Channel Calibration"

N1-RSP-11A, "Calibration of the SW Discharge Monitor"
N1-RSP-130, "Stack Radiation Monitor Quarterly Calibration Check and Channel Test"
N1-RSP-9C, "Instrument Channel Calibration of Emergency Condenser Vent Radiation Monitors"
N1-RSP-6C, "Control Room Ventilation Radiation Monitor Instrument Channel Calibration"
N1-RSP-120, "Instrument Channel Calibration of High Radiation RB Ventilation Duct Radiation Monitors"
N1-ISP-085-001, "Radwaste Discharge to Tunnel Radiation Monitor Instrument Calibration"
N1-ISP-112-010, "Stack Gas Radiation Monitor Channel Calibration"
N1-ISP-112-A001, "Stack Gas Monitor Calibration"
N1-ISP-112-004, "Off-Gas Radiation Monitor (NUMAC) Instrument Channel Calibration"
N1-ISP-085-002, "Liquid Radwaste Effluent Line"
N1-ISP-112-005, "Stack Flow Instrument Calibration"
N1-ISP-112-008, "OGESMS Flow Instrument Calibration"
N1-ISP-077-005, "Off Gas Samples/System Flow Instrument Channel Calibration"

NMPNS Unit 2 Procedures:

N2-TSP-HVC-R@001, "Testing and Analysis of Unit 2 Control Room Outdoor Air Special Filter Train System"
N2-TSP-GTS-R@001, "Testing and Analysis of Unit 2 Standby Gas Treatment System"
N2-ISP-LWS-R101, "Liquid Radwaste Discharge Flow to Lake Instrument Channel Calibration"
N2-ISP-SWP-R112, "SW Effluent Lines A and B Flow Instrument Channel Calibration"
N2-ISP-CWS-A101, "Calibration Test of the Circulating Water Cooling Tower Blowdown Line Flow Instrument Channel"
N2-ISP-RMS-R102, "Operating Cycle Channel Calibration of the Gaseous Effluent Monitoring System"
N2-RSP-RMS-R116, "Channel Calibration Test of the Liquid Radwaste Effluent Line Liquid Process Radiation Monitor"
N2-RSP-RMS-R113, "Channel Calibration Test of the SW Effluent Line Processing Radiation Monitors 2SWP*CAB146A and 2SWP*CAB146B"
N2-RSP-RMS-R112, "Channel Calibration Test of the Cooling Tower Blowdown Line Liquid Process Radiation Monitor"
N2-RSP-RMS-R103, "Channel Calibration Test of the Standby Gas Treatment System Exhaust Process Radiation Monitor"
N2-RSP-RMS-R109, "Channel Calibration Test of the Main Control Room Ventilation Process Radiation Monitors"

Section 40A2: Identification and Resolution of Problems

CNG-CA-1.01-1009, "Change Management"
NIP-ECA-01, "Corrective Action Program"
NIP-ECA-07, "Change Management Process"
NMP-TR-1.01-107, "Nuclear Fire Brigade Training Program"
N2-OP-100A, "Standby Diesel Generators"
N2-EPM-GEN-V582, "Molded Case Circuit Breaker and Thermal Overload Relay Testing"
N2-OSP-EGS-M@001, "Diesel Generator and Diesel Air Start Valve Operability Test - Division I and II"
FSA 2006-92, "Licensing Department Implementation of Staffing Study Enablers"

Nine Mile Point Nuclear Power Station Unit 1 Chemistry Manual, Attachment 17 – “Chemistry Rules and Responsibilities”

Quality and Performance Assessment Report 06-030, “Review of Staffing Study Enablers to Support Staff Reductions Scheduled for August 11, 2006”

N2-OP-100A, “Standby Diesel Generators”

N2-EPM-GEN-V582, “Molded Case Circuit Breaker and Thermal Overload Relay Testing”

N2-OSP-EGS-M@001, “Diesel Generator and Diesel Air Start Valve Operability Test - Division I and II”

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2007-3636	2006-4612	2007-5408
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2006-3669	2007-5820	2007-0643
2006-3955	2007-5692	2006-4735
2006-4229	2007-5653	2006-4171
2006-4032	2007-5398	2006-1422
2006-4078	2007-5554	2006-1383
2006-4346	2007-5498	2006-1318
2006-4383	2007-5475	2005-4734
2006-4434	2007-5392	2005-4444
2006-4685	2007-4732	2005-3711
2006-4820	2007-5624	2005-3606
2006-5359	2006-5421	2007-5737
2006-5594	2006-4599	2007-5131
2007-0142	2007-5459	2007-0720
2007-0463	2007-5454	2007-5898
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2007-0716	2007-5443	2007-4802
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2007-1305	2007-5431	
2007-1450	2007-5430	

Section 40A3: Event Followup

Section .1

N2-OP-13, “Reactor Building Closed Loop Cooling System,” Revision 6

N2-OP-13, “Reactor Building Closed Loop Cooling System,” Revision 7

N2-SOP-13, “Loss or Degraded CCP System”

N2-SOP-29.1, “Recirc Pump Failures”

P&ID-13A-G, “Reactor Building Closed Loop Cooling Water”

P&ID-38A-D, “Fuel Pool Cooling and Clean-up”

Design Document Change 2M11876, to install vents in the CCP inlet and outlet lines to the SFC heat exchangers

CR 2007-4299

Section .2

EPIP-EPP-28, "Fire Fighting"

EPIP-EPP-02-EAL, "Emergency Action Level Matrix / Unit 2"

DCP #N2-06-088, "Nine Mile Point Unit 2 Fire Protection Improvement Project, Fire Alarm Network and Workstations Installation Section"

WO 07-02412-18

LIST OF ACRONYMS

AC	alternating current
ADAMS	Agency Documents Access Management System
ALARA	as low as reasonably achievable
ANSI	American National Standards Institute
ARP	alarm response procedure
BWR	boiling water reactor
CAP	corrective action program
CB	control building
CCP	reactor building closed loop cooling water
CFR	Code of Federal Regulations
CO2	Carbon Dioxide
CR	condition report
DBD	design basis document
DCP	design change package
EAL	emergency action level
EDG	emergency diesel generator
EPIP	emergency plan implementing procedure
EOP	emergency operating procedure
FW	feedwater
HPCS	high pressure core spray
IMC	inspection manual chapter
JPM	job performance measures
LCV	level control valve
LER	licensee event report
LORT	licensed operator requalification training
MSPI	mitigating systems performance index
NCV	non-cited violation
NEI	Nuclear Energy Institute
NMPNS	Nine Mile Point Nuclear Station
NRC	Nuclear Regulatory Commission
ODCM	offsite dose calculation manual
OP	operating procedure
PARS	publicly available records
PI	performance indicator
RB	reactor building

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RCIC	reactor core isolation cooling
RETS	radiological effluent technical specification
RMS	radiation monitoring system
RTP	rated thermal power
SBO	station blackout
SDP	significance determination process
SE	safety evaluation
SFC	spent fuel pool cooling
SRO	senior reactor operator
ST	surveillance test
SW	service water
TB	turbine building
TM	temporary modification
TS	technical specification
UFSAR	updated final safety analysis report
WO	work order