October 18, 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 INSPECTION REPORT 05000220/2004007 and 05000410/2004007

Dear Mr. Spina:

On September 3, 2004, the US Nuclear Regulatory Commission (NRC) completed an engineering team inspection at the Nine Mile Point Nuclear Station, Units 1 and 2. The enclosed report documents the results of that inspection, which were discussed with you and members of your staff, at the exit meeting on September 3, 2004.

This inspection examined activities conducted under your licenses as they relate to safety, and compliance with the Commission's rules and regulations and with the conditions of your licenses. The inspection consisted of system walkdowns, examination of selected procedures, drawings, modifications, calculations, surveillance tests, and maintenance records, and interviews with station personnel.

Based on the results of this inspection, there were three NRC-identified findings of very low safety significance (Green), all of which were determined to involve violations of NRC requirements. However, because of their very low safety significance, and because they are entered into your corrective action program, the NRC is treating these three findings as non-cited violations (NCVs) consistent with Section VI.A of the NRC Enforcement Policy. If you contest any NCV 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, and the NRC Resident Inspector at the Nine Mile Point Nuclear Station.

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 Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Public Electronic Reading Room Web-site at http://www.nrc.gov/reading-rm/adams.html.

Sincerely,

/RA/

Lawrence T. Doerflein, Chief
Systems Branch
Division of Reactor Safety

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

Enclosure: Inspection Report 05000220/2004007, 05000410/2004007
w/Attachment: Supplemental Information

cc w/encl:
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M. Heffley, Senior Vice President and Chief Nuclear Officer
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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket/Report Nos:	05000220/2004007, 05000410/2004007
License Nos:	DPR-63, NPF-69
Licensee:	Nine Mile Point Nuclear Station, LLC (NMPNS)
Facility:	Nine Mile Point, Units 1 and 2
Location:	348 Lake Road Oswego, NY 13126
Dates:	August 16 - September 3, 2004
Inspectors:	B. Norris, Senior Reactor Inspector, DRS (Team Leader) H. Gray, Senior Reactor Inspector, DRS P. Kaufman, Senior Reactor Inspector, DRS J. Schoppy, Senior Reactor Inspector, DRS T. O'Hara, Reactor Inspector, DRS T. Sicola, Reactor Inspector, DRS J. Bream, Summer Co-op, DRS
Approved by:	Lawrence T. Doerflein, Chief Systems Branch Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000220/2004007 and IR 05000410/2004007; 08/16/2004 - 09/03/2004; Nine Mile Point, Units 1 and 2; Safety System Design and Performance Capability

This report is for an engineering team inspection, conducted by six Region I inspectors. Three 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 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: Mitigating Systems

- Green: The inspectors identified a Non-Cited Violation of the NMP1 Technical Specifications (TS), Section 6.4, "Procedures," regarding a May 2004 surveillance test of the NMP1 High Pressure Coolant Injection (HPCI) system that was incorrectly evaluated as satisfactory due to a controlled document not being maintained current for a TS and risk-significant system.

  The performance deficiency was that NMP1 did not ensure that the most recent revision of a controlled document was used during a TS surveillance test of the HPCI system. The finding is more than minor since it is associated with the maintenance and testing procedures attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The issue was determined to be of very low safety significance (Green) because it was not a design or qualification deficiency that resulted in a loss of function per Generic Letter 91-18.

- Green: The inspectors identified a Green Non-Cited Violation of 10CFR50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," for NMP1's failure to maintain current the Technical Basis Document for the Unit 1 Emergency Operating Procedures (EOPs). Specifically, the basis for the Anticipated Transient Without a Scram (ATWS) EOP did not discuss the "Fuel Zone" reactor water level indication, and the use of the associated correction table.

  The performance deficiency was that NMP1 did not maintain the EOP Technical Basis Document (a controlled procedure) consistent with the plant's EOPs. The finding is more than minor because it affects the procedure quality attribute of the Mitigating Systems cornerstone objective to ensure that availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was determined to be of very low safety significance (Green), because the EOP technical basis document did not represent a design or qualification deficiency that resulted in a loss of function per Generic Letter 91-18.

Cornerstone: Barrier Integrity

- Green: The inspectors identified a Non-Cited Violation of 10CFR50, Appendix B, Criterion XVI, "Corrective Action," for NMP2's failure to promptly identify and correct a condition adverse to quality concerning a valve that had dual position indication. Specifically, the operators did not recognize that the dual position indication was a degraded condition relative to the ability to close a primary containment isolation valve (CIV). In addition, engineering did not adequately evaluate the continued operability of the valve, and closed the associated Deviation/Event Report and operability determination without implementing the identified compensatory actions.

  The performance deficiency was that NMP2 did not properly identify and take adequate actions to address a condition adverse to quality; namely, a degraded primary containment isolation valve. The finding was more than minor because NMP2 failed to adequately evaluate a degraded condition with the potential to impact the Barrier Integrity cornerstone objective of providing reasonable assurance that the containment barrier protects the public from radio nuclide releases caused by accidents or events. Specifically, the issue involved the design control attribute of maintaining functionality of containment. The significance of the finding was evaluated using Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The finding was determined to be of very low safety significance (Green), because the degraded valve did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment. The inadequate evaluation of the dual indication of a CIV and the failure to address the recommended compensatory actions for potential pipe voiding concerns was an example of a cross-cutting issue in problem identification and resolution.

B. Licensee-Identified Violations

None

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R21 Safety System Design and Performance Capability

a. Inspection Scope:

The inspectors selected the Nine Mile Point Unit 1 (NMP1) high pressure coolant injection (HPCI) mode of the feedwater system, and the low pressure coolant injection (LPCI) and shutdown cooling (SDC) modes of the Nine Mile Point Unit 2 (NMP2) residual heat removal system (RHS) for their review of the design and performance capability of risk-significant systems at the Nine Mile Point Nuclear Station. The inspection also included a review of the NMP1 electromatic relief valves (ERVs) and the NMP2 safety relief valves (SRVs); these components incorporate the function of the automatic depressurization system (ADS) which is used to reduce the pressure in the reactor coolant system (RCS) to allow injection by the low pressure systems. Additionally, the inspectors reviewed an event tree at each unit: an anticipated transient without a scram (ATWS) at NMP1, and a small break loss of coolant accident (SBLOCA) at NMP2. The purpose of the review of the events was to determine if the selected systems and components supported a successful mitigation strategy to prevent core damage. The systems and components were selected because of their risk-significance related to initiating events, mitigating systems, and barrier integrity. In addition, the risk insights and probabilistic risk assessment (PRA) information relative to the selected systems were used to focus inspection activities on components and procedures that would mitigate the effects of the selected events. The inspection procedure used for this effort was IP 71111, Attachment 21.

The inspectors reviewed licensing and design basis documents for the NMP1 HPCI system and the NMP2 LPCI/SDC modes of the RHS system, and for the ERVs and SRVs for the functional requirements during normal operation and accident mitigation. The design and licensing documents reviewed for the systems included the Updated Final Safety Analysis Reports (UFSARs), Technical Specifications (TSs), and the applicable design basis documents for each system and component.

In addition, the inspectors reviewed the associated vendor manuals, engineering analyses and calculations, equipment qualification records, instrument set-points, system modifications, piping and instrument drawings, electrical schematics, instrumentation and control drawings, and logic diagrams. The inspectors reviewed completed Deviation / Event Reports (DERs), which are the licensee’s corrective action documents. The review also included a review of completed corrective and preventive maintenance packages, post-maintenance tests, and surveillance tests to determine the operational readiness, configuration control, and material condition of the systems and components. The applicable system health reports were reviewed to evaluate the current status of the systems and components and any maintenance rule actions being taken, as required by 10CFR50.62. The inspectors reviewed selected industry operating experience for applicability to Nine Mile Point, and their associated disposition.

The inspectors reviewed applicable operating procedures, abnormal and alarm response procedures, and the emergency operating procedures associated with the selected events. The inspectors reviewed the applicable training lesson plans and simulator scenarios to evaluate the consistency between the assumptions made in the design basis and the expected system response. The inspectors conducted detailed walkdowns of the accessible portions of the plant to independently assess the physical condition of the systems and components, and to ensure that availability, reliability, and functional capability had been maintained.

The electrical aspects of the systems were reviewed to assure adequate voltage existed at the components of the selected systems and components. Electrical control and logic diagrams were reviewed for the major components and valves to assure that interlocks and permissive logic were in accordance with system requirements. Short circuit calculations were reviewed to assure that circuit breakers were of adequate capacity. The mechanical inspection of the systems included a walkdown of the accessible portions of the equipment to assess the material condition and confirm the existence of adequate controls over nonconforming material and any hazards that could potentially compromise the design function of systems and components.

The inspectors reviewed how design change work had been implemented and controlled, particularly with regard to system operability status, and to verify system and component availability for the performance of design functions. In addition, field inspections were conducted with particular emphasis upon train separation, physical independence, and other common mode concerns that the design features were intended to address.

The inspectors reviewed training material associated with the operation and maintenance of the selected systems and components, assessed the NMP1 and 2 control room simulators for simulator fidelity with specific plant controls, particularly where field modifications had been effected. The inspectors interviewed applicable personnel responsible for operation and maintenance of the systems, licensing basis controls, and the development and implementation of modifications affecting the systems.

b. Findings:

1. Failure to Maintain a Controlled Document Current Resulted in a Surveillance Test Being Erroneously Considered Satisfactory

Introduction: The inspectors identified a Green non-cited violation (NCV) of the NMP1 TS, Section 6.4, “Procedures,” regarding a May 2004 surveillance test of the NMP1 HPCI system that was incorrectly evaluated as satisfactory due to a controlled document not being maintained current for a TS and risk-significant system.

Description: The inspectors identified that a May 7, 2004, surveillance test of the NMP1 HPCI system pump #11 was incorrectly evaluated. Nine Mile surveillance test procedure N1-ST-Q3, “High Pressure Coolant Injection Pump and Check Valve Operability Test,” measured flow rate and differential pressure of pumps #11 and #12;

and the values were plotted on a pump performance curve (MDC-11, Mechanical Design Criteria) for acceptability. The inspectors reviewed the surveillance test and independently plotted the results for the two pumps, and determined that pump #11 failed to meet the allowable degradation curve. The inspectors learned that the operators used an outdated revision of MDC-11 when they evaluated the test results. Specifically, the copy of MDC-11 in the NMP1 control room was Revision 10, which allowed for a 10% pump degradation; the revision in effect at the time of the surveillance was Revision 12, which allowed for only a 7% pump degradation. Subsequently, station engineering determined the pump was operable based on a calculation which re-established the 10% degradation curve as being acceptable. During Constellation's extent of condition review of the issue, they identified an additional 103 NMP1 documents that were not properly controlled, 3 of which were not current.

Analysis: The performance deficiency is that NMP1 did not ensure that the most recent revision of a controlled document was used during a TS surveillance test of the HPCI system. The finding is more than minor because it is associated with the maintenance and testing procedures attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was evaluated using Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The issue was determined to be of very low safety significance (Green) because it was not a design or qualification deficiency that resulted in a loss of function per Generic Letter (GL) 91-18.

Enforcement: The NMP1 TS, Section 6.4.1, requires written procedures and administrative policies be established, implemented, and maintained. Contrary to the above, MDC-11 was not maintained current, which resulted in a surveillance test of the HPCI system being incorrectly evaluated as satisfactory. This finding is a violation of TS 6.4.1. However because of the very low safety significance (Green) and because the finding was entered into the NMP corrective action program (DER 2004-3752), it is being treated as a NCV consistent with Section VI.A of the NRC Enforcement Policy. **(NCV 50-220/2004-07-01)**

2. Inadequate Operability Evaluation of a Degraded NMP2 Primary Containment Isolation Valve

Introduction: The inspectors identified a Green NCV 10CFR50, Appendix B, Criterion XVI, "Corrective Action," for NMP2's failure to promptly identify and correct a condition adverse to quality concerning a valve that had dual position indication. Specifically, the operators did not recognize that the dual position indication on 2ICS*V157 was a degraded condition relative to the ability to close a primary containment isolation valve (CIV). In addition, engineering did not adequately evaluate the continued operability of the valve and closed the associated DER and operability determination without implementing the identified compensatory actions.

Description: During a NMP2 control room panel walkdown on August 17, 2004, the inspectors noticed dual position indication on 2ICS*V157 (reactor core isolation cooling head spray 6" check valve). Control room operators stated that they believed the indication was valid, and that the valve was slightly off its closed seat. The inspectors independently verified that the UFSAR listed this valve as an inboard (inside the drywell) primary CIV that is normally closed and has position indication lights in the main control room to verify its position. Based on the design basis, the inspectors reviewed NMP2's evaluation and corrective actions for the degraded condition.

The operators had previously identified (April 24, 2004) the dual position indication on 2ICS*V157 during the plant startup following the refueling outage. The operators initiated DER 2004-2129 to address this condition. The engineering support analysis (ESA) assumed the valve was just off the closed seat. The inspectors reviewed the DER and noted that: (1) the associated operability determination did not adequately assess continued operation for a degraded primary CIV that could not be closed; (2) the operators did not recognize that the plant was in a TS limiting condition for operation for a degraded primary CIV (TS 3.6.1.3); (3) the operability determination was closed even though the degraded condition still existed; and (4) the compensatory measures identified by engineering in the ESA, to address potential pipe voiding concerns, were not implemented. Subsequently, the licensee revised the operability determination and the associated operating procedures until the issue can be resolved. The operable but degraded determination of 2ICS*157 was based on the valve being slightly off its closed seat, and that the differential pressure developed across the valve during a line break would be sufficient to close the valve. In addition, there are two other normally closed isolation valves in this line outside of containment.

Analysis: The performance deficiency was that NMP2 did not properly identify and take adequate actions to address a condition adverse to quality; namely, a degraded primary containment isolation valve. The finding was more than minor because NMP2 failed to adequately evaluate a degraded condition with the potential to impact the Barrier Integrity cornerstone objective of providing reasonable assurance that the containment barrier protects the public from radionuclide releases caused by accidents or events. Specifically, the issue involved the design control attribute of maintaining functionality of containment. The significance of the finding was evaluated using Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The finding was determined to be of very low safety significance (Green), because the degraded valve did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment. The inadequate evaluation of the dual indication of a CIV and the failure to address the recommended compensatory actions for potential pipe voiding concerns was an example of a cross-cutting issue in problem identification and resolution.

Enforcement: 10CFR50, Appendix B, Criterion XVI, "Corrective Action," requires that measures be established to assure that conditions adverse to quality be promptly identified and corrected. Contrary to the above, prior to August 2004, NMP2 did not promptly identify and take actions to correct a degraded primary containment isolation valve. Because this issue is of very low safety significance (Green) and has been entered into the NMP corrective action process (DER 2004-3992), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy. **(NCV 50-410/04-07-02)**

3. Failure to Maintain the NMP1 EOP Technical Basis Document Current

Introduction: The inspectors identified a Green NCV of 10CFR50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," for NMP1's failure to maintain current the Technical Basis Document for the Unit 1 EOPs. Specifically, the basis for the ATWS EOP did not discuss the "Fuel Zone" reactor water level indication, and the use of the associated correction table.

Description: As part of the review of the NMP1 EOP for an ATWS scenario (N1-EOP-3, "Failure to Scram"), the inspectors reviewed the associated technical basis document (N1-ODP-PRO-0305, "EOP/SAP Technical Basis," Revision 0, a TS required procedure). The inspectors noted that the current EOP was not consistent with the basis document. Specifically, the basis document did not discuss the purpose or use of the correction table for the Fuel Zone level indication.

The Level branch of the ATWS EOP refers the operators to the "Fuel Zone Water Level Correction Table (Figure X)" to determine the actual reactor vessel water level. The table provides a correction factor to the indicated water level, dependent on reactor power. The correction factor ranges from zero to minus 50 (0 to -50) inches. Per the EOP, the actual level is calculated by subtracting the correction factor (already a negative number) from the indicated level. Example: Assuming 10% reactor power and an indicated water level of -80 inches, the correction factor would be -13 inches. Depending on how the operators applied the correction factor, the resultant actual level could be calculated as either -67 inches (-80 -(-13)) or -93 inches (-80 -13). The operator's subsequent actions rely on the corrected level, which is assumed to be indicative of the actual reactor water level. The inspectors referenced the EOP basis document to understand how the table was to be used and how the operators were trained on the use of the EOP and the associated table.

During NMP1's review, they identified that a DER written in 2001 (DER 2001-2574) had documented the same issue, that N1-ODP-PRO-0305 was not current with the most recent revision of the NMP1 EOPs. The DER indicated that corrective action #2, to revise the EOP Basis Document, was completed; however, the revision was never issued. A new DER was initiated, DER 2004-3686. Subsequently, NMP1 identified eight other discrepancies between various EOPs and the basis document and they initiated DER 2004-4017. The additional discrepancies included: undocumented deviations from the Plant Specific Technical Guidance for the EOPs, conflicting steps within the EOPs, and potential improper implementation of the BWR Owner's Group Emergency Procedure Guidelines.

Analysis: The performance deficiency was that NMP1 did not maintain the EOP Technical Basis Document (a controlled procedure) consistent with the plant's EOPs. The finding is more than minor because it affects the procedure quality attribute (EOPs) of the Mitigating Systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The significance of the finding was evaluated using Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The finding was determined to be of very low safety significance (Green), because the EOP technical basis document did not represent a design or qualification deficiency that resulted in a loss of function per GL 91-18.

Enforcement: 10CFR50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires that activities affecting quality be prescribed by documented procedures and that the activities be accomplished in accordance with the procedures. Contrary to the above, the NMP1 EOP Basis Document (a support procedure to the EOPs) did not contain the required information to explain the use of the "Fuel Zone Water Level Correction Table" in the NMP1 EOP for an ATWS (N1-EOP-3). Because this issue is of very low safety significance (Green) and has been entered into the NMP corrective action process (DERs 2004-3684, 2004-3686, and 2004-4017), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy. **(NCV 50-220/2004-007-03)**

4OA2 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed the licensee's effectiveness in identifying and resolving problems associated with the NMP1 HPCI system and ERVs, and the NMP2 LPCI and SDC systems and the SRVs. The inspectors reviewed DERs, Licensee Event Reports, maintenance work orders, and engineering service requests to assess plant performance and licensee corrective actions. This review was to verify that identified issues were appropriately entered into the corrective action program and resolved in a timely manner. In addition, the inspectors reviewed DERs associated with the licensee's audits and self-assessments of these systems. Prior to the beginning of the inspection, the licensee performed extensive self-assessments of the selected systems, components, and the events.

b. Findings

1. The inspectors reviewed the licensee's Safety Function Validation Reports, which were their pre-inspection evaluations of the selected systems, components, and scenarios. The team considered the effort to be a beneficial reconstitution of the design basis and an opportunity to identify a number of problems. Their effort resulted in the initiation of 34 DERs, and about 15 engineering support analyses and licensing change documents, before the team began the inspection. During the inspection, there were several additional DERs generated as a direct result of the inspectors' questions, many of which required substantial engineering effort to determine the significance of the issues. Nine Mile management recognized the significance of the large number of problems identified and initiated DER 2004-4044 to analyze the collective significance of the DERs.

2. Cross-Reference to PI&R Findings Documented Elsewhere

Section 1R21 describes a NCV for ineffective corrective action associated with a containment isolation valve that could not be confirmed to be closed because of dual position indication. The plant operators had identified this issue several months earlier but had not properly evaluated the condition.

4OA4 Cross Cutting Aspects of Findings

Three NRC-identified NCVs are described in Section 1R21 of the report. One of the three NCVs was directly related to a failure to identify or correct an unacceptable condition. The other NCVs had attributes of ineffective corrective action.

4OA6 Exit Meeting Summary

On September 3, 2004, at the conclusion on the inspection, the inspectors presented the inspection findings to Mr. James Spina, Vice President NMPNS, and members of his staff, who acknowledged the findings. The inspectors confirmed that the inspection report does not contain proprietary information.

ATTACHMENT: SUPPLEMENTARY INFORMATION

In addition to the documentation that the inspectors reviewed (listed in the attachment), copies of information requests and email correspondence between the NRC and Nine Mile Point personnel are in ADAMS, under accession numbers ML042640467 and ML042640495, respectively.

ATTACHMENT

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Nine Mile Point:
M. Conway, General Supervisor, NMP2 Operations
L. Dick, NDE & Inspection Supervisor
P. Doran, System Engineering Manager
T. Evans, Manager, Training
A. Giverson, General Supervisor, Engineering Services
W. Holston, Manager, Engineering Services
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T. Kulczyky, Principal Reliability Engineer
S. Leonard, General Supervisor, Licensing
T. Mogren, General Supervisor, Design Engineering
T. O'Connor, Plant General Manager
R. Randall, Assistant to Manager, Engineering Services
R. Sanaker, General Supervisor, NMP1 Operations
J. Spina, Vice President, Nine Mile Point

NRC
J. Trapp, Branch Chief, DRP, Region I
G. Hunegs, Senior Resident Inspector, NMP

LIST OF ITEMS OPENED & CLOSED

Opened and Closed:

05000220/2004007-01	NCV	Failure to Maintain a Controlled Document Current Resulted in a Surveillance Test Being Erroneously Considered Satisfactory
05000410/2004007-02	NCV	Inadequate Operability Evaluation of a Degraded NMP2 Primary Containment Isolation Valve
05000220/2004007-03	NCV	Failure to Maintain the NMP1 EOP Technical Basis Document Current

LIST OF DOCUMENTS REVIEWED

Design and Licensing Basis Documents:

Amendment No. 1 To NMP1 Application To Convert Provisional Operating License To Full-Term Operating License, November 1973
NMP1 Technical Specifications
NMP1 Updated Final Safety Analysis Report

NMP2 NER-2A-002-MSS, In-Service Test Program Bases Document for Main Steam Safety Relief Valves, Revision 4, pages 61 to 106
NMP2 Technical Requirements Manual
NMP2 Technical Specifications
NMP2 Updated Final Safety Analysis Report
NMPC correspondence related to Generic Letter 96-01, Testing of Safety-Related Logic Circuits, NMP1L Letter 1059, dated April 18, 1996; NMP1L 1083, dated June 18, 1996; NMP1L 1442, dated June 23, 1999
SDBD-301, NMP1 Automatic Depressurization System Design Basis Document, Revision 3
SDBD-402, NMP1 Condensate and Feedwater/HPCI System Design Basis Document, Revision 9
Technical Supplement To NMP1 Petition For Conversion From Provisional Operating License To Full-Term Operating License, July 1972

<u>Design Change Packages</u>:
DCP N1-01-050, ADS, Replacement of ADS Timer Relays, Revision 3
DDC 1F01320, ADS Timing Relay Change Evaluation, Revision 0
DDC 2M11504, NMP2 Dikkers SRV Pressure Ramp Rate Change During Testing, Revision 0
EDC 2F00570, Field Nonconformance for 2RHS*MOV80B, dated May 9, 1992
ESR 03-02551, -02552, 04-01018, -01019, Seal Water Pressure out of Specification High on #12 Condensate Pump
ESR 03-00495, Broken Sight Glass in Watertight Door
ESR 04–05495, Two Pipe Supports North of Condensate Pump Room Are Installed at an Angle
ESR 04-06068, Position Indication for FCV-29-51 on #11 Feed Pump Showed Dual Indication When it Should Have Shown Full Open
ESR 04-06437, -06438, -06735, -06736, RHS Tubing Is Bent Multiple Times
ESR 04-06849, Open Ended Tubing in NMP2 RHS Heat Exchanger Room, Possible Retired in Place Tubing
ESR 04-06999, Damaged Insulation on RHS B Loop Needs Repair
ESR 04-06986, SSDI Question about RHS Pump Rebuild Frequency
ESR 04-07072, Calculation A10.1-AE-002 Was Not Dispositioned to Reflect Installation of New Orifices in RHS Pump Minimum Flow Lines
ESR 04-07088, Calculation S12-57-F001 Only Considers a Case Where 66,000 Gallons of CST Inventory is Available
ESR 04-07090, Design Basis Reconstitution Open Issue OI-S-402-072 with Respect to Undervoltage Relays for FW/HPCI Power Board Have No Design Basis
ESR 04-07183, Feedwater Aux Oil Pump 47X HPCI Seal-In Relay Deactivated per Earlier DER Resolution
LDCR 1-04-UFS-018, Revise Section VIII.A.1.1 of NMP1 UFSAR
LDCR 1-04-UFS-022, Update Reference in NMP1 UFSAR, Chapter XV
N1-00-022, FW/HPCI Low Suction Pressure Trips, Phase 2, Revision 3
N1-03-161, Logic Change to Open Min-Flow Valves 29-33 / 29-24 on a HPCI Signal, Revision 0
N1-03-206, EE-00736, Replace Rod Type Trapeze Hanger 29-R3-A With Spring Cans, Revision 2
N2-02-029, Replace GE 180 Meters
N2-02-107, Revise 2RHS*L128A Return Signal Wiring
N2-03-021, 84^{o}F Ultimate Heat Sink Temperature, Revision 0

N2-03-042, Replace Obsolete Bailey/Westronics Recorders in Control Room Panel 2CEC*PNL601
N2-55-324, Pump Frame Modification for Vibration Monitors.
N2-56-053, Relabeling of the Control Switch Escutcheon Plates at the Remote Shutdown Panels
PC2-0231-00, RHS Minimum Flow Line Re-Design, Conceptual Design Package, dated September 25, 2000
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N1-EOP-3, Failure to Scram, Revision 15
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WO 03-04092-00, Div I/II/III Battery Modified Profile Test, dated March 4, 2004
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O1-OPS-001-239-1-01, NMP1 Main Steam System, Revision 4
O1-OPS-001-259-1-01, NMP1 Feedwater System and High Pressure Coolant Injection, Revision 5
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O1-OPS-009-TRA-1-14,NMP1 Failure to Scram and Loss of Offsite Power, Revision 3
O1-OPS-009-TRA-1-30, NMP1 Feed Heater Leak, Loss of Vacuum, Failure to Scram, Revision 3
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O2-OPS-009-1DY-2-22,NMP2 Div 1 Load Sequencer Failure / Loss of Stator Water Cooling / LOCA, Revision 7
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Setpoint Data Sheet, PS-29-93, FRV Low Pressure Lock Up Setpoint, Revision 13
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System Notebook for NMP-2 Residual Heat Removal System, dated July 25, 2004
Tagging Clearance R03PRIM (RCIC), dated April 17, 2004
Technical Manual For Vertical RHS Pumps (N2B35000PUMP002), Revision 4
Topical Report TR4-34 - Review of Feedwater System Ultrasonic Flowmeter Problems March 2004

Deficiency / Event Reports:

*(+ - initiated due to NMP pre-inspection reviews / * - initiated due to NRC inspection-related activities)*

1992-3748	2001-2796	2002-3491	2004-0761	2004-3256+	2004-3712*
1993-1090	2001-3265	2002-3786	2004-0846	2004-3276+	2004-3721*
1997-3458	2001-3332	2002-3941	2004-1016	2004-3277+	2004-3723*
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1999-0585	2001-4040	2002-4256	2004-1425	2004-3328+	2004-3729*
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1999-2843	2001-4877	2003-1043	2004-1891	2004-3354+	2004-3801*
1999-3194	2001-5384	2003-1521	2004-1898	2004-3362+	2004-3876*
1999-3195	2001-5569	2003-1525	2004-1923	2004-3363+	2004-3877*
1999-3830	2001-5914	2003-1588	2004-1977	2004-3365+	2004-3935*
1999-3972	2001-6004	2003-1721	2004-2027	2004-3449+	2004-3941*
1999-4108	2002-0104	2003-1927	2004-2037	2004-3451+	2004-3946*
1999-4109	2002-0173	2003-1932	2004-2050	2004-3490+	2004-3949*
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2000-1752	2002-0238	2003-2409	2004-2168	2004-3544+	2004-3960*
2000-1757	2002-0798	2003-2674	2004-2239	2004-3570+	2004-3964*
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2000-3654	2002-1042	2003-2935	2004-2436	2004-3582+	2004-3975*
2000-4172	2002-1129	2003-3035	2004-2438	2004-3605+	2004-3986*
2000-4181	2002-1172	2003-3072	2004-2714	2004-3606+	2004-3992*
2000-4363	2002-1412	2003-3302	2004-2938	2004-3607+	2004-3993*
2001-0318	2002-1451	2003-3318	2004-2966	2004-3634+	2004-3997*
2001-0603	2002-1550	2003-3437	2004-2968+	2004-3656*	2004-3998*
2001-0822	2002-1587	2003-3563	2004-2968+	2004-3658*	2004-4005*
2001-0983	2002-1695	2003-3755	2004-2993+	2004-3661*	2004-4007*
2001-0998	2002-1697	2003-4340	2004-2993+	2004-3662*	2004-4008*
2001-1542	2002-1781	2003-4793	2004-3003+	2004-3664*	2004-4013*
2001-1773	2002-1814	2003-5061	2004-3035	2004-3674*	2004-4017*
2001-1854	2002-1834	2003-5116	2004-3065	2004-3683*	2004-4019*
2001-2041	2002-2403	2003-5121	2004-3189+	2004*3684*	2004-4022*
2001-2280	2002-2755	2003-5137	2004-3225+	2004-3686*	2004-4044*
2001-2386	2002-2957	2003-5159	2004-3234+	2004-3688*	2004-4128*
2001-2456	2002-3266	2004-0032	2004-3239+	2004-3689*	2004-4525*
2001-2606	2002-3449	2004-0228			

LIST OF ACRONYMS

ADS	Automatic Depressurization System
ARP	Alarm Response Procedure
ATWS	Anticipated Transient Without a Scram
DBD	Design Basis Document
DCP	Design Change Package
DER	Deviation / Event Report
EAI	Engineering Administrative Instruction
ECCS	Emergency Core Cooling System
EOP	Emergency Operating Procedure
ESA	Engineering Support Analysis
ERV	Electromatic Relief Valve (NMP1)
ESR	Engineering Service Request
FW	Feedwater
gpm	gallons per minute
HPCI	High Pressure Coolant Injection
IST	In-Service Test
kV	Kilo-Volt
LDCR	Licensing Document Change Request
LER	Licensee Event Report
LPCI	Low Pressure Coolant Injection
MDC	Mechanical Design Criteria
NMP	Nine Mile Point Nuclear Station
NMP1	Nine Mile Point Unit 1
NMP2	Nine Mile Point Unit 2
OP	Operating Procedure
P&ID	Piping and Instrumentation Drawings
PRA	Probabilistic Risk Assessment
QA&PA	Quality Assurance and Performance Assessment
RCS	Reactor Coolant System
RHS	Residual Heat Removal System
RPV	Reactor Pressure Vessel
SAP	Severe Accident Procedure
SBLOCA	Small Break Loss of Coolant Accident
SDC	Shutdown Cooling
SDP	Significance Determination Process
SOP	Special [Abnormal] Operating Procedure
SRV	Safety Relief Valve (NMP2)
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report