U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket/Report No:	50-220/98-16 50-410/98-16
License No:	DPR-63 NPF-69
Licensee:	Niagara Mohawk Power Corporation P. O. Box 63 Lycoming, NY 13093
Facility:	Nine Mile Point, Units 1 and 2
Location:	Scriba, New York
Dates:	August 10 - August 21, 1998
Inspectors:	L. Scholl, Senior Reactor Engineer L. James, Reactor Engineer C. Cahill, Reactor Engineer G. Cranston, Reactor Engineer
Approved by:	David C. Lew, Chief Electrical Engineering Branch Division of Reactor Safety

EXECUTIVE SUMMARY

Nine Mile Point Units 1 and 2
50-220/98-16;50-410/98-16
August 10 - August 21, 1998

This inspection report provides the results of a safety system engineering inspection performed on the Unit 1 core spray system and the Unit 2 standby gas treatment system. The primary purpose of the inspection was to assess engineering effectiveness by a review of calculations, analysis and other documents used to support system performance during normal, accident or abnormal conditions. A secondary objective of the inspection was to determine the quality of safety evaluations prepared to support plant modifications.

Engineering adequately assured that the systems inspected met the design and license bases and regulatory requirements. Design inputs and assumptions were appropriate, engineering work was technically correct and engineering outputs were translated into the applicable drawings and procedures. Several surveillance test procedures, which were reviewed, were appropriately applied to meet the technical specification requirements and consistent with their respective design bases documents. (Sections E1.1 and E1.4)

The design, implementation and testing of modifications has been generally effective. However, two design deficiencies related to the Unit 2 gas treatment system, which were designated by the licensee as low priority, were longstanding and have resulted in unnecessary operator burdens and reduced system availability. (Section E1.2)

The safety evaluations for several plant modifications and procedure changes reviewed by the team were appropriately performed. Appropriate screenings were performed to determine if the changes required further evaluation in accordance with 10 CFR 50.59. Safety evaluations were thorough and provided good bases that supported the conclusions. However, one notable exception, which was associated with a core spray system modification, was identified by the team. The safety evaluation for this modification did not fully consider issues that may result from operating with the test return valve in the open position during recirculation. These issues included human factor considerations for new operator actions, impact of potential bypass flow on the torus and piping to the torus, and the potential for water hammer in the core spray piping. This issue was left unresolved pending further review of the Nine Mile Unit 1 licensing basis. **(URI 50-220/98016-01)**(Section E1.3)

The team concluded that the engineering response to emergent issues documented in DERs was generally effective. In general, the DERs reviewed by the team were appropriately resolved, and drawings, procedures and other documents were updated, as needed. However, the evaluation of indications of reduced motor cooler flow, as documented in DER 1-98-2185, was not timely or effective. Although multiple opportunities since March 4, 1996, were available, the licensee did not identify that this deficiency resulted in pump inoperability until questioned by the NRC. The failure to identify and implement prompt corrective actions is a violation of 10 CFR 50, Appendix B, Criteria XVI, Corrective Action. **(VIO 50-220/98-016-02)**(Section E1.7)

TABLE OF CONTENTS

REPORT DETAILS

Nine Mile Point Units 1 and 2
50-220/98-16,50-410/98-16

The primary purpose of this inspection was to assess engineering effectiveness by a review of calculations, analysis and other documents used to support system performance during normal, accident or abnormal conditions. The inspectors utilized the guidance contained in NRC Inspection Procedure 93809, "Safety System Engineering Inspection (SSEI)." A secondary objective of the inspection was to determine the quality of safety evaluations prepared to support plant modifications. The inspection was conducted from August 10 - August 21, 1998, and focused on the Unit 1 core spray system and the Unit 2 standby gas treatment system.

III. ENGINEERING

E1 Conduct of Engineering[1]

E1.1 Design and Licensing Basis Documents

a. Inspection Scope (93809)

The inspectors reviewed design and licensing basis documents to verify the appropriateness of the design assumptions and inputs to determine whether the design basis conforms to the licensing commitments and regulatory requirements. The accuracy of design bases documents and analyses and the translation of engineering outputs to drawings, procedures and other documents were also assessed.

b. Observations and Findings

The inspectors reviewed a sample of various types of design and licensing bases documents including the Final Safety Analysis Reports (FSARs), System Design Basis Documents (SDBDs), calculations, drawings and technical specifications (TSs).

The inspectors found that the design bases information was generally accurate and design assumptions and inputs were consistent throughout the various documents. The calculations reviewed by the team used appropriate assumptions and data inputs; and, the methods, results and conclusions were technically correct. However, some minor problems were noted with the control of calculations. For example, results from the Unit 1 core spray system flow calculation was used in the net positive suction head calculation prior to the flow calculation being approved. Also, the Unit 2 gas treatment system (GTS) calculation that evaluated the required

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[1] Topical headings such as O1, M8, etc., are used in accordance with the NRC standardized reactor inspection report outline. Individual reports are not expected to address all outline topics. The NRC inspection manual procedure or temporary instruction (TI) that was used as inspection guidance is listed for each applicable report section.

capacity of the heaters used to reduce the relative humidity in the air going to the charcoal adsorber bed did not reflect the design flow rate change from 3500 cfm to 4000 cfm. The original calculation results indicated there was a significant margin between the required heater capacity and the actual capacity and the licensee confirmed the heater capacity was adequate by revising the calculation prior to the completion of the inspection. The licensee plans to perform additional reviews which they believe will confirm that these are isolated problems and not indicative of any programmatic weakness. Deviation/Event Report (DER) 2-98-2509 was written to document the issue and track additional licensee actions.

The inspectors did not identify any significant errors within the FSAR or SDBD. The inspectors noted that the Unit 1 core spray system SDBD had numerous update postings that made it difficult to use. The licensee reviewed this question and determined that the update category, which determines when the document is revised to incorporate updates for Unit 1 SDBDs, was improper and wrote DER 1-98-2516 to document the deficiency. Also, the Unit 2 GTS SDBD included various values for system flow rates and component capacities that made it difficult to clearly understand the design bases. The licensee initiated DER 2-98-2510 to document the need to clarify that SDBD.

The inspectors also found that the outputs from the engineering products were appropriately incorporated into plant drawings and procedures.

c. Conclusions

Engineering adequately assured that the systems inspected met the design and license bases and regulatory requirements. Design inputs and assumptions were appropriate, engineering work was technically correct and engineering outputs were translated into the applicable drawings and procedures.

E1.2 Plant Modifications

a. Inspection Scope (37550)

The team reviewed a sample of plant modifications to assess the effectiveness of engineering in designing and implementing plant modifications.

b. Observations and Findings

The team reviewed a sample of modifications for both units and found that engineering provided appropriate resolution of the technical issues. The post-modification testing was generally thorough and the affected drawings, procedures and other documents were updated in a timely manner. One minor exception noted by the team was the untimely update of the Unit 2 GTS operating procedure (following a modification in 1988) to delete the use of the fire protection deluge system as a decay heat removal method for the charcoal adsorber bed. The same issue was identified during the SDBD development in 1992 and finally corrected in 1996.

The team also noted that resolution of two system design problems appeared not to be timely. Though not of a high safety significance, the Unit 2 GTS system design results in the heater low differential temperature annunciator being in the alarm condition whenever the system is operated. This results in the operators having to verify adequate differential temperature using computer points in accordance with the alarm response procedure resulting in an unnecessary distraction to the operator. This condition was identified in 1994 and documented under DER #2-94-0430. The proposed solution is to relocate the downstream resistance temperature detector (RTD) to obtain a more representative reading that results in a sufficient differential temperature signal to clear the alarm. Proper operation of the alarm circuit will also improve the ability to provide an early indication of gross heater failure. Another modification was in process to replace the Unit 2 GTS system motor operated valve hydraulic actuators with air operators. The poor reliability of hydraulic actuators has been a long-standing problem that adversely affected system availability.

c. Conclusions

The design, implementation and testing of modifications has been generally effective. However, two design deficiencies related to the Unit 2 gas treatment system, which were designated by the licensee as low priority, were longstanding and have resulted in unnecessary operator burdens and reduced system availability.

E1.3 Safety Evaluations

a. Inspection Scope

The team reviewed the effectiveness of engineering in reviewing changes to the plant and procedures for 10 CFR 50.59 applicability and the quality of safety evaluations.

b. Observations and Findings

The team reviewed a number of plant modifications and procedure changes, and found that the licensee performed appropriate screenings to determine if the changes required further evaluation in accordance with 10 CFR 50.59. The team also reviewed several safety evaluations and found that they were generally thorough and provided a good technical bases that supported the conclusions.

The team identified a weakness with Safety Evaluation 94-072 (dated 12/19/94) that was performed to evaluate plant modification N1-90-041. The purpose of the change was to install separate minimum flow lines for each core spray pump set and to provide for the installation of jumpers to permit throttling core spray while injecting to maintain reactor vessel level following a small break loss of coolant accident (LOCA) or an anticipated transient without a scram (ATWS) condition. The jumpers permit bypassing initiation and interlock signals for the inboard and outboard isolation valves and the test return valves. These jumpers permit opening the test return valves to provide adequate minimum flow for the core spray pumps during extended recirculation operation and during pump operation for the shutdown cooling water seal.

The licensee procedures were changed to permit establishing a lineup to throttle core spray flow to the reactor vessel to provide better control of water level following a small break LOCA, during an ATWS or during shutdown following a fire. The procedure allows entry into this lineup with the reactor vessel pressure as high as 265 psig.

However, in this alignment, backflow of steam from the reactor vessel to the core spray piping and the torus air space is only prevented by maintaining forward flow from the operating core spray pump set to the vessel. The team was concerned that the failure of the running core spray pump set during extended recirculation could result in a containment bypass path. Specific technical issues that were not adequately addressed include:

- The pressurization on the torus due to an inadvertent steam flow from the reactor vessel to the torus air space.

- The temperature transient caused by an inadvertent steam flow from the reactor vessel to the torus air space. The core spray piping downstream of the test return valve and the torus have a design temperature of 205 degrees which could be exceeded.

- The effect of water hammer on the core spray piping caused by a steam blowdown of sections of the core spray piping and a subsequent pump start in accordance with N1-EOP-1 Attachment 4 step 2.44.

- The evaluation of the operators to recognize and take additional actions to the loss of a core spray pump during this condition.

During the inspection, the licensee further evaluated Emergency Operating Procedure Attachment 4 and issued a change to clarify the operator actions to be taken in the event of the loss of an operating core spray pump while simultaneously providing flow to the reactor vessel (to maintain reactor water level) and through the test line (to provide adequate minimum flow for the pumps).

Although the team had concerns with the thoroughness of the evaluation, the team and Region I staff considered that any safety consequences resulting from this potential condition would likely be minimal. The reactor vessel would be depressurized to less than 265 psig prior to operating the core spray pump in the recirculation configuration. The test return valve would not be opened until after operating the core spray pump for four hours, during which the reactor coolant system pressure would be expected to be significantly reduced. The probability of a core spray pump trip is low, and the probability of a small break LOCA is low. Nevertheless, the team concluded that the licensee's evaluation was weak in that it did not address the potential for the above effects that could result from the implementation of this modification.

The licensee indicated to the team that the licensing and design basis did not assume a single failure during the recirculation phase and, as a result, they were not required to evaluate for this condition.

At the end of the inspection, the NRC was continuing to review the applicability of the single failure criteria at NMP Unit 1, which was licensed before the development of the General Design Criteria. The determination of the licensing basis is pertinent to the NRC disposition of this issue. As a result, this item is left unresolved pending further NRC review of the NMP Unit 1 licensing basis. **(URI 50-220/98016-01)**

c. Conclusions

The safety evaluations of several plant modifications and procedure changes reviewed by the team were appropriately performed. Appropriate screenings were performed to determine if the changes required further evaluation in accordance with 10 CFR 50.59. Safety evaluations were thorough and provided good bases that supported the conclusions.

However, one notable exception, which was associated with a core spray system modification, was identified by the team. The safety evaluation for this modification did not fully consider issues that may result from operating with the test return valve in the open position during recirculation. These issues included human factor considerations for new operator actions, impact of potential bypass flow on the torus and piping to the torus, and the potential for water hammer in the core spray piping. This issue was left unresolved pending further review of the Nine Mile Unit 1 licensing basis. **(URI 50-220/98016-01)**

E1.4 System and Component Testing

a. Inspection Scope

The inspectors reviewed testing of the systems and components performed to ensure that the design bases were met.

b. Observations and Findings

The team reviewed surveillance tests associated with the Unit 1 core spray system and the Unit 2 gas treatment system. The surveillance tests were found to be appropriate to ensure technical specification requirements were met; and, the procedures were consistent with other design bases documents. Several minor testing issues were identified and documented in deviation event report (DERs) by the licensee. For example, test N2-OSP-GTS-R@001, "Standby Gas Treatment System Functional Test," for Unit 2 contained a step to verify that system flow was between 90 and 100%. If the criterion is not met, the procedure requires the performance of additional steps to ensure a system control valve is properly positioned. The ability to meet this criterion was affected by how soon the reading was taken following system startup. As a result, the step did not provide meaningful data and resulted in unnecessary operator actions. The licensee initiated DER 2-98-2508 to evaluate procedure N2-OSP-GTS-R@001 for improvement.

c. Conclusions

Several surveillance test procedures, which were reviewed, were appropriately applied to meet the technical specification requirements and consistent with their respective design bases documents.

E7 Quality Assurance In Engineering Activities

E7.1 Deviation/Event Report Evaluations

a. Inspection Scope

The team reviewed a sample of DERs associated with the systems being inspected to assess the effectiveness of engineering in evaluating and resolving the issues. The adequacy of operability determinations was also reviewed.

b. Observations and Findings

The team reviewed a sample of DERs and in general found that the engineering resolution was appropriate and when necessary affected drawings, procedures and other documents were updated. One notable exception was the evaluation of DER 1-98-2185 which documented thermography readings for the 122 core spray and 111 containment spray pumps that indicated that flow to motor coolers may be restricted. The licensee did not perform an operability evaluation for this specific condition but instead relied on a previous evaluation performed to evaluate the effects of increasing the motor cooler inlet temperature from 140°F to 163°F. When the team questioned the applicability of that evaluation to the identified condition of potentially reduced flow rate, the licensee determined additional evaluation was necessary. The licensee then performed testing of the core spray pump which included instrumenting the cooler piping to determine actual flow rate. The results of the test indicated that the flow rate was approximately 0.6 gpm, whereas the licensee documentation indicated that the required flow was 4.5 gpm. The pump was declared inoperable and follow up investigation identified that the reduced cooling water flow was due to a crimp in the cooling coil internal to the pump motor.

In addition to repairing the pump, the licensee issued three DERs to address the following aspects:

- 1-98-2534 Ineffective use of thermography data.
- 1-98-2535 Failure to request an engineering supporting analysis (ESA) and failure to restore pump motor coolers to original design criteria in a timely manner.
- 1-98-2544 Inadequate analysis of the circumstances when the problem was first identified.

Following the inspection the licensee performed an evaluation to determine if the core spray pump would have been operable with the reduced cooling water flow. The results of the evaluation indicated that the maximum bearing oil temperature would have been exceeded when they assumed simultaneous worst case core spray room and torus water temperatures. With the elevated oil temperature the licensee concluded that the pump would likely have operated for a number of hours. Since this evaluation could not support extended operation of the pump the licensee reported the condition to the NRC in LER 98-16. The inspector reviewed the LER and concluded that it was thorough and contained a comprehensive corrective action plan. LER 98-16 is closed.

Regarding the safety significance of the condition found, the team determined that the core spray pump would have functioned for several hours. Failure was contingent on worse case assumptions (i.e., assumed highest ambient room temperatures and torus water temperature). Also, the team determined that impact of losing one core spray pump would be of low risk significance.

Nevertheless, the team concluded that the licensee failed to promptly identify and correct a condition adverse quality which a violation of the requirements of 10 CFR 50, Appendix B, Criteria XVI, Corrective Action. **(VIO 50-220/98016-02)**

c. Conclusions

The team concluded that the engineering response to emergent issues documented in DERs was generally effective. In general, the DERs reviewed by the team were appropriately resolved, and drawings, procedures and other documents were updated, as needed. However, the evaluation of indications of reduced motor cooler flow, as documented in DER 1-98-2185, was not timely or effective. Although multiple opportunities since March 4, 1996, were available, the licensee did not identify that this deficiency resulted in pump inoperability until questioned by the NRC. The failure to identify and implement prompt corrective actions is a violation of 10 CFR 50, Appendix B, Criteria XVI, Corrective Action. **(VIO 50-220/98016-02)**

E7.2 FSAR Validation

a. Inspection Scope

The team reviewed the licensee's process to validate of the accuracy of the FSAR. Specifically, the team reviewed a sample of the licensee's findings resulting from this process for the Unit 1 core spray system and Unit 2 standby gas treatment system.

b. Observations and Findings

The licensee has a multi-discipline team performing the FSAR validation and creating a computer data base which will contain a number of "records" that will document bases for FSAR information. For example, each sentence (or as appropriate, a

group of sentences or a paragraph) is contained as a record in the data base and will be reviewed and the bases documented. Any discrepancies are documented and dispositioned by the Deficiency Review Team. Where appropriate, the issues are entered in the DER process for evaluation and resolution. More minor issues such typographical errors, clarifications, and editorial corrections are tracked in the validation data base. The licensee has completed the Unit 1 review and is scheduled to complete the Unit 2 review by October, 1998. The licensee also plans to keep the new data base up to date in the future so that it will be a design bases information useful tool.

c. Conclusions

The team concluded that the licensee had appropriately implemented a self-assessment to identify discrepancies and to validate the accuracy of the FSARs.

E8 Miscellaneous Engineering Issues (92903)

E8.1 (Closed) LER 50-410/98-23: Secondary containment emergency recirculation unit coolers (UCs) 2HVR*UC413A and B may have been incapable of performing their design function. Contrary to design, the lag in response time of the flow switches combined with allowances for uncertainty for timer relays could have resulted in parallel operation of the UC fans. Parallel operation could have resulted in air flow in the performance curve unstable zone. This could have resulted in a trip of one UC on low flow, and the loss of the second UC, assuming a postulated single failure.

Although, the licensee had past opportunities to identify this issue, it was subsequently identified, by the licensee, as a result of corrective actions taken for a similar problem with the control room air conditioning unit (ACUs) (see LER 98-17 and DER 2-98-1459). The team determined that the root cause evaluation and subsequent corrective were effective and should prevent the reoccurrence of this problem. Specifically, the licensee conducted modification N2-98-011 to eliminate the design discrepancy to ensure that 2HVR*UC413A and B fans do not start and operate in parallel. The inspector determined that no violations of NRC requirements occurred. This LER is closed.

E8.2 (Closed) Unresolved Item 50-410/96-10-05: Gas treatment system surveillance test adequacy. During the performance of a Unit 2 GTS surveillance test a damper in the reactor building ventilation system inadvertently closed due to failure of a relay. As a result the normal ventilation system was unable to maintain a negative pressure in secondary containment. This unresolved item was opened to track the NRC review of the licensee evaluation of the event.

During the GTS surveillance test the secondary containment emergency recirculation unit coolers (UCs) were being operated in the test mode. When a test damper failed closed the unit cooler fan operation prevented the normal ventilation exhaust fans from exhausting sufficient air to maintain the negative pressure. If this same failure occurred following an accident, the normal ventilation is automatically shut down

and isolated and the emergency recirculation unit coolers and the GTS system would have operated normally. The licensee determined that it was not necessary to operate the emergency recirculation unit coolers during the applicable GTS test and has revised the procedure accordingly.

The team reviewed the licensee evaluation and concluded that the system design was adequate and that the licensee corrective actions for the event were appropriate. No violations of NRC requirements were identified. This item is closed.

E8.3 (Closed) Unresolved Item 50-410/97-01-01: Unit 2 Standby Gas Treatment System Operability with Both Cross-Connect Valves Open

From 12/11/96 to 12/13/96, both cross connect isolation valves in the Standby Gas Treatment System (GTS) were in the failed open position, 2GTS*MOV28B due to long standing actuator problems and 2GTS*MOV28A due to preplanned preventative maintenance. On January 15, 1997, the licensee made a 4-hour non-emergency notification based on questions regarding the ability of the GTS trains for fulfill their safety functions with both cross connect valves were in the failed open position. An engineering supporting analysis later determined that both GTS trains were operable with the cross connect valves failed open, and the licensee retracted the 4-hour non-emergency notification. NRC inspectors initiated an unresolved item (URI) questioning the appropriateness of the retraction and, generically, whether operation with both valves normally open satisfied the requirements of Technical Specification (TS) Section 3.6.5.3.

In review of these issues, inspectors considered NRC Regulatory Guide (RG) 1.52, Revision 2, "Design, Testing, and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants," NMP2 procedure N2-OP-61B, TS Section 3.6.5.3, and P&IDs. The inspectors concluded that the two GTS trains would be operable with the cross connect isolation valves in the failed open position based upon the determination that damage caused by a single event in one GTS train would not cause damage to or disable the remaining GTS train. No violations of NRC requirements were identified. This unresolved issue is closed.

IV. PLANT SUPPORT

F2 Fire Protection Facilities and Equipment

F2.1 SGT Charcoal Deluge System

a. Inspection Scope (64704)

The inspector walked down the unit 2 SGT systems, interviewed the system engineer and the fire protection engineer, and reviewed FPW System Valve Cycling Surveillance, N2-FSP-FPW-A003, to determine if the SGT charcoal filter deluge system was in compliance with the NMP Fire Protection Plan as contained in the NMP2 USAR.

b. Observations and Findings

The inspector found that the material condition of the accessible portions of the deluge systems was acceptable and that general housekeeping in the SGT areas was good. The inspector found that fire protection engineer was knowledgeable about the system requirements and that the surveillance requirements for the deluge systems were satisfactory to ensure proper operations.

c. Conclusion

The inspector concluded that the SGT charcoal filter deluge system was in compliance with the NMP Fire Protection Plan as contained in the NMP2 USAR.

F2.2 Fire Barrier Penetration Seals

a. Inspection Scope

The inspector visually inspected a number of fire barrier penetration seals in Unit 1 and 2 during the plant walkdowns. In addition, the inspector reviewed the seal details and inspection records for penetration 2WK 192G01 in the Unit 2 SGT building to verify that the seal was properly installed.

b. Observations and Findings

During plant tours the inspector noted no missing seals or seals with more than superficial damage. The inspector reviewed the Field Take Off, Installation & Inspection Record for the penetration and the associated detail drawing, NMP-E-01-03, 2WK 192G01. The inspector compared these documents to the installed seal and found the seal to be acceptable.

c. Conclusions

The inspector concluded that the licensee had maintained the effectiveness of the observed fire barrier penetration seals.

F3 Fire Protection Procedures and Documentation

F3.1 Unit 2 SGT Combustion Loading

a. Inspection Scope

The inspector compared the charcoal loading as described in Standby Gas Treatment System Carbon Mass and Residence Time Verification No. GTS-012 to the combustible loading as described in NMP2 USAR table 9A.3-3 to evaluate documentation consistency.

b. Observations and Findings

The inspector found that the USAR and SGT Design Base Document list the weight of charcoal loaded in each filter train as 1,360 lbm. The inspector found that Standby Gas Treatment System Carbon Mass and Residence Time Verification No. GTS-012 Attachment E list the actual weight loaded in each filter as 1,400 lbm. The licensee confirmed that the actual weight loaded was 1,400 lbm per filter. The licensee determined that the additional weight would increase the fire loading 0.7 minutes and 0.6 minutes, respectively. In accordance with the NEP-FPP-01, Fire Protection Engineering, this additional loading does not provide a significant increase to the fire load. This failure to accurately translate the actual charcoal load into the fire loading calculations constitutes a violation of minor significance and is not subject to formal enforcement action. The licensee has issued DER 2-98-2548 to address the documentation discrepancy.

c. Conclusion

The inspector concluded that the fire loading discrepancy did not provide a significant increase to the fire loading and that the licensee's corrective actions as described in the DER will correct the documentation discrepancy.

V. MANAGEMENT MEETINGS

X1 Exit Meeting Summary

A meeting was held with licensee management on August 14, 1998, to discuss the scope and findings of the first week of inspection. An exit meeting was held on August 21, 1998, during which the inspectors' findings were presented. NMPC acknowledged the findings and conclusions. The results of additional review and evaluation of information obtained during the inspection were discussed with the licensee on October 26, 1998.

PARTIAL LIST OF NMPC PERSONS CONTACTED

R. Abbott	Vice President, Nuclear Engineering
P. Mezzafero	Technical Support Manager, Unit 1
R. Smith	Plant Manager, Unit 1
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A. Shahrpass	Mechanical Design Supervisor, Unit 2
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W. Yeager	Engineering Services Manager
P. Bartolini	Mechanical Engineer, Unit 1
P. Politzi	System Engineer, Unit 1
D. Flood	System Engineer, Unit 2

INSPECTION PROCEDURES USED

IP 64704	Fire Protection
IP 37550	Engineering
IP 93809	Safety System Engineering Inspection
IP 92903	Follow up - Engineering

ITEMS OPENED, CLOSED, AND UPDATED

OPENED

50-220/98016-01	URI	Licensee evaluation did not consider potential issues associated with a change involving an unreviewed safety question or submit a license amendment per 10 CFR 50.59.
50-220/98016-02	VIO	Failure of licensee to identify and correct a low flow condition to a core spray pump motor cooler.

CLOSED

50-220/98-16	LER	Core Spray Pump Motor Bearing Cooling Flow Outside Design Basis Requirement.
50-410/98-23	LER	Secondary Containment Emergency Recirculation Unit Coolers May Have Been Incapable Of Performing Design Function.
50-410/96-10-05	URI	Gas Treatment System Surveillance Test Adequacy.

CLOSED

50-410/97-01-01 URI Gas Treatment System Operability With Cross-Connect Valves Open.

UPDATED

none

LIST OF ACRONYMS USED

ATWS	Anticipated Transient Without Scram
ASSS	Assistant Station Shift Supervisor
CFR	Code of Federal Regulations
DER	Deviation/Event Report
ECCS	Emergency Core Cooling System
ESF	Engineered Safeguards Feature
GTS	Gas Treatment System
IR	Inspection Report
LOCA	Loss of Coolant Accident
LER	Licensee Event Report
NMPC	Niagara Mohawk Power Corporation
NPSH	Net Positive Suction Head
NRC	Nuclear Regulatory Commission
RG	Regulatory Guide
RTD	Resistance Temperature Detector
SDBD	System Design Basis Document
SORC	Station Operating Review Committee
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report
Unit 1	Nine Mile Point Unit 1
Unit 2	Nine Mile Point Unit 2
URI	Unresolved Item
VIO	Violation