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 MUELLER,J.H. Niagara Mohawk Power Corp.

SUBJECT: Discusses results of Plant Performance Review of Nine Mile Point Units 1 & 2 completed on 990223.Forwards historical listing of plant issues that were considered & advises of planned insp effort resulting from Nine Mile Point PPR.

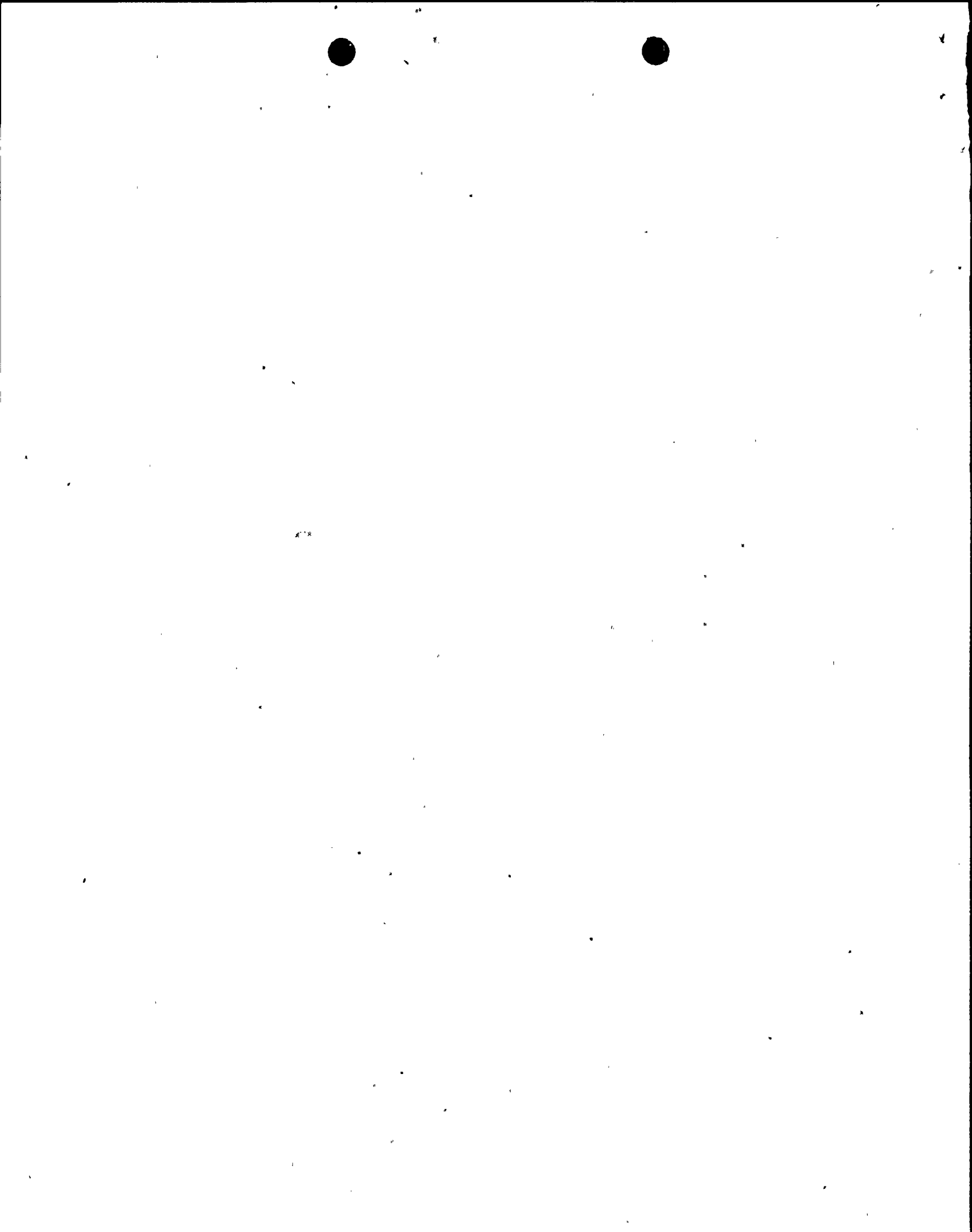
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April 9, 1999

Mr. John H. Mueller  
Chief Nuclear Officer  
Niagara Mohawk Power Corporation  
Nine Mile Point Nuclear Station  
Operations Building, 2nd Floor  
P.O. Box 63  
Lycoming, NY 13093

SUBJECT: PLANT PERFORMANCE REVIEW - NINE MILE POINT UNITS 1 & 2

Dear Mr. Mueller:

On February 23, 1999, the NRC staff completed a Plant Performance Review (PPR) of Nine Mile Point Units 1 & 2. The staff conducts these reviews for all operating nuclear power plants to develop an integrated understanding of safety performance. The results are used by NRC management to facilitate planning and allocation of inspection resources. PPRs provide NRC management with a current summary of licensee performance and serve as inputs to the NRC's senior management meeting (SMM) reviews. PPRs examine information since the last assessment of licensee performance to evaluate long term trends, but emphasize the last six months to ensure that the assessments reflect current performance. The PPR for Nine Mile Point Units 1 & 2 involved the participation of all technical divisions in detailed evaluation of inspection results and safety performance information for the period April 1998 to January 15, 1999, and a review of long-term performance trend since your last Systematic Assessment of Licensee Performance (SALP). The NRC's most recent summary of licensee performance was provided in a letter of December 30, 1997, and was discussed in a public meeting with you on January 9, 1998.

As discussed in the NRC's Administrative Letter 98-07 of October 2, 1998, the PPR provides an assessment of licensee performance during an interim period that the NRC has suspended its SALP program. The NRC suspended its SALP program to complete a review of its processes for assessing performance at nuclear power plants. At the end of the review period, the NRC will decide whether to resume the SALP program or terminate it in favor of an improved process.

No automatic reactor shutdowns occurred during the assessment period. Nine Mile Point Unit 1 shut down in May 1998 due to an emergent problem with the control room emergency ventilation system. After the problem was addressed, the unit returned to essentially full power for the remainder of the period. Unit 2 operated at full power following restart from the refueling outage in July until November 1998 when the unit was shut down to address a problem with a reactor recirculation system flow control valve. Following repairs, the plant returned to full power operations.

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Overall performance at both units was acceptable, but a few areas of weak performance were noted. Operator control of plant evolutions was safe and conservative. Human performance and work control were improving, but problems in these areas require continued management attention. The material condition of both units was generally good. Heightened engineering management involvement resulted in better problem identification and more critical plant design reviews; continued management attention to engineering backlogs is warranted. Plant Support programs and their day-to-day implementation continued to be a station strength. The corrective action program improved as a result of increased management focus but some inconsistencies in program implementation require continued attention.

Operators continued to respond well to reactor plant power changes and equipment degradation issues, such as the Unit 2 recirculation flow control valve problem. The number of Unit 1 operations staff errors was reduced from that which occurred earlier in the period as a result of aggressive management oversight. Site management was observed to be proactive in the area of self assessments and mentoring, and was more focused on improving human performance. However, a November 1998 Unit 1 reactivity management error indicated the need for continued commitment in this area. The normal NRC core inspection program is planned with some increased emphasis on corrective action program effectiveness.

Maintenance staff performance continued to be acceptable with only a single forced outage at Unit 2 related to an equipment problem. Maintenance personnel responded well to emergent equipment issues. The Maintenance Rule was appropriately implemented and circuit breaker maintenance problems that occurred early in the assessment period were effectively addressed by program revisions. The development of a work activity risk monitor from the enhanced Probabilistic Risk Assessment model was a positive work planning attribute. However, a few incidents of poor work planning and control resulted in safety system configuration errors. Material condition at both units was good. The normal NRC core inspection program is planned with some increased emphasis placed on the area of work control and configuration control.

Engineering performance has improved, including more thorough responses to industry events and system design deficiency identification. Early in the inspection period, a poor evaluation of a degraded Unit 1 core spray pump and untimely corrective actions for a Unit 2 emergency diesel generator fuel line degradation illustrated a lack of rigor by the engineering support staff. In contrast, recently performed engineering reviews of the control room emergency ventilation systems at both units resulted in the timely identification and correction of system design deficiencies. The design and installation of the new emergency core cooling system pump suction strainers at Unit 2 represented sound engineering practices and the continued identification of logic system testing deficiencies illustrated critical reviews and good problem identification. Independent Safety Engineering Group assessments were thorough. Management has taken action to address the engineering backlog. However, continued attention is needed to improve work prioritization and backlog reduction efforts. The NRC plans to perform the normal core inspection program. In addition, initiative engineering inspections are planned to review the installation of modifications, engineering support activities, and logic system functional testing deficiencies.

Site programs in radiation protection, security, and emergency preparedness were well implemented. Total accumulated radiation exposure at Unit 1 for 1998 was the lowest in unit history, as the result of a number of enhanced work processes. Self-assessment efforts were effective in identifying problems and determining improvement measures in the Plant Support



area. Radiological effluent and monitoring programs were effectively implemented and maintained. Previously identified deficiencies involving radioactive material transportation activities were appropriately addressed. Emergency preparedness programs were generally strong with good procedural controls, and the facilities and equipment were well maintained. The security program was well managed and implemented. The NRC plans to perform the normal core inspection program.

Enclosure 1 contains a historical listing of plant issues, referred to as the Plant Issues Matrix (PIM), that were considered during this PPR process to arrive at an integrated view of Nine Mile Point performance trends. Please note that the PIM was in two different formats due to a program change effective on October 1, 1998. The PIM included items summarized from inspection reports or other docketed correspondence between the NRC and Niagara Mohawk Power Corporation. The NRC does not attempt to document all aspects of licensee programs and performance that may be functioning appropriately. Rather, the NRC only documents issues that the NRC believes warrant management attention or represent noteworthy aspects of performance. In addition, the PPR may also have considered some pre-decisional and draft material that does not appear in the attached PIM, including observations from events and inspections that had occurred since the last NRC inspection report was issued, but had not yet received full review and consideration. This material will be placed in the Public Docket Room as part of the normal issuance of NRC inspection reports and other correspondence.

This letter advises you of our planned inspection effort resulting from the Nine Mile Point PPR. It is provided to minimize the resource impact on your staff and to allow for personnel availability and scheduling conflicts to be resolved in advance of inspector arrival onsite. Enclosure 2 details our inspection plan for the next six months. The rationale or basis for each inspection outside the core inspection program is provided so that you are aware of the reason for emphasis in these program areas. Resident inspections are not listed due to their ongoing and continuous nature.

Because of the anticipated changes to the inspection program and other initiatives, this inspection schedule is subject to revision. Any changes to the schedule will be discussed promptly with your staff. If you have any questions, please contact G. Scott Barber at 610-337-5232.

Sincerely,

ORIGINAL SIGNED BY:

Richard V. Crlenjak, Deputy Director  
Division of Reactor Projects

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

Enclosures:

1. Plant Issues Matrix
2. Inspection Plan





John H. Mueller

4

cc w/encls:

G. Wilson, Senior Attorney

M. Wetterhahn, Winston and Strawn

J. Rettberg, New York State Electric and Gas Corporation

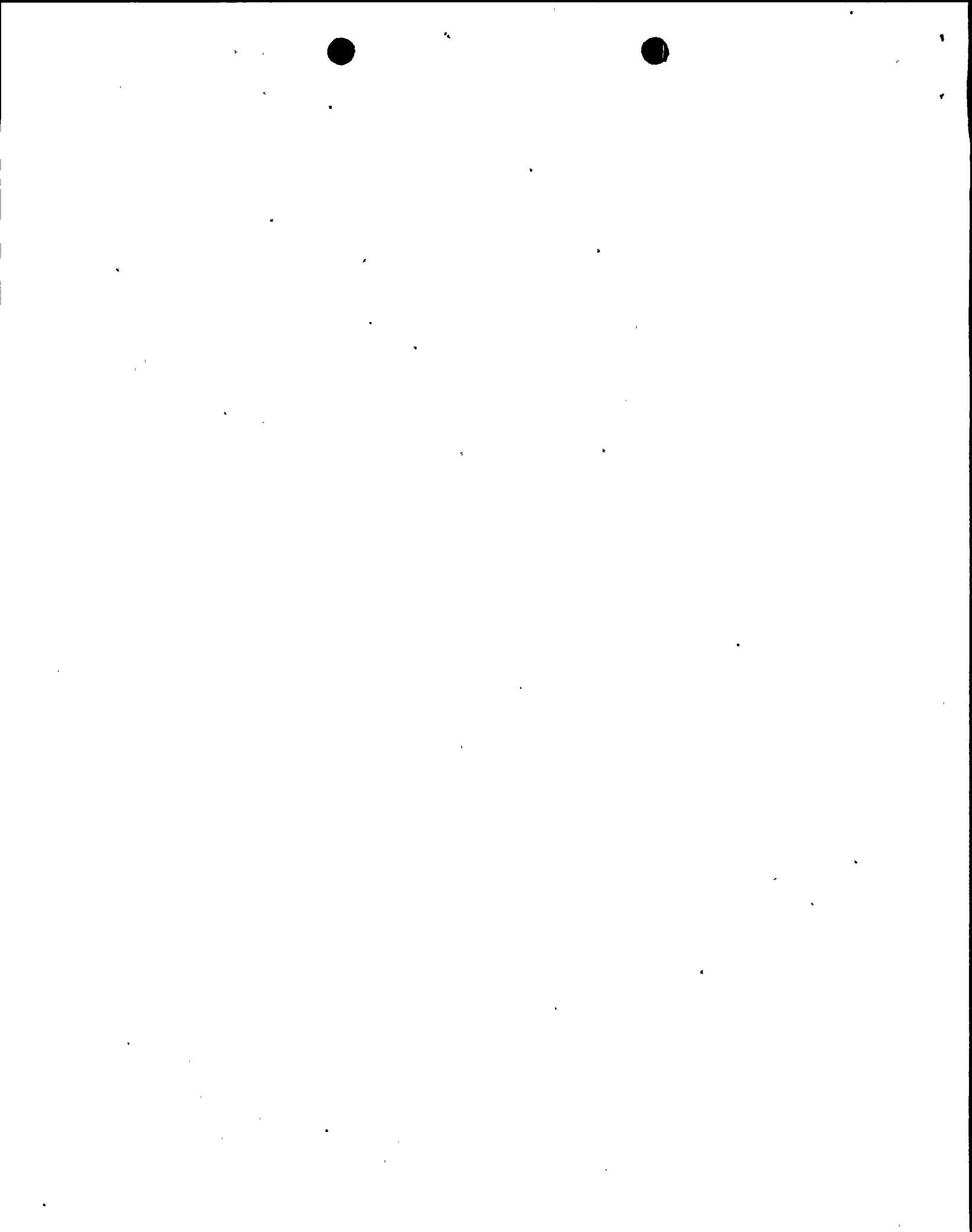
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F. Valentino, President, New York State Energy Research  
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J. Spath, Program Director, New York State Energy Research  
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John H. Mueller

5

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# NINE MILE 1 & 2 PLANT ISSUES MATRIX

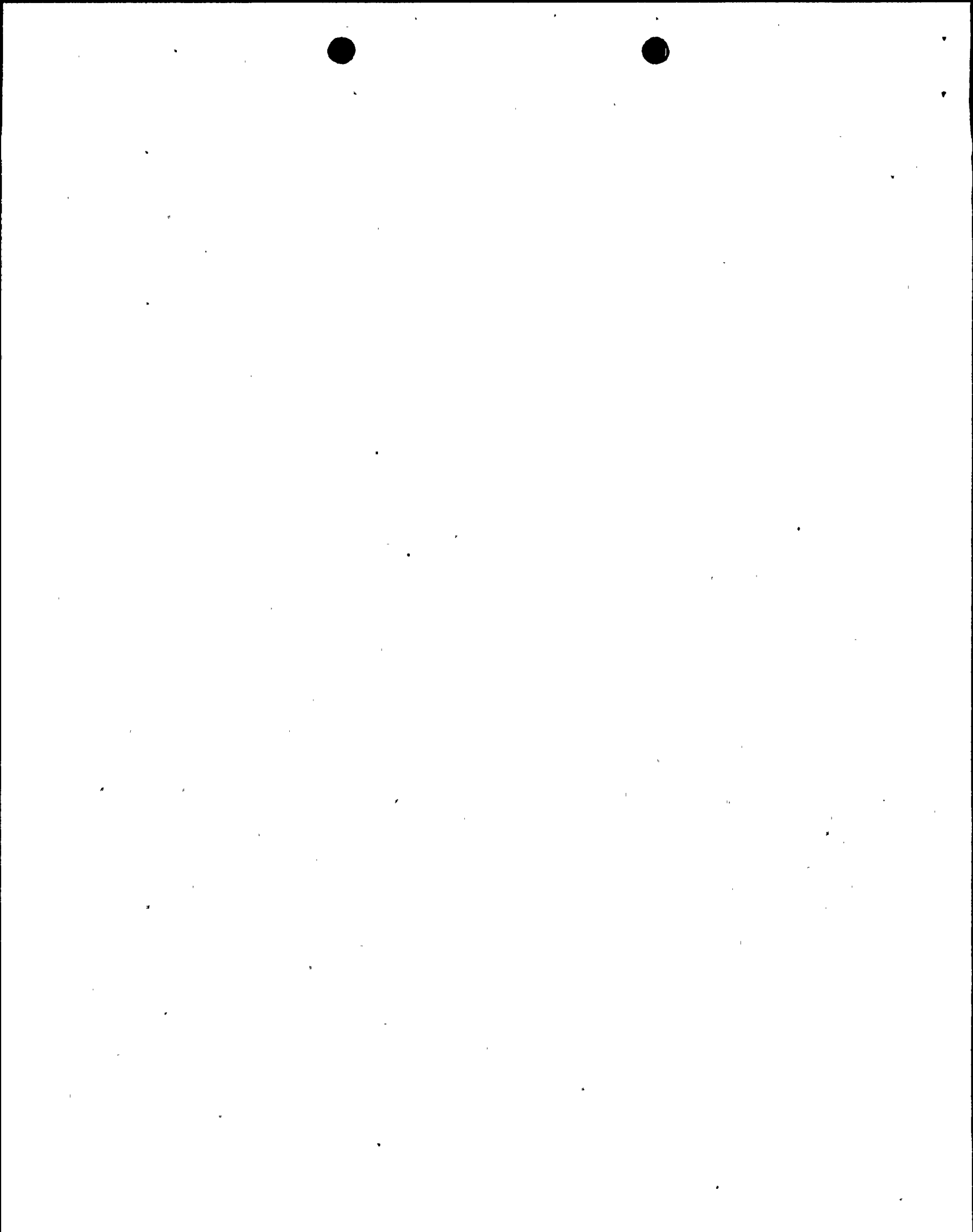
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8/4/98	Positive	IR 98-17	N	OPS	2B 3A 3C	The Unit 1 simulator configuration and management controls, including the computer upgrade, were implemented properly. The simulation facility was maintained and operated as certified in accordance with the requirements of 10 CFR 55.45 and ANSI/ANS 3.5-1985, as endorsed by Regulatory Guide 1.149, Rev. 1. Training department personnel routinely briefed trainees on simulator deficiencies that may affect planned training evolutions. Overall, there was no evidence of negative training as a result of simulator deficiency problems and of untimely or uncorrected simulator deficiencies.
8/11/98	NCV Positive	IR 98-13 NCV 98-13-01 and 02	N	OPS	5A 3A 5C	The licensee appropriately resolved past inspection findings and appropriately identified and acted on violations dealing with senior reactor operator duties in the control room.
8/11/98	Positive	IR 98-13	N	OPS	1C 3A	Operations department management was proactive in initiating quality assurance surveillances and establishing the mentoring program. The self-assessment and quality assurance audits were effective in identifying the recent decline in operations performance. The assessment of DER trends, the mentoring program, and quality assurance's 1997 audit of operations and recent surveillance collectively provided a thorough assessment of the operations organization performance.
8/11/98	Positive	IR 98-13	N	OPS	3C 1A	The shift supervisor provided appropriate oversight of shift activities and pre-evolution briefs were well managed. Operations management was observed providing appropriate oversight of control room activities.
8/11/98	Positive	IR 98-13	N	OPS	3B 1A 3A	Control room and plant operators demonstrated appropriate knowledge of plant systems and administrative requirements necessary to safely operate the plant. All operations and testing evolutions observed were conducted in a safe and controlled manner.
8/11/98	Positive	IR 98-13	N	OPS	3A 1A	Operators implementing several surveillance tests exhibited good procedure adherence skills. Operators interviewed were fully aware of management's expectations for verbatim procedure compliance.
8/11/98	Positive	IR 98-13	N	OPS	2B 3A 1C	Appropriate procedure guidance was available for the risk significant operator actions reviewed. The procedures were walked down in the field with licensed operators and the operators were found to have a thorough understanding of the procedure guidance. The surveillance procedures used for the tests observed were of good quality.





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8/11/98	Positive	IR 98-13	N	OPS	2B 3C 3A	The administrative guidance for temporary modifications, control room deficiencies, and operator work-arounds was appropriate. However, the effectiveness of the implementation of the programs could not be determined, as operators were still in the process of developing a comprehensive list of deficiencies and work-arounds.
8/11/98	Negative	IR 98-13	N	OPS	5A 5C 3A	Plant operators were effective in identifying deficient plant equipment and had established appropriate thresholds for including deficiencies in the corrective action program. However, the inspectors noted that a poor interface existed between operations and the work planning organization in identifying and resolving deficient or incomplete work packages.
8/11/98	Positive	IR 98-13	N	OPS	2B 1A	The administrative guidance governing safety and configuration tagging was appropriate to protect workers and the integrity of safety-related systems. The implementation of the safety and configuration tagging administrative requirements by plant operators was effective.
8/11/98	Positive	IR 98-13	N	OPS	3C 1A 1C	The management standards and expectations for plant operators were appropriate and clearly documented in the Operations Manual. Operations personnel consistently adhered to expectations regarding communications, control room access, control board awareness, and shift turnovers. Log keeping and annunciator response were acceptable. Operations personnel were effectively tracking technical specification equipment status but operators were unclear as to management expectations on the equipment status log entries.
6/26/98	VIO	IR 98-11 VIO 98-11-02	N	OPS	5A 5B 5C 3B	The identification of FCV 80-118 as a primary containment isolation valve by the systems engineer was good, but the oversight by the operations staff of this valve's primary containment isolation function reflects poorly on their systems knowledge and sensitivity to containment integrity monitoring. The failure to maintain primary containment integrity for 3.5 days was a violation of the Unit 1 Technical Specification 3.3.0. (VIO 50-220/98-11-02)
6/26/98	Negative	IR 98-11	N	OPS	5B 5C	The licensee's immediate action to conduct control panel system line-up verifications without referring to the system operating procedures was a poorly founded decision based upon the control room operators not having identified the flow control valve out-of-position for 3.5 days by relying on unaided memory of proper systems' configuration.
6/26/98	Negative	IR 98-11	N	OPS	3A 3C 5A	Between April 7 and 11, over sixty control panel walkdowns were unsuccessful in identifying this containment spray system mis-positioned valve. This was a significant operations staff oversight and indicative of a lack of attentiveness to safety system configuration. In contrast, the in-plant operator's identification of the breaker open/closed indicating lights deficiency demonstrated good attention to detail, proper awareness of plant conditions, and prompt and appropriate response to a deficient condition.



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
6/26/98	VIO	IR 98-11 VIO 98-11-01	L	OPS	3A 3C 1A	A Unit 1 reactor operator failed to follow the operating procedure for restoration of the containment spray system to its standby configuration resulting in the system being in a degraded condition for 3.5 days. This was a violation of Technical Specification 6.8.1, involving the failure to implement procedures, as written. (VIO 50-220/98-11-01)
8/5/98	NCV Positive	IR 98-06 NCV 98-06-01	L	OPS	4C 5A 5C	During the Unit 1 planned shutdown on April 28, the licensee determined that the rod block function of the rod worth minimizer had not been properly tested since a 1974 Technical Specification change. This licensee identified and corrected violation of TS surveillance requirements was not cited.
8/5/98	Negative	IR 98-06	N	OPS	3A 3B 3C	Licensee response to the May 11, 1998 engineered safety feature actuation was appropriate. The cause of the event was poor work package and tagout development and a subsequent poor plant impact assessment by the Station Shift Supervisor prior to re-energizing the Division II trip unit power supplies.
8/5/98	Positive	IR 98-06	N	OPS	3A 1A	During sustained Unit 1 control room observations, operators' attentiveness, procedure adherence, shift turnovers, log keeping, and control of activities were found to be acceptable. Supervisory oversight and communication were good, particularly during a control rod drive pump post-maintenance test and a feedwater pump swap. In-plant operators were knowledgeable of system and equipment functions. Material condition in the reactor building was acceptable.
7/7/98	Negative	IR 98-05	N	OPS	1A 3A	While transferring a double blade guide (DBG) from the spent fuel pool to the reactor vessel, the DBG became disengaged from the grapple and came to rest in the fuel transfer canal. NMPC determined that the root cause was the refueling crew did not properly verify engagement of the grapple. NMPC's root cause investigation was methodical and thorough, the root cause determination was technically sound, and the corrective actions adequately addressed the cause.
7/7/98	VIO	IR 98-05 VIO 98-05-01	L	OPS	1A 3A 5A	During performance of a Unit 1 surveillance test, the containment spray raw water inter-tie check valve did not open with the required torque and the station shift supervisor (SSS) failed to enter the core spray system TS 3.1.4.d action statement, as required by the surveillance test. The relieving SSS identified the procedural non-compliance and took prompt and appropriate action to comply with the surveillance procedure. The failure to properly implement the surveillance test is a violation of TS 6.8.1.



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

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2/17/98	Negative	IR 98-03	N	OPS	1A 3B	<p>An assessment review of the initial examination submittal of November 19, 1997 consisting of the written, job performance measures and operating tests found that the submittal was inadequate. NRC staff concerns were noted in a letter dated December 2, 1997 and the examination was postponed until the week of January 20, 1998. A revised examination was resubmitted and another assessment indicated that the submittal did not require additional modifications. NRC inspection report 50-410/97-08 (OL) documented significant areas of difficulty identified by NRC staff of an NMP-2 initial license written examination submittal of April 7, 1997. There was apparent ineffective corrective actions to improve the quality of initial examination submittals that resulted again in the postponement of the examination.</p> <p>The inspectors determined the applicants were well prepared for the examination and met all regulatory eligibility requirements.</p>
5/27/98	Negative EEI	IR 98-02 EEI 98-02-04	L	OPS	3A 5A 3C	<p>LER 50-410/98-02 appropriately documented the circumstances involving a Unit 2 reactor operator who left the "at-the-controls" area of the control room. The NRC staff's disposition of this apparent TS violation remains under review.</p>
5/27/98	Positive NCV	IR 98-02 NCV 98-02-03	L	OPS	1A 5A 5B 5C	<p>A non-conservative operating philosophy resulted in exceeding the Unit 1 maximum allowable core thermal power during the eight-hour shift-average. The computer program which calculated and reported the shift-average power did not provide a sufficiently accurate readout of reactor power to assist the control room staff. NMPC's investigation identified seven other instances since the beginning of the year where the TS limit of 1850 MW<sub>th</sub> was exceeded. This licensee identified and corrected TS violation was not cited.</p>
5/27/98	Negative NCV	IR 98-02 NCV 98-02-02	N	OPS	5A 5C	<p>The NRC noted several degraded conditions in the Unit 1 control room which were not formally identified as Control Room Deficiencies. However, the operators and system engineers were aware of the problems and actions were in-place to address them. This minor procedural non-compliance was not cited.</p>
5/27/98	Positive NCV	IR 98-02 NCV 98-02-01	N	OPS	1A 2A 5A	<p>The Unit 2 residual heat removal system walkdown and performance history reviews indicated that the material condition of the system was good, and that the system demonstrated a high level of reliability. However, two minor discrepancies were identified which differed from the design contained in the UFSAR and were not cited due to their minor safety consequence.</p>
2/14/98	Negative	IR 98-01	N	OPS	2B 5A	<p>The quarterly reviews of extended markups at Unit 1 were weak in that the reviewers failed to identify numerous markup discrepancies that were later identified by the inspectors. Unit 1 management was aware of the weaknesses, and proposed corrective actions appeared appropriate.</p>



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2/14/98	NCV Negative	IR 98-01 NCV 98-01-02	N	OPS	5A 1C	Most catch containments installed in Unit 1 were adequately installed and maintained. However, many designated as "permanent" did not have an engineering evaluation to determine if a plant change or modification was required. The most recent semi-annual catch containment review lacked depth, in that NMPC failed to fully evaluate whether catch containments should be removed or that those designated as "permanent" had the required engineering evaluation. This minor procedure violation was not cited.
2/14/98	NCV Negative	IR 98-01 NCV 98-01-01	N	OPS	3A 5A	During an inspection in the Unit 2 residual heat removal pump rooms, the inspectors identified inadequate separation between conduits for safety-related temperature elements of different divisions. A breakdown in communications between an Assistant Station Shift Supervisor and a system engineer resulted in a one week delay in recognizing the impact that inadequate conduit separation had on the operability of safety-related plant equipment. This minor 10 CFR 50, Appendix B, violation was not cited.
2/14/98	Positive	IR 98-01	N	OPS	4B 5A	Routine monitoring of the Unit 2 refuel reliability index allowed NMPC to identify a reactor fuel leak early, before it degraded any further. The flux tilting and power suppression evolution was methodical and well-controlled due, in part, to good communication and coordination among all involved organizations. NMPC took aggressive actions to prevent further leak degradation.
2/14/98	Positive	IR 98-01 LER 98-01	N	OPS	1A	Unit 2 operators responded appropriately to the failure of the Division II containment atmosphere gaseous/particulate radiation monitor that occurred while the Division I monitor was inoperable for maintenance. Station Operations Review Committee members maintained the proper safety focus during the meeting to discuss the basis for requesting enforcement discretion. A Notice of Enforcement Discretion (NOED) was issued to preclude a unit shutdown while working to restore the Division I radiation monitor to an operable status.
1/23/98	NCV Positive	IR 97-12 LER 97-11 NCV 97-12-03	L	OPS	1A 3B	The Unit 1 operations and reactor engineering staffs' initiative to perform a procedure review prior to an infrequently performed evolution, (reactor shutdown by full control rod insertion), was appropriate. This review was good in that it identified the need for some procedural enhancements. The review also identified that, in the past, on several occasions the mode switch was placed in REFUEL contrary to the TS. This licensee identified and corrected violation was not cited.
1/23/98	NCV Negative	IR 97-12 NCV 97-12-02	N	OPS	3A 1A 1C	Unit 2 licensed control room operators were not aware that the posted surveillance test data for standby liquid control was out of date and that the surveillance was potentially overdue. A chemistry technician failed to post the surveillance summary sheet after completion of the surveillance, as required by procedure.





# NINE MILE 1 & 2 PLANT ISSUES MATRIX

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1/23/98	Positive	IR 97-12	N	OPS	2B 3A 1A	The Unit 1 shutdown safety verification procedure was considered a valuable aid for the control room operators to assist in monitoring plant conditions and assuring that safety functions were sufficiently available during shutdown conditions. Periodic briefings of safety function status during work control meetings and shift turnover was good, in that, it ensured personnel awareness of system status and allowed for feedback of any current or potential deviations.
1/23/98	Negative	IR 97-12	N	OPS	2A 4A 3C	Following the inspectors' identification of the Unit 1 hydrogen/oxygen analyzer cabinet doors being improperly secured, the licensee completed a technically sound and extensive analysis to determine that operation in this condition did not adversely impact the equipment operability. However, past operations with the cabinet doors improperly secured indicated a poor questioning attitude on part of the Unit 1 operators, in that they failed to recognize the potential safety concern associated with the condition.
1/23/98	Negative	IR 97-12	N	OPS	5C 4B	Upon identification that the SRV position indication at the Unit 2 remote shutdown panel (RSP) was unreliable during a control room fire due to a portion of the cabling and components being contained with the control room fire-zone, NMPC engineering staff recommended the incorporation of a caution in the RSP procedure regarding the potential unavailability of the indication. Since the loss of SRV position indication could have been confusing to the operators during a plant shutdown from the RSP, the inspectors considered the time to the scheduled procedure revision date to be excessive, and the licensee promptly incorporated the caution statement.
1/23/98	NCV Positive	IR 97-12 NCV 97-12-01	L	OPS	4A 5B	NMPC identified that the Unit 2 condensate storage tank building temperatures were not being maintained in accordance with the UFSAR, and took appropriate corrective action to change the temperature control switches to the proper set point. Additionally, NMPC identified that the capacity of the building heaters needed upgrading to maintain desired temperature; this was appropriately evaluated and adequate compensatory actions were established. This licensee identified and corrected violation was not cited.
1/23/98	Positive	IR 97-12	N	OPS	1A 3A	The shift brief for the newly-installed emergency cooling condenser keepfull modification was synergistic and provided sufficient detail on the system hardware and operation. The conduct of control room activities during the Unit 1 plant startup following repairs to the condensers was good and improved compared to previous startups. The overall reactor startup appeared to run smoother than previous startups due to the improvement in control rod drive performance.



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1/23/98	Positive	IR 98-03	N	OPS	3B	The inspectors determined the Unit 1 applicants were well prepared for the examination and met all regulatory eligibility requirements.
1/23/98	Negative	IR 98-03	N	OPS	3B 3C	NRC IR 97-08(OL) documented significant areas of difficulty identified by NRC of an NMP-2 initial license written examination. There was apparent ineffective corrective actions to improve the quality of subsequent initial examination submittals.
1/23/98	Negative	IR 98-03	N	OPS	3B 3C	An assessment of the initial examination submittal consisting of the written, job performance measures and operating tests found that the submittal was inadequate. A revised examination did not require additional modification.
11/8/97	Negative	IR 97-11	L	OPS	5B 4B	NMP1 operations staff operability evaluation for the channel 12 GEMAC, though reasonable, did not probe deep enough into all potential reference leg leakage paths.
11/8/97	Positive	IR 97-11	L	OPS	2A 3C	An NMP2 SSS's oversight & questioning attitude was good & identified improper APRM gain setting adjustments.
11/8/97	Positive	IR 97-11	N	OPS	1A 3C	Control room activities during an NMP2 shutdown were well-coordinated, with good supervisory command & control.
10/4/97	Positive	IR 97-07	N	OPS	2A 3A	System walkdowns & performance history reviews indicated that the material condition of NMP2 SLCS was good, and that the system has demonstrated a high level of reliability. The knowledge level of the technicians and operators observed during the performance of a test was good. Some minor poor work practices were observed.
10/4/97	Positive	IR 97-07	N	OPS	1A 3B 3A	Special simulator training resulted in good operating crew performance during the 9/15/97 manual reactor shutdown at NMP1. During the unit shutdown, CROs' use of alarm response procedures, 3-part communications, & self/peer checking were noticeably improved.
9/10/98	EEI	IR 98-09 EEI 98-09-01	L	MAINT	1A 3A 3C	During preparations for maintenance on the Unit 1 containment spray system, the markup for isolation of the system was inadequate, resulting in a breach of the primary containment integrity. This issue remains open pending the NRC inspectors' review of NMPC's completed root cause analysis and determination of corrective actions to prevent recurrence.
7/23/98	Strength	IR 98-12	N	MAINT	5A 5B 5C	The licensee's self assessment, provided substantial improvements to the MR program. An aggressive program was in place to continue self monitoring by the licensee.
7/23/98	Positive	IR 98-12	N	MAINT	3B 3C	System engineers and operations department personnel were knowledgeable of the MR, and their associated duties and responsibilities were adequate to ensure it's implementation.



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
7/23/98	Positive	IR 98-12	N	MAINT	2B 1C 1A	The licensee used appropriate administrative controls for the conduct of on-line maintenance. A review of completed and planned on-line work activities identified through risk assessments for the activities reviewed. Responsible work control staff interviewed demonstrated good knowledge and use of the risk assessment computer software.
7/23/98	Strength	IR 98-12	N	MAINT	2B 3A	The licensee's systematic approach to the development of the risk monitor from the enhanced PRA model was considered a strength. The team concluded that integrating the individual plant examination of external events (IPEEE) and containment functions into the current PRA model made it a comprehensive risk evaluation tool.
7/23/98	Positive	IR 98-12	N	MAINT	2B	The licensee's approach to balancing unavailability and reliability adequately contributes to preventing failures of SSCs while minimizing unavailability as required by the MR.
7/23/98	Positive	IR 98-12	N	MAINT	2B 5A	The periodic assessment was timely and adequate.
7/23/98	NCV Positive	IR 98-12 NCV 98-12-01	L	MAINT	2B 5A 5C	The licensee's SSC scoping, function identification, and system boundary descriptions were acceptable. However, the licensee added 13 SSCs to the MR scope after the required implementation date of July 10, 1996. The licensee was credited with identifying and correcting a violation of 10 CFR 50.65.
7/23/98	Positive	IR 98-12	N	MAINT	2B 5C	SSC performance criteria for reliability and unavailability were conservatively established, and were directly related to the failure rates assumed in the PRA. Appropriate corrective actions were taken when an SSC failed to meet its goal, performance criteria, or experienced a functional failure. The condition monitoring program, for structures, was good and the overall material condition of the SSCs walked down was good.
7/23/98	Positive	IR 98-12	N	MAINT	2B 1C	The licensee's approach to performing risk ranking of structures, systems and components (SSCs) for the Maintenance Rule (MR) was acceptable. Performance criteria for reliability and unavailability was commensurate with the assumptions in the enhanced probabilistic risk assessment (PRA) model for the sampled systems. Decisions by the expert panel, regarding performance criteria, and their knowledge of online and shutdown risk assessment were appropriate to effectively implement the requirements of the maintenance rule.
8/5/98	Positive	IR 98-06	N	MAINT	4C 3A 1C	The Unit 2 post-refueling hydrostatic test procedure was well written, and provided good instructions for control of activities. The inspections performed by NMPC during the test were comprehensive, and the licensee made the required repairs to reduce the total leakage to within specified acceptance criteria. The licensee took the necessary actions to request and obtain NRC approval for relief from the ASME Code requirements for noted leakage.



# NINE MILE 1. & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
8/5/98	Positive	IR 98-06	N	MAINT	4C 3A 1C	The second ten-year inservice inspection plan for Unit 2 was updated to reflect industry operating experience. The bases for selected relief requests were valid and accurate. Core shroud inspections were conducted in accordance with industry guidelines. NDE personnel were trained in accordance with the industry standards.
7/7/98	VIO	IR 98-05 VIO 98-05-02	L	MAINT	2B 4B	During this inspection period, the NMPC staff self-identified that the TS required service test of the Unit 2 Division I battery was not completed during the previous two refueling outages. NMPC had improperly credited the battery cyclic performance test for satisfying the requirements of the service test. NMPC requested and was granted a Notice of Enforcement Discretion (NOED) to avoid the consequential TS required shutdown. The NOED was exited on May 2, 1998 upon the unit achieving Cold Shutdown conditions and the service test was completed satisfactorily on May 7, 1998. Notwithstanding, the failure to have properly service tested the Division I battery, since April 1995, is a violation of TS 4.8.2.1.d.
5/27/98	Positive	IR 98-02	N	MAINT	2A 3A 2B	The recent lubrication procedure improvements at both units were good. Program enhancements at Unit 2 have been effective in eliminating component unavailability related to the lubrication program. The inspectors considered that past operator training and lubrication procedures at both units were weak and that some individuals exercised poor judgement when adding grease. Overall, the lubrication programs at both units were acceptable.
5/27/98	VIO	IR 98-02 VIO 98-02-05	N	MAINT	3A 5B 2B	During troubleshooting of the Unit 1 control room ventilation system temperature control valve, an unanticipated repositioning of the control room ventilation system dampers occurred. This resulted in the control room emergency ventilation system being declared inoperable. The inspectors determined that the planning for the troubleshooting should have identified the impact on the dampers. The failure to have identified this plant impact during the work order preparation was a violation of TS 6.8.1. (VIO 50-220/98-02-05)
2/14/98	VIO	IR 98-01 VIO 98-01-03	N	MAINT	2B 5A	Based upon the NRC inspector's questions, NMPC management declared the Unit 1 liquid poison system inoperable. Portions of the system piping had not been periodically flow tested and NMPC was unable to readily ascertain whether the piping from the liquid poison tank to the pump suction valves was obstructed. NMPC's decision to declare the liquid poison system inoperable and commence a shutdown was conservative, and the actions taken to test the system were appropriate. The special evolution brief was thorough. Although the previous Unit 1 liquid poison system surveillance testing met TS, the testing was inadequate to verify system operability. This was a violation of 10CFR50, App B, Crit XI.
2/14/98	Positive	IR 98-01	N	MAINT	5B	NMPC appropriately evaluated the impact of a leaking fuel delivery valve on the operability of the Unit 2 emergency diesel generator.





# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
1/23/98	Positive	IR 97-12 LER 97-14	N	MAINT	5B	Licensee's actions were appropriate in response to an unexpected isolation of the Unit 1 vent and purge system that occurred during radiation monitor troubleshooting. The licensee's root cause of the event was reasonable and the Station Operating Review Committee's review of the event maintained the proper safety focus.
1/23/98	Negative	IR 97-12	S	MAINT	3A 2B	Due to inattention during a surveillance test, a Unit 2 technician inadvertently inserted a circuit card extender upside down, causing a reactor protection system half-scam signal. In addition, the surveillance test procedure did not contain a precautionary note which could have warned the technician of the potential plant impact if the card were incorrectly inserted.
1/23/98	Positive	IR 97-12	N	MAINT	3A 1C	Pre-evolution briefs for the Unit 1 emergency cooling condenser capacity test were detailed and safety-focused. Operators demonstrated a questioning attitude and the briefs were synergistic. The control room environment was very good and clear and formal three-part communications were consistently used.
1/23/98	Positive	IR 97-12	N	MAINT	2B 3A 1C	A Unit 1 emergency cooling condenser hydrostatic test pre-evolution brief was adequate. Communications during the test were good, in that formal three-way communications were consistently used. Operations and inservice testing supervision provided good oversight and assistance, which resulted in a well-coordinated evolution.
11/8/97	Negative	IR 97-11 IR 97-06 VIO 97-06-01	N	MAINT	3A 3C 2B 5C	An I&C technician incorrectly performed a step in a calibration procedure and this was not identified during supervisory review. A 1995 NMP1 main steam break instrument trip channel calibration procedure change was in error and received an inadequate review. In addition, the wrong APRM was adjusted during an NMP2 reactor shutdown. These violations were additional examples of the violations cited in IR 97-06.
11/8/97	Positive	IR 97-11	N	MAINT	3C 2A	NMP2 SW system surveillance tests were performed in a controlled manner. ASSS effectively coordinated testing activities & provided a detailed brief. Operators & technicians used clear three-part communications & adhered to the test procedures.
11/8/97	Positive	IR 97-11	N	MAINT	2B 3C	NMP1 forced outage work scope was adequately managed & appropriately safety-focused.
11/8/97	Positive	IR 97-11	N	MAINT	2A	Material condition of the NMP1 CRD housing support & MSL flow restrictor piping and instrumentation was very good.
10/4/97	VIO	IR 97-07 VIO 97-07-03 LER 97-07	L	MAINT	2B 3A	The discovery by the NMP2 I&C technician of the missed calibration of NMP2 H2 recombiner system components was good, however, the failure to perform TS 4.6.6.1.b.1 was a violation.



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
10/4/97	Negative	IR 97-07	N	MAINT	1C	During a NMP1 EC condenser pipe cutting evolution, a poor safety & radiological work practice was identified, in that, maintenance personnel were using a rubber-gloved hand to remove metal shavings.
10/4/97	Positive	IR 97-07	N	MAINT	3A 5A 2B 2A	During NMP1 EC condenser repair activities, maintenance personnel adhered to work order requirements & all associated procedures & documentation were readily available & the revision current. QA oversight of activities was appropriate. FME controls were appropriately maintained. Material accountability & system cleanliness were well controlled.
9/10/98	NCV	IR 98-09 NCV 98-09-02	L	ENG	4A 4C	At Unit 1, an inadequate engineering evaluation of a 1997 configuration change resulted in a non-conformance with the 10CFR50, Appendix R, Safe Shutdown Analysis, by opening the core spray high point vent valves to address GL 96-06 thermal over-pressurization concerns. Upon identification, NMPC took prompt and appropriate corrective actions. This licensee identified and corrected violation of Appendix R was not cited. (NCV 50-220/98-09-02
9/10/98	NCV	IR 98-09 NCV 98-09-03	L	ENG	4A 4C	During Unit 2 surveillance testing, NMPC identified that both control room air conditioning units were running in parallel, contrary to the intended design. This design vulnerability could have potentially resulted in the system being inoperable, under certain design basis accident scenarios. This licensee identified and corrected violation of 10CFR50, Appendix B, Criterion III, Design Control, was not cited. (NCV 50-410/98-09-03)
7/31/98	Positive	IR 98-10	N	ENG	5A 5C	The Quality Assurance (QA) audits and Independent Safety Engineering Group (ISEG) assessment were thorough and of good quality.
7/31/98	Positive	IR 98-10	N	ENG	5B 5C	The licensee's corrective actions and preventive actions for recurrence for six escalated enforcement items, two violations, and four unresolved items and one inspector followup item were found acceptable. All 13 items were closed.
8/5/98	NCV Positive	IR 98-06 NCV 98-06-05	L	ENG	5A 5B 4C	During their Generic Letter 96-01 review of safety-system logic testing, NMPC identified that portions of the Unit 2 service water pump loss of offsite power (LOOP) automatic start sequencing and the LOOP/loss of coolant accident manual start interlock logic circuit were not being tested as required by TS. Prompt and appropriate actions were taken to demonstrate logic system operability. This licensee identified and corrected surveillance testing deficiency was not cited.



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
8/5/98	NCV Positive	IR 98-06 NCV 98-06-04	L	ENG	5A 5B 4C	During the review of Unit 2 safety system logic testing per Generic Letter 96-01, NMPC identified that a number of logic circuits were not being tested as required by TS. Specifically, these circuits were not being properly test with the alternate offsite supply breaker supplying the divisional bus. Prompt and appropriate actions were taken to demonstrate logic system operability. This licensee identified and corrected surveillance testing deficiency was not cited.
8/5/98	NCV Positive	IR 98-06 NCV 98-06-03	L	ENG	5A 5B 4C	Unit 1 engineering staff identified that since 1990, the reactor vessel level instrumentation could have been indicating as much as 6.5 inches higher than actual. This resulted in the low reactor water level trip settings being non-conservative and outside the allowable values provided in the TS. This licensee identified and corrected violation was not cited.
8/5/98	NCV Positive	IR 98-06 NCV 98-06-02	L	ENG	4A 5A 5C	The Unit 1 design deficiency involving the control room emergency ventilation system and interfacing auxiliary control room fire dampers (reference LER 98-12) was properly identified by the licensee and promptly corrected. Accordingly, this violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," was not cited.
7/7/98	Positive	IR 98-05	N	ENG	5A 2B 5B	The inspectors observed that NMPC's follow-up of the Part 21 report concerning GE SBM-type control switches and their identification of the susceptible switches at Unit 1 was thorough and an example of an improving questioning attitude by the engineering staff.
7/7/98	Positive NCV	IR 98-05 NCV 98-05-05	L	ENG	5A 4B 4C	During a review of the control room emergency ventilation system initiation logic, NMPC determined that the system would not automatically initiate, as required. Specifically, the system would not automatically start as a result of a main steam line break or a loss of coolant accident. This licensee identified and corrected violation of 10CFR50, Appendix B, Criterion XI, "Test Control," was not cited.
7/7/98	Positive NCV	IR 98-05 NCV 98-05-04	L	ENG	2B 4B 5A	During a review of Unit 1 operating procedures, NMPC identified that the normally open vent valves on the containment spray raw water heat exchangers violated secondary containment integrity, in that it provided a potential release path from the reactor building to the environment. This licensee identified and corrected violation of secondary containment integrity requirements was not cited.
7/7/98	Positive	IR 98-05	N	ENG	4A 3A	The design and installation of the new ECCS pump suction strainers appeared adequate to ensure sufficient net positive suction head for the pumps in the event of a loss of coolant accident (LOCA).



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

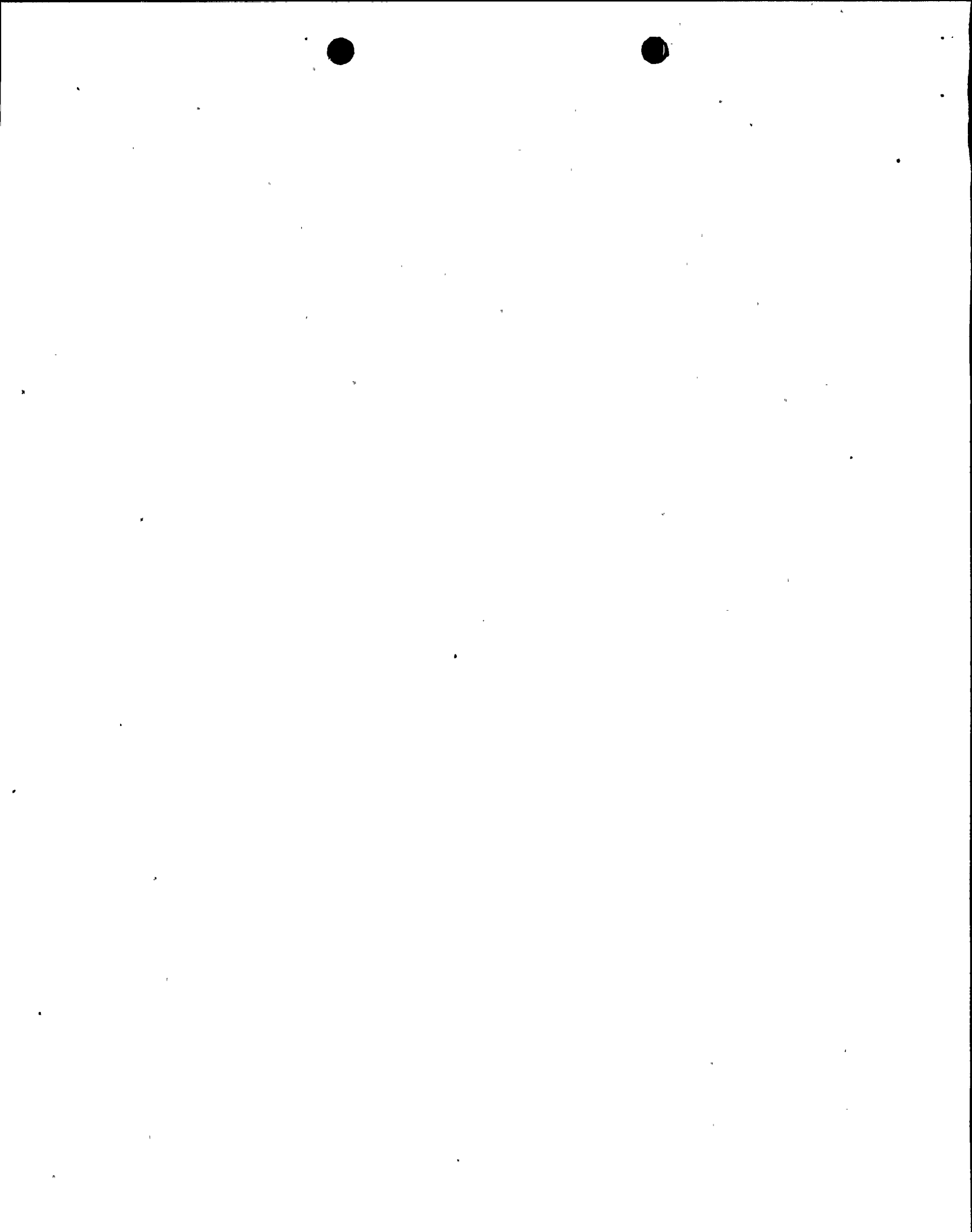
<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
7/7/98	VIO	IR 98-05 VIO 98-05-03	N	ENG	4A 4B 4C	During surveillance testing of the Unit 2 Division II EDG, a fuel leak developed between the fuel filter and the fuel injectors. NMPC determined that the leak was caused by vibration of the fuel supply piping, which caused fretting of the pipe at a pipe support. Subsequent licensee investigation identified notable, but less severe, fretting on the Division I EDG fuel supply piping. The fuel line supports were installed in 1993, but the specific design change to install a protective grommet was not adequately incorporated into the final design package. This is a violation of 10CFR50, Appendix B, Criterion III, "Design Control."
5/27/98	Positive NCV	IR 98-02 NCV 98-02-15	L	ENG	4C 5A 4B	Prior to October 1993, NMPC failed to perform TS logic system functional testing of the reactor vessel high water level main turbine trip at Unit 2 in accordance with an established surveillance test procedure. Fortunately since October 1993, NMPC has tested this trip function per a repetitive work order. This licensee identified and corrected violation was not cited.
5/27/98	Positive NCV	IR 98-02 NCV 98-02-14	L	ENG	5A 4B 4C	At Unit 2, probabilistic risk arguments were incorrectly used to justify less restrictive pipe stress limits in seismic qualification analyses for temporary shielding. Based on the analyses, the temporary shielding installed during refueling outages in 1992, 1993, 1995, and 1996, resulted in four systems exceeding allowable pipe stresses. This licensee identified and corrected violation was not cited.
5/27/98	Positive NCV	IR 98-02 NCV 98-02-11	L	ENG	4C 4B 3A	The engineering calculations, supporting analyses, temporary modifications, and safety evaluations associated with the operability determination for the degraded condition of the Unit 1 control room emergency ventilation system (CREVS) were generally well prepared. The inspectors identified that 1991 calculations projected, under worst case conditions, that the CREVS may not have been able to maintain the control room temperature below the UFSAR value of 75°F. This minor 10 CFR 50, Appendix B, Criterion XVI violation was not cited.
5/27/98	VIO	IR 98-02 VIO 98-02- 08,09,10	N	ENG	4A 4B 4C	NMPC's failure to properly maintain the control room emergency ventilation system design attributes and to properly test the system to demonstrate operability in accordance with the UFSAR is a violation of 10 CFR 50, Appendix B, Criteria III and XI. (VIO 50-220/98-02-08, -09, and -10). The immediate actions taken by the NMPC staff to initiate a detailed design review, implement interim compensatory measures, and to report this problem in accordance with 10 CFR 50.72 and 50.73 were determined to have been appropriate.





# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
5/27/98	Positive NCV	IR 98-02 NCV 98-02-07	L	ENG	5A 5C 4C	During their Generic Letter 96-01 review of safety-system logic testing, NMPC identified that portions of the loss of power/degraded voltage circuitry at Unit 2 were not being tested as required by TSs. Prompt and appropriate corrective actions were taken to demonstrate logic system operability. This licensee identified and corrected surveillance testing deficiency was not cited.
2/14/98	Positive	IR 98-01 Part 21	N	ENG	4B 3C	NMPC responded quickly and appropriately to a vendor notification related to a possible failure of spring-return switches used in the emergency cooling and containment spray systems at Unit 1. Control room operators were aware of the potential failure mode; however, the associated operating procedures were not revised to include a precautionary note related to the concern.
2/14/98	Positive	IR 98-01	N	ENG	5A 4B 3A	The licensee's actions at both units to address an industry concern with potentially defective emergency diesel generator air start solenoid valves was timely and technically sound.
2/14/98	NCV Negative	IR 98-01 NCV 08-01-09 LER 97-16	L	ENG	2B	NMPC identified that a portion of the Unit 2 testing for the recirculation pump trip in response to an ATWS was not completed in accordance with the TS. Specifically, the logic system functional testing failed to include the high reactor pressure trip of the low frequency motor generator. In addition, the failure to specify an acceptability range for the lower frequency motor generator time delay in the subsequent procedure change procedure indicated weaknesses in the procedure and in the review of the associated procedure change. Furthermore, in December 1996, NMPC missed an opportunity to identify the inadequate surveillance test due to a non-conservative interpretation of the UFSAR. This licensee identified and corrected violation was not cited.
2/14/98	NCV Negative	IR 98-01 NCV 98-01-07 NCV 98-01-08 LER 97-13	L	ENG	5B 3C	Prior to April 30, 1992, Unit 2 operated with circuit breakers in the racked out position, and failed to recognize the adverse impact on switchgear seismic qualification and, therefore, switchgear operability. Although NMPC took appropriate actions in 1992 to preclude future operations with breakers in the racked out position, they failed to recognize that they were in an unanalyzed condition, and that the condition was reportable. This licensee identified and corrected violation was not cited.



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
2/14/98	VIO	IR 98-01 VIO 98-01-06	N	ENG	5B 3C 2A	The inspectors identified that the temperature control valve for the Unit 1 control room emergency ventilation system had been inoperable since 1983. The administrative controls to disposition the failed valve had not been properly implemented; i.e., the controlled drawings did not indicate the inoperable valve, nor was an engineering evaluation performed, as required by procedures, to determine if continued operation with the degraded condition was acceptable. This was a violation of TS 6.8.1.
1/23/98	NCV Negative	IR 98-01 NCV 98-01-05	N	ENG	5A 3C	The inspectors identified that NMPC failed to perform a design change for permanently installed scaffolding. This minor procedural violation was not cited.
2/14/98	NCV Positive	IR 98-01 NCV 98-01-04	L	ENG	3A 2B 4B	As a result of a good questioning attitude by a system engineer, NMPC identified that maintenance on the Unit 1 SW drag valve in the reactor building violated secondary containment integrity. Past maintenance on the valve exceeded the allowable LCO outage time, and a reactor shutdown had not been initiated in accordance with TS. This licensee identified and corrected violation was not cited.
1/23/98	Positive	IR 97-12 Part 21 Notification	N	ENG	4B 5B	The licensee's review of an industry concern regarding possible communication between the drywell and the wetwell was appropriate, and their evaluation of other possible evolutions which created a drywell-to-wetwell flow path was good. Actions taken at both units to address identified discrepancies were adequate.
1/23/98	VIO	IR 97-12 VIO 97-12-07 LER 97-12	L	ENG	4B 5A	The 1997 engineering review of the Unit 1 Safe Shutdown Analysis and Fire Protection Engineering Evaluation documents was good, in that it disclosed previous engineering deficiencies, particularly that emergency lighting required to support alternate shutdown of the plant was missing. However, earlier reviews of these documents were weak in that they failed to identify these deficiencies. This was a violation of 10CFR50, Appendix R.
1/23/98	NCV Negative	IR 97-12 LER 97-12 NCV 97-12-06	L	ENG	5A 4B 5B	Prior to September 1996, NMPC failed to monitor the Unit 2 relay room temperature, as required by TS. Furthermore, when the licensee identified this issue in 1996, they incorrectly dispositioned it, resulting in a failure to recognize that the condition was reportable, and missed an opportunity to identify other subsequently identified concerns related to the UFSAR description of the control room envelope. This licensee identified and corrected violation was not cited.
1/23/98	VIO	IR 97-12 VIO 97-12-05 LER 97-14	L	ENG	3A 4B 5A	A Unit 2 reactor operator demonstrated a good questioning attitude in identifying that a TS required surveillance test for the rod sequence control system was inadequate. This was a violation of TS4.1.4.2.b.1.



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
1/23/98	NCV Negative	IR 97-12 LER 97-15 NCV 97-12-04	L	ENG	5A 5C 4B	At Unit 2, NMPC's identification of a breach between an equipment qualification classified harsh environment area and a mild environment area, an original construction deficiency, was considered good. Particularly noteworthy was the recognition that in the event of a high energy line break, the breach could result in the potential loss of several safety-related systems. Once identified, the licensee took appropriate actions to repair the breach and to verify no other similar openings. This licensee identified and corrected violation was not cited.
1/23/98	Positive	IR 97-12	N	ENG	4A 4B	The Unit 1 modification of the EC keepfull system was well designed. The modification was installed according to the drawings, and adequately tested.
11/8/97	Positive	IR 97-11	L	ENG	4B	An engineering safety analysis identified a NMP1 GEMAC level instrument reference leg leakage path which was appropriately resolved within the TS allowed outage time.
11/8/97	NCV	IR 97-11 NCV 97-11-05	L	ENG	4A 2B	APRM gain setting adjustments at both units were not performed in accordance with the respective TSs. This licensee identified violation of TS was not cited.
11/8/97	VIO	IR 97-11 VIO 97-11-04	L	ENG	2B 4A	A design review team identified that the positive pressure surveillance test for the NMP2 control room envelope did not include the relay room. This was a violation of TS 4.7.3.e.2.
11/8/97	VIO	IR 97-11 VIO 97-11-05 LER 97-11	L	ENG	4B 2B	The discovery by NMP2 system engineers of missed surveillance testing of APRMs indicated a good questioning attitude; however, the failure to perform these surveillance tests was a cited violation of TS 4.3.1.2.
11/8/97	Positive	IR 97-11	N	ENG	5A	NMPC's self-assessment of procurement activities was critical & in-depth.
10/4/97	NCV	IR 97-07 NCV 97-07-05 LER 97-07	L	ENG	2B 4A 5A 2A	The interface between NMP1 smoke purge system and CREVS was inadequately evaluated during modifications in the early 1980s. NMP1 operator's questioning attitude of the control room smoke purge system was very good & resulted in an engineering operability evaluation of the impact on control room emergency ventilation system operability.
10/4/97	NCV Negative	IR 97-07 NCV 97-07-04	N	ENG	4C	Review in 1996 of the calculations to support the modification to bring the NMP1 blowout panels within the design basis identified minor calculational errors & corrective actions in early 1996 related to the NMP1 blowout panels design control concern had not been fully effective. This violation of 10CFR50, Appendix B, Criterion III was not cited.
10/4/97	Positive	IR 97-07	N	ENG	4B	NMP2 PRA associated with de-energizing one of the two offsite 115 kV supplies for planned maintenance accurately accounted for all equip out of service at the time of maint, & provided a thorough evaluation justifying the conclusion.



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
10/4/97	NCV Negative	IR 97-07 NCV 97-07-01	N	ENG	2B 3A	NMP2 ops considered a catch containment used to collect oil leaking from a RCIC pump gear box to be a permanent installation; however, contrary to NMPC procedure, a plant change request had not been initiated. This minor procedural violation was not cited.
8/5/98	Positive	IR 98-06	N	PS	4C 5A 5C	The licensee established, implemented, and maintained an effective ventilation system surveillance program.
8/5/98	Positive	IR 98-06	N	PS	4C 2B 3A	The licensee established, implemented, and maintained an effective radiation monitoring system program with respect to electronic calibrations, radiological calibrations, system reliability, and tracking and trending.
7/7/98	Positive	IR 98-05	N	PS	1C 5A 5B 5C	The DER system and the self-assessment program were effective in their use to identify, evaluate, and resolve radiological program deficiencies.
7/7/98	Positive	IR 98-05	N	PS	1C 5A 5C	The contractor laboratory continued to implement effective QA/QC programs for the REMP, and continued to provide effective validation of analytical results. The laboratory demonstrated the ability to accommodate and incorporate difficult media and geometries into the program. The programs are capable of ensuring independent checks on the precision and accuracy of the measurements of radioactive material in environmental media.
7/7/98	Positive	IR 98-05	N	PS	1C 2B 3A	ALARA goals were effectively used as a tool to aid radiological planning to minimize radiation exposure. Numerous ALARA initiatives including publication of a pre-outage report, use of cameras, use of temporary shielding, planned reactor vessel nozzle hydro washes, and an attempt to chemically decontaminate the reactor recirculation system demonstrated management support and a commitment to maintaining radiation exposures ALARA.
7/7/98	Negative	IR 98-05	N	4-PS	2B 5A 3C	Procedure S-RPIP-5.4, "Dose Tracking and Timekeeping," lacked clarity with regard to the method for determining the available administrative extremity exposure, and several examples of inaccurate determinations of available administrative extremity exposure were identified.
7/7/98	Positive	IR 98-05	N	PS	3C 1A	Radiological controls for outage work were well planned and health physics personnel maintained close oversight of work.
7/7/98	Positive	IR 98-05	N	PS	2A 1C	Housekeeping was adequate in that aisles and walkways were clear and free of debris, radiological boundaries and postings were clear, and access controls to radiologically controlled areas were effective.





# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
7/7/98	VIO	IR 98-05 VIO 98-05-06	N	PS	2B 3A 5A	Overall, the licensee effectively maintained meteorological monitoring system operability, and satisfactorily performed channel calibrations and channel functional tests for the meteorological instrumentation, with the exception of the wind speed channel. The failure to perform the channel calibration of the wind speed channel according to the channel calibration definition in TS 1.4, in that the accuracy of the entire wind speed channel was not measured from the sensor to the channel output, constitutes a violation of Unit 2 TS 3/4.3.7.3.
7/7/98	Positive	IR 98-05	N	PS	1A 2B	The licensee effectively maintained and implemented the Radiological Environmental Monitoring Program in accordance with regulatory requirements. The licensee performed a comprehensive review of an anomalous indication of Iodine 131 in an environmental milk sample.
5/27/98	Positive	IR 98-02	N	PS	3A 3C	Radiological controls for the Unit 1 1998 Fuel Pool clean out project were thorough and sound, and included lessons learned from industry events and close health physics oversight.
5/27/98	Positive	IR 98-02	N	PS	2B 3C	Radioactive calibration and check sources were well controlled in that procedural guidance for the control and issuance of radioactive sources was clear, storage cabinets for radioactive sources were securely locked, sources were stored in a neat and orderly fashion, and source issuance records for 1998 were complete.
4/21/98	Positive	IR 98-08	N	PS	1C 2A	The licensee was conducting security and safeguards activities in a manner that protected public health and safety in the areas of access authorization, alarm stations, communications, and protected area access control of personnel and packages. This portion of the program, as implemented, met the licensee's commitments and NRC requirements.
4/21/98	Positive	IR 98-08	N	PS	2A 2B	The licensee's security facilities and equipment in the areas of protected area assessment aids and personnel search equipment were determined to be well maintained and reliable and were able to meet the licensee's commitments and NRC requirements.
4/21/98	Positive	IR 98-08	N	PS	3A 3B	The security force members (SFMs) adequately demonstrated that they have the requisite knowledge necessary to effectively implement the duties and responsibilities associated with their position. Security force personnel were being trained in accordance with the requirements of the Plan and training documentation was properly maintained and accurate.
4/21/98	Positive	IR 98-08	N	PS	1A 1C	The level of management support, in general, was adequate to ensure effective implementation of the security program, and was evidenced by adequate staffing levels and the allocations of resources to support programmatic needs.



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4/21/98	EEI	IR 98-08 EEI 98-08-01 EEI 98-08-02	N	PS	5A 5C	The effectiveness of licensee management controls relative to the administration of the security program was a weakness. Management's less than aggressive actions to address and resolve the issues associated with the improper control and storage of SGI resulted in two apparent violations of NRC requirements. The first apparent violation was as a result of the licensee's failure to properly control, store, and classify safeguards information (SGI) and the second apparent violation was as a result of the licensee's failure to properly report the violation in accordance with the requirements of 10 CFR 73.21.
4/21/98	NCV Negative	IR 98-08 NCV 98-08-03	N	PS	1C 5A	In 1996 and 1997, the licensee failed to conduct unannounced drug and alcohol testing at an annual rate equal to at least 50% of the work force as required by 10 CFR 26.24(a)(2). However, the NRC has determined to exercise discretion and refrain from issuing a violation but will issue an NCV.
3/13/98	VIO	IR 98-04 VIO 98-04-02	S	PS	1C 3C	One violation of transportation regulations (10CFR71.5) was identified involving the release of vehicle (flat-bed trailer) for unrestricted use, that exceeded the radiation limits specified in 49CFR173.443.
3/13/98	Positive	IR 98-04	N	PS	1C	A generally effective program for the collection, processing and return to the plant of liquid wastes, and for the collection, processing, storage and transportation of radwaste was established.
1/23/98	Negative	IR 98-01	N	PS	1C 3A 5A	Control room and fire brigade personnel appropriately responded to numerous Unit 1 fire alarm actuations, and the investigation efforts appeared adequately coordinated. However, the failure to fully investigate and resolve previous similar false fire protection system actuations was a weakness and likely contributed to the recent event. Although Unit 1 fire suppression system operability did not appear to be affected by degraded components, the impact of the deficiencies could hinder plant personnel responding to an in-plant fire due to potential multiple false alarms.
1/23/98	VIO	IR 97-12 VIO 97-12-09 LER 97-13	S	PS	3A 1C	An inadvertent automatic isolation of the Unit 1 drywell vent and purge lines, occurred due to personnel inattention-to-detail, particularly a failure to follow procedure. This was a violation of TS 6.8.1.
1/23/98	Positive	IR 97-12	N	PS	2A 1C	An inspection of normally inaccessible areas of the Unit 2 reactor water cleanup system found the material condition of the equipment to be satisfactory, with the condition of the equipment in the valve aisle to be particularly good. Housekeeping in the areas inspected was acceptable, and appropriate radiological controls were established.



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

<i>Date</i>	<i>Type</i>	<i>Source</i>	<i>ID</i>	<i>SFA</i>	<i>Code</i>	<i>Item Description</i>
11/8/97	Negative	IR 97-11 URI 97-11-08	N	PS	2A 4C	NMP2 radwaste facility fire-door removed for over 3 years without being evaluated as a permanent modification. This was considered a weakness in the licensee's breach permit program to have allowed this permit to remain open. This issue was left unresolved pending further NRC review.
11/8/97	Positive	IR 97-11	N	PS	1C	A QA audit of the security program was comprehensive in scope & depth. NMPC security & safeguards programs were effective & received management support.
11/8/97	NCV Negative	IR 97-11 NCV 97-11-07	L	PS	3A 1C	Inattentiveness to postings within the RCA resulted in an NMP2 employee & three visitors entering a posted HRA without authorization. This licensee identified and corrected violation was not cited.
11/8/97	Positive	IR 97-11	N	PS	3A	NMP2 operator performance during examinations was generally good, although communications & command/control were noted weaknesses.
11/8/97	Positive	IR 97-11	N	PS	3B 3C	NMP2 licensed operator requalification training program was effective & the remedial training program remained strong. During NMP2 LORT event recognition & diagnosis, understanding & interpreting alarms, board manipulations, TS usage, event classification performance were good. Facility evaluator's assessments were objective & thorough.
10/4/97	Positive	IR 97-07	N	PS	1C 3C	Plant personnel were trained & equipped to combat a control room fire.
10/4/97	Positive	IR 97-07	N	PS	1C 1B	NMP security personnel response to a "suspicious looking" package was acceptable. Declaration of an UE by the NMP2 SSS was appropriate & in accordance with the NMP2 Emergency Plan.
10/4/97	SL-III	IR 97-07 EA 97-530	S	PS	5A 3A 3C	On three different occasions, NMPC inadequately controlled shipments of radiological material to facilities offsite. 1) shipment shifted during transport & caused radiation levels in occupied space of truck to exceed limits; 2) a wrong liner of low-level radwaste was shipped offsite for disposal; 3) a sample was shipped to an unlicensed facility - a similar occurrence happened in 1995. All of the examples appeared to be due to a lack of procedures describing radwaste operator activities, inattention-to-detail, & a lack of supervisory oversight. (Escalated Enforcement docketed per NRC letter dated 1/22/98, Violations 97-530-1013, 1023, 1033, and 1034 issued. EELs 97-07-07, 09, and 10 closed.)
10/4/97	Negative	IR 97-07 EA 97-530	N	PS	5A	A number of required audits of vendors providing shipping casks were not performed, indicative of a lack of attention by management oversight. (EELs 97-07-12 and 13 withdrawn, 1/22/97)



# NINE MILE 1 & 2 PLANT ISSUES MATRIX

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10/4/97	Negative	IR 97-07 EA 97-530	N	PS	5C 1C	QA program failed to identify the defects within the unit specific PCPs, & in one instance failed to ensure that corrective actions were taken to address an identified defect, indicative of a lack of attention by management. (EEI 97-07-11 withdrawn, 1/22/97)
10/4/97	Positive	IR 97-07	N	PS	2A	At NMP2, plant conditions were generally very good relative to radiological housekeeping in radwaste.
10/4/97	Negative	IR 97-07	N	PS	3C 2A	The lay-up of the NMP1 #11 waste concentrates tank was questionable. Indicative of lack of attention by management.
10/4/97	Negative	IR 97-07 EA 97-530	N	PS	5A 3A 3C	The Process Control Programs and associated procedures have not been properly maintained. Indicative of a lack of attention by management. (EEI 97-07-06 withdrawn, 1/22/97)
10/4/97	Positive	IR 97-07	N	PS	1C	At both units, good programs have been established for the processing of liquid & solid radwaste.
10/4/97	Positive	IR 97-07	N	PS	5A	QA oversight of the RP, ALARA, contamination control, & external dosimetry programs was well implemented; audits & self-assessments were of appropriate scope & technical depth.
10/4/97	Positive	IR 97-07	N	PS	1C	RP program area was being well-implemented at both units.
10/4/97	VIO	IR 97-07 VIO 97-07-02	L	PS	3A	NMP1 RP staff inattention-to-detail & failure to self-check a completed surveillance test data sheet resulted in the failure to perform a ventilation radiation monitor instrument channel calibration within the required frequency. This was a violation of TS 4.6.2.a.
10/4/97	Positive	IR 97-07	N	PS	1C	Radiological controls during NMP1 EC condenser repair activities were satisfactory.
10/4/97	Positive	IR 97-07	N	PS	1C 5A	Questioning attitude of NMP1 chemistry tech & heightened sensitivity of NMP1 staff to the possibility of an EC condenser tube leak were good.





**ABBREVIATIONS USED IN PIM TABLE**

<i>ALARA</i>	<i>As Low as Reasonably Achievable</i>
<i>APRM</i>	<i>Average Power Range Monitor</i>
<i>CFR</i>	<i>Code of Federal Regulations</i>
<i>CRD</i>	<i>Control Rod Drive</i>
<i>CREVS</i>	<i>Control Room Emergency Ventilation System</i>
<i>EC</i>	<i>Emergency Cooling</i>
<i>FME</i>	<i>Foreign Material Exclusion</i>
<i>H<sub>2</sub></i>	<i>Hydrogen</i>
<i>HRA</i>	<i>High Radiation Area</i>
<i>I&amp;C</i>	<i>Instrumentation &amp; Control</i>
<i>NMPC</i>	<i>Nine Mile Power Corporation</i>
<i>NRC</i>	<i>Nuclear Regulatory Commission</i>
<i>PRA</i>	<i>Probabalistic Risk Assessment</i>
<i>QA</i>	<i>Quality Assurance</i>
<i>SLCS</i>	<i>Standby Liquid Control System</i>
<i>SSS</i>	<i>Senior Shift Supervisor</i>
<i>UE</i>	<i>Unusual Event</i>
<i>ATWS</i>	<i>Anticipated transient without scram</i>
<i>TS</i>	<i>Technical Specifications</i>
<i>LCO</i>	<i>Limiting Condition for Operation</i>
<i>SW</i>	<i>Service Water</i>
<i>SRV</i>	<i>Safety Relief Valve</i>



<i>RSP</i>	<i>Remote Shutdown Panel</i>
<i>CST</i>	<i>Condensate Storage Tank</i>
<i>CRO</i>	<i>Control Room Operator</i>
<i>UFSAR</i>	<i>Updated Final Safety Analysis Report</i>



**GENERAL DESCRIPTION OF PIM TABLE COLUMNS**

<b>Date</b>	The actual date of an event or significant issue for those items that have a clear date of occurrence (mainly LERs), the date the source of the information was issued (such as for EALs), or the last date of the inspection period (for IRs).
<b>Type</b>	The categorization of the item or finding - see the Type / Findings Type Code table, below.
<b>Source</b>	The document that describes the findings: LER for Licensee Event Reports, EAL for Enforcement Action Letters, or IR for NRC Inspection Reports.
<b>ID</b>	Identification of who discovered issue: N for NRC; L for Licensee; or S for Self Identifying (events).
<b>SFA</b>	SALP Functional Area Codes: OPS for Operations; MAINT for Maintenance; ENG for Engineering; and PS for Plant Support.
<b>Code</b>	Template Code - see table below.
<b>Item Description</b>	Details of NRC findings on LERs that have safety significance (as stated in IRs), findings described in IR Executive Summaries, and amplifying information contained in EALs.

**TYPE / FINDINGS CODES**

<b>ED</b>	Enforcement Discretion - No Civil Penalty
<b>Strength</b>	Overall Strong Licensee Performance
<b>Weakness</b>	Overall Weak Licensee Performance
<b>EEI *</b>	Escalated Enforcement Item - Waiting Final NRC Action
<b>VIO</b>	Violation Level I, II, III, or IV
<b>NCV</b>	Non-Cited Violation
<b>DEV</b>	Deviation from Licensee Commitment to NRC
<b>Positive</b>	Individual Good Inspection Finding
<b>Negative</b>	Individual Poor Inspection Finding
<b>LER</b>	Licensee Event Report to the NRC
<b>URI **</b>	Unresolved Item from Inspection Report
<b>Licensing</b>	Licensing Issue from NRR
<b>MISC</b>	Miscellaneous - Emergency Preparedness Finding (EP), Declared Emergency, Nonconformance Issue, etc. The type of all MISC findings are to be put in the Item Description column.

**TEMPLATE CODES**

<b>1</b>	Operational Performance: A - Normal Operations; B - Operations During Transients; and C - Programs and Processes
<b>2</b>	Material Condition: A - Equipment Condition or B - Programs and Processes
<b>3</b>	Human Performance: A - Work Performance; B - Knowledge, Skills, and Abilities / Training; C - Work Environment
<b>4</b>	Engineering/Design: A - Design; B - Engineering Support; C - Programs and Processes
<b>5</b>	Problem Identification and Resolution: A - Identification; B - Analysis; and C - Resolution

**NOTES:**

- \* EEIs are apparent violations of NRC requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the EEIs and the PIM entries may be modified when the final decisions are made. Before the NRC makes its enforcement decision, the licensee will be provided with an opportunity to either (1) respond to the apparent violation or (2) request a predecisional enforcement conference.
- \*\* URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.



United States Nuclear Regulatory Commission  
 PLANT ISSUE MATRIX  
 By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
01/02/1999	1998019	Pri: OPS Sec:	NRC	POS	Pri: 1B Sec: 3A Ter:	Good operator performance. On November 24, 1998, Unit 2 was shutdown to troubleshoot and repair the reactor recirculation system flow control valve. During the plant shutdown and subsequent startup, the operators' performance was generally good as evidenced by clear three-way communications, appropriate use of procedures and sufficient management oversight and control. (Section O1.4)
01/02/1999	1998019	Pri: OPS Sec:	Self	POS	Pri: 1B Sec: 3A Ter:	Inadvertant control rod insertion well responded to by operators. On December 30, 1998, a control rod inadvertently inserted as a result of a failed component associated with the control rod drive system. Unit 2 operators responded very well to the abnormal combination of alarms that were received and took conservative actions. Good communication between operators and good management oversight were noted. (Section O1.5)
01/02/1999	1998019	Pri: OPS Sec: MAINT	NRC	POS	Pri: 1B Sec: Ter:	Good focus on shutdown risk. A good focus on shutdown risk was evident during the Unit 2 forced outage to repair the reactor recirculation system flow control valve. (Section O2.1)
01/02/1999	1998019-01	Pri: OPS Sec: MAINT	Licensee	NCV	Pri: 1B Sec: Ter:	Failure to complete JS surveillance test for SRMs and IRMs during shutdown. On November 23, 1998, Unit 2 failed to complete the required technical specification surveillance tests for source range monitors and intermediate range monitors during a plant shutdown. Sufficient controls were not in place to ensure that requirements were met; specifically the shutdown procedure was weak. This licensee-identified and corrected non-compliance is being treated as a Non-Cited Violation. (NCV 50-410/98-19-01) (Section O8.2)
11/21/1998	1998015	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	Loop recovery preps were good. Unit 2 preparations for the recovery from single loop operations that resulted from the November 13, 1998 recirculation flow control valve failure were well performed. The use of simulator training for Unit 2 operators in anticipation of recovery from single loop operations was considered good. (Section O1.3)
11/21/1998	1998015	Pri: OPS Sec:	NRC	POS	Pri: 1B Sec: Ter:	Control room operator response to recirc flow control valve closure On November 13, 1998, the Unit 2 "B" reactor recirculation flow control valve failed closed. Control room operator response to the rapid reduction in power was good. The operators demonstrated a good awareness of the potential for power oscillation due to the power-to-flow condition resulting from the transient. (Section O1.2)
11/21/1998	1998015	Pri: OPS Sec:	NRC	POS	Pri: 1B Sec: Ter:	Operator response to single rod scram good Operator response to a single control rod scram on November 11, 1998 at Unit 2 was good. Technical specification and procedure requirements were appropriately implemented. (Section O2.1)





**United States Nuclear Regulatory Commission**  
**PLANT ISSUE MATRIX**  
 By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
11/21/1998	1998015-01	Pri: OPS Sec:	Licensee	NCV	Pri: Sec: Ter:	<b>UNIT 1 POOR REACTIVITY MANAGEMENT DURING ROD SEQUENCE EXCHANGE.</b> Poor reactivity management at Unit 1 resulted in a control rod being established in an incorrect position during a control rod sequence exchange. Specifically, personnel error during the development of the control rod movement sheets caused the control rod to be in a position that was not as previously planned. The licensee identified and corrected violation is being treated as a Non-Cited Violation (NCV), consistent with Section VII.B.1 of the NRC Enforcement Policy. (NCV 50-220/98-15-01) (Section O1.4)
11/21/1998	1998015-02	Pri: OPS Sec:	NRC	NCV	Pri: Sec: Ter:	<b>UNIT 2 STANDBY LIQUID CONTROL SYSTEM INOPERABLE DUE TO A VALVE INADVERTENTLY LOCKED CLOS</b> On September 11, 1998, the Unit 2 operations staff identified and promptly corrected the improper positioning of a manual isolation valve to the suction of the Division II standby liquid control system pump. The licensee determined that the valve was locked closed vice locked open, since the performance of surveillance testing on August 27, 1998. This licensee identified and corrected violation of Technical Specification 3.1.5.a.1 (reference LER No. 50-410/98-25) is being treated as a Non-Cited Violation (NCV), consistent with Section VII.B.1 of the NRC Enforcement Policy. (NCV 50-410/98-15-02) (Section O8.1)
01/02/1999	1998019	Pri: MAINT Sec:	NRC	NEG	Pri: Sec: Ter:	<b>Weak surveillance test procedures.</b> During routine observations of surveillance testing at Unit 2, two surveillance test procedures were determined to be weak in that specific procedure steps lacked clarity. Personnel were capable of completing the procedures; however, there was the potential to misunderstand what the required actions were. (Section M3.1)
11/21/1998	1998015	Pri: MAINT Sec:	NRC	NEG	Pri: 2A Sec: Ter:	<b>Material condition of recirc flow control system poor.</b> The material condition of the Unit 2 reactor recirculation flow control system was poor as evidenced by the numerous deficiencies identified by Niagara Mohawk Power Corporation during troubleshooting of the November 13, 1998, flow control valve failure. (Section M1.3)
11/21/1998	1998015	Pri: MAINT Sec:	NRC	POS	Pri: 3A Sec: Ter:	<b>Troubleshooting of single rod scram reasonable.</b> Unit 2 troubleshooting efforts for the single control rod scram on November 11, 1998 were reasonable. Although a definite cause could not be determined, corrective and preventive actions were appropriate. (Section M1.2)
10/14/1998	1998018	Pri: MAINT Sec:	NRC	NEG	Pri: 2B Sec: 2A Ter:	<b>IN 95-22 lack of follow-up was a missed opportunity.</b> Satisfactory progress had been made in refurbishing safety-related 4.16 kV Magne-Blast breakers. Although the licensee's planned actions to refurbish safety-related ABB Type HK breakers and safety-related ABB K-Line breakers on an accelerated basis were acceptable, the licensee's previous poor review of Information Notice 95-22 reflected a missed opportunity to establish a more timely refurbishment program. As a result, many ABB K-Line breakers exceeded the 10-year recommended interval for refurbishment and showed indication of lubrication degradation. (M2.3)
10/14/1998	1998018	Pri: MAINT Sec:	NRC	NEG	Pri: 2B Sec: 5A Ter:	<b>Licensee's operating experience review program was weak.</b> The licensee's operating experience review (OER) program to review industry events and problems was weak. In many cases, the reviews were narrowly focused, without considering generic applicability. Some reviews were performed by personnel not familiar with plant equipment, resulting in inappropriate conclusions. Although some of the weak reviews were identified by the licensee in their self-assessment audits, the team identified additional examples. The past incomplete reviews missed the opportunities to prevent two breaker failures. The OER program procedure did not provide guidance for detail reviews to determine generic applicability of NRC INs. (M6.1)



**United States Nuclear Regulatory Commission**  
**PLANT ISSUE MATRIX**  
 By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
10/14/1998	1998018	Pri: MAINT Sec:	NRC	NEG	Pri: 2B Sec: 5A Ter:	Vendor interface was weak. The licensee's vendor interface program for medium-voltage and low-voltage breakers was weak. The vendor manual binders were poorly organized, incomplete and contained irrelevant materials. The licensee's "periodic re-contact" of breaker vendors was ineffective. There were cases where incorrect vendor department or inappropriate vendor personnel were contacted. Although many of the examples were identified by the licensee in their self-assessment audits, others were identified by the NRC team. (M6.2)
10/14/1998	1998018	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: Ter:	Physical condition of breakers good The physical condition of safety and nonsafety-related breakers was good. The switchgear was located in clean, well maintained and adequately lighted areas. The technicians performing breaker testing were knowledgeable and familiar with breaker test requirements. The safety-related breakers at NMP2 had performed acceptably during the past five years. (M2.1, M2.2)
10/14/1998	1998018	Pri: MAINT Sec:	NRC	POS	Pri: 2B Sec: Ter:	Treatment of breakers under the Maintenance Rule was consistent with industry practise. The licensee's treatment of power circuit breakers under the Maintenance Rule (MR) was consistent with MR requirements and industry practices. The licensee's close review of breaker performance by class associated with standard-MR-performance-monitoring had helped to identify and to provide prompt corrections of common breaker problems caused by inadequate preventive maintenance in the past. (M6.3)
10/14/1998	1998018	Pri: MAINT Sec:	NRC	POS	Pri: 2B Sec: 3A Ter:	PM program for med-voltage and low-voltage breakers was generally good. The licensee's PM programs for medium-voltage and low-voltage breakers were generally good and had incorporated most vendor-recommended preventive maintenance actions, and recommendations identified in NRC Information Notices (IN). The Magne-Blast breaker procedures had been recently improved to include reduced-control-voltage testing. Examples in which procedures deviated from accepted industry practices were identified. During the inspection, the licensee initiated actions to include further improvements to the procedures. (M3.1, M3.2)
10/14/1998	1998018	Pri: MAINT Sec:	NRC	POS	Pri: 2B Sec: 5A Ter:	Self-assessments in the area of med- and low-voltage breakers were good. The licensee's self-assessment audits for the medium-voltage and low-voltage breakers program were good, resulting in many significant findings in the operating experience review and breaker vendor interface areas. The audit reports were of good quality. However, at the time of the inspection, the resolutions for most of the audit findings were not yet complete. Also, the team identified additional examples of problem in areas identified by the licensee as being weak. (M7.1)
10/14/1998	1998018	Pri: MAINT Sec:	NRC	POS	Pri: 5A Sec: 5C Ter:	WRs and DERs involving breakers were well documented. The work requests and Deviation/Event Reports (DER) were well documented. Corrective actions were appropriate and timely. The root cause evaluation and apparent cause evaluations were well documented, thorough, and contained appropriate recommended corrective actions. (M4.1)
01/02/1999	1998019-02	Pri: ENG Sec:	Licensee	NCV	Pri: 4B Sec: Ter:	Difficulties in controlling Unit 2 reactor vessel water level during startup. An inadequate review associated with the Unit 2 depleted zinc oxide injection modification, installed in June 1998, resulted in an unexpected rise in reactor vessel water level during the November 30, 1998, plant startup. This licensee identified and corrective violation of design control was treated as a non-cited violation. (NCV 50-410/98-19-02) The Unit 2 review of the unexpected rise in reactor vessel water level was technically sound and NMPC appropriately revised the operating procedures to prevent recurrence. However, a weakness was noted with the documentation of corrective action in the deviation/event report in that the evaluation did not include the ongoing evaluation of the modification process. (Section E1.2)

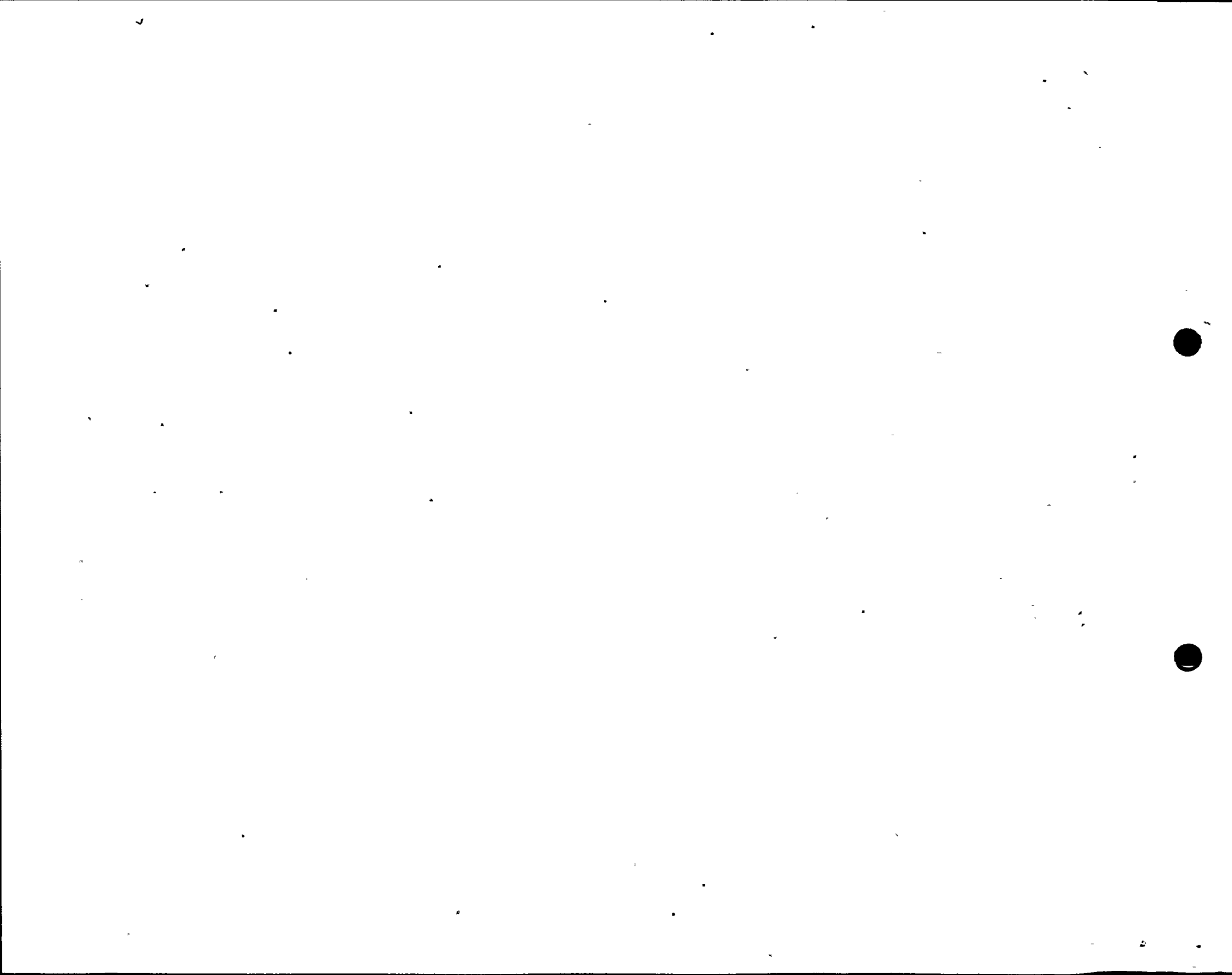


## United States Nuclear Regulatory Commission

## PLANT ISSUE MATRIX

By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
01/02/1999	1998019-04	Pri: ENG Sec:	Licensee	NCV	Pri: 4A Sec: 4C Ter:	Systems did not meet design requirements due to pipe stresses. Niagara Mohawk Power Corporation demonstrated a good questioning attitude when they identified that the weight of 522 safety-related valves at Unit 2 was greater than the weight shown on the vendor valve drawings. Following a comprehensive and thorough evaluation, the licensee determined that a total of five valves within residual heat removal, reactor core isolation cooling and reactor building floor drain systems caused the associated piping not to meet design requirements under all conditions.
01/02/1999	1998019-05	Pri: ENG Sec:	Licensee	NCV	Pri: 4A Sec: 4C Ter:	RCIC logic design deficiency. Niagara Mohawk Power Corporation demonstrated a good questioning attitude during their Generic Letter 96-01 review by identifying an unrelated discrepancy associated with three motor-operated valves within the Unit 2 reactor core isolation cooling system. Specifically, the seal-in contacts within the control circuits of these valves were in series with overload relay contacts. Should the overload relays trip in conjunction with a transitory RCIC initiation signal, the seal-in function would have been lost, rendering the system incapable of performing the design function. This discrepancy existed from initial plant startup until it was unknowingly corrected by an unrelated modification in December 1993.
11/21/1998	1998015	Pri: ENG Sec:	NRC	NEG	Pri: 4B Sec: 5A Ter: 5C	Poor management oversight to complete timely repairs The failure to complete timely repairs to the Unit 2 recirculation system flow control valve isolation coils indicated poor management oversight. Work prioritization failed to recognize the impact that the failed recirculation system hydraulic power unit isolation coils could have on reactivity control. (Section E1.1)
11/21/1998	1998015	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: Ter:	Engineering troubleshooting of recirc flow control valve methodical. Unit 2 troubleshooting was methodical, thorough and provided a technically sound explanation of the failure of the recirculation system flow control valve to lock in the as-is position during the event. However, the initiating cause of the event was not positively identified. (Section E1.1)
11/21/1998	1998015-03	Pri: ENG Sec:	NRC	NCV	Pri: Sec: Ter:	UNIT 2 SINGLE FAILURE CRITERION FOR SPENT FUEL POOL COOLING. While this inconsistency represented a violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," it was not a condition that could have reasonably been prevented by corrective actions for previous similar violations. This licensee identified and corrected violation is being treated as Non-Cited Violation consistent with Section VII.B.1 of the NRC Enforcement Policy. (NCV 50-410/98-15-03)
11/21/1998	1998015-04	Pri: ENG Sec:	NRC	NCV	Pri: Sec: Ter:	UNIT 2 INOPERABLE GASEOUS EFFLUENT MONITORING SYSTEM. From September 29, 1998 until October 8, 1998, the Unit 2 main stack effluent monitoring instrumentation portion of the gaseous effluent monitoring system was inoperable. The cause was that an alternate power supply had been established to facilitate maintenance, but was inadequate. NMPC determined that a lack of rigor during the technical review process contributed to the problem. Proper corrective actions were taken. The inadequate development of the alternate power supply was determined to be a violation of 10 CFR 50, Appendix B, Criterion III, "Design Control." However, this licensee identified and corrected violation is being treated as a Non-Cited Violation, consistent with Section VII.B.1 of the NRC Enforcement Policy. (NCV 50-410/98-15-04) (Section E8.3)



**United States Nuclear Regulatory Commission**  
**PLANT ISSUE MATRIX**

By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
11/02/1998	1998016-01	Pri: ENG Sec:	NRC	URI	Pri: 4A Sec: 4C Ter:	Licensee evaluation did not consider potential issues associated with a change involving an unreviewed safety performed. 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)
11/02/1998	1998016-02	Pri: ENG Sec:	NRC	VIO IV	Pri: 4B Sec: 5A Ter:	Failure of licensee to identify and correct a low flow condition to a core spray pump motor cooler. 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)
10/26/1998	1998016	Pri: ENG Sec:	NRC	POS	Pri: 1C Sec: 3A Ter:	Engineering adequately assured design and licensing basis was met. 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)
10/26/1998	1998016	Pri: ENG Sec:	NRC	POS	Pri: 4C Sec: Ter:	Design, implementation, and testing of modifications has been generally effective. 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)
10/14/1998	1998018	Pri: ENG Sec:	NRC	NEG	Pri: 4B Sec: 3A Ter:	Control circuit voltage drop calculations were weak. The licensee's control-circuit-voltage-drop calculations were weak. The calculations required several corrections during the team's reviews. The basis for assuring safety-related breakers had sufficient control-voltage for proper breaker operations was initially not well developed, and required the development of an operability determination and additional, revised testing of the breakers. (E8.1)
11/21/1998	1998015	Pri: PLTSUP Sec:	NRC	NEG	Pri: 3A Sec: Ter:	June 17 security event - performance weakness. On June 17, 1998, a security force member left a post prior to ensuring that the intrusion detection aids were functioning properly. The inspector concluded, based on observation of the area in question, discussions with security supervision, and procedural reviews, that there was no violation of NRC requirements as security was not compromised. However, procedural weakness were noted which were associated with the deactivating and securing of intrusion detection aids. (Section S2)





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 By Primary Functional Area

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11/21/1998	1998015	Pri: PLTSUP Sec:	NRC	POS	Pri: 1A Sec: Ter:	Outage ALARA was good. Unit 2 effectively planned and implemented specific ALARA initiatives during the sixth refueling outage including hot spot and system flushes, reactor vessel nozzle hydrowashes, and temporary shielding. However, the overall ALARA goal for 1998 was exceeded due to deficiencies in planning, coordination and communication of outage work; a 24% increase in outage scope growth; and cancellation of a planned chemical decontamination of the recirculation system. (Section R1)
11/21/1998	1998015	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Self assessments in the RP area effective. Deviation event reports, self-assessments, and quality assurance audits were effectively used to identify a declining trend in the radiation dosimetry program and to initiate corrective actions. (Section R7)
11/21/1998	1998015	Pri: PLTSUP Sec:	NRC	POS	Pri: 2B Sec: Ter:	Good ALARA noted. Unit 1 exhibited effective performance in maintaining radiation exposures as low as is reasonably achievable (ALARA) in 1998 as evidenced by being on pace to receive the lowest collective dose in station history in spite of significant challenges including a forced outage, a cleanup of the spent fuel pool, and on-line level switch work in feedwater heater bays. (Section R1)
11/21/1998	1998015	Pri: PLTSUP Sec:	NRC	POS	Pri: 2B Sec: 2A Ter:	High Rad access control good, and housekeeping effective. Access to high radiation areas was effectively controlled with radiation work permits, health physics briefings, and locked doors. Housekeeping was effectively maintained as evidenced by clear aisles and walkways in both Unit 1 and 2 reactor buildings. Efforts to improve material conditions in the Unit 1 No. 11 concentrated waste tank room was effective in that encrusted concentrates had been removed from floors and piping, and the room was cleared of loose debris including paper, trash, and asbestos. (Section R2)
11/21/1998	1998015	Pri: PLTSUP Sec:	NRC	POS	Pri: 4C Sec: 5A Ter: 5C	DERs effectively used to address RP problems. Deviation event reports were effectively used to document, evaluate, and resolve radioactive waste and transportation issues as evidenced by thorough reviews, accurate causal analyses, and corrective actions which specifically address identified root causes. (Section R7)



## ENCLOSURE 2

## NINE MILE POINT INSPECTION PLAN

INSPECTION	TITLE/PROGRAM AREA	PLANNED DATE	INSPECTION TYPE
IP 86750	Solid Rad. Waste Management and Transportation of Radioactive Material	04/05/99	Core Inspection
IP 37700	Design Changes and Modifications	04/12/99	Regional Initiative
IP 83750	Occupational Radiation Exposure (Outage)	04/12/99	Core Inspection
IP 73753	Inservice Inspection	04/19/99	Core Inspection
TI 2515-Y2K	Review of Year 2000 Readiness for Computer Systems at Nuclear Power Plants	05/31/99	Safety Issue Review
IP 61725	Surveillance Testing and Calibration Control Program	TBD	Regional Initiative
IP 37750	Engineering	08/23/99	Core Team Inspection
IP 84750	Radioactive Waste Treatment, and Effluent and Environmental Monitoring	09/06/99	Core Inspection
IP 83750	Occupational Radiation Exposure (Non-Outage)	09/13/99	Core Inspection
IP 71001	Licensed Operator Requalification Program Evaluation	11/01/99	Core Inspection
IP 37550	Engineering	11/15/99	Regional Initiative
U01255	Initial Operator License Examination Preparations	11/15/99	Operator Licensing
U01255	Initial Operator License Examinations	12/06/99	Operator Licensing

