

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

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Licensee: Niagara Mohawk Power Corporation
301 Plainfield Road
Syracuse, New York 13212
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Inspection Summary: This inspection report documents routine and reactive inspections of plant operations, radiological controls, surveillance, maintenance, emergency preparedness, security, engineering and technical support and safety assessment/quality verification activities.

Results: See Executive Summary.



TABLE OF CONTENTS

	<u>Page</u>
Executive Summary	
1.0 Summary of Facility Activities	1
1.1 Facility Operations - Unit 1	1
1.2 Facility Operations - Unit 2	1
1.3 NRC Activities	1
2.0 Plant Operations (71707, 71710, 93702)*	2
2.1 Routine Plant Operations Review - Unit 1	2
2.2 Control of Make-up Demineralizer - Unit 1	2
2.3 Review of Operation of Auxiliary Boilers - Unit 1	4
2.4 Review of a Restart Preparation "Near Miss" - Unit 1	5
2.5 Routine Plant Operations Review - Unit 2	5
2.6 Containment Purge Valve Leak Test Failure - Unit 2	6
2.7 Reactor Core Isolation Cooling System Initiation - Unit 2	6
2.8 Turbine Building Closed Loop Cooling Systems Observation - Unit 2	7
2.9 Diesel Generator Annunciator Problem - Unit 2	7
2.10 Spurious Containment Isolations - Unit 2	8
2.11 Previously Identified Items - Unit 1	8
3.0 Maintenance and Surveillance Observations (62703, 61726)	8
3.1 Observation of Maintenance Activities - Units 1 and 2	8
3.2 Observation of Surveillance Activities - Units 1 and 2	10
3.3 Previously Identified Items - Unit 2	11
4.0 Engineering and Technical Support (71707)	11
4.1 Part 21 Fuel Injection Concern - Unit 2	11
4.2 Previously Identified Items - Unit 2	12



Table of Contents (Continued)

	<u>Page</u>
5.0 Safety Assessment and Quality Verification (71707, 40500)	12
5.1 Review of Licensee Event and Special Reports - Unit 2	12
5.2 Review of Offsite Review Committee Meeting	12
5.3 Review of Nuclear Division Policy and Directives Manual	13
6.0 Management Meetings (71707)	13

* The NRC inspection manual procedure or temporary instruction that was used as inspection guidance is listed for each applicable report section.



Executive Summary

Nine Mile Point Combined Inspection Report Report No. 50-220/91-09 & 50-410/91-09 03/31/91 - 05/11/91

Plant Operations

Unit 1 operations performance was good during this inspection period. A non-cited violation was identified by the inspector concerning poor control of a make-up demineralizer system.

Unit 2 operations performance was good during this inspection period. Plant startup following an unplanned outage was performed well. A temporary waiver of compliance for continued operation with a failed containment purge system isolation valve was granted. There were three inadvertent engineered safety feature actuations caused by equipment problems. An example of poor follow through of a known deficiency was identified by the inspector concerning high service water differential pressure across the turbine building closed loop cooling heat exchangers.

Surveillance and Maintenance

Maintenance and surveillance activities observed at both units were generally well planned and executed. The corrective maintenance performed at Unit 2 on the recirculation loop sample line was an example of excellent team work and management oversight.

Engineering and Technical Support

A Unit 2 Niagara Mohawk response to a Part 21 notification involving defective fuel injectors in Cooper-Bessimer diesels was prompt and comprehensive.

A Unit 2 unresolved item concerning pipe stress analysis deficiencies in the shutdown liquid control system was closed.

Safety Assessment/Quality Verification

The offsite review committee was observed to be thorough and effective in addressing safety significant issues and concerns.

A review of the Nuclear Division Policy and Directives Manual was performed and no concerns were identified.

Three licensee event reports were reviewed and found to be well written and thorough.



DETAILS

1.0 SUMMARY OF FACILITY ACTIVITIES

1.1 Facility Operations - Unit 1

During this reporting period the unit operated at full power and no significant operational concerns or events were encountered. Near the end of the previous inspection period Niagara Mohawk was advised by the State of Washington authorities at the Hanford Disposal Site at Richland that, as a result of external contamination surveys, removable contamination on the cask recently received was in excess of specified transportation limits. Details of this concern are documented in inspection report 50-220/91-10, dated April 4, 1991, and a Notice of Violation was issued. Niagara Mohawk promptly responded to this shipping cask external contamination concern and the response to the violation was documented in a May 3, 1991 letter (NMP1L 0580).

Commencing the week of April 22, 1991 and for six weeks, Niagara Mohawk licensed operators at both units were participating in an onsite industry sponsored team training program.

On April 24, 1991, Niagara Mohawk representatives met with the NRC staff in headquarters to discuss the Unit 1 torus wall thinning issue. In short, Niagara Mohawk stated that they were proceeding with plans to commence installation of mid-bay steel bands during the 1992 refuel outage. However, an engineering analysis was being prepared, in parallel, to support potential postponement of this modification until the year 2007.

1.2 Facility Operations - Unit 2

Following repairs to a small reactor coolant pressure boundary leak on a recirculation piping sample line identified on March 29, the reactor was taken critical on April 10, 1991. Power operations continued through the end of this inspection period. Two unrelated inadvertent reactor building isolations/standby gas treatment initiations occurred on April 11 and April 15. In addition, a spurious reactor core isolation cooling system isolation occurred on May 8. On April 24 Niagara Mohawk requested and received a temporary waiver of compliance for continued operation with a failed containment purge system isolation valve (see details of these operational events in section 2.2).

1.3 NRC Activities

The inspection activities during this report period included inspection during normal, backshift and weekend hours by the resident staff. There were 24 hours of backshift (evening shift) and six hours of deep backshift (weekend, holiday and midnight shift) inspections during this period.

No region based specialist inspections were conducted during this inspection period.

During the week of April 8, 1991, the reactor project section chief was onsite to attend the 50-220/91-06 and 50-410/91-06 exit meeting, tour the facility and talk with station management.



On April 30, 1991, Niagara Mohawk senior nuclear division managers met with the Regional Administrator and other NRC staff members in the Region I office to discuss Niagara Mohawk progress with implementation of the Nuclear Division Business Plan and recent Nine Mile Point Units 1 and 2 performance.

2.0 Plant Operations

2.1 Routine Plant Operations Review - Unit 1

During the inspection period the inspectors observed control room activities including operator shift turnovers, shift crew briefings, panel manipulations and alarm response, and routine safety system and auxiliary system operations conducted in accordance with approved operating procedures and administrative guidelines. The inspectors made independent verification of safety system operability by review of operator logs, system markups, control panel walkdowns and component status verifications in the field. Discussions were held with operators and technicians in the field to assess their familiarity with current system status and personnel response to events during the inspection period.

Overall plant operations performance at Unit 1 was good during this inspection period.

2.2 Control of Make-up Demineralizer System - Unit 1

On a routine tour of the plant on April 18, 1991, the inspector noted that preparations were underway to make demineralized water using a portable (temporary) makeup demineralizer system. The portable demineralizer system being prepared for use was a large, trailer-mounted processing skid (Ecolochem trailer) which had recently been brought on site. The inspector reviewed the controlled working copy of procedure N1-CI-15, Portable Makeup Demineralizer System, which governs the connection and operation of the system. The inspector noted that eleven of the first twenty-two steps of the installation and startup portion of the procedure were marked not applicable (N/A). The inspector determined that the reason for this was that N1-CI-15 was written for using a portable Culligan demineralizer system. Accordingly, many of the installation and operation steps were N/A with respect to operation of the Ecolochem demineralizer system. The inspector concluded that marking N/A such a large number of steps in N1-CI-15 was inappropriate and that the procedure should have been revised to reflect connection/operation of the Ecolochem system. This concern was communicated to the Unit 1 chemistry supervisor. The chemistry supervisor responded that a conscious decision was made to N/A the steps in N1-CI-15, as the procedure could be generically applied to the operation of demineralizer systems. The inspector noted that the purpose and system description section of N1-CI-15 refers only to operation of a Culligan system. As such, the decision to allow marking of N/A a number of the procedure steps appeared improper. The inspector requested Niagara Mohawk review the issue and to determine whether a procedure change was more appropriate.



After further review, the inspector determined that the operation of makeup systems falls under the requirements of Appendix A to Regulatory Guide (RG) 1.33. As such, procedures should be written for operation of these systems per the provisions of Technical Specification (TS) 6.8.1. Further, Administrative Procedure (AP) 2.0, Production of Procedures, states that procedures required by TS 6.8.1 shall be approved by the Plant Manager, reviewed against 10 CFR 50.59, and reviewed and evaluated by five SORC members. Also, TS procedures are required to be reviewed on a biennial basis. Contrary to these requirements, the inspector noted that N1-CI-15 was a Chemistry Instruction (vice procedure), was signed by the supervisor of chemistry and radiochemistry, and was on a quadrennial review cycle. The same was found to be true for N2-CI-4, Portable Demineralizer Trailers, for operation of the Ecolochem trailer at Unit 2.

The inspector discussed these findings with station management and requested they evaluate them. Further, the inspector requested that Niagara Mohawk determine if safety evaluations were performed for use of the Culligan and Ecolochem portable demineralizer systems at Unit 1 to supplant the in-plant MUD system which was retired in place in the 1970s.

In response to these concerns, on April 19, 1991 plant management halted all further use of the Ecolochem systems at Unit 1 and 2 until the adequacy of the procedures with respect to RG 1.33 and TS 6.8.1 could be determined. The inspector verified that halting production of demineralized water would not adversely impact safe operation of the units while the procedural issues were resolved.

On April 29, Niagara Mohawk communicated the following assessments:

- Operation of the portable demineralizer systems at Unit 1 and Unit 2 should have been by operating procedures, not by chemistry instructions, to be in conformance with AP 2.0 requirements.
- All department instructions at Unit 1 were reviewed to determine if they directed operation of plant equipment and if they should be operating procedures vice instructions. This review identified one chemistry, two reactor analyst (process computer related) and several radwaste instructions which needed to be rewritten as procedures.
- Niagara Mohawk concluded that N1-CI-15 should have been revised to reflect connection with the Ecolochem trailer and that the steps should not have been simply marked N/A, in this instance.
- At Unit 1, no safety evaluation for operation of the Culligan portable demineralizer system (in use since the late 1970s) nor for the recently procured Ecolochem trailer, was performed.



While the safety significance of the specific findings with respect to operation of the portable systems was minor, the inspector was concerned over the programmatic weaknesses which allowed the installation of temporary modifications (the Culligan and Ecolochem systems) without the requisite 50.59 safety evaluations being performed because the system was historically treated as non-safety related. Further, the weakness in the administrative control of procedures which allowed activities covered by RG 1.33 to be performed by non-TS controlled instructions, was also a concern.

The inspector concluded that Niagara Mohawk's response to the above concerns were acted on quickly, that a thorough review of the issues was conducted and that corrective actions were appropriate. In that, the violations of TS 6.8.1 and AP-2.0 were identified by the inspector, were of minor safety significance, were given prompt attention by Niagara Mohawk and were properly corrected, in accordance of 10 CFR 2, Appendix C, Sections V.A. and V.G.1, this is a non-cited violation. (50-220/91-09-01)

2.3 Review of Operation of Auxiliary Boilers - Unit 1

In light of the recent FitzPatrick nuclear plant contamination event of March 18, 1991, caused by misoperation of the radwaste (RW) concentrator and auxiliary boiler, the inspector reviewed Unit 1 equipment and procedures to see if similar concerns existed (reference NRC inspection report 50-333/91-80). The inspector determined the following:

- The procedures for operation of the RW concentrator and electric auxiliary boiler were well written, up-to-date and reflected actual operating practices.
- Clear criteria were listed in procedures for sampling of both systems during operation, as well as when the systems were shutdown. Instructions and procedural guidance existed for when to batch, that is drain, the RW concentrator. Batching was based on the concentration of impurities in the concentrator unit.
- In the event of liquid leakage from either system, the runoff was directed to floor drains which drain to RW system holding tanks. Any release of steam from the boiler, whether from manual venting or actuation of relief valves, was directed to floor drains. Therefore, in the event of accidental contamination of the boiler, contaminated steam/liquid would either go to the drain or to the RW building atmosphere. The RW building had its own air handling and treatment system and was also monitored for the presence of radiation. Therefore, provisions did exist to alert operators to any release of radioactive material to the building atmosphere. No direct path existed for the unmonitored release of radioactive steam or liquid to the environment from either system.



In summary, the inspector concluded that the procedural and design deficiencies which allowed the FitzPatrick contamination event to occur did not exist in the Unit 1 RW concentrator and boiler systems. Further, the RW operators interviewed by the inspector were quite familiar with the operating procedures and requirements, as well as, the physical location and layout of the equipment. The inspector determined that Niagara Mohawk was performing its own review of this issue, but the results were not available by the end of the inspection. No concerns were identified.

2.4 Review of a Restart Preparation "Near Miss" - Unit 1

During the conduct of routine observations and discussions in the control room, the inspector was informed of a "near miss" event involving the inspection and closeout of the Unit 1 drywell prior to startup from the mid-cycle outage. The licensed operator conducting the drywell closeout inspection noted two small lines entering containment which were not capped off, although both were threaded and had evidence of either pipe dope or teflon tape on the threads. Prior to completing the drywell closeout, the operator capped both lines and subsequently informed the station shift supervisor of the actions taken. After further consideration of this action, the operator researched the lines which were capped and identified them to be containment atmosphere sampling lines. Action was immediately taken to uncap the lines prior to final drywell closeout and reactor startup.

An investigation was conducted of this event and a lessons learned summary developed and communicated to all operations personnel. The inspector reviewed and discussed the lessons learned with operations management and concluded that final corrective actions were appropriate. An important aspect of this event was that the operator involved continued to question his actions after the sampling lines were capped. However, this event also emphasized the necessity to use the proper methods and procedures, e.g., work requests or deficiency event reports, prior to taking action involving safety or safety-related components.

2.5 Routine Plant Operations Review - Unit 2

During the inspection period the inspectors observed control room activities including operator shift turnovers, shift crew briefings, panel manipulations and alarm response, and routine safety system and auxiliary system operations conducted in accordance with approved operating procedures and administrative guidelines. The inspectors made independent verification of safety system operability by review of operator logs, system markups, control panel walkdowns and component status verifications in the field. Discussions were held with operators and technicians in the field to assess their familiarity with current system status and personnel response to events during the inspection period.

Overall plant operations performance at Unit 2 was good during this inspection period.



2.6 Containment Purge Valve Leak Test Failure - Unit 2

On April 23, containment purge valve 2CPS*AOV106 failed a seat leakage test required to be performed by Technical Specification (TS) 4.6.1.7.2. This valve is a 14-inch air-operated butterfly valve with resilient material seating surfaces and functions as the inside containment isolation purge supply valve. TS 3.6.1.7 action statement b specifies to restore the inoperable valve to operable status within 24 hours or be in at least hot shutdown within the next 12 hours and in cold shutdown within the following 24 hours. Attempts to flush the valve seat and retest the valve were unsuccessful. Since valve 2CPS*AOV106 was inaccessible for corrective maintenance during plant operations, Niagara Mohawk requested a temporary waiver of compliance (TWC) from TS 3.6.1.7, action statement b and the surveillance requirements of TS 4.6.1.7.2 applicable to valve 2CPS*AOV104, the outside containment isolation purge supply valve. Niagara Mohawk proposed that the waiver be effective until issuance of an emergency TS amendment, which would provide relief from the operability and surveillance testing requirements for this penetration until the next unit shutdown. Niagara Mohawk determined the significance of the leaking valve was low because the affected penetration remained isolated by closed isolation valve 2CPS*AOV104 and upstream manual isolation valve 2CPS-V6. In addition, the leak test failure was not indicative of an impending catastrophic failure of the resilient seating surfaces. The waiver was first reviewed and approved by the site operations review committee and subsequently reviewed and approved by the NRC staff on April 24, 1991.

The use of a waiver to prevent an unnecessary plant transient (plant shutdown) until an emergency TS amendment could be issued, was proper, and the justification provided by Niagara Mohawk for the TWC was appropriate. The Niagara Mohawk request was in accordance with the NRC staff guidelines of the February 22, 1990 letter on TWCs from the Office of Nuclear Reactor Regulation.

2.7 Reactor Core Isolation Cooling System Initiation - Unit 2

At approximately 8:00 a.m. on May 8, 1991, a reactor core isolation cooling (RCIC) system isolation occurred. The containment isolation valves responded properly; however, no apparent cause for the isolation was evident because the isolation signal did not seal-in. Control room operators left the RCIC system isolated and entered the applicable Technical Specification limiting condition for operation action statement while troubleshooting was conducted.



Further investigation did not identify a cause for the isolation. A surveillance test was being conducted on the leakage detection system at the time of the isolation; however, that portion of the area high temperature detection circuit which would result in a RCIC isolation was not being tested at the time. A careful inspection of the circuit identified one terminal wire with frayed insulation and that wire was replaced. The RCIC high temperature detection portion of the leakage detection system was surveillance tested satisfactorily, and the RCIC system was unisolated at approximately 6:00 p.m. on May 8.

The inspector considered the system troubleshooting to have been comprehensive in attempting to identify the cause of the isolation. The inspector also observed good supervisory involvement in assisting in this effort. Notification of this event per 10 CFR 50.72 was appropriate. The inspector had no concerns.

2.8 Turbine Building Closed Loop System Observation - Unit 2

During a tour of the turbine building, the inspector noted the service water differential pressure across the A and C turbine building closed loop cooling (TBCLC) heat exchangers was 7.5 and 6.5 PSID, respectfully. An operator aid tag on the differential pressure gages stated the nominal value to be less than 5 PSID and referred to operating procedure (OP)-11. The inspector reviewed OP-11 which states that 5 PSID across the heat exchangers should not be exceeded. This observation was discussed with the on-duty station shift supervisor who was aware of the high differential pressure condition. However, due to isolation valve leakage, adequate isolation of the heat exchangers for cleaning could not be achieved. The shift supervisor acknowledged that OP-11 should be revised to reflect the higher allowable differential pressure. After a review of the technical manual, which stated that the maximum differential pressure for the heat exchanger was 10 PSID, the supervisor initiated a change to OP-11 to increase the differential pressure limit up to 8 PSID. The inspector considered that this action was an appropriate response to the identified concern.

Although the operations staff was aware of the high differential pressure across the TBCLC heat exchangers, they did not take appropriate action to followup on a known deficiency. This observation was discussed with the plant manager who agreed with the concern.

2.9 Diesel Generator Annunciator Problem - Unit 2

During a tour of the Division II emergency diesel generator space, the inspector noted that the diesel was lined up for automatic start; however, the "overspeed trip" annunciator (408-1-7) window was lit. The operating procedure indicated this alarm annunciates when the overspeed trip is in a tripped condition only. The inspector notified the control room operators and determined that the operators were not aware annunciator 408-1-7 was lit. The supervisor dispatched an auxiliary operator to respond to the annunciator in accordance with the alarm response card instructions. The operator found the overspeed trip mechanism was properly set, but could not determine the source of the lit annunciator. The supervisor determined that the lit annunciator was false and initiated an emergency work request to correct the deficiency.



The inspector concluded that the lit annunciator did not represent a true condition and that the Division II emergency diesel generator was operable. The shift supervisor's actions to promptly investigate the matter and initiate an emergency work request to correct the deficiency were appropriate.

2.10 Spurious Containment Isolations - Unit 2

On April 11 and April 15, the secondary containment isolated and the standby gas treatment system started automatically. Both actuations were initiated by spurious low air flow signals in the reactor building ventilation system. At the time of these isolations there were no plant evolutions in progress that could have contributed to the events.

The inspector verified that Niagara Mohawk made the proper 10 CFR 50.72 and 50.73 notifications. These two events were reported in LER 91-07 issued May 13, 1991. The Niagara Mohawk root cause evaluation identified two factors contributing to the spurious signals. First, the difference between the normal air flow and the low air flow trip setpoint was too narrow. Secondly, there were fluctuations observed in the air signal used to calibrate the low air flow trip setpoint. A deficiency event report (2-91-Q-0155) was written to formally evaluate the low air flow protective trip function and the adequacy of the trip settings.

The inspector notes that Niagara Mohawk has been trending the increase in spurious actuations of the standby gas treatment system and secondary containment isolations and was appropriately pursuing further engineering evaluation of this adverse trend.

2.11 Previously Identified Items - Unit 1

(Closed) Violation 50-220/90-06-01: Improper Control of System Markup

Corrective action taken in response to this violation was previously reviewed but the violation remained open pending inspector review of the final revision to Administrative Procedure (AP) 4.2, Control of Equipment Markups, Revision 3, approved December 5, 1990. The inspector verified that appropriate personnel were trained on Revision 3 of AP-4.2 prior to its implementation date of January 14, 1991. The inspector also reverified that the changes made to AP-4.2 per the corrective actions outlined in the Notice of Violation response were also incorporated in Revision 3. No concerns were identified. This violation is closed.

3.0 Maintenance and Surveillance

3.1 Observation of Maintenance Activities - Units 1 and 2

The inspector observed and reviewed selected portions of preventive and corrective maintenance to verify compliance with regulations, use of administrative and maintenance procedures, compliance with codes and standards, proper QA/QC involvement, and equipment alignment and retest. The following activities were observed:



Unit 1

- Cleaning and inspection of the 11 reactor building closed loop cooling (RBCLC) heat exchanger per work request 184168. Additionally, a modification to cut and remove a limited number of tubes to prevent flow-induced vibration damage was also observed. This same modification was performed on the 12 and 13 RBCLC heat exchangers prior to startup from the last refueling outage.

- Cleaning and inspection of the 112 containment spray (CS) heat exchangers per procedure N1-MPM-080-R410. Removal of scale on the lower third of the tube bundle was observed. The cleaning was performed to aid in improving the thermal performance of the CS exchangers. As discussed in inspection report 50-220/90-02, thermal performance and design basis of the CS system is currently under review. The inspector reviewed protective markup 1-91-03340 initiated for the maintenance activity. He determined that the isolation was proper and that all tags were correctly placed on the associated valves, breakers and removed control fuses. The inspector also verified that the appropriate Technical Specification limiting condition for operation was entered and that the compensatory surveillance was performed daily to ensure operability of its redundant component.

No concerns were identified for the safety-related maintenance activities observed.

Unit 2

- Work request 169975, Loop calibration of the Division II emergency diesel generator jacket water low pressure switch.

- Work request 190584, Electrical preventive maintenance on diesel generator building supply fan, 2HVPFN1B.

- The inspector reviewed the repair plan for the corrective maintenance performed on the A recirculation loop sample line, 2RCS*HOSE44. During plant operation, the hose developed an unisolable reactor pressure boundary leak which caused a forced unit shutdown. The hose was made of corrugated stainless steel with a flexible woven mesh sheath.

Niagara Mohawk utilized a mock up to establish the most effective isolation and repair plan. A freeze seal and pressure plug were utilized to isolate the repair area. The flex hose was replaced by hard piping. A failure analysis of sample line 2RCS*HOSE44 was initiated. Prior to unit restart, all flex hoses integral to the reactor coolant pressure boundary were examined. Although some minor irregularities were identified, the vendor found no other hoses which needed replacement or repair.



This repair required extensive work in the drywell and was well coordinated and performed. Excellent management oversight was evident.

The work activities discussed above were appropriately completed. The inspector had no concerns.

3.2 Observation of Surveillance Activities - Units 1 and 2

The inspector observed and reviewed portions of completed surveillance tests to assess performance in accordance with approved procedures and Limiting conditions of operation, removal and restoration of equipment, and deficiency review and resolution. The following tests were reviewed:

Unit 1

- N1-ST-M4, Emergency diesel generator manual start and one hour rated load test and power board 102 and 103 undervoltage relay test.
- N1-ST-Q6, Containment spray systems quarterly operability test.
- N1-ST-Q16, Emergency diesel generator quarterly test.

The inspector noted no discrepancies.

Unit 2

- N2-OSP-ICS-Q001, Reactor core isolation cooling valve operability test. During the test, the operator identified several procedural errors with the test and processed the appropriate procedure changes. The inspector noted that this procedure had recently gone through the procedure upgrade program. The inspector discussed this with the plant manager and was concerned about the quality of the verification of the procedure upgrade program. The plant manager acknowledged the inspector's concern and indicated a followup review would be initiated.
- N2-OSP-E6S-M001, Diesel generator and diesel air start valve operability test, Division I/II.

The inspector noted no discrepancies other than those discussed above.



3.3 Previously Identified Items - Unit 2

(Closed) Violation 50-410/90-80-01: Improper Erection of Scaffolding

Numerous scaffolds were erected and used in safety related areas without engineering evaluation and/or were not tagged as required. Niagara Mohawk admitted to the violation, as stated. All scaffolding in safety related areas were reinspected and either reworked to assure full compliance to procedures and standards or removed. A lessons learned transmittal (91-07) was issued stressing adherence to the scaffolding program requirements. New scaffolding control procedures (N1-MAI-5.4-002 and N2-MAI-5.4-002) were issued and implemented on March 28, 1991. The inspector performed a walkdown of approximately 20 scaffolds located in the reactor and turbine buildings. The scaffolds were properly erected, tagged and inspected by engineering, when required. In summary, the corrective actions taken by Niagara Mohawk were comprehensive. This violation is closed.

(Closed) Unresolved Item 50-410/89-15-01: Inadequate Diesel Air Start Surveillance Methodology

Inadequate surveillance test methodology did not properly verify operability of the diesel air start valves. Procedure N2-OSP-E6S-M001 was revised to record the pressure drop in each air receiver to verify each air start valve opened. Step 8.2.9 specifies that approximately equal pressure drop in both air receivers and a successful diesel start satisfies the forward flow exercise of the diesel air start valves. This item is closed.

4.0 Engineering and Technical Support

4.1 Part 21 Fuel Injection Concern - Unit 2

On April 9, 1991, the inspector informed Niagara Mohawk Unit 2 management of a 10 CFR Part 21 notification to the NRC involving Houston Lighting and Power Company (South Texas 1 and 2). The Part 21 notification involved defective fuel injectors installed in Cooper-Bessimer diesels used at the South Texas facilities. Timely followup of this information by Niagara Mohawk management identified that the technical staff had already been appraised of the South Texas diesel concerns and preliminary indication was that the suspect batch or batches of deficient fuel injectors were not installed in either of the Unit 2 diesels. A detailed verification activity was ongoing at the conclusion of the inspection period and included a hands-on check of fuel injectors in the warehouse.

Niagara Mohawk indicated that traceability of the fuel injectors was difficult and that a review of this specific problem would be conducted. In spite of this problem, current periodic testing techniques provide accurate individual diesel cylinder performance information which would most likely provide early detection of fuel injector malfunctions or defects.



4.2 Previously Identified Items - Unit 2

(Closed) Unresolved Item 50-410/90-06-02: Potential Errors in Stress Analysis Methodology

A Niagara Mohawk engineering staff review of pipe stress calculations for the standby liquid control system revealed potential nonconforming conditions including errors in the modeling and analysis for piping in accordance with criteria specified in the updated safety analysis report (USAR). The corrective actions taken were to reanalyze the affected piping analyses and penetration calculations using criteria described in the USAR with two exceptions. As described in an NRC letter, dated February 7, 1991, the NRR staff reviewed Niagara Mohawk's corrective actions and concluded that the actions were acceptable. This item is closed.

5.0 Safety Assessment and Quality Verification

5.1 Review of Licensee Event Reports (LERs) and Special Reports - Unit 2

The following LERs were reviewed and found satisfactory:

- LER 90-24, Control room special filter train initiation due to spurious radiation monitor signal caused by electrical ground noise.
- LER 90-25, Secondary containment isolations due to low flow condition caused by personnel error (reference inspection report 90-10).
- LER 91-01, Primary containment vent and purge valve isolation (Group 9) due to lightning strike.

5.2 Review of Offsite Review Committee Meeting

On April 18, 1991, the inspector attended meeting No. 91-02 of the safety review and audit board (SRAB) held at the Nuclear Training Center. The inspector verified that the proper SRAB quorum was satisfied and that the designated Technical Specification oversight/review and auditing functions were being adequately addressed. Although the inspector observed generally good discussion and emphasis upon safe plant operations and operations support activities, a couple of SRAB members contributed little to the discussions held on the various topics presented for SRAB review. The inspector concluded that, in spite of this, the discussions observed were thorough and effective in addressing the safety significant issues and concerns.



5.3 Review of Nuclear Division Policy and Directives Manual

On May 2, 1991, the inspectors were provided a copy and given a general overview of the Niagara Mohawk Nuclear Division Policy and Directives Manual. Revision 00 of the Nuclear Division Policy and associated Nuclear Division Directives (NDDs) all became effective May 3, 1991. The purpose of the Policy and NDDs is to provide management direction for the conduct and control of all operations, maintenance and modifications of Nine Mile Point 1 and 2 nuclear power plants. The Policy provides a descriptive summary of the organizational responsibilities, general program requirements and elements for ensuring the safe, reliable and efficient operation of the units. The NDDs identify activities with requirements and responsibilities that are deemed essential to ensure safe, reliable and efficient operation of the units.

The inspectors reviewed selected NDDs and found them to be well written and precise in purpose and direction. Of particular note was the highlighted references within the text to the source document or regulatory requirement for the specific activity addressed by the directive. The inspector also reviewed the 10 CFR 50.59 evaluation prepared by Niagara Mohawk to support implementations of the new Nuclear Division Policy and NDDs. No discrepancies were noted in the evaluation and the evaluation was considered thorough. As stated in the 10 CFR 50.59 evaluation, the Policy and NDDs provide only direction and guidance for the safe operation of the nuclear facilities and do not constitute a change or modification to existing administrative control or quality assurance requirements. Where change may be indicated by a difference between the existing administrative control or quality assurance requirements and the new Nuclear Division Policy and NDDs, the necessary change will be made with the appropriate 10 CFR 50.59 review and approval processes. The inspector had no concerns.

6.0 Management Meetings

At periodic intervals and at the conclusion of the inspection, meetings were held with senior station management to discuss the scope and findings of this inspection. Based on the NRC Region I review of this report and discussions held with Niagara Mohawk representatives, it was determined that this report does not contain safeguards or proprietary information.

