U.S. NUCLEAR REGULATORY COMMISSION

REGION I

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License Nos.:	DPR-63 NPF-69
Licensee:	Niagara Mohawk Power Corporation P. O. Box 63 Lycoming, NY 13093
Facility:	Nine Mile Point, Units 1 and 2
Location:	Scriba, New York
Dates:	June 4 to July 22, 1995
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Approved by: _____ August 25, 1995

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Reactor Projects Section No. 1A
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EXECUTIVE SUMMARY

Nine Mile Point Units 1 and 2
50-220/95-16 & 50-410/95-16
June 4 to July 22, 1995

PLANT OPERATIONS

During this inspection period, Unit 1 operated at essentially full power. Unit 2 had just completed a refueling outage and was in power ascension testing. During the escalation to full power, the Unit 2 operators inserted a manual reactor scram after a high stator water temperature turbine runback, and a manual turbine trip because of high vibration. Later, power was reduced due to oscillations of the #4 turbine control valve.

Mr. Richard Abbott was promoted to Vice President-Nuclear Generation. Mr. Norman Rademacher succeeded Mr. Abbott as the Unit 1 Plant Manager.

On two occasions, Unit 1 identified equipment that did not perform as expected but did not declare the equipment inoperable. NMPC management took the appropriate actions to correct the problem while engineering performed an operability determination. The NRC concern is that operability determinations may be being made with inadequate bases. **(URI 50-220/95-16-01)**

The inspectors noted that on at least two occasions, the Unit 2 Shift Technical Advisor was directly involved in moving control rods and thus affected reactivity. The two STAs have been selected to participate in the next SRO license class. The Unit 2 TSs allow the Assistant Station Shift Supervisor to assume the STA functions, if qualified. But administrative controls do not exist to ensure that the ASSS is qualified and certified as an STA prior to assuming those duties. **(URI 50-410/95-16-02)**

MAINTENANCE

Unit 1 received a containment half-isolation signal due to a main steam line break temperature switch tripping prematurely. Three switches are connected in series which could have caused the signal. The switches are located in the main steam isolation valve room, the steam tunnel, and above the turbine stop valves; all are high temperature and high radiation areas. The two switches that were easiest to work on were replaced initially, and the as-found condition identified that both switches were still within the acceptable range of calibration. However, the third switch as-found calibration showed a setpoint of about 146 degrees Fahrenheit, the normal ambient for the area.

The instrumentation and control maintenance foreman provided a detailed summary of the planned activity, including temperature and radiation information; pictures had been taken to facilitate the repairs, and to minimize individual dose. Radiation protection personnel and emergency medical technicians monitored the work crews while in the hazardous areas. The replacement of the switches was completed with minimal total dose, no contaminations, and no heat stress related injuries. Supervisory oversight

was present during the entire evolution. The inspector considered the performance of the repairs to be well planned and executed.

ENGINEERING

The inspector reviewed the Unit 1 modification to implement the backfill of reactor vessel water level reference legs. The review included the design change package, safety evaluation, associated procedures, and a plant walkdown. The inspector concluded that the modification to the reactor vessel level instrumentation reference legs meets the requirements of the generic letter and bulletin, and no unreviewed safety questions were created.

The inspectors monitored the power ascension testing associated with the NRC approved power uprate for Unit 2. An administrative procedure was developed to control the evolution, and the associated implementing procedures were revised, as necessary. The power ascension was well coordinated with a slow and cautious approach, with only one significant exception. While at about 77% reactor power, an automatic generator runback occurred due to high stator cooling water temperature; turbine bypass valves opened, and when reactor pressure continued to rise, a manual reactor scram was inserted. The high temperature was due to low cooling water flow to the stator cooling water heat exchanger. The low cooling water flow was because of an inadequate coordination of a design review associated with the heat exchanger. In addition, it was identified after the fact that the stator cooling water high temperature alarm setting was above the alarm setpoint.

The inspector reviewed NMPC's program for control of safety related modifications, as required 10 CFR 50.59. The procedures governing the 50.59 process were easily traceable from a top level policy document, through Nuclear Division Directives, to the final implementing procedures. The 50.59 procedures follow NSAC-125 closely, and the safety evaluations are based on the criteria presented in 10 CFR 50.92(c). The training program requires trainees to perform an applicability review (determine whether there is a change to the facility/procedures/testing requiring a safety evaluation) and a safety evaluation (determine whether there is an unreviewed safety question). Both units have done an excellent job of managing the temporary modification program, including reducing the number. In the last two years, Unit 1 has reduced their number from 68 to 11; and Unit 2 has gone from 50 to 21. The technical support groups perform an annual self-assessment of their progress and report to the plant manager; and the QA department audits the status of temporary modifications. The inspector reviewed several safety evaluations for design change requests, including the Unit 1 reactor core shroud repair design package. The evaluations were done in accordance with plant procedures and provided a sound basis for the conclusion that no unreviewed safety issue was involved.

PLANT SUPPORT

The NRC recently approved new emergency action levels based on the guidance contained in NUMARC/NESP-007 "Methodology for Development of Emergency Action Levels." The inspector attended one of the training classes which described the EALs, the relationship between EALs and the emergency operating procedures, and each of the four emergency classifications. The technical bases documents were part of the training. The trainees were presented with several hypothetical events and required to properly classify the events using the new EALs. The information very useful, and the tabletop exercises identified many questions from the trainees.

Over the last several months, significant effort was expended on correcting long standing problems with the fire detection panels at both units; there were a large number of trouble alarms, causing several annunciators in the control rooms. During the period, Unit 2 achieved a "black board" on the fire panels, and Unit 1 has reduced the number of alarms significantly. This continuing effort to achieve a black board of the fire protection panel contributes to the control room operators ability to readily detect an alarm and diagnose a problem with the system. This would not have occurred without the support of the NMPC management in correcting the long standing problem.

Both units completed refueling outages this spring. As part of the post-outage work, contract personnel were retained for cleanup, decontamination, removal of equipment, and painting. The painting accomplished two functions, visual impression and easier cleaning in the future. There was a marked improvement in both radiological and general cleanliness.

SAFETY ASSESSMENT/QUALITY VERIFICATION

During a self-assessment of the Unit 1 maintenance surveillance program, NMPC discovered that three I&C surveillances had not been performed in accordance with TS requirements. Rather than being completed during a refueling outage, they were performed every 24 months. NMPC determined the root cause to be a misinterpretation by the maintenance planners. **(NCV)** At Unit 2, it was identified that a division of service water had been placed in service with an out of calibration radioactivity monitor. Poor planning and an unusual system configuration cause the event. **(NCV)**

NMPC did a good job of identifying and correcting the above issues. And although the trend of personnel performance errors is improving, the NRC is concerned that the errors continue.

DETAILS

1.0 SUMMARY OF ACTIVITIES

NMPC Activities

During this inspection period, Nine Mile Point Unit 1 (Unit 1) operated at full power with minor power reductions for maintenance. Unit 2 started the period in power ascension after completion of the fourth refueling outage. On June 5, 1995, Unit 2 initiated a manual reactor scram after a turbine runback due to high stator water temperature; following repairs, the reactor was re-started on June 8. On June 9, while at 46% power, the turbine was manually tripped due to high vibration. Unit 2 achieved 100% power on June 20, after completion of turbine testing. On June 23, power was reduced to about 98% due to oscillations of the #4 turbine control valve; power remained at this level for the remainder of the report period.

Organizational Changes

On July 28, 1995, Mr. Richard Abbott, Unit 1 Plant Manager, was promoted to become the new Vice President-Nuclear Generation. The new Unit 1 Plant Manager is Mr. Norman Rademacher.

NRC Activities

The inspectors conducted inspection activities during normal, backshift, and weekend hours. Specialist inspections conducted during the period included the areas of environmental monitoring and licensed operator requalification training. The results of these inspections will be documented and reported separately.

2.0 PLANT OPERATIONS (30702, 71707, 92901, 93702)*

2.1 Operational Safety Verification

The inspectors observed overall operation and verified that Niagara Mohawk Power Corporation (NMPC) operated the units safely and in accordance with their procedures and regulatory requirements. The inspectors conducted regular tours of all accessible plant areas. The tours included walkdowns of safety systems and components for leakage, lubrication, cooling, and general material conditions that might affect system operation.

2.2 Unit 1 Operability Determinations

The inspector observed that on two occasions recently, Unit 1 identified equipment that did not perform as expected but the basis for concluding that the equipment was operable was weak.

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

- On June 18, a half-isolation signal was received when a main steam line break (MSLB) temperature switch activated at an unexpectedly low temperature. The setpoint for the temperature switch is 195 $\pm$ 5°F (degrees Fahrenheit), and ambient temperature was about 150°F. The following morning, about 11 hours later, the half-isolation signal cleared.

  When the signal first came in, the Station Shift Supervisor (SSS) considered the channel operable because the system had performed its safety function (i.e., to initiate a main steam line isolation automatically due to a high temperature indicative of a steam line break). When the signal cleared, the SSS assumed that the temperature switch had reset due to lowering area temperature. The SSS concluded that the switch remained operable.

  When the inspector questioned the basis for the operability of the system, he was told that the switch had tripped in the conservative direction and that this proved that it was capable of performing its intended safety function. After the inspector expressed concern that other problems could affect the operability of the instrument a formal engineering operability evaluation was conducted. This included discussions with the vendor regarding possible failure modes of the switch. Based on the information received from the vendor, and since the alarm signal had reset, it was determined that the switch would trip again if necessary, although at the lower setpoint. This determination was reviewed and approved on June 20, 1995.

- On June 30, after performance of surveillance procedure N1-ISP-036-005, "Lo-Lo-Lo Reactor Water Level Channel Test/Calibration," the inspector noted that a portion of the procedure did not meet acceptance criteria. The technicians had identified this to the SSS. The portion of the test for the protection circuit was satisfactory, but the control room indicator could not be calibrated for the 60 inch reading. The SSS determined that the system was still operable because the safety function passed, although an "out-of-calibration" sticker was placed next to the meter.

  The inspector discussed the surveillance results with the SSS and questioned the operability of the instrument considering that it had not passed the associated surveillance test. Afterwards, a clarifying operator aid was put on the control board explaining the problem with the indicator.

  The inspector discussed these examples with Unit 1 management. In these instances, although the appropriate actions had been initiated to correct the problems, there was a concern that the SSS was making operability determinations without external assistance and that the SSS had a weak basis for the initial determination. In the first case, additional information was required from the vendor before engineering could determine that the system was operable. In the second case, the level indicator remained in service even though it could not be calibrated.

The NRC is concerned that shift supervision may be making decisions on equipment operability without adequate bases. In addition, shift supervision appears to have no requirement to seek outside assistance in making operability determinations. The licensee acknowledged the NRC concerns. This item remains unresolved pending further review. **(URI 50-220/95-16-01)**

2.3 Unit 2 Shift Staffing of the STA

During a review of the Unit 2 control room logs, the inspectors noted that on at least two occasions, the shift technical advisor (STA) was directly involved in moving control rods under-instruction of the reactor operator. Two STAs have been selected to participate in the next class for a senior reactor operator (SRO) license. One of the requirements for completion of the training course is to perform a minimum of five significant control manipulations which affect reactivity or power level while under the direct control of a licensed operator. The intent of the control rod movements was to assist the STAs in meeting the requirement.

The Unit 2 TSs require the STA position to be filled during power operations. In addition, the assistant station shift supervisor (ASSS), if qualified, may assume the STA functions under certain conditions. In addition, the TSs state that if the ASSS is also the STA, the SSS may not leave the control room until an additional SRO licensed individual assumes the control room command function.

However, there are no administrative controls to ensure that (1) the ASSS is qualified and certified as an STA prior to assuming those duties, nor (2) the minimum control room staffing is maintained during the time that the ASSS is also the STA. Pending further review by the inspectors, this item will remain unresolved. **(URI 50-410/95-16-02)**

3.0 MAINTENANCE (61726, 62703, 92902, 60705)

3.1 Maintenance and Surveillance Observations

The inspectors observed maintenance and surveillance activities to ascertain if safety-related work was conducted according to approved procedures, the TSs, and the appropriate industry codes and standards. Observation of activities verified that: LCOs were satisfied, removal and restoration of equipment were controlled, administrative authorizations and tag outs were obtained, procedures were adequate, certified parts and materials were used, test equipment was calibrated, radiological requirements were implemented, system prints and wire removal documentation were used, quality control hold points were established, deficiencies were documented and resolved, and records were complete and accurate. In general, the activities observed and reviewed were effective with respect to meeting the safety objectives. No significant concerns were identified during the inspectors' review. The inspectors considered the below to be an example of good performance.

3.2 Unit 1 MSLB Temperature Detector Repairs

On June 18, Unit 1 received a half-isolation signal due to a main steam line break (MSLB) temperature switch tripping prematurely. The following morning, the alarm cleared unexpectedly. Four temperature switches, in series, feed this trip circuitry. All four switches are calibrated to trip at 195±5°F; the switches had been calibrated during the recent refueling outage. Ambient temperatures were above normal; the outside air temperature was very warm, and NMPC believed that this contributed to poor unit cooler efficiency.

The four switches are located in the main steam isolation valve (MSIV) room, the steam tunnel, above the turbine stop valves, and above the turbine bypass valves. All four areas are high temperature (>120°F) and high radiation (>1000 mrem) areas. Local temperature readings at the time of the alarm were in the range of 145-156°F. The temperature switch above the bypass valves was determined not to be the problem due to circuitry design.

A maintenance work order (#95-02220-04) was generated to replace the temperature switches in the MSIV room and the steam tunnel. To replace the switch over the stop valves would require the erection of scaffolding and would result in a higher total dose. Radiation protection personnel and emergency medical technicians monitored the work crews during the work. The replacement of the two switches was completed on June 27, with minimal total dose, no contaminations, and no heat stress related injuries.

After the old switches were removed, as-found condition identified that both switches were still within the acceptable range of calibration. A second work order was developed in anticipation of replacement of the third switch if the condition reoccurred. On July 13, the half-isolation signal was again received, and the temperature switch over the stop valves was replaced. As-found calibration of that switch showed a setpoint of about 146°F.

The inspector reviewed the work orders, observed the pre-job brief to the I&C technicians, and monitored the repairs from the control room. The I&C foreman provided a detailed summary of the planned activity, including temperature and radiation information; pictures had been taken to facilitate the repairs, and to minimize individual dose. Supervisory oversight was present during the entire evolution. The inspector considered the performance of the repairs to be well planned and executed.

4.0 ENGINEERING (37551, 92903, TI 2515/128)

4.1 Unit 1 Backfill Modification

The NRC issued a temporary instruction (TI 2515/128) to review plant modifications which were implemented to mitigate the entrainment of dissolved gasses in cold reference legs of reactor vessel water level instruments. The inspector reviewed the documentation relating to the installation of the modification for Unit 1. In addition, the inspector conducted a walkdown of the physical plant to verify installation of the modification.

The reactor vessel water level wide range (Lo-Lo-Lo) and core range level sensors are connected to cold reference legs. The three reference legs for these instruments were provided with purge flow from the control rod drive (CRD) system. Each reference leg supply has its own filter, flow meter, and flow control valves. The purge supply lines include two spring loaded check valves downstream of the flow control valves to provide isolation between the safety related reference legs and non-safety related purge supply. The check valves are included in the inservice testing program for leak rate measurements. If leakage exceeds an amount which would cause a 1 inch change in indication during an 8 hour period, corrective actions are required.

The necessary flow rate to flush the reference legs every 6 hours was calculated to be 3.82 pounds per hour. The flow rate selected for use was 4 pounds per hour. The safety evaluation for the modification evaluated the effects of the design flow on the instrument indications, and determined that the increased flow due to the reactor depressurizing to atmospheric pressure, combined with the opening of one of the two in-line flow control valves, represented a small fraction (< 0.1%) of the indication span. In addition, the effect of the density change (due to the injection of cooler CRD water) in the reference leg will be on the order of 2.5 inch under worst case conditions. This change is less than the anticipated change due to drywell and reactor building temperatures following an accident.

NRC Information Notice 93-89, "Potential Problems with BWR Level Instrumentation Backfill Modifications," documents problems identified at several facilities related to the installation of the backfill modification from the CRD system. These problems included reactor scram, opening of safety relief valves, and loss of low-pressure injection capability due to false signals. The Unit 1 safety evaluation evaluated the effect of closure of the manual isolation valve in the reference leg. Closing of the valve would result in the reference leg being pressurized to CRD system pressure, which would drive the affected level instruments to their lowest indication. This would result in a Lo-Lo-Lo signal being sent to the automatic depressurization system (ADS) logic. ADS should not initiate since a concurrent high drywell pressure signal is also required. In addition, the electromatic relief valves would not open, since their pressure transmitters are connected to the variable leg of the level transmitter.

To prevent inadvertent closure, the manual valves are locked open in the instrument rooms, which are also locked. Maintenance procedures which require operation of these valves require a second verification of their final position, and operator verification of the proper functioning of the associated instruments once the work is completed. These measures should prevent automatic ADS actuation caused by the closure of the manual isolation valves in the reference legs.

An operating procedure has been prepared for the operation of the reference leg backfill injection system. The procedure provides for starting and securing backfill injection flow, including precautions and steps to prevent introduction of air into the reference legs. Also included are actions in the event that the backfill injection system becomes unavailable during plant operation, with reference to the applicable LCOs in the TSs. The procedure

includes a chart of desired flow as a function of reactor pressure. Verification that flow is within the allowable range has been added to the shift logs, with as found and as left (in the event that adjustments are necessary) flow rates recorded.

During post-modification testing, problems were experienced with particulate clogging of the flow control valves. This was subsequently resolved by the replacement of the filter elements with finer mesh and the addition of a third filter just before the flow metering station.

The inspector concluded that the modification to the reactor vessel level instrumentation reference legs meets the requirements of the generic letter and bulletin, and that no unreviewed safety questions were created.

4.2 Unit 2 Power Uprate Ascension

As discussed in NRC inspection report 50-410/95-12, the NRC approved a 4.3% power increase for Unit 2 to 3467 megawatts thermal. NMPC developed an administrative procedure, N2-TDP-SAT-0102, for overall control of the evolution; it defined those systems affected by the uprate, and detailed the associated testing. The inspectors reviewed the associated implementing procedures and monitored the approach to the higher power level. The procedures were revised as necessary and the power ascension was slow and cautious. The licensee had one related problem during the power ascension.

On June 5, while at about 77% reactor power, Unit 2 experienced an automatic generator runback due to high stator cooling water temperature. The turbine bypass valves opened, as required; when reactor pressure continued to rise, a manual reactor scram was inserted. All control rods inserted and all systems responded as designed. The high temperature was due to a lower than expected cooling water flow to the stator cooling water heat exchanger. The root cause of the low flow was inadequate coordination of a design review associated with the heat exchanger cooling water flow. As a result, the cooling water valve throttle position was not verified. Although recommended to monitor stator cooling water temperature during power ascension, engineering did not recognize that monitoring was required prior to reaching the previous 100% power level. In addition, it was identified after the fact that the stator cooling water high temperature alarm setting was above the required alarm setpoint.

Corrective actions included adjusting the heat exchanger cooling water flow, enhanced monitoring during the remainder of the power ascension testing, and correction of the alarm setpoint. Also, the design control program was revised to define the ownership of design documents and to emphasize that reviews are not limited to the group that owns the design document. The event was discussed in LER 50-410/95-07. **LER 50-410/95-07 is closed.**

4.3 Safety Evaluation Review

The inspector reviewed NMPC's programs for control of safety related modifications, as required by Title 10 of the Code of Federal Regulations, Part 50.59 (50.59). The review included the procedures, the training program

and related records, temporary modification logs, lifted leads record, defeated annunciators list, and selected modification packages including the associated 50.59 applicability reviews and safety evaluations. Documents reviewed are listed below.

1. POL, Rev. 6, 03/15/95, Nuclear Division Policy
2. NDD-SEV, Rev. 1, 09/16/94, Nuc. Div. Directive - Evaluations Safety
3. NDD-LPP, Rev. 1, 06/18/93, Nuc. Div. Directive - Lic's Programs
4. NDD-PRO, Rev. 1, 09/29/94 ,Nuc. Div. Directive - Procedures & Orders
5. NIP-LPP-01, Rev. 2, 10/01/94, I/F Procedure, Licensing Programs
6. NIP-SEV-01, Rev. 2, 09/01/94, I/F Procedure, SEs
7. NIP-PRO-04, Rev. 3, 06/30/94, I/F Procedure, Procedure change Erol's
8. NLAP-LPP-170, Rev. 3, 06/25/94, Nuc. Licensing Admin Procedures
9. NLAP-SEV-0101, Rev. 0, 09/01/94, Guideline for Applied Review
10. NLAP-SEV-0102, Rev. 0, 09/01/94, Guideline for SEs
11. NSAS-POL-01, Rev. 0, 01/01/94, Nuc. Safety & Assessment Org.
12. GAP-DES-03, Rev. 4, 03/15/95, Control of Temporary Modifications
13. QARSE-SE-Q-0-3-0, 06/15/95, Lesson Plan for 50.59 Qualification
14-34. Applicability Review documents for changes not requiring 50.59 SE. AR#s: 09659, 03270, 01989, 04944, 03099, 03030, 02440, 02443, 03745, 01961, 07794, 08631, 08719, 09612, 07728, 03266, 08265, 09889, 08259, 02649, 02650
35. Unit 2 SE 95-059, 03/31/95, Primary Containment Integrated Leak Rate Test
36. Unit 1 SE 94-080, 04/01/95, Reactor Core Shroud Repair
37. Unit 1 SE 95-007, 02/02/95, Core Shroud Repair Installation
38. Unit 1 SE 94-021, 12/14/94, Revise UFSAR to Specify Instrument Air Particle Size Limit of 40 microns
39. Unit 1 SE 91-035, Rev.2, 07/21/94, Operation of NMP1 with One High Pressure FW Heater Out of Service and Reactor Power > 80%

The licensee's procedures governing the 50.59 process were easily traceable from a top policy document generated by the Executive Vice President. Policy is implemented through Nuclear Division Directives, which in turn are implemented through either nuclear interface procedures or departmental administrative procedures. The expectations are further defined in branch procedures, and finally in technical implementing procedures (documents 1-12). Changes to the plant procedures or facility (design, function, or method of performing the function), as described in the Updated Final Safety Analysis Report (UFSAR), or a new test/experiment not described in the UFSAR, are controlled through approved procedures which appeared to be comprehensive and thorough. The 50.59 procedures follow NSAC-125 closely, using the same wording in places. The safety evaluations are based on the three criteria presented in 10 CFR 50.92(c).

The 50.59 training program was revised in 1994 to combine the applicability review training course and the safety evaluation training course. The course (document 13) now requires trainees to perform an applicability review (determine whether there is a change to the facility/procedures/testing requiring a safety evaluation) and a safety evaluation (determine whether there is an unreviewed safety question). A substantial number of persons were qualified to perform 50.59 reviews. Requalification is required after

2 years. The training program is based primarily on NSAC-125, plant procedures, and industry good practices. Although not required by procedures, all members of the station onsite review committee (SORC) for each unit had completed 50.59 training and were qualified to perform reviews.

The inspector determined that logs of temporary modification implementation are maintained in the Unit 1 and Unit 2 control rooms by the station shift supervisor (SSS) and the chief shift operator (CSO), as required by procedure GAP-DES-03. Also, a file index of temporary modifications is kept in the control rooms, as well as a log of defeated annunciators. The inspector reviewed the logs and found them to be current.

The staffs at both units have done an excellent job of managing the temporary modification program; including reducing the number of open temporary modifications. Unit 1 has reduced their number from 68 in April 1993, to 11 in July 1995; while Unit 2 has gone from 50 in February 1994, to 21 in June 1995. The technical support groups perform an annual self-assessment of their progress and report to the plant manager; and the QA department audits the status of temporary modifications.

The licensee performs an applicability review (AR) for all proposed changes to the plant, procedures, or testing. The AR screens the proposed change to determine whether the change must be processed under 10CFR50.59 (for an unresolved safety issue) or 50.90 (TS change), or whether such processing is not required. The inspector selected 21 ARs (documents 14-34) for which the licensee had concluded no 50.59 or 50.90 review was needed. The inspector's review agreed with the licensee's conclusion in all cases.

The inspector reviewed safety evaluations for 4 design change requests for Unit 1 and one for Unit 2 (documents 35-39). These included the Unit 1 reactor core shroud repair design package. The evaluations were done in accordance with plant procedures and provided a sound basis for the conclusion that no unreviewed safety issue was involved.

In conclusion, the inspectors determined that NMPC has developed a well defined program with clear expectations from senior management that have been translated into the implementing procedures. The implementation of the program resulted in thorough evaluations of design changes, a reduction in the number of temporary modifications, and no unreviewed safety questions. The inspectors had no further questions.

5.0 PLANT SUPPORT (71707, 71750, 92904)

The inspectors routinely monitor activities in the areas of radiation protection, emergency preparedness, security, fire protection, and general housekeeping during tours. Minor weaknesses were discussed with the appropriate supervision, no significant deficiencies were noted.

5.1 Emergency Preparedness

On June 15, the NRC approved changes to the emergency action levels (EALs) for Unit 1 and Unit 2. The EALs incorporated the guidance NUMARC/NESP-007

"Methodology for Development of Emergency Action Levels." NUMARC/NESP-007 was endorsed by the NRC in Regulatory Guide 1.101, Revision 3, as an acceptable method for developing site-specific emergency classification schemes.

The inspector attended one of the training classes that discussed the new EALS, the specific session was focused towards the emergency director positions. The training described the EALs, the relationship between EALs and the emergency operating procedures (EOPs), and each of the four emergency classifications. The three fission product barriers were defined, discussed with respect to various accidents, and then the loss of barriers was related to the emergency classification. The Unit 1 and Unit 2 emergency classification technical bases documents were used as part of the training. The trainees were presented with several hypothetical events and required to properly classify the events using the new EALs.

The inspector considered the information very useful, and the tabletop exercises were beneficial. NMPC utilized a consultant to conduct the training. The inspectors will continue to monitor implementation of the EALs during future drills and licensed operator training.

5.2 Fire Protection

Over the last several months, NMPC expended significant effort on correcting long standing problems with the fire protection systems at both units. Specifically, the fire detection panels had a large number of trouble alarms; causing several annunciators in the control rooms. During this inspection period, Unit 2 achieved a "black board" on the fire panels, and Unit 1 has reduced the number of alarms significantly.

The inspectors concluded that the initiative of NMPC management to remedy this long standing problem and the expectation that a black board of the fire protection panel is achievable will contribute to the control room operators ability to readily detect an alarm and diagnose a problem with the system.

5.3 Housekeeping

Both units completed refueling outages this spring. As part of the post-outage work, contract personnel were retained for about a month at each unit to restore the buildings to pre-outage condition. The efforts included extensive cleanup, decontamination of many long standing contaminated areas, removal of scaffolding and equipment that was no longer required, and painting. The painting accomplished two functions, visual impression and easier cleaning in the future. Compared to the appearance of the units after their previous outages, there is a marked improvement in both radiological and general cleanliness.

6.0 SAFETY ASSESSMENT/QUALITY VERIFICATION (71707, 90712)

6.1 Licensee Event Report Review

The below Licensee Event Reports (LER) were reviewed for accuracy and compliance with the requirements of technical specifications.

(Closed) LER 50-220/95-03
Technical Specification Surveillance Tests not Performed at the Required Frequency Because of Cognitive Error

On May 16, 1995, it was discovered during a self-assessment of the maintenance surveillance program that three I&C surveillance procedures had not been performed in accordance with TS requirements. Specifically, the surveillances were to be performed during "each major refueling outage," but were instead performed during normal operation or a maintenance outage.

NMPC determined the cause of the missed surveillances to be error on the part of the personnel involved in the surveillance program. The frequency was misinterpreted by the planners to mean "once each refueling cycle;" it was further confused when I&C technicians interpreted once each refueling cycle to be the same as every 24 months. Thus, the I&C procedures were removed from the scope of the previous refuel outage (2/20/93-4/13/93). The procedures were performed during the outage just completed. The preventative maintenance/surveillance test (PM/ST) database and the I&C procedures were corrected to reflect the proper frequency and plant conditions; and the database will be reviewed for similar occurrences.

The inspectors reviewed the LER and determined that it satisfactorily described the event, the root cause evaluation, and corrective actions to prevent similar occurrences in the future. This is a violation of TS surveillance requirement 4.6.11. This violation was not cited in accordance with the NRC Enforcement Policy, as described in NUREG-1600, Section VII.B.1. **LER 50-220/95-03 is closed.**

(Closed) LER 50-410/95-04
Technical Specification Violation Caused by Inadequate Work Planning

On May 11, 1995, NMPC identified that a division of service water (SW) had been placed in service two days earlier without an operable radioactivity monitor, as required by TSs. NMPC's root cause analysis identified inadequate planning in that management did not assess the unusual SW configuration and establish the necessary procedural guidance. Although a service water radioactivity monitor was in operation at the time of the event, the monthly source check had elapsed; rendering the monitor inoperable.

Immediate corrective actions included compensatory grab samples, which indicated no abnormal radioactivity levels. In addition, training was or will be provided to shift, technical support, and management personnel to enforce expectations.

The inspectors reviewed the LER and determined that it satisfactorily described the event, the root cause evaluation, and corrective actions to prevent similar occurrences in the future. This is a violation of TS 3.7.1.1, in that a division of service water was considered operable without all of the attendant instrumentation, as required by the definition of operable, in section 1.27 of the Unit 2 TS. This violation was not cited in accordance with the NRC Enforcement Policy, as described in NUREG-1600, Section VII.B.1. **LER 50-410/95-04 is closed.**

(Closed) LER 50-410/95-05
Reactor Manual Scram to Protect Turbine-Generator from High Vibration

On May 30, 1995, a manual reactor scram was inserted in order to break condenser vacuum and to subsequently slow the turbine generator which was experiencing excessive vibration. This event was discussed in NRC inspection report 50-410/95-12. The LER accurately describes the event and the associated corrective actions. **LER 50-410/95-05 is closed.**

(Closed) LER 50-410/95-07
Reactor Scram Caused by Generator High Stator Water Temperature

This LER is discussed in Section 4.2 of this report. **LER 50-410/95-07 is closed.**

6.2 Senior NMPC Management Meeting

On July 14, the inspectors attended the Nuclear SBU SMT (strategic business unit senior management team) performance review for June. The meeting was chaired by the Executive Vice President. During the meeting they reviewed the performance of both units against established goals for safety, commercial, regulatory, and professional indicators. The results are compared on a monthly basis, as well as year-to-date, and are graphed to determine any trends.

The inspectors consider this meeting to be one of the better self-assessments by NMPC. The monthly comparison of achievement against previously established goals provides real time feedback to senior management as to the performance of the Nine Mile Point Station organization.

7.0 PREVIOUSLY OPENED ITEMS (92901, 92902, 92903, 92904)

(Closed) URI 50-410/94-14-01
Lack of IST Stroke Time Source Document

During an NRC review of the stroke times for Unit 2 power-operated valves, it was determined that NMPC had poor documentation for the valve stroke times. Technical support administrative procedure N2-TD-IIT-0105, "Establishment of IST Pump and Valve Acceptance Criteria," requires that the limiting stroke times and the source document for the limit be recorded. The inspectors identified several examples where the stroke time limiting values differed between documents.

Several systems were found to have stroke times for inservice tests (IST) which were not consistent with design calculations. In addition, it was discovered that numerous IST limits were revised by engineering department memorandum, without the corresponding update to the design calculation. Also, the information provided by some of the memoranda were not properly implemented.

During this report period, the inspectors reviewed the new source document, M2-0003, "ASME XI IST Valve Stroke Time Limits in Safety Direction," discussed

corrective actions with the IST program coordinator, and reviewed the corrective actions delineated in the related deviation/event reports (DERs). Corrective actions delineated in DER 2-94-0997 included: a comparison of all IST valve actual stroke times and limits to the design; and a revision of the IST program plan to require the new control document (M2-0003) be used for all IST stroke time acceptance criteria.

In addition, after the review of the Unit 2 IST program, NMPC decided to provide control documents with acceptance criteria for check valves, pumps, valve leakage, and system pressure testing. All of the aforementioned control documents had been approved for use, except for the pump acceptance criteria. This document was in draft form and undergoing review by station management.

The inspector determined that all of the licensee's actions appeared to be appropriate to resolve the problem; especially the initiative to increase the scope of control documents for IST program components. This item is closed.

(Closed) URI 50-220/93-05-01
Instrument Air System Particle Size Requirements and Monitoring

During an NRC inspection of the Unit 1 instrument air system, a discrepancy was noted between the chemistry department procedures and the UFSAR related to the maximum allowable particle size.

The inspectors discussed these issues with chemistry management, and reviewed the safety evaluation, and determined that the use-as-is disposition was acceptable. The inspectors reviewed the licensee's determination that the use of 5 micron filters versus 3 microns did not violate any design or licensing basis commitments. The vendors concurred that the 5 microns limit meets current design requirements for instrument air filtration. A change to update the NMP1 UFSAR to reflect the actual size of the instrument air dual filter has been initiated.

The inspector determined that NMPC's actions were thorough and comprehensive, with excellent engineering documentation to support the decision. This item is closed.

8.0 MANAGEMENT MEETINGS

At periodic intervals and at the conclusion of the inspection period, meetings were held with senior station management to discuss the scope and findings of this inspection. During the exit meeting on August 21, Mr. Abbott reaffirmed the position of NMPC management that they disagreed with the NRC concern regarding the Unit 1 operability determinations issue (see paragraph 2.2).

Based on the NRC Region I review of this report, and discussions held with Niagara Mohawk Power Corporation representatives, it was determined that this report does not contain safeguards or proprietary information.