

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

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50-410/99-01

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: January 3, 1999 - February 13, 1999

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EXECUTIVE SUMMARY

Nine Mile Point Units 1 and 2
50-220/99-01 & 50-410/99-01
January 3, 1998 - February 13, 1999

This integrated inspection report includes aspects of licensee operations, engineering, maintenance, and plant support. The report covered a six-week period of resident inspection and the results of a physical security inspection from January 4 to 8, 1999, by a region based specialist.

Operations

Cold weather preparations were appropriately performed at Unit 2. The development of the Cold Weather Checklist was noted as a useful enhancement. (Section O1.2)

The Unit 1 control room operator shift turnovers were well conducted, with formal communications, detailed briefs, and minimal distractions. Operators performing rounds were knowledgeable of plant conditions and demonstrated proper communication and watchstanding skills. (Section O1.3)

System walkdowns and performance history reviews identified that the material condition of the Unit 2 hydrogen recombiner system was good, and that the system has demonstrated a high level of reliability. (Section O2.1)

A Unit 1 operator identified a discrepancy between the two emergency condenser loop seal level instruments which represented good watchstanding and system awareness. The Unit 1 Technical Support staff adequately investigated this emergency condenser loop seal water level problem and developed appropriate corrective action. (Section O2.2)

The Unit 1 Station Operations Review Committee (SORC) was appropriately focused on safety issues. The SORC members demonstrated a good questioning attitude and safety perspective. (Section O8.1)

Maintenance

Unit 1 new fuel receipt inspection and storage activities were performed well. Good use of procedures, thorough inspection, and good attention to cleanliness controls and communications were noted. Appropriate management and Quality Assurance staff involvement was noted. A potential oversight of reactor building crane inspection requirements was properly addressed. (Section M1.2)

Two of the thirteen maintenance activities observed during this inspection period were inadequately planned. In one instance, a Unit 2 Station Shift Supervisor identified that an approved work order did not properly incorporate emergency diesel generator partial loading operating limits in support of work on the Division III switchgear. The second instance involved a Unit 2 work order associated with the lubrication of the reactor water cleanup system pump motor. The work order lacked detailed information regarding required tools and the amount of



Executive Summary (cont'd)

grease to be used. Consequently, the absence of this information resulted in the operator receiving unnecessary dose, which was inconsistent with good ALARA practices. (Section M3.1)

Plant Support

Housekeeping and radiological controls for the reactor water cleanup system areas were acceptable. (Section R2.1)

On January 14, NMPC declared an Unusual Event due to the plant's proximity to a hydrogen fire at the adjacent FitzPatrick Nuclear Power Plant. The site Emergency Preparedness Program requirements were effectively implemented for a fire at an adjacent facility. NMPC held a post-event critique to review their performance and used the UE as a training opportunity. Several recommendations were made to improve the specific response capabilities. (Section P4.1)

NMPC conducted their security and safeguards activities in a manner that protected public health and safety, and in accordance with their license commitments and NRC requirements. (Section S1)

NMPC security facilities and equipment were well maintained and reliable and were able to meet the license commitments and NRC requirements. (Section S2)

Security and safeguards procedures and documentation were properly implemented. Event Logs were being properly maintained and effectively used to analyze, track, and resolve safeguards events. (Section S3)

The security force members adequately demonstrated that they had the requisite knowledge necessary to effectively implement the duties and responsibilities associated with their position. (Section S4)

Security force personnel were trained in accordance with the requirements of the Training and Qualification Plan. Training documentation was properly maintained and accurate, and the training staff provided effective training. (Section S5)

The level of management support was adequate to ensure effective implementation of the Security Plan, and was evidenced by adequate staffing levels and the allocation of resources to support programmatic needs. (Section S6)

Security audits were comprehensive in scope and depth, audit findings were reported to an appropriate level of management, and the audit program was found to have been properly administered. In addition, a review of the documentation applicable to the self-assessment program indicated that self-assessments were effective in identifying and resolving potential performance weaknesses. (Section S7)



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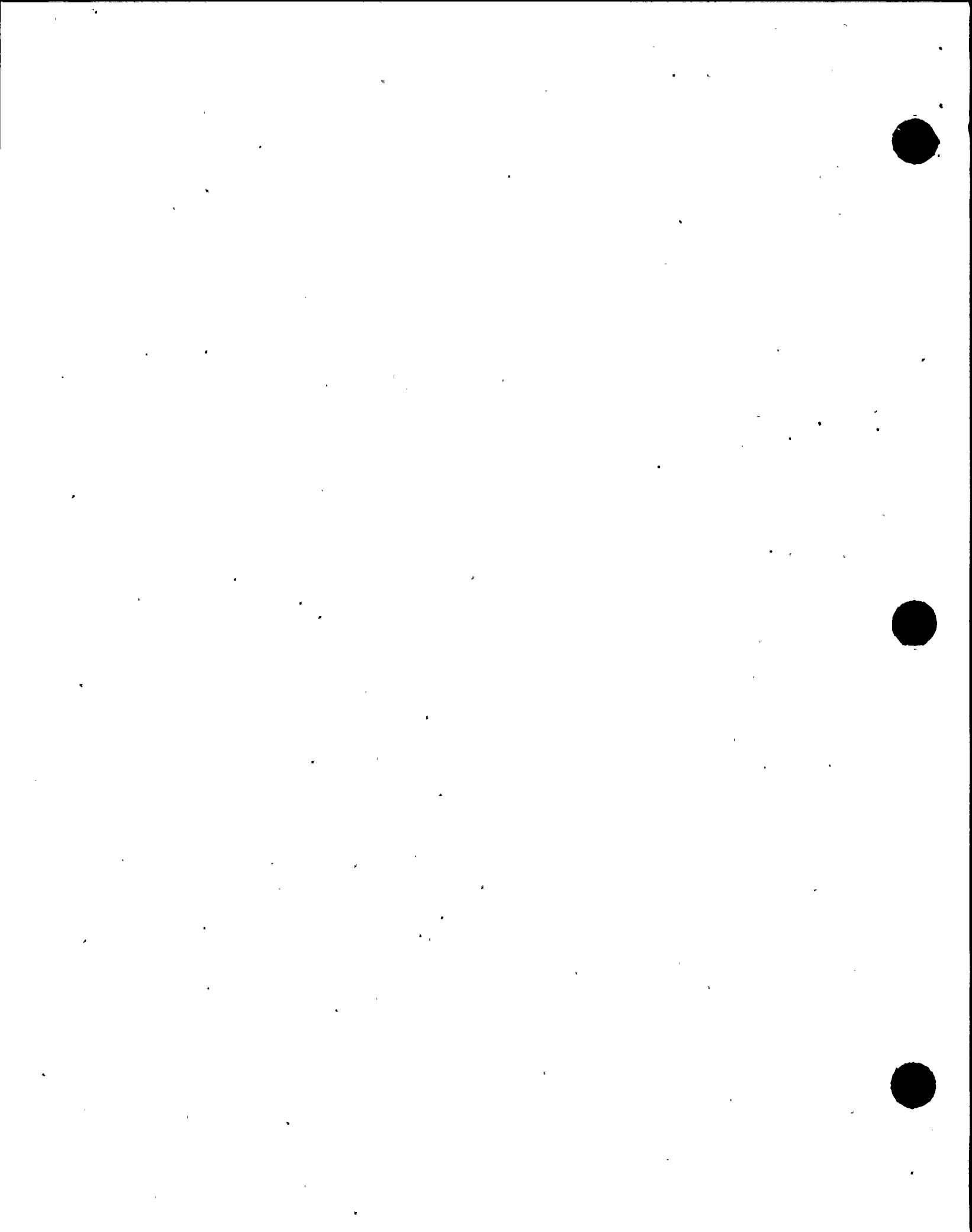
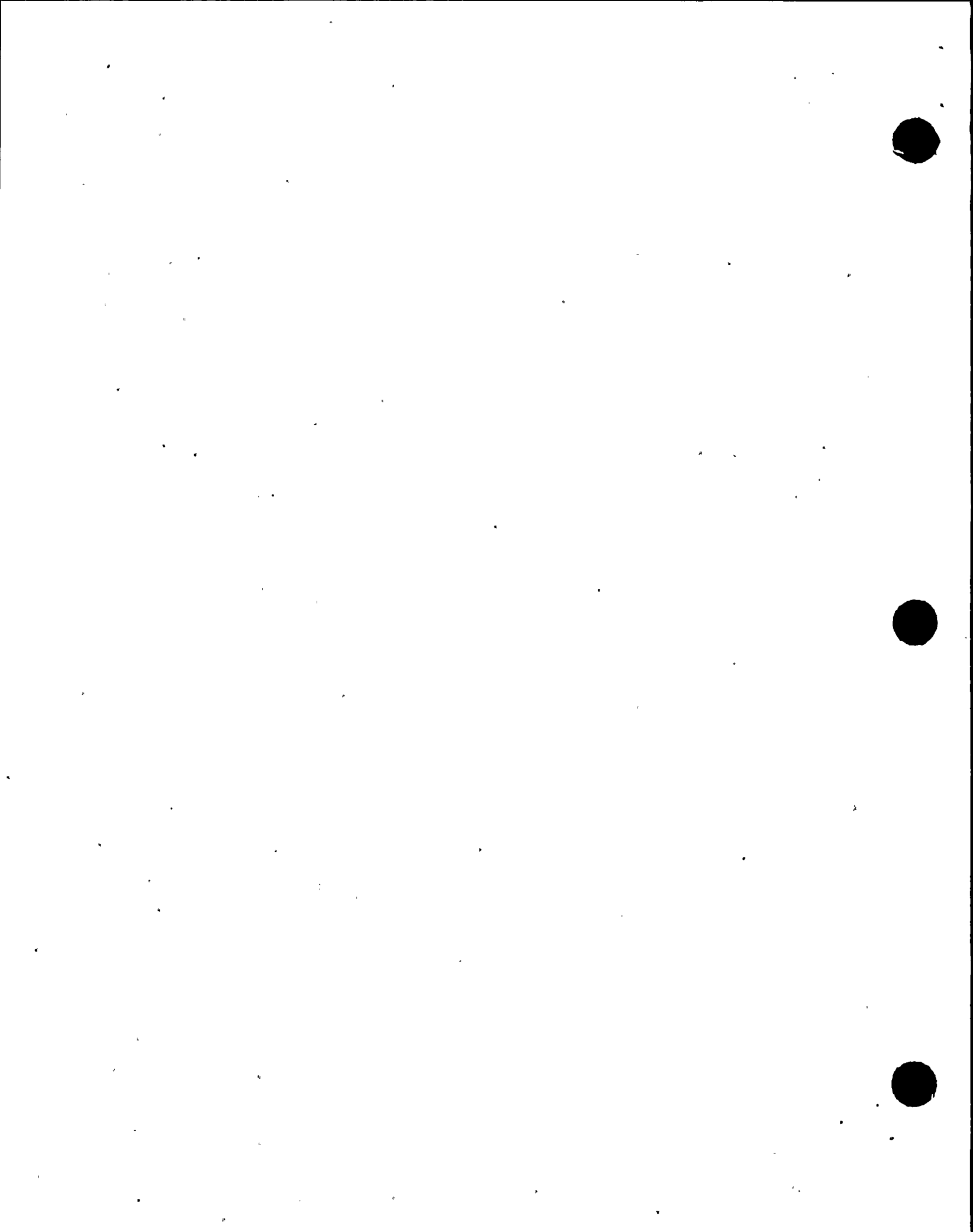


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ATTACHMENTS

- Attachment 1 - Partial List of NMPC Persons Contacted
 - Inspection Procedures Used
 - Items Opened, Closed, and Updated
 - List of Acronyms Used



Report Details

Summary of Plant Status

With the exception of routine scheduled power reductions, Units 1 and 2 operated at 100% reactor power throughout the inspection period.

I. Operations

O1 Conduct of Operations¹

O1.1 General Comments (71707)

Using NRC Inspection Procedure 71707, the resident inspectors conducted frequent reviews of plant operations. The reviews included periodic tours of accessible areas of both units, verification of engineered safeguards features (ESF) system operability, verification of adequate control room and shift staffing, verification that the units were operated in conformance with Technical Specifications (TS), and verification that logs and records accurately identified equipment status or deficiencies. In general, the conduct of operations was professional and safety-conscious.

O1.2 Cold Weather Preparations (Unit 2)

a. Inspection Scope (71707)

The inspectors reviewed Unit 2 preparations for cold weather conditions including procedures and processes.

b. Observations and Findings

The inspectors verified completion of necessary Unit 2 maintenance activities in preparation for cold weather conditions. The activities were completed under various procedures and were tracked by a recently developed "Cold Weather Checklist" contained in procedure N2-OP-102, "Meteorological Monitoring." This checklist was developed as a result of the licensee's review of NRC Information Notice (IN) 98-02, "Nuclear Power Plant Cold Weather Problems and Protective Measures." The Unit 2 preventive maintenance/surveillance testing (PM/ST) scheduling program requires the completion of the cold weather checklist every Fall. Additionally, Operations Surveillance Procedure N2-OSP-LOG-S001, "Shift Checks - Mode 1," the operators monitor various station temperatures, including the service water intake temperature. Furthermore, the operability of the service water heater system is periodically verified during the performance of TS 4.7.1.1.2 required surveillance.

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



c. Conclusions

Cold weather preparations were appropriately performed at Unit 2. The development of the Cold Weather Checklist was noted as a useful enhancement.

O1.3 Control Room Observations (Unit 1)

a. Inspection Scope (71707)

During the inspection period, inspectors conducted control room observations of shift turnovers, control room briefs, and operator rounds to verify Unit 1 was operated safely and in accordance with procedures.

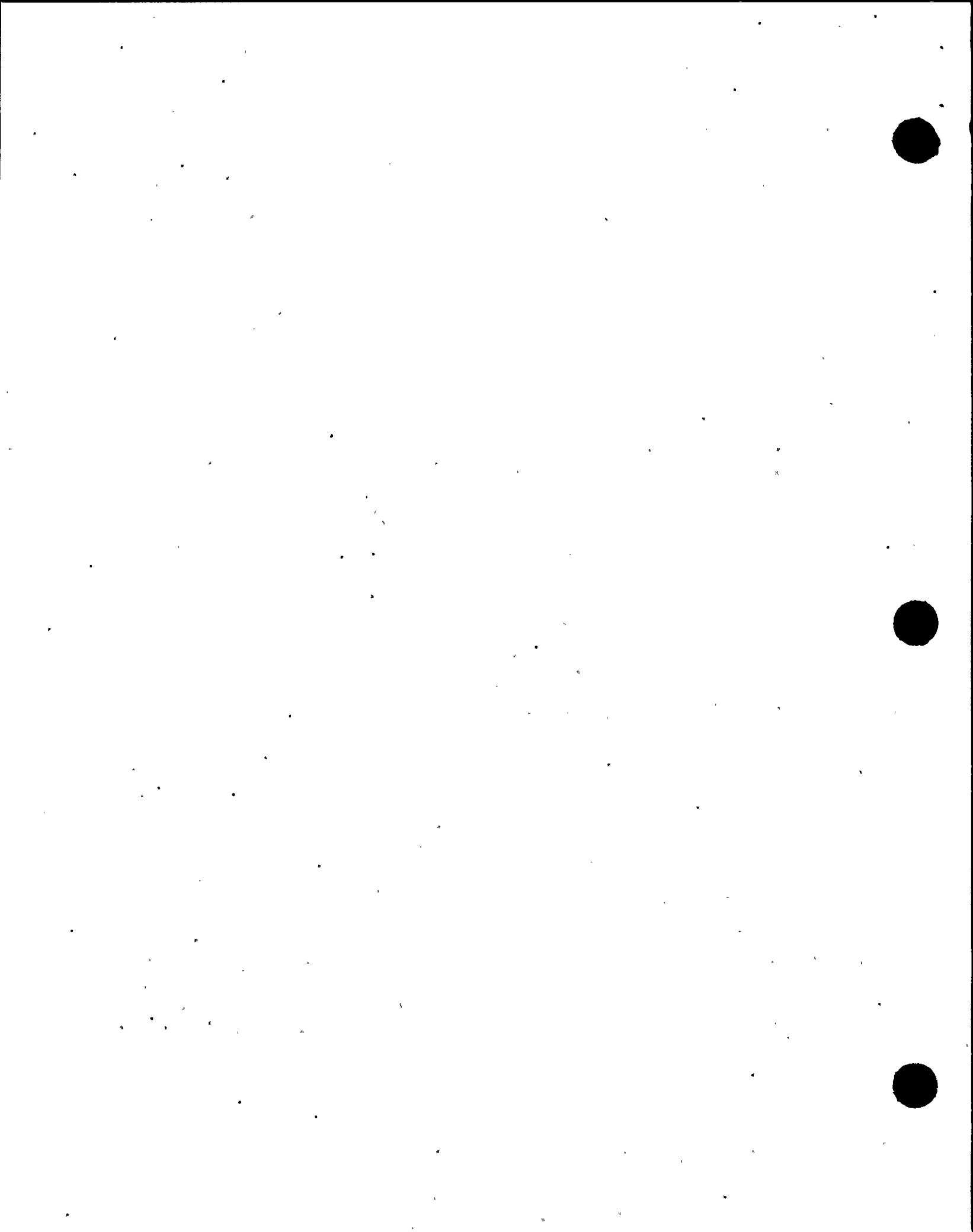
b. Observations and Findings

The inspectors observed shift crew turnovers and noted good utilization of a turnover sheet to brief the on-coming operators. The turnover brief included surveillance testing in progress and tests planned. The inspectors observed that during the turnover, a designated on-shift reactor operator monitored the operation of the plant. The inspectors noted that despite several turnovers being conducted simultaneously, the control room was quiet and distractions were at a minimum. The inspectors observed shift turnover briefs led by the Assistant Senior Shift Supervisor (ASSS), who gave each on-shift person an opportunity to add information to the brief or to clarify the information presented. The Shift Technical Advisor briefed the current most limiting thermal limit and discussed recent industry information. Lessons learned from the industry information were amplified and expanded on by the ASSS.

During this inspection period, the inspector accompanied a plant operator on rounds in the reactor building. The operator utilized an electronic log recorder during his routine rounds. The inspector noted proper use of alarm response procedures and communications with the control room. The operator was familiar with various emergency operating procedures and reactor building operator actions. The operator was knowledgeable of the function of various plant equipment, as well as, temporary test equipment.

c. Conclusions

The Unit 1 control room operator shift turnovers were well conducted, with formal communications, detailed briefs, and minimal distractions. Operators performing rounds were knowledgeable of plant conditions and demonstrated proper communication and watchstanding skills.



O2 Operational Status of Facilities and Equipment

O2.1 Hydrogen Recombiner System Walkdown (Unit 2)

a. Inspection Scope (71707)

The inspectors assessed the ability of the hydrogen recombiner system (HCS) to perform the intended function. This assessment included a visual inspection (walkdown) of accessible portions of HCS train "B". The inspectors reviewed the applicable sections of the Unit 2 Updated Final Safety Analysis Report (UFSAR), technical specifications (TS), applicable deviation/event reports (DERs), operating procedures, and selected surveillance procedures. The inspectors also reviewed the HCS with respect to the Maintenance Rule, Title 10 of the Code of Federal Regulations Part 50.65 (10 CFR 50.65). During the assessment, the inspectors discussed HCS performance with the system engineer, operators, and operations and technical support department supervision.

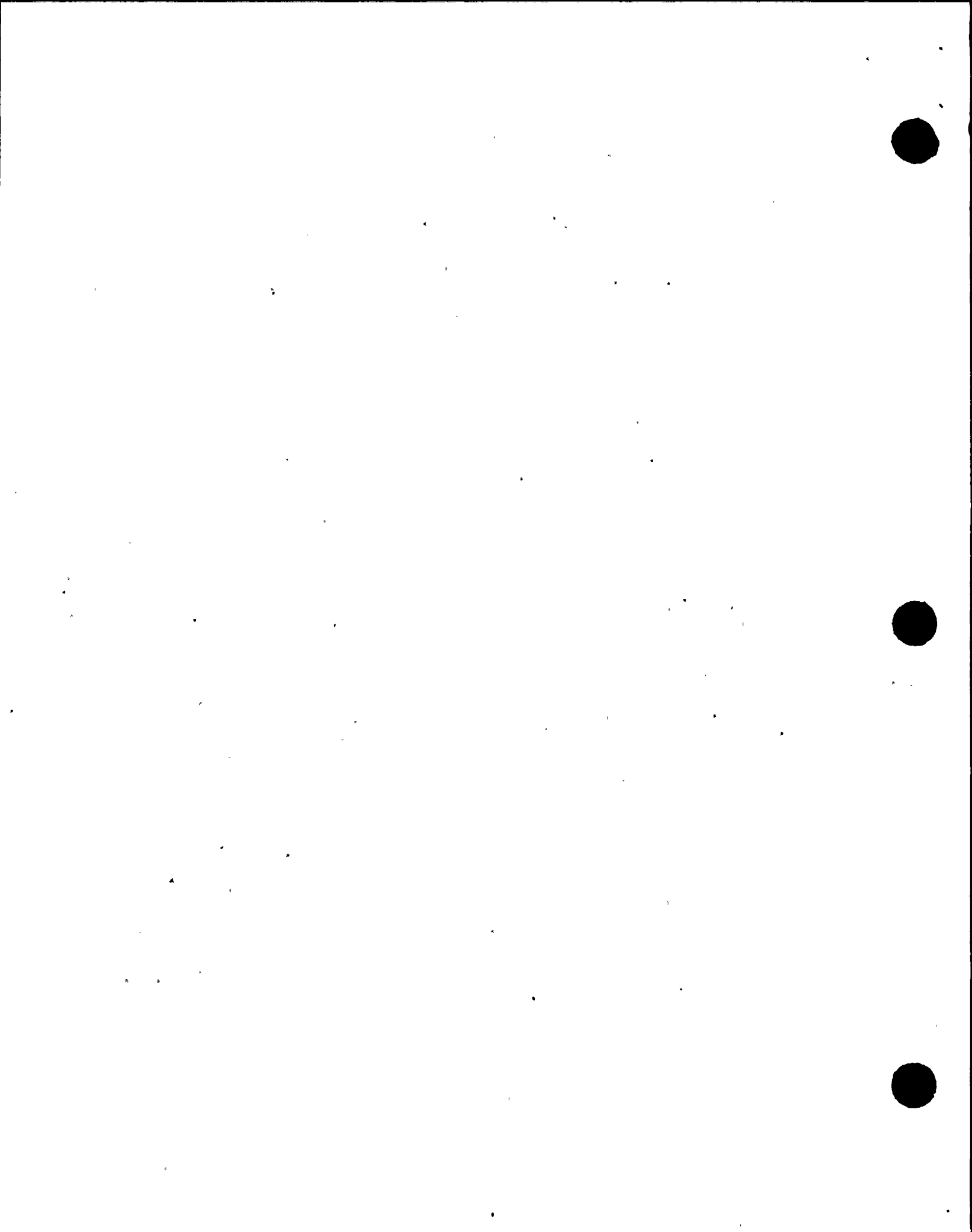
b. Observations and Findings

The Unit 2 HCS is used to process the hydrogen and oxygen released to the primary containment during a design basis accident (DBA) loss of coolant accident (LOCA). The recombiner system combines the free hydrogen and oxygen back into water vapor to minimize the concentration of these flammable gases and prevent an explosive mixture. The recombiners use a thermal recombination process, which is accomplished by raising the temperature of the gases to the point where the hydrogen-oxygen reaction occurs spontaneously to form water vapor. The system contains two parallel recombiner trains, of which only one is required following the DBA LOCA. The second recombiner provides redundant reliability.

The inspectors performed a walkdown of accessible portions of HCS train "B". The inspectors compared plant drawings and procedure N2-VLU-01, "Walkdown Order Valve Lineup & Valve Operations," Revision 0, Attachment 62, to the actual valve positions with no significant discrepancies. Overall, material condition of the system and housekeeping were good. A few minor discrepancies were noted and brought to operations department supervision for correction.

The inspectors reviewed selected surveillance tests associated with the HCS. Based on this sample, the inspectors determined that the tests adequately included the requirements described in the TS and UFSAR.

The inspectors reviewed recent DERs associated with the HCS and concluded that they were minor in nature, and that the licensee was taking appropriate corrective actions to address the issues. Additionally, the inspectors discussed system performance with the system engineer, who indicated no major concerns associated with the system, and that the system has demonstrated a high level of reliability. The inspectors verified that the HCS was appropriately incorporated within the Maintenance Rule program.



c. Conclusions

The system walkdowns and performance history reviews identified that the material condition of the Unit 2 hydrogen recombiner system was good, and that the system has demonstrated a high level of reliability.

O2.2 Emergency Condenser Loop Seal Drain Down (Unit 1)

a. Inspection Scope (71707)

On December 28, 1998, an operator conducting rounds noted that the loop seal level indication for the emergency condenser was well below the level of the opposite loop. As a result, operators declared the system inoperable and entered the appropriate technical specification limiting condition for operation (LCO). Niagara Mohawk Power Corporation (NMPC) formed a team to determine the cause and to formulate corrective actions for the discrepancy. The inspector reviewed and assessed the resolution of the problem to evaluate the adequacy of engineering support.

b. Observations and Findings

The emergency condenser system is designed as a backup to the main turbine condenser to remove reactor core decay heat following a reactor scram and closure of the main steam isolation valves. The system has two loops with two emergency condensers per loop. The shell side of the condensers have an overflow line which ensures that a free air space is maintained. The drain from the overflow is connected to the waste collection system via a loop seal. Maintaining an appropriate water level in the loop seal ensures that steam and gases vent through the atmospheric vent and not the waste collection system. NMPC investigation determined that the loop seal was drained as a result of the siphoning effect through the waste collection system when the torus water level was lowered. The drain line for lowering the torus water level connects to the emergency condenser overflow drain line. There is a vacuum breaker valve upstream of the loop seal to prevent siphoning. However, NMPC believes that this valve did not function properly and a work package to clean and inspect the vacuum breaker was initiated.

The NMPC investigation team developed short and long term corrective actions. These actions included emergency condenser operating procedure changes, the addition of loop seal level check to operator rounds, and entering the vacuum breakers into the preventive maintenance program. Engineering reviewed the potential for an unmonitored release and determined that a release pathway was not established. In addition, recommendations were made for entering the loop seal level instrument into the calibration program. The inspectors noted that the Technical Support staff continued to monitor system performance and had scheduled monitoring of the vacuum breaker operation the next time the torus water level is lowered.



c. Conclusions

A Unit 1 operator identified a discrepancy between the two emergency condenser loop seal level instruments represented good watchstanding and system awareness. The Unit 1 Technical Support staff adequately investigated this emergency condenser loop seal water level problem and developed appropriate corrective action.

O8 Miscellaneous Operations Issues

O8.1 Station Operations Review Committee (Unit 1)

a. Inspection Scope (71707)

The inspectors attended a Station Operations Review Committee (SORC) meeting to evaluate the effectiveness of the safety committee. The inspectors also reviewed previous SORC meeting minutes.

b. Observations and Findings

The meeting was led by the SORC vice chairman and the requirement for a quorum was met using several alternate members. The SORC members reviewed the closure of a deviation and event report; which included a licensee event report and a safety evaluation. The SORC members asked several insightful questions of the topic presenters and were focused on the potential impact on plant safety. The topics were expanded to incorporate potential generic issues. The presenters were well versed on the topics presented and able to appropriately address the SORC's questions. The SORC reached agreement at the end of the meeting that none of the issues discussed involved an unreviewed safety question.

c. Conclusions

The Unit 1 Station Operations Review Committee (SORC) was appropriately focused on safety issues. The SORC members demonstrated a good questioning attitude and safety perspective.

II. Maintenance

M1 Conduct of Maintenance

M1.1 General Comments (61726, 62707)

Using NRC Inspection Procedures 61726 and 62707, the inspectors periodically observed various maintenance activities and surveillance tests. As part of the observations, the inspectors evaluated the activities with respect to the requirements of the Maintenance Rule, as detailed in 10CFR50.65. In general, maintenance and surveillance activities were conducted professionally, with the work orders (WOs) and necessary procedures in use at the work site, and with an appropriate focus on safety.



Specific activities and noteworthy observations are detailed below. The inspectors reviewed procedures and observed all or portions of the following maintenance/surveillance activities:

- WO 98-12094-00 Remove existing/install refurbished breaker Cubicle 1-feed from 2NNS-SWG016-2
- WO 98-12094-01 Replace removable portion of trip fuse block
- WO 98-09478-00 N2-PM-W001 Reactor water cleanup pump, lubrication of motor and pump
- N2-RSP-RM-Q107 Channel Functional Test of the Reactor Building below Refuel Floor Process Radiation Monitors
- N2-OSP-EGS-M@002 Diesel Generator & Diesel Air Start Valve Operability Test-Division III
- N1-ST-Q19 Control Room HVAC System Operability Test
- N1-ISP-036-003, Rev. 2 Hi-Lo Reactor Water Level Instrument Trip Channel Test/Calibration
- N1-PM-S5 Control Room System Line-up Verification.
- WO 99-00234 Replace broken belts on air compressor #2, diesel generator 103
- WO 1-99-00217 Bleed oil from hydrogen sensing lines.
- WO 98-00803-00 Perform N1-MPM-GEN-SA806, Inspection of Reactor Building Crane
- N2-PM-M008 Operations Preventive Maintenance
- N2-PM-M004 Extraction Steam Non-return Valve Operational Test

M.1.2 New Fuel Receipt and Inspection (Unit 1)

a. Inspection Scope (62707)

The inspectors observed various activities involving the receipt, handling, and inspection of new fuel by the maintenance staff at Unit 1. The inspection method included the direct observation of fuel handling and the review of procedures associated with fuel handling. The inspector reviewed maintenance procedure N1-MMP-FHP-001, Revision 2, Truck Unloading and New Fuel Transfer to Reactor Building Elevation 340, N1-MMP-FHP-002, Revision 4, Movement of Containers and New Fuel on Reactor Building Elevation 340, and N1-MMP-FHP-003, Revision 3, New Fuel Bundle Inspection.

b. Observations and Findings

The fuel receipt process consisted of receiving fuel, transporting it to the refuel floor, and then inspection and transfer to the new fuel vault. The inspector noted good communications and attentiveness by the maintenance staff. Quality Assurance support was noted, as well as, periodic observations by management. The inspector verified lifting and handling equipment was installed per procedure and that proper security measures were taken while fuel was being transferred. The inspector noted thorough inspection of the fuel by the mechanics, good control of the foreign material exclusion area, and attention to cleanliness of the work area. Proper procedure use was noted and checklists were being used where appropriate. The inspector verified qualifications



and eye examinations (required for new fuel inspections) for the mechanics were current.

During the review of the preliminary actions of procedure N1-MMP-FHP-001, the inspector noted that step 7.1.4, required verification of the completion of N1-MPM-GEN-SA806, Inspection of Reactor Building Crane. The inspector reviewed the completed maintenance procedure, which was performed on November 18, 1998. The inspector noted that section 7.3, Electrical Inspection, was not performed at that time but had been performed on January 13, 1998 which was outside of its annual performance window. NMPC subsequently determined that the electrical inspection was still within a 25% grace period and scheduled the inspection to be performed prior to the upcoming refueling outage. Subsequent review by the NMPC determined that the preventive maintenance surveillance testing program tracked the electrical and mechanical maintenance as one activity. The mechanical portion of the procedure is performed semi-annually and the electrical annually. NMPC stated that tracking of these crane maintenance activities would be revised to identify two separate entities.

c. Conclusions

Unit 1 new fuel receipt inspection and storage activities at Unit 1 were performed well. Good use of procedures, thorough inspection, and good attention to cleanliness controls and communications were noted. Appropriate management and Quality Assurance staff involvement was noted. A potential oversight of reactor building crane inspection requirements was properly addressed.

M3 Maintenance Procedures and Documentation

M3.1 Planning and Development of Work Orders (Unit 2)

a. Inspection Scope (62707)

During the routine observations of Unit 2 maintenance activities, the inspectors reviewed various work orders (WOs) to assess the quality and accuracy of the completed maintenance.

b. Observations and Findings

During recent reviews and observations of maintenance activities at Unit 2, the inspectors noted shortcomings with the development and planning of two WO's. Specifically, WO 98-12094-00, "Remove existing/install refurbished breaker Cubicle 1-feed from 2NNS-SWG016-2," and WO 98-09478-00, "N2-PM-W001 Reactor water clean-up pump, lubrication of motor and pump."

With respect to WO 98-12094, on the day before the work was scheduled to be performed, the Unit 2 Station Shift Supervisor (SSS) identified that certain Division III emergency diesel generator (EDG) operational limitations were in conflict with the approved WO. Based on follow-up discussions with the EDG system engineer and members of the Unit 2 work control organization, the inspector determined that the



impact of running the Division III EDG partially load was considered during the work order preparation. However, during the development of the work order, the operating procedure limitations were not incorporated. This was evidenced by the fact that the work order estimated times for running the Division III EDG, partially loaded and unloaded, were greater than that allowed by the operating procedure.

As a result of the SSS's questions, NMPC revised the operating procedure to relax the Division III EDG operating limitations associated with partial load operations and the maintenance work on the Division III switchgear was satisfactorily completed. The inspectors reviewed the procedure change and applicable vendor information and determined the change to have been appropriate.

WO 98-09478-00, regarding the lubrication of the reactor water cleanup system (RWCU) pump motor, required an entry into a contaminated high radiation area. The inspectors entered the RWCU pump room with the worker and observed the lubrication of the "A" pump motor. Based on the discussion and a review of the associated work order and procedure, the inspectors ascertained that the required amount of grease to be injected was based on the motor shaft diameter. However, the shaft diameter was not included in the work order or the procedure. As a result, the operator spent additional time in the high radiation area to visually estimate the shaft diameter and determine the amount of grease to inject. The inspector also observed that the operator spent several minutes trying to remove the motor grease plug before concluding that he had the incorrect tool to remove the plug. Consequently, the operator had to exit and re-enter the contaminated high radiation area to complete the job with the proper tool. The inspector noted that neither the procedure nor the work order contained information regarding the tools required to perform the task.

c. Conclusion

Two of the thirteen maintenance activities observed during this inspection period were inadequately planned. In one instance, a Unit 2 Station Shift Supervisor identified that an approved work order did not properly incorporate emergency diesel generator partial loading operating limits in support of work on the Division III switchgear. The second instance involved a work order associated with the lubrication of the reactor water cleanup system pump motor. The work order lacked detailed information regarding required tools and the amount of grease to be used. Consequently, the absence of this information resulted in the operator receiving unnecessary dose, which is not in keeping with good ALARA practices.

III. Engineering

E8 Miscellaneous Engineering Issues (37551, 92700, 90712, 92903)

- E8.1** (Closed) VIO 50-220/97-12-07: Failure to provide 10 CFR 50 Appendix R emergency lighting for access to, and closure of the Unit 1 emergency condenser (EC) vent manual isolation valves. Specifically, in the event of a control room fire, operators were required to locally verify that the EC vent-to-torus isolation valve is closed. However, NMPC identified that adequate emergency lighting was not installed for the operators to



perform this action. Subsequently, NMPC issued Licensee Event Report (LER) 50-220/97-12, "Additional 10 CFR 50 Appendix R Section III.J Lighting Deficiencies," docketing this discrepancy. This LER was reviewed and closed in NRC Inspection Report 50-220/97-12. Based on the docketing of LER 50-220/97-12, which provided the root cause and corrective actions regarding the missing emergency lights, NMPC was not required to provide a separate response to the Notice of Violation. The inspectors verified satisfactory completion of the corrective actions documented in the LER. Accordingly, this violation is closed.

IV. Plant Support

R2 Status of RP&C Facilities and Equipment (71750)

R2.1 Inspection of Normally Inaccessible Reactor Water Cleanup Areas (Unit 2)

During the planned outage of the Unit 2 reactor water cleanup system, the dose rates in the areas housing the system components were significantly reduced; the inspectors used this opportunity to tour these normally inaccessible areas. During the tour, the inspectors observed that the material condition of the equipment contained in the areas inspected was satisfactory, with one minor exception regarding a loose pipe support, which was subsequently corrected. Housekeeping and radiological controls for the areas inspected were acceptable.

P4 Staff Knowledge and Performance in EP (93702)

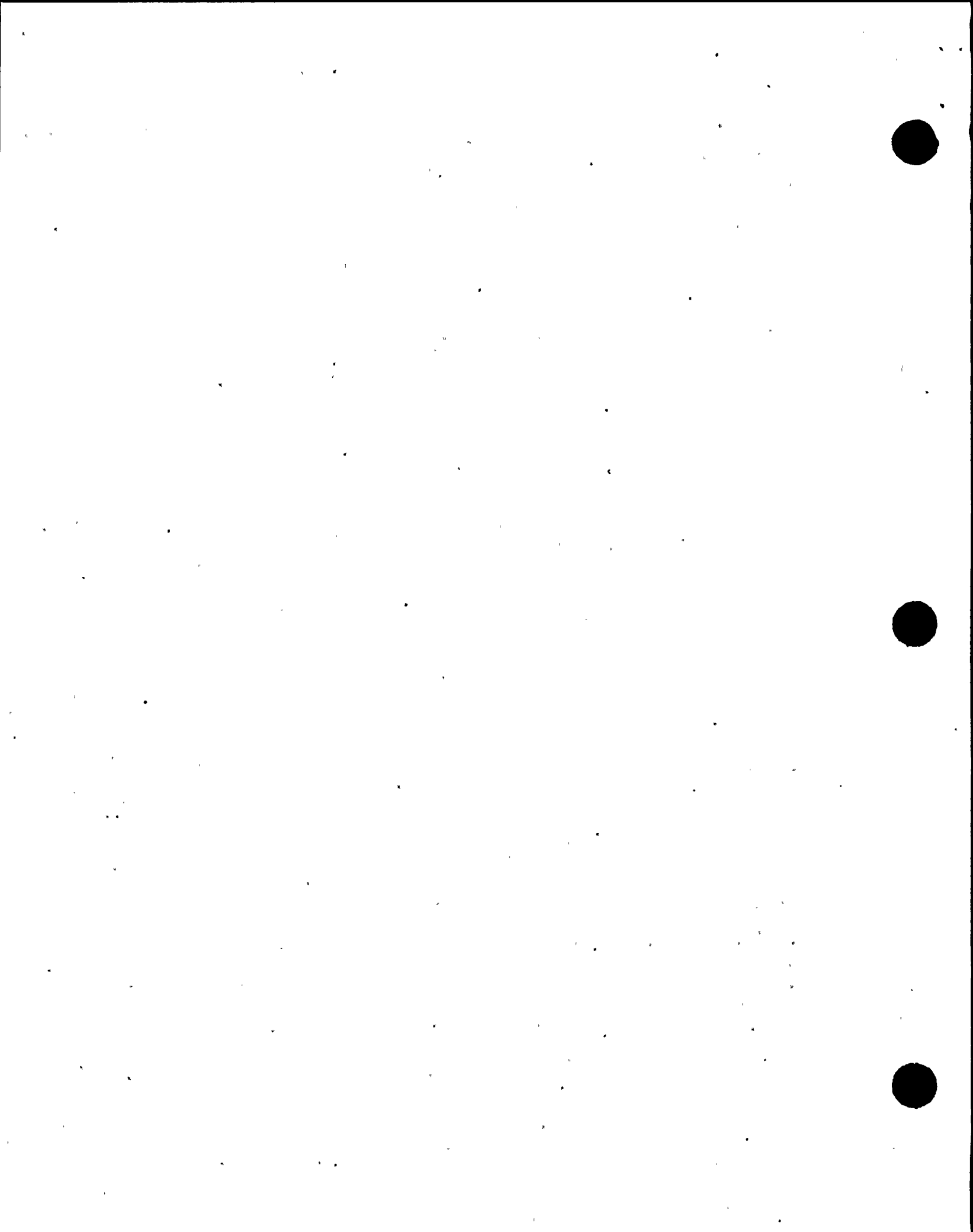
P4.1 Notification of Unusual Event Declared Due to Fire at Adjacent Facility

On January 14, NMPC declared an Unusual Event (UE) due to the plant's proximity to a hydrogen fire at the adjacent FitzPatrick Nuclear Power Plant. The inspector observed the NMPC staff's initial response. As a precaution, NMPC evacuated the warehouse and the engineering buildings, which are geographically located the closest to the location of the FitzPatrick hydrogen storage facility. Additionally, the Technical Support Center was staffed. NMPC staff response to this event was appropriate. NMPC held a post-event critique to review their performance and used the UE as a training opportunity. Several recommendations were made to improve the specific response capabilities. The inspectors concluded the site Emergency Preparedness Program requirements were effectively implemented for a fire at an adjacent facility.

S1 Conduct of Security and Safeguards Activities

a. Inspection Scope (81700)

The security program was inspected during the period of January 4-8, 1999. Areas inspected included alarm stations, communications, and protected area (PA) access control of personnel and packages.



b. Observations and Findings

Alarm Stations The inspector observed operations of the Central Alarm Station (CAS), and the Secondary Alarm Station (SAS) and verified that the alarm stations were equipped with appropriate alarms, surveillance, and communications capabilities. Interviews with the alarm station operators found them knowledgeable of their duties and responsibilities. The inspector also verified, through observations and interviews, that the alarm stations were continuously manned, independent and diverse so that no single act could remove the plants capability for detecting a threat and calling for assistance. The alarm stations did not contain any operational activities that could interfere with the execution of the detection, assessment, and response functions.

Communications The inspector verified, by document reviews and discussions with alarm station operators, that the alarm stations were capable of maintaining continuous intercommunications, communications with each security force member (SFM) on duty, and were exercising communication methods with the local law enforcement agencies, as committed to in the Security Plan (Plan).

PA Access Control of Personnel, Hand-Carried Packages, and Material On January 5 and 8, 1999, the inspector observed personnel and package search activities at the East and West personnel access portals respectively. The inspector determined by direct observations that positive controls were in place to ensure only authorized individuals were granted access to the PA and that all personnel and hand carried items entering the PA were properly searched.

c. Conclusions

NMPC was conducting its security and safeguards activities in a manner that protected public health and safety and in accordance with their license commitments and NRC requirements.

S2 Status of Security Facilities and Equipment

a. Inspection Scope (81700)

Areas inspected were: PA assessment aids; PA detection aids; personnel search equipment and testing; maintenance and compensatory measures.

b. Observations and Findings

PA Assessment Aids On January 5, 1998, the inspector evaluated the effectiveness of the assessment aids by observing an SFM conducting a walkdown of the PA. The assessment aids had good picture quality and excellent zone overlap. To ensure Plan commitments were satisfied, the inspector verified that the licensee had procedures in place requiring the implementation of compensatory measures in the event the alarm station operators were unable to properly assess the cause of an alarm.



Personnel and Package Search Equipment On January 7, 1998, the inspector observed both the routine use and the weekly performance testing of the personnel and package search equipment. The inspector determined by observations and procedural reviews that the search equipment performed in accordance with licensee procedures and Plan commitments.

PA Detection Aids On January 5, 1998, the inspector observed an SFM conducting performance testing of the perimeter intrusion detection system (PIDS). The testing consisted of three intrusion attempts in each of five different zones. The appropriate alarms were generated in each attempt. In addition, during the perimeter walkdown, five random intrusions were attempted with the appropriate alarm being generated in each case. The inspector determined that the equipment was functional and effective and met the requirements of the Plan.

Testing, Maintenance and Compensatory Measures The inspector reviewed testing and maintenance records for security related equipment for the previous six months and found that documentation was on file to demonstrate that the licensee was testing and maintaining systems and equipment as committed to in the Plan. The records indicated a good working relationship between electrical maintenance and security staffs as evidenced by the minimal use of compensatory measures due to repairs being accomplished on out-of-service security equipment in a timely manner.

c. Conclusions

NMPC security facilities and equipment were determined to be well maintained and reliable and were able to meet the license commitments and NRC requirements.

S3 Security and Safeguards Procedures and Documentation

a. Inspection Scope (81700)

Areas inspected were implementing procedures and security event logs.

b. Observations and Findings

Security Program Procedures The inspector verified that the procedures were consistent with the Plan commitments and were properly implemented. The verification was accomplished by reviewing selected implementing procedures associated with PA access control of personnel, packages and materials, testing and maintenance of personnel search equipment and performance testing of PA detection aids.

Security Event Logs The inspector reviewed the Security Event Logs for the previous twelve months. Based on this review and discussion with security management, it was determined that the licensee appropriately analyzed, tracked, resolved, and documented safeguards events that did not require a one-hour report to the NRC.



c. Conclusions

Security and safeguards procedures and documentation were properly implemented. Event Logs were properly maintained and effectively used to analyze, track, and resolve safeguards events.

S4 Security and Safeguards Staff Knowledge and Performance

a. Inspection Scope (81700)

Area inspected was security staff requisite knowledge.

b. Observations and Findings

The inspector observed a number of SFMs in the performance of their routine duties. These observations included alarm station operations, personnel and package searches, and performance testing of the PIDS. Additionally, the inspector interviewed SFMs and, based on their responses, determined that the SFMs were knowledgeable of their responsibilities and duties, and that they could effectively carry out their assignments.

c. Conclusions

The SFMs adequately demonstrated that they had the requisite knowledge necessary to effectively implement the duties and responsibilities associated with their position.

S5 Security and Safeguards Staff Training and Qualification

a. Inspection Scope (81700)

Areas inspected were security training and qualifications, and training records.

b. Observations and Findings

Security Training and Qualifications (T&Q) On January 5, 1999, the inspector randomly selected and reviewed T&Q records of seven SFMs. Physical and requalification records were inspected for armed and supervisory personnel. The results of the review indicated that the security force was being trained in accordance with the approved T&Q plan.

Training Records The inspector was able to verify, by reviewing training records, that the records were properly maintained, accurate and reflected the current qualifications of the SFMs.



c. Conclusions

Security force personnel were being trained in accordance with the requirements of the T&Q Plan. Training documentation was properly maintained and accurate and the training provided by the training staff was effective.

S6 Security Organization and Administration

a. Inspection Scope (81700)

Areas inspected were management support, effectiveness, and staffing levels.

b. Observations and Findings

Management Support The inspector reviewed various program enhancements made since the last program inspection conducted in April 1998. These enhancements included the allocation of resources for procurement of additional weapons, a new security vehicle, and a new x-ray screening system.

Management Effectiveness The inspector reviewed the management organizational structure and reporting chain and noted that the Manager, Nuclear Security's position in the organization provided an appropriate level for making senior NMPC management aware of programmatic needs.

Staffing Levels The inspector verified that the total number of trained SFMs immediately available on shift met the requirements specified in the Plan.

c. Conclusions

The level of management support was adequate to ensure effective implementation of the Security Plan, and was evidenced by adequate staffing levels and the allocation of resources to support programmatic needs.

S7 Quality Assurance (QA) in Security and Safeguards Activities

a. Inspection Scope (81700)

Areas inspected were audits, problem analyses, corrective actions, and effectiveness of management controls.

b. Observations and Findings

Audits The inspector reviewed the 1997 Nuclear Quality Assurance audit of Security and Fitness For Duty (FFD), conducted April 13-17, 1998, (Audit No. 98006). The audit was found to have been conducted in accordance with the Plan and FFD rule and was enhanced by the use of technical specialists on the team.



Audit No. 98006 identified four deficiencies. The inspector determined that the findings were related to administrative and procedural issues and were not indicative of programmatic weaknesses.

Problem Analyses The inspector reviewed data derived from the security department's self-assessment program. Potential performance weaknesses were being properly identified, tracked, and trended.

Corrective Actions The inspector reviewed corrective actions implemented by the licensee in response to the QA audits and self-assessment program. The inspector determined that the corrective actions were technically sound and were performed in a timely manner.

Effectiveness of Management Controls The inspector observed that the licensee had programs in place for identifying, analyzing, and resolving problems. They included the performance of annual QA audits, a departmental self-assessment program, and the use of industry data, such as violations of regulatory requirements identified by the NRC at other facilities, as a criterion for self-assessment.

c. Conclusions

The review of the NMPC audit program indicated that the audits were comprehensive in scope and depth, that the audit findings were reported to an appropriate level of management, and that the audit program was being properly administered. In addition, a review of the documentation applicable to the self-assessment program indicated that self-assessments were effective in identifying and resolving potential performance weaknesses.

V. Management Meetings

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of the licensee management at the conclusion of the inspection on February 25, 1999. The licensee acknowledged the findings presented.



ATTACHMENT 1

PARTIAL LIST OF PERSONS CONTACTED

Niagara Mohawk Power Corporation

N. Paleologos	Plant Manager, Unit Two
R. Smith	Plant Manager, Unit One
N. Rademacher	Manager, Quality Assurance
H. Christensen	Manager, Security
D. Bosnic	Manager, Operations, Unit Two
S. Doty	Manager, Maintenance, Unit One
L. Pisano	Manager, Maintenance, Unit Two
D. Topley	Manager, Operations, Unit One

INSPECTION PROCEDURES USED

IP 37551	On-Site Engineering
IP 61726	Surveillance Observations
IP 62707	Maintenance Observations
IP 71707	Plant Operations
IP 71750	Plant Support
IP 81700	Physical Security Program for Power Reactors
IP 90712	In-Office Review of Written Reports of Non-Routine Events at Power Reactor Facilities
IP 92700	Onsite Follow-up of Written Reports of Non-Routine Events at Power Reactor Facilities
IP 92903	Follow-up - Engineering
IP 93702	Event Response

ITEMS OPENED, CLOSED, AND UPDATED

OPENED

None

CLOSED

50-220/97-12-07	VIO	Failure to provide Appendix R emergency lighting for access to and closure of the Unit 1 emergency condenser
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LIST OF ACRONYMS USED

ASSS	Assistant Station Shift Supervisor
CAS	Central Alarm Station
DBA	Design Basis Accident
EC	Emergency Condenser
EDG	Emergency Diesel Generators
ESF	Engineered Safeguards Feature
FFD	Fitness For Duty
HCS	Hydrogen Recombiner System
HPCS	High Pressure Core Spray
IN	Information Notice
LER	Licensee Event Report
LOCA	Loss of Coolant Accident
NMPC	Nine Mile Point Corporation
NRC	Nuclear Regulatory Commission
PID	Perimeter Intrusion Detection System
PM/ST	Preventive Maintenance/Surveillance Testing
RWCU	Reactor Water Cleanup
SAS	Secondary Alarm Station
SFM	Security Force Member
SORC	Station Operating Review Committee
SSS	Station Shift Supervisor
T&Q	Training and Qualification
TS	Technical Specification
UE	Unusual Event
UFSAR	Updated Final Safety Analysis Report
Unit 1	Nine Mile Point Unit 1
Unit 2	Nine Mile Point Unit 2
VIO	Violation
Walkdown	Visual Inspection
WO	Work Order

