U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-263/88015(DRS)

Docket No. 50-263 License No. DPR-22

Licensee: Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401

Facility Name: Monticello

Inspection At: Monticello, Minnesota

Inspection Conducted: August 15-25, 1988

Inspectors: A. M. Bongiovani 9/23/88
Date

F. A. Maura 9/23/88
Date

Approved By: M. P. Phillips, Chief 9/23/88
Operational Programs Section Date

Inspection Summary

Inspection on August 15-25, 1988 (Report No. 50-263/88015(DRS))
Areas Inspected: Special announced inspection to review the history of RCIC problems and the adequacy of the licensee's evaluations and corrective actions (61700, 61725, 62700, and 62702); and to review actions on previous inspection items (92701 and 92702).
Results: No violations or deviations were identified. With regards to the review of RCIC problems, the following observations were noted:

- The cause of the turbine exhaust line high pressure trips on second starts was never determined. The licensee will verify the proper operation of the exhaust line drain check valve and of the vacuum breaker check valves (Paragraph 2.d).

- The planned corrective actions to prevent a recurrence of the RCIC steam line flooding are adequate; however, the question on system operability has not been fully answered. Additional licensee and NRC work may be required (Paragraph 2.e).

- The RCIC pump vibration problem is being closely monitored and the planned corrective actions are adequate.

DETAILS

1. Persons Contacted

Northern States Power Company

*B. Day, Superintendent, Operating Engineering
*S. Hammer, Lead Production Engineer
M. Hammer, Lead I&C Engineer
*W. Hill, Superintendent, Technical Engineering
J. LaCasse, Systems Engineer
J. Nelson, Senior Production Engineer
D. Nevinski, General Superintendent, Operations
J. Nystrom, Senior Production Engineer
L. Pudlick, Senior Production Engineer
E. Seedorf, I&C Supervisor
*W. Shamla, Plant Manager
P. Tobin, Senior Production Engineer

United States Nuclear Regulatory Commission

P. Hartman, Senior Resident Inspector
C. Vanderniet, Resident Inspector

*Denotes those attending the exit meeting on August 25, 1988.

The inspectors also contacted other licensee personnel including members of the operating, maintenance, and engineering staff.

2. Reactor Core Isolation Cooling System Problems

a. Introduction

The RCIC system at Monticello is a safety-related system designed to inject a constant 400 gpm flow into the reactor vessel for a reactor pressure range from 150 to 1120 psig in the event the reactor is isolated and the feedwater system is unavailable. The RCIC is not an ESF system. Since the 1987 refueling outage, the RCIC has experienced a number of problems (several turbine trips on second start attempts, steam line flooding, and high pump vibration). The purpose of this inspection was to review the history of RCIC system problems and the adequacy of the licensee's evaluations and corrective actions taken or planned.

b. Review of RCIC Historical Records

The inspectors reviewed the licensee's Reportable Events (LERs, ROs, and AOs) and Significant Operating Event Reports for the period of January 1, 1980, to the present, in an effort to determine the history

of problems experienced with the RCIC system during this decade. Only two problems, piping degradation and motor operator torque switch problems, were identified as having occurred more than once, and no repeats have been reported to have occurred since 1983. The most recent problems, turbine exhaust high pressure trips (1986 and 1988), turbine steam line flooding (1988), and high pump vibration (1987-1988) were not documented as having occurred previously.

In an effort to obtain additional information as to the type and frequency of problems experienced with the RCIC system, the inspectors reviewed the pump and valve operability surveillance tests performed from January 1983 to June 1988 and the flow control system dynamic tests performed form 1982 thru 1987. The majority of the problems documented as a result of these tests have been deviations from the valve stroke time acceptance criteria. The inspectors also reviewed the lubrication history of the turbine, pump, and valves in the system; and the calibration records of selected instruments. The findings and conclusions of our review are summarized in the following paragraphs.

c. RCIC Turbine Trips on First Start

Following the 1986 refueling outage, the RCIC system was tested during July at 150 psig and 1000 psig satisfactorily. On August 4, during the monthly surveillance test, the RCIC turbine tripped on its initial start. The licensee was not able to determine the cause of the trip other than to know it was not caused by overspeed. During a subsequent start the same day the licensee experienced trouble with high temperature indication at the RCIC coupler end bearing (loose wire), and with speed and flow control (throttle Valve MO-2080 trip mechanism failing to latch properly). Both problems were repaired and post-maintenance testing was performed satisfactorily on August 5. The system was declared operable. On August 6, the licensee performed the RCIC quarterly valve operability and monthly pump operability test. No problems were noted. On August 7, the licensee attempted to run the RCIC pump, but the turbine tripped on high exhaust pressure. A strip chart recorder which was monitoring the exhaust pressure, among other parameters, showed a peak pressure of ~ 50 psig at ~ 2 seconds following the start signal. The investigation revealed that the steam trap on the turbine exhaust line was not working properly and water was accumulating in the Line (condensate generated due to a leaking steam inlet valve, MO-2078). The licensee opened the steam trap bypass valve, RCIC-23, and declared the RCIC system operable as long as RCIC-23 remained open. The licensee continued to investigate the cause for the buildup in the exhaust line. A modification was performed during the 1987 refueling outage to eliminate the water buildup into the turbine exhaust line. The modification has prevented the occurrence of first start trips.

d. RCIC Turbine Trips on Second Start

The RCIC pump operability test was a single start test until 1978. With the generation of test procedures for the Inservice Testing program (ASME Code Section XI) the licensee changed its method of performing the pump operability test. The new procedure required two turbine starts. The first start was conducted with the pump return line (to condensate storage tank) valve MO-2110 wide open. The valve was then throttled to obtain a flow rate of ~ 400 gpm at ~ 1000 psig; next the turbine was tripped, and after a few minutes the turbine was restarted to measure the time required to reach 400 gpm. The two starts were required due to the poor flow control characteristics of valve MO-2110.

From May 1978 to May 1988, the licensee performed two-start pump operability surveillance tests. No turbine trips during the second start were recorded until four trips were experienced between January and April 1988.

The licensee conducted an investigation to determine the cause of the second start trips. A series of rapid starts were performed during April 1988 which determined that following a two-minute shutdown period a maximum turbine exhaust pressure of 46 psig was experienced. The high exhaust pressure turbine trip point was set at 40 psig. The test data also showed that just prior to the restart, a slight vacuum (up to 3.5 psig) may have formed in the exhaust line, which probably drew water from the torus into the exhaust line. The licensee has changed the RCIC instantaneous exhaust pressure trip from 40 psig to 50 psig. The time delayed (five seconds) trip remains at 25 psig. Since the pump return line valve MO-2110 was changed to improve its flow control characteristics during the last refueling outage, the licensee has revised the pump operability surveillance procedure to discontinue the two-start requirement.

The licensee has not been able to explain why it took approximately ten years of two-start testing before experiencing high turbine exhaust trips. This is not explained by the fact that the high exhaust pressure (in excess of 40 psig) occurs in a narrow band of time interval between the turbine shutdown and the second start. The inspectors reviewed all the modifications performed on the RCIC system during the last refueling outage, since all the known second start trips have occurred after the outage restart. The results were:

(1) To correct the first start trips experienced in 1986, the turbine exhaust line drain line was modified to prevent water buildup. The modification (87M024) made several changes to the drain line. The existing 3/4 inch piping was replaced by 1" piping to promote better flow characteristics. A less resistant

swing check valve was installed to replace the piston check valve. The steam trap ST-2088 was replaced by a 3/16-inch flanged restriction orifice and a Y strainer for easier maintenance. The piping was rerouted to provide an additional seven inch head for drainage and the supports were modified slightly to compensate for these changes. The modification was considered safety-related and was installed under QA controls.

The licensee's investigation into the possible cause of the second start trips did not include verification that the new check valve was installed correctly and was operating properly. The licensee has agreed to verify proper installation and operation of the check valve at the next convenient time when the RCIC can be declared inoperable.

(2) During the 1987 refueling outage, the licensee completed several modifications involving motor operated valves (MOV) in response to IE Bulletin 85-003. Modification 872003 involved the replacement of the remaining motor operators supplied by Rotork Controls, Inc. with those manufactured by Limitorque Corporation. The original motor operators were no longer being manufactured by Rotork, thus replacement was necessary due to the unavailability of spare parts. The following valves were affected by this modification: water side MO-2100, inboard torus suction; MO-2101, outboard torus suction; MO-2102, suction to the CST/ and steam side MO-2096, cooling water supply. Generally, the stroke times of the water side valves increased approximately fifty percent and the stroke times for MO-2096 decreased approximately fifty percent. However, these changes should not have caused the recent RCIC turbine trips.

Modification 87M035 involved the following:

(a) Rewiring of the torque switch bypass limit switch or rotor number four for each MO valve.

(b) Installation of four train limit switch mechanisms where two trains had existed.

(c) Setting of the torque switch bypass.

(d) Preoperational testing to verify proper functioning.

(e) Installation of grease relief kits on the older motor operators to prevent hydraulic locking.

Special Procedure 8220-"IE Bulletin 85-03 MOV Setup and Test Procedure" was performed on the motor operated valves to ensure that the desired thrusts were produced in the open and closed directions under reduced voltage conditions. The licensee has

committed to taking power and current signature traces each refueling outage for trending purposes and performing baseline testing once every four refueling outages.

As a result of the modifications, the cycling times of these valves have decreased by approximately ten percent. Surveillance Test 0255-08-1A-1, "RCIC System Tests, Valve Operability" has been revised to reflect the new stroke times obtained. The new stroke times were consistent with the UFAR, RCIC design specifications and Technical Specifications. The inspectors did not identify any problems in this area which would have contributed to the turbine trips.

(3) Modification 85M028-3 replaced the existing pump return line to condensate storage tank valve, MO-2110 from a globe valve to a drag valve in order to improve the flow control characteristics of the test line. Although problems with the valve operator still exist, the inspectors determined this modification had no effect on the turbine exhaust line pressure.

A final possible explanation for the high exhaust pressure experienced during the second starts of the RCIC system in 1988 could be the maloperation of the check valves designed to prevent suppression pool water from being drawn into the steam exhaust line. As stated earlier, during the diagnostic testing, the licensee measured a peak vacuum in that section of the exhaust line of 3.5 psig. The check valves are designed to open at 0.5 psig. The exhaust line at its highest point is $\sim$ 2 feet above the suppression pool water level. During the investigation, the licensee verified that the check valves would open, but did not determine the pressure required to open them. If the valves are not opening properly, water could enter the horizontal section of the exhaust line. Once there, the water will not necessarily drain back into the suppression pool and some if it will fill the vertical section of line downstream of the containment isolation check valves. The licensee will test the vacuum breaker check valves for opening pressure if such a test is determined to be feasible. The licensee is also considering a valve replacement during the next outage.

While the licensee's corrective action (increasing the trip setpoint to 50 psig) appears to be sufficient to prevent recurrence of the RCIC turbin restart trips, there is no certainty that the peak pressure in the exhaust line will remain below 50 psig since the actual cause of the peak pressure was never determined. The licensee will attempt to determine if the check valve in the exhaust drain line and the check valves in the exhaust line vacuum breaker line are working properly. This is an Open Item (263/88015-01) pending review of the results.

e. RCIC Turbine Steamline Flooding

On February 8, 1988, the licensee was testing level switch LS 13-74, RCIC steam supply drain post level alarm in accordance with RCIC System Instrument Maintenance Procedure No. 7140. This procedure calls for closing the steam line drain valve RCIC-3, allowing the condensate to buildup until the high level alarm annunciates in the control room, and finally reopening the drain valve RCIC-3. Since the alarm failed to annunciate, the operators forgot that the drain valve was closed and the lines filled with water. Upon discovery (higher than normal pressure on steam line pressure indicators), the drain valve was opened. At that time, the level switch was found valved out and that was suspected to be the cause of its failure to alarm; however, subsequent testing demonstrated that the level switch was malfunctioning. The licensee was not able to determine when and why the level switch was isolated. A replacement switch is on order and will be installed as soon as possible. In the meantime, the licensee has stopped testing level switch LS 13-74. A planned procedure modification which would establish time limits for valve RCIC-3 being closed is being considered to prevent repetition of the event. This is an Open Item (263/88015/-02) pending completion of the licensee's action to prevent recurrence of the event.

The question of system operability during the event has been addressed by the licensee. The capability of the turbine steam supply and exhaust lines to withstand the additional loads that could result from starting the system with the steam supply line full of water was evaluated by Nutech. According to the Nutech report, all line stresses and support loads were within acceptable limits (worse case being seismic event for the steam line full of water and water slug for the turbine exhaust line); however, the Nutech letter is not clear whether the exhaust line analysis was for a static or dynamic condition. The capability of the RCIC turbine to accept water is based on tests conducted in 1969 which are documented as an amendment to the Duane Arnold FSAR in 1971 on a HPCI turbine, and previous tests (1968) on an RCIC turbine (not documented). Both GE and the Terry Steam Turbine Company have certified that the RCIC turbines are capable of accepting water starts and water injection under load with pressures up to 1250 psig. Turbine overspeed trip is only a concern if the water in the line is near saturated conditions; however, General Electric feels that is not a problem at Monticello because the Terry Turbine at this site has steam admission nozzles on the lower half of the turbine casing only. No test data exists to confirm this position. These two issues, the Nutech Analysis and the possible turbine overspeed trip will be addressed in a separate regional inspection.

f. Pump Vibration

The licensee has experienced high vibration readings on both the inboard and outboard pump bearings. A record review showed above

normal readings on the outboard bearing as far back as 1986. The inboard high readings have occurred mainly in 1988. The high vibration readings have not been consistent. For example, all pump vibration readings following the 1987 refueling outage were low. Some of the discrepancies between successive readings could be explained by the licensee's use of different vibration analyzers. The cause of the high readings is still under investigation. Following discussions with the pump manufacturer, the licensee plans to replace the pump to turbine coupling fasteners, as they do not appear to be identical, and perform a coupling alignment at the next convenient opportunity. If these steps do not reduce the vibration readings, the licensee plans to change the bearings during the next refueling outage. The licensee will continue monitoring the readings and will accelerate the corrective action schedule should the problem grow worse.

g. Other Records Reviewed

(1) Lubrication

The inspectors reviewed the lubrication records for the RCIC turbine, pump, and system motor operated valves. Procedure PM 4916-12, Lubrication, requires that the RCIC pump and turbine lubricant be changed, and the vacuum pump be lubricated, every refueling outage. The records from September 30, 1984 to July 5, 1988 showed that the lubrication work was performed as required. The licensee also takes samples of the turbine lube oil monthly. The inspector reviewed 1987 and 1988 sample results against the lubricant specifications (Mobil Vaportec Light) and noted no significant deviations. The inspectors reviewed the lubrication history for the motor operated valves during the last two refueling outages and determined that the work was done in accordance with the vendor recommendations.

(2) Motor Operated Valves Maintenance History

The inspectors reviewed approximately 50 maintenance records covering the period from 1986 to the present. Preventive maintenance was completed every refueling outage (every other refueling for motor starters). The only recurring equipment failures noted were on valves AD-1322 and MO-2110.

A review of the maintenance history of air-operated check valve, AD-1322, indicated problems with leakage and position indication. Since 1985, each year the licensee has needed to repack the valve due to leakage through the gland retainer. Steam leakage has also occurred at the valve body to hinge pin cover bolted connection. This was temporarily fixed by a Furmanite injection this past outage. As a result, during this

cycle, the valve remote position indicator will be inoperable; however, operability of the valve was demonstrated through cycling and listening for seat movement with a stethoscope prior to unit restart following the refueling outage. This valve is not a Section XI valve and is only stroked during cold shutdowns. The present remote position indicator limit switch has a history of unreliability and the licensee has initiated modification plans to improve its performance.

During the 1987 outage, the RCIC test flow control valve, MO-2110 was replaced to improve its flow control characteristics. Following the modification, the valve actuator was electrically isolated and the valve was manually throttled to approximately the 47% open position due to problems experienced with the actuator. The system is still capable of injecting 400 gpm over the pressure range of 150 to 1100 psig since valve MO-3502 (in series with NO-2110) in closed. In response to Bulletin 85-03, the licensee tested MO-2110 and determined that the operator was capable of producing more thrust than required, and as a result, the valve was binding near the bottom of the stroke. To reduce further damage to the stem, the licensee isolated the valve electrically. Operators are capable of manipulating the valve locally for surveillance purposes. The inspectors noted that the control room operators were aware of the condition of the valve and that the control panel was properly tagged. Discussions between the licensee and manufacturer continue for a solution to the actuator problem. The inspectors had no further concerns.

(3) Calibrations

The inspectors reviewed the calibration history of the following RCIC instruments:

(a) TS 13-79 through 82 A, B, C, and D, area high temperature RCIC steam line isolation, for the period from August 6, 1985 to August 1988. No problems were found.

(b) PS 13-67, pump suction low pressure trip for February 3, 1988. No problems were found.

(c) PS 72 A and B, turbine exhaust high pressure, from August 4, 1981 to February 3, 1988 for the "A" and from October 14, 1984 to April 22, 1988 for the "B" switch. PS 72A was found to have exceeded its trip setpoint (25 psig) by more than its ±5% allowable error on five occasions. The worse case being ±14%. PS 72B exceeded its setpoint of 40 psig on only one occasion. Considering the function and range of these switches, their performance is considered acceptable.

(d) PS 13-87 A through D, turbine steam supply low pressure isolation for the period from July 3, 1984 to February 3, 1988. These sensors were replaced in 1984 in order to satisfy EQ requirements. Their trip setpoint is 57± 2 psig. The records showed that during the first recalibration the as-found settings ranged from 11 to 26 psig. The trip point during subsequent recalibrations have ranged from 48 to 55 psig, which while an improvement, does not meet the ±5% acceptance criteria. In addition these switches have a large dead band (40-50 psig), which is acceptable as long as the RCIC is operational at 150 psig reactor pressure. Since the RCIC is not an ESF system, the licensee will consider the need to have EQ switches for this application.

3. Action on Previous Inspection Items

(Closed) Open Item (263/87005-02): Inadequate basis for Core Spray System surveillance test acceptance criteria. The inspectors reviewed the bases for the acceptance criteria, which were determined by General Electric, and found them acceptable. Review of Test Procedure 0255-03-1A-1, Core Spray Systems Monthly Valve Test indicated that the licensee has incorporated instrument inaccuracies in the acceptance criteria. The test required a flow of 3070 gpm, 50 gpm greater than the Technical Specification requirement of 3020 gpm with the reactor pressure at 130 psi above the torus pressure. The 50 gpm difference represented the error associated with the flow meter. No other concerns were identified. This item is considered closed.

(Closed) Open Item (263/87005-03): Potential for water hammer due to draining of a system during surveillance test. The licensee has revised their Section XI IST program to cycle valves MO-1749 and MO-1750 only during cold shutdown conditions. Procedure 0225-03-1A, Core Spray Systems Test was revised to preclude the cycling of these valves during the monthly valve tests.

The licensee reviewed other ECCS surveillances to verify that the potential for draining did not occur during valve evolution. A similar concern was identified in Procedure 0255-04-1A, RHR Quarterly Valve Test. Due to the relative locations of valves MO-2D06, No. 11 Discharge to Torus, and MO-2010, No. 11 Torus Spray Injection, the stroking of MO-2006 before MO-2010 allowed some water to drain from the piping. The procedure revision reversed the cycling order for MO-2010 and MO-2006 and similarly for MO-2011 and MO-2007. No other problems were identified. This item is considered resolved.

(Closed) Open Item (263/87005-05): Potential isolation of overprotective devices. The licensee responded by temporarily locking opening the CST-150 and CST-151 valves until the permanent modification was completed during the 1987 outage. The Modification 87M023 consisted of removing

CST-150, blank flanging CST-151 and installing system isolation valves which allowed independent isolation of the "A" and "B" loops. At the time of this inspection, the modification package is going through final review.

The licensee reviewed other safety-related systems to verify that no similar relief valve isolation concerns existed. Discussions indicated that a concern was identified in the Control Rod Drive System. The licensee plans to complete their review and take whichever corrective action is required. This item is considered closed.

(Closed) Open Item (263/87005-07): Seismic qualification of the RHR pump motor replacement. The inspectors reviewed the evaluations performed by Nutech, Bechtel, and the licensee which determined the effects of the heavier replacement motor. The analyses indicate that the larger motor has minimal effect on the casing stress and the present bolting conditions satisfy design criteria. No further concerns were identified. This item is considered closed.

(Closed) Violation (263/87005-08): Failure to control the configuration of the torus access hatch. The inspectors reviewed the corrective actions taken by the licensee as stated in the letter from C. E. Larson to H. J. Miller dated October 13, 1987.

During a walkdown of the torus room, the inspectors noticed a discrepancy in the studs markings. A large number of studs were stamped as both A193B7 and A320L7 materials; however, the B7 markings were crossed out. The design required A320L7 studs. Discussions with the licensee indicated that Cardinal Industrial Products Incorporated supplied the licensee with 100 studs incorrectly stamped as B7 material. The vendor authorized the licensee to restamp the studs with the correct A320L7 label and provided an amended certificate of compliance for the studs. The inspectors reviewed these documents and found no problems.

The licensee inspected other containment closure fasteners to verify that no material deficiencies existed. Two deviations were identified concerning the drywell equipment hatch and the drywell head manway closure fasteners. The material problems were resolved; however, the procedures which govern the manipulation of the hatches are yet to be revised to include a verification of proper closure materials. This item is considered closed.

(Closed) Open Item (263/87005-11): Licensee to reevaluate the instantaneous relay settings for 4.16KV motors in accordance with IEEE-242-1975 for maximum expected bus voltage. The inspectors reviewed Engineering Evaluation 86-075, Revision 1, which changed the factor between the 4.16 KV instantaneous overcurrent relay setting and the maximum symmetrical starting current from 1.6 to 1.75. The revision calls for adjusting the recorded motor starting current to a bus voltage of 4375v before using the 1.75 factor to determine the instantaneous

relay setting. The licensee determined that applying the tolerance for relay instrument drift calibration equipment, data equipment, and data interpolation error to the 1.75 factor will maintain the relay setting between 1.63 and 1.87. During the 1987 refueling outage, the licensee obtained traces of motor starting current for all 4.16 KV pumps. The inspector reviewed several of the traces and determined that the licensee calculated the new relay settings in accordance with the instructions in Engineering Evaluation 86-025, Revision 1. A review of Work Request Authorizations showed that the following motors required new relay settings:

Nos. 11, 12, 13, and 14 RHR pumps
Nos. 11 and 12 Core Spray pumps
Nos. 11, 12, 13, and 14 RHR Service Water pumps
Nos. 11 and 12 Condensate pumps
Turbine Auxiliary Oil pump

The relay settings were changed during the 1987 refueling outage. This item is considered closed.

(Closed) Open Item (263/87005-12): Maintenance and testing procedures for ECCS pumps motors 4.16 Kv circuit breakers allow too large of an operational setting tolerance and relay drift which could result in spurious motor trips.

The inspectors reviewed the following maintenance and testing procedures:

a. 4850-09 PM, Rev. 4, No. 11, Core Spray Pump 4.16 KV No. 152-505 Bkr.
b. 4850-10 PM, Rev. 4, No. 11, RHR Pump 4.16 KV No. 152-504 Bkr.
c. 4850-12 PM, Rev. 4, No. 13, RHR Pump 4.16 KV No. 152-503 Bkr.
d. 4850-11 PM, Rev. 4, No. 11, RHR Service Water Pump 4.16 KV No. 152-508 Bkr.
e. 4850-07 PM, Rev. 4, No. 13, RHR Service Water Pump 4.16 KV No. 152-506 Bkr.

and noted that the licensee has revised the procedures to allow a maximum instantaneous overcurrent setpoint deviation of -5 to +10% for the "as-found" condition and -0 to +5% for the "as-left" condition. This new criteria will maintain a minimum factor of 1.6 on as found instantaneous overcurrent relay settings and an as left setting of 1.75 as stated in Engineering Evaluation 86-075, Revision 1 (See Open Item (263/87005-11). The procedures for the Division 2 breakers (No. 12 Core Spray Pump and No. 14 RHR pumps, and No. 12 and No. 14 RHR Service Water Pumps) are being revised. They will be approved for use prior to the next refueling outage. The licensee is also applying the same criteria to the nonsafety-related breakers. This item is considered closed.

(Closed) Open Item (263/87005-13): Capability of Divisions 1 and 2 250vdc batteries to supply their design basis load is questionable.

During the 1987 refueling outage, the licensee replaced the 250vdc batteries with the following C&D Power Systems lead calcium cells:

Type of Cell	Division 1 KCR-19	Division 2 KCR-15
Nominal capacity (amp-hrs) to avg. 1.75 v per cell @ 77°F		
8 hr	742	577
4 hr	630	490
1 hr	378	298
1 min	929	777

In the case of the Division 1 battery, the replaced battery had an eight hour discharge capacity of 577 amp-hrs and a one minute discharge capacity of 830 amp-hrs, significantly lower than the new battery. The inspector reviewed the results of the modified service tests conducted on each division (Procedure No. 4922 PM for Division 2 and No. 4923 for Division 1) and determined that:

a. The programmed load (ampers) did not agree with the loads listed in the USAR Tables 8.5.1 and 8.5.1.a. The licensee stated that the loads used are based on the highest of either the design load requirements for the station blackout condition or the battery's rated capacity. The licensee agreed to incorporate the design load requirements for station blackout into the USAR.

b. Based on the programmed load and the time to reach a battery terminal load of 210 V, the Division 1 and 2 batteries have a capacity of 101% and 110% of the imposed requirement respectively.

c. No level corrections were made to the specific gravity readings since it takes weeks for the readings to reach a meaningful value. The licensee understands that it must either maintain the electrolyte level at its high level mark or make level correctives to the final specific gravity readings (those taken ~ 6 weeks after recharge).

d. The normal float voltage is 270 v and the equalizing voltage is 280 v. The licensee stated that during the performance of the modified service test including the recharging of the batteries, all plant loads are disconnected. In addition, the batteries do not require equalization charges and all loads are capable of accepting the 280 v equalizing charge.

This item is considered closed.

(Open) Open Item (263/87005-14): Justify using 101 volts as the minimum acceptable voltage for the 125 vdc batteries and complete formal calculations for battery sizing. The inspector reviewed the results of the modified service tests (No. 4924 PM) performed on 125 vdc batteries No. 11 and 12 during the last refueling outage and determined that:

a. The licensee has changed the minimum acceptable voltage from 101v to 105v.

b. Using 105v as the terminal voltage, the tests demonstrated a capacity of 113% of requirement for Battery No. 11 and 115% for Battery No. 12.

c. As in the case of the 250v batteries, the programmed load profile during the test did not agree with USAR Table 8.5-2, because according to the licensee, the loads used are based on the station blackout condition. The licensee plans to incorporate the load requirements for station blackout into the USAR.

The licensee has not completed the battery sizing calculations, therefore, this item remains open pending completion of the calculations and review by the NRC.

4. Open Items

Open items are matters that have been discussed with the licensee, which will be reviewed further, and involve some action on the part of the NRC or licensee or both. Open items identified during the inspection are discussed in Paragraph 2.

5. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) on August 25, 1988, and summarized the purpose and findings of the inspection. The inspectors discussed the likely content of the inspection report with regards to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents or processes as proprietary.

U.S. NUCLEAR REGULATORY COMMISSION

INSPECTOR'S REPORT
Office of Inspection and Enforcement

PRINCIPAL INSPECTOR

REVIEWER: PHILLIPS

INSPECTORS: A.M. Bongiovanni, F. Ihlenfeldt

LICENSEE/VENDOR	TRANSACTION TYPE	DOCKET NO (8 digits) OR LICENSE NO (BY PRODUCT) (13 digits)	REPORT NO	REPORT SEQ	NEXT INSPE MO
Northern States Power Co. (Monticello Station)	I - INSERT M - MODIFY D - DELETE R - REPLACE	0 5 0 0 0 2 8 3	8 8 0 1 5	A B C D	

PERIOD OF INVESTIGATION/INSPECTION FROM MO	DAY	YR	TO MO	DAY	YR	INSPECTION PERFORMED BY	ORGANIZATION CODE (IF REGION/HQ CO ING ACTIVITY (See IEMM 0530 "Manpowe ing — Weekly Manpower Reporting" for code REGION	DIVISION	BRA
0 8	1 5	8 8	0 8	2 5	8 8	X 1 - REGIONAL OFFICE STAFF 2 - RESIDENT INSPECTOR 3 - PERFORMANCE APPRAISAL TEAM OTHER	3	3	1

REGIONAL ACTION (Check one box only)	TYPE OF ACTIVITY CONDUCTED (Check one box only)			
1 - NRC FORM 591	X 02 - SAFETY	06 - MGMT. VISIT	10 - PLANT SEC	14 - INQUIRY
X 2 - REGIONAL OFFICE LETTER	03 - INCIDENT	07 - SPECIAL	11 - INVENT. VER	15 - INVESTIGAT
	04 - ENFORCEMENT	08 - VENDOR	12 - SHIPMENT/EXPORT	
	05 - MGMT AUDIT	09 - MAT ACCT	13 - IMPORT	

INSPECTION INVESTIGATION FINDINGS (Check one box only) A	B	C	D	TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS A	B	C	D	ENFORCEMENT CONFERENCE HELD A	B	C	D	REPORT CONTAIN 2.790 INFORMATION A	B	C	D	LETTER OR REPORT TRANSMITTAL NRC FORM 591 OR REG LETTER IS SUED MO	DAY	YR	REPORT SE TO HQ FO ACTION MO	DAY
X				0 0												0 9	2 6	8 8		

1 - CLEAR; 2 - VIOLATION; 3 - DEVIATION; 4 - VIOLATION & DEVIATION

ENFORCEMENT CONFERENCE HELD: 1 - YES

REPORT CONTAIN 2.790 INFORMATION: 1 - YES

MODULE INFORMATION

REC ORD TYPE	MODULE NUMBER INSP NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	SEQ #	PRIORITY	DIRECT INSPECTION EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL
B	0 1	5	3 0	7 0 3		A		0 1 0 4	- - -	-				
						B								
						C								
						D								
B	0 5	6 1	7 0 1			A		0 2 1 0	0 3 1 0					
						B								
						C								
						D								
B	0 3	5	6 1	7 1 2 5		A		0 4 1 0	0 1 2 1 0					
						B								
						C								
						D								
	0 5	6 2	7 0 1 2			A		0 2 1 0	0 2 1 0					
						B								
						C								
						D								

MODULE INFORMATION

REC ORD TYPE	MODULE NUMBER INSP NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	SEQ #	PRIORITY	DIRECT INSPECTION EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOL PHASE	MANUAL CHAPTER	PROCEDURE
B	0 5	5 9 2	7 0 1			A		0 1 2 9	- - -		5	6 1	7 1
						B							
						C							
						D							
B	0 5	5 9 2	7 0 1			A		0 4 1 0	0 2 1 0				
						B							
						C							
						D							
B	0 7	5 9 2	7 0 1			A		0 1 1 7	- - -		5	6 2	7 1
						B							
						C							
						D							
B	0 8	5 9 2	7 0 1			A		0 0 1 6	- - -		5	6 1	7 1
						B							
						C							
						D							

cal.

maint

Surv.

maint

* CIRCLE SEQUENCE IF VIOLATION OR DEVIATION

U.S. NUCLEAR REGULATORY COMMISSION

INSPECTOR'S REPORT

Office of Inspection and Enforcement

McCURA

Phillips

Bongiovanni

[illegible] (NSP)

88015

PERIOD OF INVESTIGATION/INSPECTION					
FROM			TO		
MO	DAY	YR	MO	DAY	YR
08	15	88	08	25	88

RESULT OF [illegible]: REGIONAL [illegible] / RESIDENT INSPECTOR / PERFORMANCE APPRAISAL TEAM / OTHER

ORGANIZATION CODE OF REGION/HQ CONDUCTING ACTIVITY: 3 | 2 | 1

REGIONAL ACTION (Check one box only)

- 1 – NRC FORM 591
- [X] 2 – REGIONAL OFFICE LETTER

TYPE OF ACTIVITY CONDUCTED (Check one box only)

- [X] 02 – SAFETY
- 03 – INCIDENT
- 04 – ENFORCEMENT
- 05 – MGMT. AUDIT
- 06 – MGMT. VISIT
- 07 – SPECIAL
- 08 – VENDOR
- 09 – MAT. ACCT.
- 10 – PLANT SEC
- 11 – INVENT. VER
- 12 – SHIPMENT EXPORT
- 13 – IMPORT
- 14 – INQUIRY
- 15 – INVESTIGATION

INSPECTION/INVESTIGATION FINDINGS (Check one box only)

- [X] 1 – CLEAR
- 2 – VIOLATION
- 3 – DEVIATION
- 4 – VIOLATION & DEVIATION

TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS: 00

ENFORCEMENT CONFERENCE HELD: 1 – YES

REPORT CONTAINS 2.790 INFORMATION: 1 – YES

LETTER OR REPORT TRANSMITTAL DATE: NRC FORM 591 OR REG. LETTER ISSUED: 09 26 88; REPORT SENT TO HQ FOR ACTION: MO DAY YR

MODULE INFORMATION

RECORD TYPE	MODULE NUMBER INSP (NUMBER / PHASE / MANUAL CHAPTER / PROCEDURE NUMBER / LEVEL)	SEQ. #	PRIORITY	DIRECT INSPECTION EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP (PHASE / MANUAL CHAPTER / PROCEDURE NUMBER / LEVEL)
B	5 92701	A		008			5 37700
B	5 92702	A		008			

RP 0516B

SALP FUNCTIONAL AREA ASSESSMENT AND PRELIMINARY INSPECTOR EVALUATION FORM

Facility: [illegible] Inspection Report No.: 263/88[illegible]

FUNCTIONAL AREAS	✓	I	II	III	IV	V	Dev	Unit	Rating	
PLANT OPERATIONS										OPERATIONS
RADIOLOGICAL CONTROLS										
MAINTENANCE / Surveillance	X								2	
~~SURVEILLANCE~~ Engineering + Tech Support										
~~FIRE PROTECTION~~ Safety Assessment + QV										
EMERGENCY PREPAREDNESS										
SECURITY										
~~OUTAGES~~										
QUALITY PROGRAMS & ADMIN. CONTROLS AFFECTING QUALITY *										*
LICENSING ACTIVITIES *										*
TRAINING & QUALIFICATION EFFECTIVENESS *										*
SOILS AND FOUNDATIONS										CONSTRUCTION
CONTAINMENT, SAFETY-RELATED STRUCTURES & MAJOR STEEL SUPPORTS										
PIPING SYSTEMS & SUPPORTS										
SAFETY-RELATED COMPONENTS MECHANICAL										
AUXILIARY SYSTEMS										
ELECTRICAL EQUIPMENT AND CABLES										
INSTRUMENTATION										

*Functional areas for Construction and Operations

CRITERIA FOR DETERMINING CATEGORY RATING

1. Management Involvement in Assuring Quality.
2. Approach to Resolution of Technical Issues from a Safety Standpoint.
3. Responsiveness to NRC Initiatives.
4. Enforcement History.
5. Operational and Construction Events.
6. Staffing (including management).

RATING KEY: (For Categories 2 - Declining and 3, provide narrative basis for conclusion)

Category 1
Category 2
Category 2 - Declining
Category 3

☒ Inspector(s) concerns adequately addressed or

☐ Inspection Evaluation Form being processed.

Lead Inspector [signature] [illegible] (Signature) (Date)

Section Chief [signature] 9/17/88 (Signature) (Date)

March 3 1988

OUTSTANDING ITEM LIST (OIL) TRACKING FORM

Submitted by: F MAURA

Sec. Chief Approval

Item No.	Type Code	Func. Area	Date Entered
50-388/88-15-01 (Unit 1)	OPN	03	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
F MAURA	OPS	

Responsible Inspector	Closed	Final Report
F MAURA	__/__/__	

Interim Insp. Reports				

Followup Date

Remarks:

__/__/__ LICENSEE TO VERIFY CHECK VALVE IN RCIC INJECTION LINE DRAIN LINE AND CHECK VALVES IN MAIN STEAM LINES ARE WORKING PROPERLY

TYPE CODE

AEO -	ABNORM. ENVIR. OCC.	ORD -	ORDERS TO LICENSEE
ALG -	ALLEGATION	OTH -	OTHER
BUL -	BULLETIN	P20 -	10 CFR PART 20
CAL -	CONFIR. ACTION LTR.	P21 -	10 CFR PART 21
CIR -	CIRCULAR	RJR -	REGION III REQUESTS
DEV -	DEVIATION	REC -	RECOMMENDATIONS
GLR -	GENERIC LETTER	RIP -	REGULATORY IMPROVEMENT PROGRAM
IAL -	IMMEDIATE ACTION LETTER	SEP -	SAFETY EVAL. PROGRAM
INF -	INFORMATION NOTICE	SER -	SAFETY EVAL. REPORT
LER -	LICENSEE EVENT REPORT	SGR -	73.71 SAFEGUARDS REPORTS
NC -	NON-COMPLIANCE (1-2-3-4-5)	SSF -	SIGNIFICANT SAFETY FINDING
NVX -	NO VIOLATION 10 CFR 2,	TMI -	THREE-MILE ISLAND ACTION ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

REGIS

EPB	P
FRP	P
MLS	P
MOS	P
MPS	P
NM1	P
NM2	P
OL1	R
OL2	S
OPS	T

OUTSTANDING ITEM LIST (OIL) TRACKING FORM

Submitted by: E. MAURA

Sec. Chief Approval: [signature]

Item No.	Type Code	Func. Area	Date Entered
263/88015-02 (Unit 1)	DPN	04	__/__/__
___/______-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
E. MAURA	DRP ~~DRS~~	_________

Responsible Inspector	Closed	Final Report
HARTMAN ~~MAURA~~	__/__/__	_____

Interim Insp. Reports _____ _____ _____ _____ _____

Followup Date

__/__/__

Remarks:

Modify procedure for testing level switch [illegible] to prevent repetition of RCIC steam line flooding event.

Status Code

_

TYPE CODE

AFO	ABNORM. ENVIR. OCC.	ORD	ORDERS TO LICENSEE
ALG	ALLEGATION	OTH	OTHER
BUL	BULLETIN	P20	10 CFR PART 20
CAL	CONFIR. ACTION LTR.	P21	10 CFR PART 21
CIR	CIRCULAR	R3R	REGION III REQUESTS
DEV	DEVIATION	REC	RECOMMENDATIONS
GLR	GENERIC LETTER	RIP	REGULATORY IMPROVEMENT PROGRAM
IAL	IMMEDIATE ACTION LETTER	SEP	SAFETY EVAL. PROGRAM
INF	INFORMATION NOTICE	SER	SAFETY EVAL. REPORT
LER	LICENSEE EVENT REPORT	SGR	73.71 SAFEGUARDS REPORTS
NC	NON-COMPLIANCE (1-2-3-4-5)	SSF	SIGNIFICANT SAFETY FINDING
NVX	NO VIOLATION 10 CFR 2.	TMI	THREE-MILE ISLAND ACTION ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

SECTI

EPB
FRP
MLS
MOS
MPS
NM1
NM2
OL1
OL2
OPS

OUTSTANDING ITEM LIST (OIL) TRACKING FORM

Submitted by: Bongiovanni Sec. Chief Approval [initials]

Item No.	Type Code	Func. Area	Date Entered
263/87005-02 (Unit 1)	OPN	11	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
GWright	---	--------

Responsible Inspector	Closed	Final Report
BONGIOVANNI	08/22/88	88015

Interim Insp. Reports ----- ----- ----- ----- -----

Followup Date: __/__/__

Remarks:

Status Code

[mark]

TYPE CODE

AEO	ABNORM. ENVIR. OCC.	ORO	ORDERS TO LICENSEE
ALG	ALLEGATION	OTH	OTHER
BUL	BULLETIN	P20	10 CFR PART 20
CAL	CONFIR. ACTION LTR.	P21	10 CFR PART 21
CIR	CIRCULAR	R3R	REGION III REQUESTS
DEV	DEVIATION	REC	RECOMMENDATIONS
GLR	GENERIC LETTER	RIP	REGULATORY IMPROVEMENT PROGRAM
IAL	IMMEDIATE ACTION LETTER	SEP	SAFETY EVAL. PROGRAM
INF	INFORMATION NOTICE	SER	SAFETY EVAL. REPORT
LER	LICENSEE EVENT REPORT	SGR	73.71 SAFEGUARDS REPORTS
NC	NON-COMPLIANCE (1-2-3-4-5)	SSF	SIGNIFICANT SAFETY FINDING
NV6	NO VIOLATION 10 CFR 2, APP. C, SEC. V.A	TMI	THREE-MILE ISLAND ACTION ITEMS
		UNR	UNRESOLVED ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

SECTIO[N]

EPS	P
FRP	P
MLS	P
MOS	P
MPS	P
NM1	P
NM2	P
OL1	R
OL2	S
OPS	T

OUTSTANDING IT[illegible]IST (OIL) TRACKING FORM

Submitted by: A.M. Bongiovanni

Sec. Chief Approval [illegible]

Item No.	Type Code	Func. Area	Date Entered
263/87005-03 (Unit 1)	OPN	04	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
G Wright	---	----------

Responsible Inspector	Closed	Final Report
BONGIOVANNI	08/25/88	88015

Interim Insp. Reports				
_____	_____	_____	_____	_____

Followup Date

__/__/__

Remarks:

Status Code

[illegible]

TYPE CODE

AEO	ABNORM. ENVIR. OCC.	ORD	ORDERS TO LICENSEE
ALG	ALLEGATION	OTH	OTHER
BUL	BULLETIN	P20	10 CFR PART 20
CAL	CONFIR. ACTION LTR.	P21	10 CFR PART 21
CIR	CIRCULAR	R3R	REGION III REQUESTS
DEV	DEVIATION	REC	RECOMMENDATIONS
GLR	GENERIC LETTER	RIP	REGULATORY IMPROVEMENT PROGRAM
IAL	IMMEDIATE ACTION LETTER	SEP	SAFETY EVAL. PROGRAM
INF	INFORMATION NOTICE	SER	SAFETY EVAL. REPORT
LER	LICENSEE EVENT REPORT	SGR	73.71 SAFEGUARDS REPORTS
NC	NON-COMPLIANCE (1-2-3-4-5)	SSF	SIGNIFICANT SAFETY FINDING
NV6	NO VIOLATION 10 CFR 2,	TMI	THREE-MILE ISLAND ACTION ITEMS
			UNRESOLVED ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

SECTI[illegible]

EPS	
EPP	
MTS	
MOS	
MPS	
MM1	
MM2	
OL1	
OL2	
OPS	

NRR 1201

OUTSTANDING IT[illegible]IST (OIL) TRACKING FORM

Submitted by: A.M. Bongiovanni

Sec. Chief Approval _____

Item No.	Type Code	Func. Area	Date Entered
263187005-05 (Unit 1)	OPN	11	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
Gwright	---	---

Responsible Inspector	Closed	Final Report
BONGIOVANNI	08/25/88	88015

Interim Insp. Reports				
~~88015~~	_____	_____	_____	_____

Followup Date

__/__/__

Remarks:

Status Code

C

TYPE CODE

AEO	ABNORM. ENVIR. OCC.	ORD	ORDERS TO LICENSEE
ALG	ALLEGATION	OTH	OTHER
BUL	BULLETIN	P20	10 CFR PART 20
CAL	CONFIR. ACTION LTR.	P21	10 CFR PART 21
CIR	CIRCULAR	R3R	REGION III REQUESTS
DEV	DEVIATION	REC	RECOMMENDATIONS
GLR	GENERIC LETTER	RIP	REGULATORY IMPROVEMENT PROGRAM
IAL	IMMEDIATE ACTION LETTER	SEP	SAFETY EVAL. PROGRAM
INF	INFORMATION NOTICE	SER	SAFETY EVAL. REPORT
LER	LICENSEE EVENT REPORT	SGR	73.71 SAFEGUARDS REPORTS
NC	NON-COMPLIANCE (1-2-3-4-5)	SSF	SIGNIFICANT SAFETY FINDING
NVO	NO VIOLATION 10 CFR 2,	TMI	THREE-MILE ISLAND ACTION ITEMS
		UNR	UNRESOLVED ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

SECTI[illegible]

EPS	[illegible]
FRP	[illegible]
MLS	[illegible]
MOS	[illegible]
MPS	[illegible]
MM1	[illegible]
MM2	[illegible]
OL1	[illegible]
OL2	[illegible]
OPS	[illegible]

OUTSTANDING IT[illegible]ST (OIL) TRACKING FORM

Submitted by: Bongiovanni

Sec. Chief Approval

Item No.	Type Code	Func. Area	Date Entered
263/87005-07 (Unit 1)	OPN	01	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
G Wright	---	---

Responsible Inspector	Closed	Final Report
BONGIOVANNI	08/26/88	88-15

Interim Insp. Reports _____ _____ _____ _____ _____

Followup Date

__/__/__

Remarks:

Status Code

F

TYPE CODE

AEO	ABNORM. ENVIR. OCC.	ORD	ORDERS TO LICENSEE
ALG	ALLEGATION	OTH	OTHER
BUL	BULLETIN	P20	10 CFR PART 20
CAL	CONFIR. ACTION LTR.	P21	10 CFR PART 21
CIR	CIRCULAR	R3R	REGION III REQUESTS
DEV	DEVIATION	REC	RECOMMENDATIONS
GLR	GENERIC LETTER	RIP	REGULATORY IMPROVEMENT PROGRAM
IAL	IMMEDIATE ACTION LETTER	SEP	SAFETY EVAL. PROGRAM
INF	INFORMATION NOTICE	SER	SAFETY EVAL. REPORT
LER	LICENSEE EVENT REPORT	SGR	73.71 SAFEGUARDS REPORTS
NC	NON-COMPLIANCE (1-2-3-4-5)	SSF	SIGNIFICANT SAFETY FINDING
NVO	NO VIOLATION 10 CFR 2.	TMI	THREE-MILE ISLAND ACTION ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

SECTIO

EPS	P
FRP	P
MLS	P
MOS	P
MPS	P
NM1	P
NM2	P
OL1	R
OL2	S
OPS	I

OUTSTANDING ITEM LIST (OIL) TRACKING FORM

Submitted by: Bongiovanni

Sec. Chief Approval

Item No.	Type Code	Func. Area	Date Entered
263/87005-08 (Unit 1)	ENC	07	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
G. Wright	---	---

Responsible Inspector	Closed	Final Report
BONGIOVANNI	08/25/88	88015

Interim Insp. Reports				
~~88015~~	-----	-----	-----	-----

Followup Date

__/__/__

Remarks:

Status Code

D

TYPE CODE

AEO -	ABNORM. ENVIR. OCC.	ORD -	ORDERS TO LICENSEE
ALG -	ALLEGATION	OTH -	OTHER
BUL -	BULLETIN	P20 -	10 CFR PART 20
CAL -	CONFIR. ACTION LTR.	P21 -	10 CFR PART 21
CIR -	CIRCULAR	R3R -	REGION III REQUESTS
DEV -	DEVIATION	REC -	RECOMMENDATIONS
GLR -	GENERIC LETTER	RIP -	REGULATORY IMPROVEMENT PROGRAM
IAL -	IMMEDIATE ACTION LETTER	SEP -	SAFETY EVAL. PROGRAM
INF -	INFORMATION NOTICE	SER -	SAFETY EVAL. REPORT
LER -	LICENSEE EVENT REPORT	SGR -	73.71 SAFEGUARDS REPORTS
NC -	NON-COMPLIANCE (1-2-3-4-5)	SSF -	SIGNIFICANT SAFETY FINDING
NVO -	NO VIOLATION 10 CFR 2,	TMI -	THREE-MILE ISLAND ACTION ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

SECTION

EPS	P1
FRP	P1
MLS	P2
MOS	P2
MPS	P3
MM1	P1
MM2	P3
OL1	RE
OL2	SG
OPS	IS

OUTSTANDING ITEM LIST (OIL) TRACKING FORM

Submitted by: F. MAURA

Sec. Chief Approval

Item No.	Type Code	Func. Area	Date Entered
2631870025-11 (Unit 1)	OPN	11	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
G. Wright	---	----------

Responsible Inspector	Closed	Final Report
E. MAURA	08/25/88	11015

Interim Insp. Reports				
_____	_____	_____	_____	_____

Followup Date: __/__/__

Remarks: ----------

Status Code: ----------

TYPE CODE

AEO	ABNORM. ENVIR. OCC.	ORD	ORDERS TO LICENSEE
ALG	ALLEGATION	OTH	OTHER
BUL	BULLETIN	P20	10 CFR PART 20
CAL	CONFIR. ACTION LTR.	P21	10 CFR PART 21
CIR	CIRCULAR	R3R	REGION III REQUESTS
DEV	DEVIATION	REC	RECOMMENDATIONS
GLR	GENERIC LETTER	RIP	REGULATORY IMPROVEMENT PROGRAM
IAL	IMMEDIATE ACTION LETTER	SEP	SAFETY EVAL. PROGRAM
IRF	INFORMATION NOTICE	SER	SAFETY EVAL. REPORT
LER	LICENSEE EVENT REPORT	SGR	73.71 SAFEGUARDS REPORTS
NC	NON-COMPLIANCE (1-2-3-4-5)	SSF	SIGNIFICANT SAFETY FINDING
NVS	NO VIOLATION 10 CFR 2,	TMI	THREE-MILE ISLAND ACTION ITEMS
		UNR	UNRESOLVED ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

REGIS

EPB	F
FRP	P
MLS	P
MOS	P
MPS	P
RM1	P
RM2	P
OL1	R
OL2	R
OPS	T

OUTSTANDING ITEM LIST (OIL) TRACKING FORM

Submitted by: F. MAURA

Sec. Chief Approval: [signature]

Item No.	Type Code	Func. Area	Date Entered
263182005-L2 (Unit 1)	OPN	01	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
G. Wright	---	-------

Responsible Inspector	Closed	Final Report
F. Maura	08/25/88	88015

Interim Insp. Reports				
_____	-----	-----	-----	-----

Followup Date: __/__/__

Remarks: ----------

Status Code: -

TYPE CODE

AEO	ABNORM. ENVIR. OCC.	ORD	ORDERS TO LICERSEE
ALG	ALLEGATION	OTH	OTHER
BUL	BULLETIN	P20	10 CFR PART 20
CAL	CONFIN. ACTION LTR.	P21	10 CFR PART 21
CIR	CIRCULAR	R3R	REGION III REQUESTS
DEV	DEVIATION	REC	RECOMMENDATIONS
GLR	GENERIC LETTER	RIP	REGULATORY IMPROVEMENT PROGRAM
IAL	IMMEDIATE ACTION LETTER	SEP	SAFETY EVAL. PROGRAM
INF	INFORMATION NOTICE	SER	SAFETY EVAL. REPORT
LER	LICENSEE EVENT REPORT	SGR	73.71 SAFEGUARDS REPORTS
NC	NON-COMPLIANCE (1-2-3-4-5)	SSF	SIGRIFICANT SAFETY FINDING
NVS	NO VIOLATION 10 CFR 2,	THI	THREE-MILE ISLAND ACTION ITEMS
			UNRESOLVED ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/N-R

REGIS

EPS	F
FRP	F
MLS	P
NOS	P
NPS	P
NRI	P
NRQ	P
OL1	R
OL2	S
OPS	T

OUTSTANDING ITEM LIST (OIL) TRACKING FORM

Submitted By: F. MAURA

Sec. Chief Approval

Item No.	Type Code	Func. Area	Date Entered
0431870005-13 (Unit 1)	OPN	04	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
G. Wright	---	----------

Responsible Inspector	Closed	Final Report
F. MAURA	08/25/88	88015

Interim Insp. Reports				
_____	_____	_____	_____	_____

Followup Date

__/__/__

Remarks:

Status Code

-

TYPE CODE

AFO -	ABNORM. ENVIR. OCC.	ORD -	ORDERS TO LICERSEE
ALG -	ALLEGATION	OTH -	OTHER
BUL -	BULLETIN	P20 -	10 CFR PART 20
CAL -	CONFIR. ACTION LTR.	P21 -	10 CFR PART 21
CIR -	CIRCULAR	R3R -	REGION III REQUESTS
DEV -	DEVIATION	REC -	RECOMMENDATIONS
GLR -	GENERIC LETTER	RIP -	REGULATORY IMPROVEMENT PROGRAM
IAL -	IMMEDIATE ACTION LETTER	SEP -	SAFETY EVAL. PROGRAM
INF -	INFORMATION NOTICE	SER -	SAFETY EVAL. REPORT
LER -	LICENSEE EVENT REPORT	SGR -	73.71 SAFEGUARDS REPORTS
NC -	NON-COMPLIANCE (1-2-3-4-5)	SSF -	SIGNIFICANT SAFETY FINDING
NVS -	NO VIOLATION 10 CFR 2, APP. C SEC. V.A	TMI -	THREE-MILE ISLAND ACTION ITEMS
		UNR -	UNRESOLVED ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

EPS	P
FRP	P
MLS	P
MOS	P
MPS	P
MM1	P
MM2	P
OL1	R
OL2	R
OPS	T

Attachment 1 to RP 1201

OUTSTANDING ITEM LIST (OIL) TRACKING FORM

Submitted by: F. MAURA

Sec. Chief Approval: [signature]

Item No.	Type Code	Func. Area	Date Entered
05000287/87005-LL (Unit 1)	OPN	11	__/__/__
___/_____-__ (Unit 2)			

Original Inspector	Resp. Sec.	Note
G. WRIGHT	---	-------

Responsible Inspector	Closed	Final Report
F. MAURA	__/__/__	-----

Interim Insp. Reports				
88015	-----	-----	-----	-----

Followup Date: __/__/__

Remarks: ----------

Status Code: -

TYPE CODE

AEO -	ABNORM. ENVIR. OCC.	ORD -	ORDERS TO LICERSEE
ALG -	ALLEGATION	OTH -	OTHER
BUL -	BULLETIN	P20 -	10 CFR PART 20
CAL -	CONFIR. ACTION LTR.	P21 -	10 CFR PART 21
CIR -	CIRCULAR	R3R -	REGION III REQUESTS
DEV -	DEVIATION	REC -	RECOMMENDATIONS
GLR -	GENERIC LETTER	RIP -	REGULATORY IMPROVEMENT PROGRAM
IAL -	IMMEDIATE ACTION LETTER	SEP -	SAFETY EVAL. PROGRAM
INF -	INFORMATION NOTICE	SER -	SAFETY EVAL. REPORT
LER -	LICENSEE EVENT REPORT	SGR -	73.71 SAFEGUARDS REPORTS
NC -	NON-COMPLIANCE (1-2-3-4-5)	SSF -	SIGNIFICANT SAFETY FINDING
NVS -	NO VIOLATION 10 CFR 2.	TMI -	THREE-MILE ISLAND ACTION ITEMS

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

REGIS

EPB	I
FRP	I
MLB	I
MOS	I
MPS	I
RM1	I
RM2	I
OL1	R
OL2	S
OPB	T