

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-282, 50-306
License Nos: DPR-42, DPR-60

Report No: 50-282/96014, 50-306/96014

Licensee: Northern States Power Company

Facility: Prairie Island Nuclear Generating Plant

Location: 1717 Wakonade Drive East
Welch, MN 55089

Dates: October 9 - November 19, 1996

Inspectors: S. Ray, Senior Resident Inspector
R. Bywater, Resident Inspector

Approved by: J. Jacobson, Chief, Projects Branch 4
Division of Reactor Projects

EXECUTIVE SUMMARY

Prairie Island Nuclear Generating Plant, Units 1 & 2
NRC Inspection Report 50-282/96014, 50-306/96014

This inspection included aspects of licensee operations, maintenance, engineering, and plant support performed by the resident inspectors.

Operations

- The inspectors observed that the conduct of routine plant operations was generally good. Operators were observant and knowledgeable of plant conditions. Shift turnover meetings were excellent, logs and verbal communications were usually good. (Section 01.1)
- The inspectors identified that the licensee failed to test the redundant diesel generator as required when one diesel generator was determined to be inoperable. This was due to a licensee misinterpretation of the requirements but was a violation of Technical Specifications. (Section 01.2)
- The inspectors and licensee determined that several cable tray separation discrepancies existed in addition to those previously identified. (Section 02.1)
- The inspectors observed that licensee activities associated with spent fuel cask loading were performed carefully and correctly. (Section 02.2)

Maintenance

- Inspector observed maintenance and surveillance activities were well conducted with good communications, proper pre-job planning, safe work practices, and excellent coordination between departments. (Section M1.1)
- Operators failed to perform two steps in a diesel generator test procedure which resulted in a unanticipated start of the engine and a violation of Technical Specifications. (Section M1.2)
- The licensee made a conservative initial report to the NRC concerning the above event while the reporting requirements were clarified. (Section M1.2)
- The inspectors determined that cotter pins on spindle nuts on main steam relief valves appeared to be properly installed and that maintenance procedures for relief valve assembly were adequate to prevent the problem that other facilities had with the cotter pins. (Section M2.1)
- The licensee identified an inadequate surveillance for component cooling pumps during activities associated with NRC Generic Letter 96-01. This was considered a non-cited violation. (Section M3.1)

Engineering

- The inspectors determined that licensee corrective actions for previously identified problems with 480-volt motor starters were behind the original schedule but still adequate. (Section E2.2)

Plant Support

- The inspectors determined that licensee operation of the hypobromous acid feed system a short time before the system was completely turned over for operations following a major modification was acceptable. (Section R3.1)

Report Details

Summary of Plant Status

Both units operated at or near full power for the entire inspection period except for brief power reductions for various testing and maintenance activities.

During this period the fifth dry spent fuel storage cask was loaded and transported to the Independent Spent Fuel Storage Installation.

On November 13, 1996 the licensee submitted a letter to the NRC requesting that the Commission's review of the recently submitted license application for an offsite Independent Spent Fuel Storage Installation be suspended pending the outcome of the Minnesota Court of Appeal's review of a lawsuit involving the issue. On November 15, 1996, the NRC Spent Fuel Project Office staff responded by letter and granted the request for suspension of review activities.

I. Operations

01 Conduct of Operations

01.1 General Comments

a. Inspection Scope (71707)

Using Inspection Procedure 71707, the inspectors conducted frequent reviews of plant operations. These reviews included observations of control room evolutions, shift turnovers, operability decisions, logkeeping, etc. Updated Safety Analysis Report (USAR) Section 13, "Plant Operations," was reviewed as part of the inspection.

b. Observations and Findings

Operators were attentive to their panels and knowledgeable of the cause of annunciators and unusual plant conditions. Both the operators and supervisors were cognizant of the status of ongoing surveillance testing and significant maintenance activities.

Shift turnover meetings were disciplined, comprehensive, and attended by representative of all appropriate departments. All necessary information on plant conditions, expected evolutions, recent problems, significant changes to procedures, etc. were covered. During the turnover meetings operators remained in view and attentive to their panels. The supervisors conducting the meetings gave the opportunity for all members of the crew to contribute information.

Both control room and outplant operators were diligent in identifying equipment problems and initiating work orders. Logs were accurate, complete, and timely. Verbal communications between operators was usually in accordance with management expectations.

c. Conclusions

The inspectors observed that the conduct of routine plant operations was generally good. No significant operational challenges occurred during the inspection period. One problem with operators performing a surveillance activity is discussed in Section M1.2 of this report.

01.2 Failure to Demonstrate Operability of the Redundant Diesel Generator with one Diesel Generator Inoperable

a. Inspection Scope (92901)

On November 14, 1996, an outplant operator noticed that ventilation supply fan dampers for the D5 diesel generator were not controlling properly. The diesel was declared inoperable until the problem was repaired. However, the inspectors noted that the redundant diesel generator was not tested with 24 hours as required by Technical Specification 3.7.B.1. The inspectors reviewed the licensee's decision process for not conducting that test. USAR Section 8.4, "Plant Standby Diesel Generator System," was reviewed as part of the inspection.

b. Observations and Findings

The system engineer was contacted to evaluate the diesel ventilation system immediately after the operator's finding. The engineer determined that the dampers were failed in such a position that outside air cooling would not be supplied. In that condition, the engineer determined that the engine might not be able to perform its intended function and the diesel was declared inoperable.

The operators and engineer immediately determined that the ventilation dampers on the redundant D6 diesel generator were operating normally. The problem appeared to be with loose connection on the controller for the D5 ventilation. The problem was repaired later the same day.

Also on the same day, the licensee's Operations Committee, led by senior plant management, reviewed the issue and determined that there was no common mode problem and that testing of the D5 diesel was not necessary.

Technical Specification 3.7.B.1 required, in part, that during startup or power operation, one diesel generator may be inoperable for 7 days provided that operability of the other diesel generator is demonstrated by performance of surveillance requirement 4.6.A.1.e within 24 hours. That requirement applied unless the diesel generator was inoperable due to preplanned preventative maintenance or testing. Surveillance requirement 4.6.A.1.e specified a slow start and 60 minute loaded run of the diesel (the normal monthly surveillance test).

The Technical Specification Bases for Section 3.7 stated that "following the inoperability of a diesel generator, the redundant diesel generator is tested to prove that the cause of the inoperability does not affect both diesel generators." Licensee management indicated they believed they had adequately proved that the cause of the inoperability of the D5 diesel generator did not affect both diesel generators and therefore that the Bases of the Technical Specifications allowed them not to test

the D6 generator. In addition, licensee management pointed out that Improved Standard Technical Specification (ISTS) 3.8.1.B.3.1 clearly allowed the option of determining that the redundant diesel was not inoperable due to a common cause failure without performing the diesel operability surveillance. The licensee was in the process of adopting the ISTS.

The inspectors informed licensee management that, although there was no operability concern with the D6 diesel generator, the current Technical Specifications as written still required the diesel to be tested. This was a violation. (306/96014-01)

c. Conclusions

Failure to test the redundant diesel generator was a violation of Technical Specification 3.7.B.1. Licensee management reviewed the condition at the time and took what they believed to be appropriate action to verify that a common mode problem did not exist. Not testing the redundant diesel was the result of a misinterpretation of requirements and was based on wording in the basis section and ISTS. Nevertheless, the licensee was bound by their current Technical Specifications and should have performed the test. The requirements were clarified by discussions between the inspectors and licensee management.

02 Operational Status of Facilities and Equipment

02.1 Engineered Safety Feature System Walkdowns

a. Inspection Scope (71707, 92903)

The inspectors used Inspection Procedures 71707 and 92903 to walk down selected portions of the safeguards cable tray system. USAR Section 8.7, "Cables and Raceways," was reviewed as part of the inspection.

b. Observations and Findings

The inspectors conducted the walkdowns in conjunction with the licensee's investigation of the extent of cable tray interaction problems first discussed in Inspection Report 282(306)/96008, Section E2.1. Some of the walkdowns were in the company of licensee personnel performing Work Order 9611421.

Both the inspectors' and licensee's walkdowns and the licensee's drawing reviews indicated that the number of tray interactions not meeting the separation criteria of USAR Section 8.7 was significantly greater than those originally identified. While most of the interactions involved cable trays added as part of the event monitoring modification, some involved original construction or other modifications.

Except for the single interaction involving pressurizer heater cables discussed in Inspection Report 96008, to date, none of the additional interactions inspected appeared to violate the criteria established by the licensee in their justification for continued operation (JCO) safety

evaluation discussed in Inspection Report 96008. Thus no new immediate operability concerns were identified.

c. Conclusions

This issue continued to be reviewed by the NRC as Unresolved Item 282/96008-09. During this inspection period, the plant manager indicated that the licensee intended to be in a position to startup from the next refueling outage on each unit without reliance on the JCO.

02.2 Dry Spent Fuel Storage Cask Loading Activities

a. Inspection Scope (71707)

The inspectors observed a limited number of activities associated with the loading of spent fuel into a dry fuel storage cask. Activities observed included fuel assembly inspections, movement of spent fuel into the cask, removal of the cask from the spent fuel pool, and movement of the cask to the Independent Spent Fuel Storage Installation (ISFSI). ISFSI Safety Analysis Report (SAR) Section 10, "Operating Controls and Limits," was reviewed as part of the inspection.

b. Observations and Findings

During loading of the fifth spent fuel cask the licensee experienced problems with the fuel thimble gripping tool that was used to transfer certain of the older fuel assemblies. The tool was used because of suspected problems with the thimble tubes' attachment to the top nozzle which made it prudent to move the assemblies without reliance on gripping the top nozzle. Previous problems with the tool were discussed in Inspection Report 282(306)/96006, Section 01.5. The tool began to slip to the extent that the licensee abandoned its use for the remainder of the loading of the fifth cask and selected alternate assemblies to be loaded.

The inspectors were concerned that, if the tool was not considered reliable, then ISFSI Technical Specification 3.1.1.(6) might not be met. That specification stated that fuel assemblies known or suspected to have structural defects or gross cladding failures (other than pinhole leaks) sufficiently severe to adversely affect fuel handling and transfer capability shall not be loaded into the cask for storage. A similar statement was included in ISFSI SAR Section 10.1.1.1.f. In addition, the inspectors were concerned that 10 CFR 72.122(1), which required that storage systems must be designed to allow ready retrieval of spent fuel for further processing or disposal, might not be met.

The inspectors, licensee representatives, and representatives of the NRC Spent Fuel Project Office (SFPO) held a conference call on October 18, 1996, in which the issues were discussed. Licensee representatives stated that the thimble tube tool would work properly for some time after mandrels were replaced before it began to slip, and thus could be used for cask unloading if necessary.

c. Conclusions

The conclusion of the SFPO during the conference call was that the regulations and specifications were met. The NRC Region III Division of Nuclear Material Safety was in the process of requesting for a written interpretation from the SFPO on those issues.

All cask loading operations observed by the inspectors were conducted carefully and correctly.

II. Maintenance

M1 Conduct of Maintenance

M1.1 General Comments

a. Inspection Scope (61726, 62707)

The inspectors observed all or portions of the following maintenance and surveillance activities. Including in the inspection was a review of the surveillance procedures (SP) or work orders (WO) listed as well as the appropriate Updated Safety Analysis Report (USAR) sections regarding the activities.

- SP 1093 D1 Diesel Generator Slow Start Test
- SP 1102 11 Turbine-Driven Auxiliary Feedwater Pump Test
- SP 1305 D2 Diesel Generator Slow Start Test
- SP 2088 Safety Injection Pumps Test
- SP 2095 Bus 25 Load Sequencer Test
- SP 2102 22 Turbine-Driven Auxiliary Feedwater Pump Test
- SP 2226B Containment Hydrogen Monitor Quarterly Calibration
- WO 9611406 Repair Oil Leak on D2 Diesel Generator
- WO 9611420 Check Grease in D2 Diesel Generator Governor
- WO 9611421 Inspect Cable Tray Separation in Auxiliary Building
- WO 9611916 Troubleshoot the Fuel Thimble Grip Tool

b. Observations and Findings

- While observing SP 1093, the inspectors noted that an air line to one of the cylinders air start control valves was dented. The inspectors pointed the problem out to the system engineer. The system engineer contacted a vendor representative who stated that the problem should not affect operability. The engineer and the inspectors also reviewed NRC Information Notice 89-07, "Failures of Small-Diameter Tubing in Control Air, Fuel Oil, and Lube Oil Systems Which Render Emergency Diesel Generators Inoperable." The inspectors determined that the line was not susceptible to excessive vibration and the dent would not be likely to cause a vibration induced crack.
- For SP 1305, an operator error during the procedure caused an unanticipated engine start. This event is discussed in Section M1.2 of this report.

- For both SP 2088 and SP 2102 the inspectors noted excellent communication and performance by the operators. Although the procedures could be and were performed as written, operators recognized some procedure enhancements were possible and took the proper actions to initiate the revision process.
- For WO 9611421, the results of the inspections were discussed in Section 02.1 of this report. The inspectors noted that the engineers performing the inspections were meticulous in conducting the measurements and thorough in documenting the results.
- For WO 9611916, issues which lead to the need for the work order were discussed in Section 02.2 of this report. The inspectors observed that the work which involved mechanics, riggers, engineers, quality services personnel, radiation protection personnel, and a vendor representative was well coordinated and carefully performed.

c. Conclusions

Inspector observed maintenance and surveillance activities were well conducted with good communications, proper pre-job planning, safe work practices, and excellent coordination between departments. The inspectors noted continued strong system engineer involvement in all phases of maintenance and surveillance activities.

M1.2 Operator Error During Surveillance Test

a. Inspection Scope (61726)

On October 30, 1996, while performing post maintenance testing on the D2 diesel generator, an operator error caused an unanticipated start of the diesel. The inspectors reviewed the circumstances of the event. The inspectors also reviewed USAR Section 8.4, "Plant Standby Diesel Generator Systems," as part of the inspection.

b. Observations and Findings

The licensee was performing Surveillance Procedure SP 1305, "D2 Diesel Generator Slow Start Test," revision 13, as part of post maintenance testing for Work Orders 9611406 and 9611420. The diesel was successfully run and was then shutdown in accordance with the procedure. Step 7.67.6 of the procedure directs that between 10 and 15 minutes after the engine shutdown, the operators were to air roll the engine at least one revolution to displace excess oil above from the upper pistons.

Before rolling the engine, step 7.67.3 of the procedure required the operators to place the local diesel generator control switch to STOP to energize the shutdown solenoid which isolated the fuel racks. Step 7.67.4 required the operators to attempt to open the governor fuel control linkage to verify the shutdown solenoid was energized. Due to miscommunications between the two operators performing the test, those steps were not accomplished. Thus when the diesel was rolled using the starting air, the fuel control linkage admitted fuel to the cylinders

and the engine started and came up to normal speed. The engine was subsequently shutdown and properly air rolled.

The inspectors interviewed the operator responsible for performing the procedure. The operator stated that they were near the end of the 10 to 15 minute window indicated in the procedure and there was some perceived time pressure to complete the roll. The operator asked a second operator if the steps to prepare the engine for rolling had been done and said a positive but somewhat unclear response was received. The responsible operator did not personally verify that steps 7.67.3 and 7.67.4 were completed.

After the event, the licensee and inspectors reviewed 10 CFR 50.72 and associated guidance to determine if the event was reportable to the NRC as an Engineered Safety Feature actuation. 10 CFR 50.72(b)(2)(ii)(B)(1) exempted reporting of invalid actuations that occurred while the system was properly removed from service. NUREG-1022, Supplement No. 1, "Licensee Event Report System," dated June 7, 1984, Section II 6.6 stated that the event would be not reportable if the system was removed from service such that it can not perform its intended function (inspectors' emphasis). However the Statements of Consideration for 10 CFR 50 published as 57 FR 41378 on September 10, 1992, stated that the event would not be reportable if the system was properly removed from and all requirements of plant procedures for removing equipment from service had been met (inspectors' emphasis).

The system was considered out of service at the time of the event but the diesel was available and could have performed its intended function. Licensee procedures for removing the diesel from service required that the engine be placed in a functional condition so that its post maintenance test could be run and then be considered in service after the test was successfully completed and reviewed. The inspectors discussed the requirements with representatives of the NRC Office for Analysis and Evaluation of Operational Data who stated that the Statements of Consideration were published later than the NUREG and were the current NRC guidance.

Since the documents listed above were somewhat unclear, the licensee conservatively reported the event to the NRC on October 30, 1996. The licensee retracted the report on November 7, 1996, when the reporting requirements were clarified and it was determined that the diesel was properly out of service administratively in accordance with licensee procedures.

c. Conclusions

The failure of the operators to perform steps 6.67.3 and 6.67.4 of SP 1305 resulting in an unanticipated start of the D2 diesel generator was considered a violation of Technical Specification 6.5.A.4 which required that detailed written procedures for surveillance and testing which could affect nuclear safety be prepared and followed.
(282/96014-02)

Although it was an unnecessary challenge to a safety system, the event was not safety significant. All equipment performed as expected. The

violation would normally be eligible for the exercise of discretion. However, as discussed in the cover letters of the previous two resident inspector reports (282(306)/96008 and 282(306)/96010) the NRC has been concerned with a negative performance trend in operator performance of surveillance activities. Thus the event was considered a violation that could have been prevented by the licensee's corrective action for those previous findings and was therefore cited.

The licensee's initial reporting of the event to the NRC pending clarification of the reporting requirements was considered a conservative decision.

M2 Maintenance and Material Condition of Facilities and Equipment

M2.1 Spindle Nut Cotter Pins in Main Steam Safety Valves

a. Inspection Scope (92902)

The inspectors became aware of recent findings at other plants where spindle nut cotter pins in main steam safety valves were missing. That could result in the spindle nut moving down the spindle due to vibration, causing the valve to fail to close after opening. The inspectors examined the plant's main steam safety valves. In addition, the inspectors reviewed USAR Section 11.4, "Steam Safety, Relief and Dump Systems," as part of the inspection.

b. Observations and Findings

Although the licensee's safety valves were a different manufacturer than those at the other affected plants, they appeared to be of similar design where the manual lifting lever pushed on a release (spindle) nut to manually open the valve. The release nut was held in place by a cotter pin. If the nut traveled down the shaft, it could cause the valve to stick open.

Not all of the nut cotter pins were accessible without scaffolding. However, the ones observed were all in place and the free ends of the cotter pins were bent to keep them from falling out. For the cotter pins that were not accessible, the inspectors verified that the release nut appeared to be in the normal position on the spindle. The vendor technical manual (Consolidated Maxiflow Safety Valve Manual 3700, dated November 1970) specified a 1/8" gap between the top lever and release nut. It appeared that all release nuts met that specification. The vendor manual also contained instructions for securing the release nut with a cotter pin.

The inspectors reviewed licensee maintenance procedure D44.1, "Pressure Relief Valve Testing and Repair for Valves Governed by ASME/ANSI OM-1987," revision 1. The procedure referred the mechanics to the vendor manual for specific assembly instructions. The inspectors also verified that licensee engineers were aware of and reviewing the industry problems with the cotter pins.

c. Conclusions

The inspectors' observations indicated no obvious problems with missing cotter pins in the relief valves. The inspectors determined that the licensee's procedures for valve assembly referred to the vendor manual which contained adequate instructions for installing the cotter pin. The inspectors also determined that the licensee was proactive in reviewing the recent industry events regarding the missing pins.

M3 Maintenance Procedures and Documentation

M3.1 Inadequate Surveillance of Component Cooling Water Pumps

a. Inspection Scope (92700)

On October 10, 1996, while performing reviews of surveillance testing in accordance with NRC Generic Letter 96-01, "Testing of Safety-Related Logic Circuits," the licensee identified that the automatic start of component cooling water pumps on low system pressure had not been formally tested at part of the surveillance program. The licensee issued Licensee Event Report (LER) 282(306)/96-18 on November 12, 1996, to report the cause and corrective actions for the finding. The inspectors reviewed the LER and circumstances surrounding the finding. In addition, the inspectors reviewed USAR Sections 10.4.2, "Component Cooling System," and 8.4, "Plant Standby Diesel Generator Systems," as part of the inspection.

b. Observations and Findings

As reported in the LER, the licensee discovered that the low pressure start of the pumps was credited in the Updated Safety Analysis Report after loss of offsite power to prevent loss of reactor coolant pump seals. Although Technical Specification 4.5.A.4.a stated that system tests shall be performed each refueling shutdown by tripping the actuation instrumentation, no surveillance test existed to test the low pressure starts on the pumps.

However, the low pressure start of the each of the pumps had been demonstrated within the most recent surveillance interval either through a combination of other tests or actual events such as the June 29, 1996, loss of offsite power to the safeguards busses on both units. In addition, the low pressure start of one of the pumps, for which a documented operation was not immediately available, was tested on the day of discovery. The licensee committed to revise the surveillance testing of the pumps to include the low pressure start its next due date. Completion of additional reviews and actions in accordance with Generic Letter 96-01 was continuing.

c. Conclusions

The inspectors concurred with the licensee's conclusion as discussed in the LER that the operability of the low pressure start feature of all component cooling pumps had been adequately demonstrated during the current surveillance interval. However, no such assurance existed for previous intervals.

Failure to perform the surveillance testing required by Technical Specification 4.5.A.4.a was a violation. This licensee-identified and corrected violation is being treated as a Non-Cited Violation, consistent with Section VII.B.1 of the NRC Enforcement Policy. (282/96014-03) LER 282(306)/96-18 remained open pending the inspectors' review of the completion the committed procedure revisions to include testing of the low pressure start of the pumps.

M8 Miscellaneous Maintenance Issues (92700, 92902)

- M8.1 (Closed) Licensee Event Report 282(306)/96-17: This event was previously discussed in Inspection Report 282(306)/96010, Section M3.2. At the time of that report, the LER had not yet been issued. The LER was issued on November 1, 1996, and the inspectors determined that it met all the requirements of 10 CFR 50.73. Violation 282/96010-03 was issued for the event described in the LER. Thus the LER is closed to avoid duplicate tracking and its corrective actions will be verified when the violation is closed.

III. Engineering

E2 Engineering Support of Facilities and Equipment

E2.1 Review of Updated Safety Analysis Report (USAR) Commitments (37551)

While performing the inspections discussed in this report, the inspectors reviewed the applicable portions of the USAR that related to the areas inspected and used the USAR as an engineering/technical support basis document. The inspectors compared plant practices, procedures, and/or parameters to the USAR descriptions as discussed in each section. No new discrepancies were identified.

E2.2 Review of 480-Volt Motor Starter Problems

a. Inspection Scope (92903)

Inspection Reports 282(306)/94010, Section 7.a, and 282(306)/94015, Section 2.d, discussed problems and proposed corrective actions for licensee-identified problems with 480-volt motor starters due to hardened grease. The 480-volt breakers were considered an "(a)(1)" category system in accordance with the Maintenance Rule (10 CFR 50.65) due to hardened grease problems and the issue was briefly reviewed in the recent Maintenance Rule Baseline Inspection documented by Inspection Report 282(306)/96012.

The inspectors met with licensee engineering personnel on November 1, 1996, to obtain an update on the progress of corrective actions and review recent performance of the motor starters. The inspectors also reviewed USAR Section 8.3.2.4, "480-Volt Auxiliary System," as part of the inspection.

b. Observations and Findings

There were a total of 344 480-volt breakers with motor starters in which the factory installed grease was subject to hardening. As discussed in the previous inspection reports, the licensee conducted an extensive investigation and testing program to determine an acceptable replacement grease and to determine the expected useful life of the original grease. They then embarked on a program to refurbish all the affected breakers which included cleaning out the old grease and installing acceptable grease.

The original refurbishment schedule was to complete three to six breakers per week during operations and 30 to 40 during each refueling outage. While the refueling goals have been met, the licensee was unable to maintain the schedule during operations primarily due to concerns with on-line maintenance risk. As of November 1, 1996, the licensee still had 48 breakers on unit 1 and 45 breakers on unit 2 that had grease that had exceeded its expected useful life and hadn't been replaced.

The inspectors determined that the vast majority of the remaining breakers either had no safety function or the component they supplied was normally in its safety position so the motor starter would not normally be called upon during an event. The licensee had priorities established for the grease replacement project that considered such things as age of the grease, environmental conditions, safety function of the equipment, normal and accident states of the equipment, whether the equipment was routinely exercised, whether the equipment was in the Maintenance Rule scope, etc. The inspectors determined that the prioritization system was appropriate.

The inspectors reviewed recent failures of 480-volt starters due to hardened grease. There had been eight failures in the previous year but only one in the previous six months. Most of the failures were associated with ventilation fans. None of the failures were associated with starters that had replacement grease and none of the failures were for breakers with old grease that had not yet reached the end of its expected useful life. Thus the licensee's evaluation of the old grease lifetime and corrective action of replacing the grease with a different type both appeared to be effective.

c. Conclusions

The inspectors concluded that, while the licensee's corrective actions were behind the original schedule, motor starter grease replacement was proceeding steadily and proper priorities had been established. Performance of the breakers was being monitored against established goals such that reasonable assurance was provided that the associated systems could fulfill their intended functions.

IV. Plant Support

R1 Radiological Protection and Chemistry Controls (71750)

During normal resident inspection activities, routine observations were conducted in the areas of radiological protection and chemistry controls using Inspection Procedure 71750. No discrepancies were noted.

R3 Radiological Protection and Chemistry Procedures and Documentation

R3.1 Modification to Hypobromous Acid Feed System

a. Inspection Scope (71750)

The inspectors reviewed the implementation a recent major modification to the hypobromous acid feed system. The inspection included observing system operation and discussions with engineering, chemistry, and operations personnel. This system was not discussed in the Updated Safety Analysis Report.

b. Observations and Findings

On the date inspected (Monday, October 21, 1996), the modification was nearly complete. All construction work was completed but the system had not been turned over for operations yet. Valve tags, equipment labels, tank level indicators, and revised procedures were not yet in place. However, the system had been operated by chemists during the previous weekend.

The inspectors determined that procedures had been revised but had not been distributed. Valve and equipment tags were manufactured and in fact were in the process of being attached during the inspection. Tank levels could be determined by observing the fluid because the polyethylene tanks were not completely opaque.

The inspectors determined that the system was only operated by chemists and that all duty chemists had been trained on the post-modification configuration and operation of the system. The chemists determined that it was desirable to add chemicals to the intake water over the weekend even if the system had not been completely turned over for operations.

c. Conclusions

The inspectors determined that operation of the system prior to completing all equipment labeling and procedure distribution was acceptable under the circumstances that it was only for a weekend period and the appropriate chemistry personnel had been trained. Better communication of the system status between engineering, chemistry, and operations personnel could have prevented confusion.

P1 Conduct of Emergency Preparedness Activities (71750)

During normal resident inspection activities, routine observations were conducted in the area of emergency preparedness using Inspection Procedure 71750. No discrepancies were noted.

S1 Conduct of Security and Safeguards Activities (71750)

During normal resident inspection activities, routine observations were conducted in the areas of security and safeguards activities using Inspection Procedure 71750. No discrepancies were noted.

An additional inspection of licensee activities in this area was conducted during this period and was discussed in Inspection Report 282(306)/96013.

F1 Control of Fire Protection Activities (71750)

During normal resident inspection activities, routine observations were conducted in the area of fire protection activities using Inspection Procedure 71750. No discrepancies were noted.

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 November 19, 1996. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. Wadley, Plant Manager
K. Albrecht, General Superintendent Engineering
J. Goldsmith, General Superintendent Design Engineering
J. Hill, Manager Quality Services
G. Lenertz, General Superintendent Plant Maintenance
D. Schuelke, General Superintendent Radiation Protection and Chemistry
M. Sleigh, Superintendent Security
J. Sorensen, General Superintendent Plant Operations

INSPECTION PROCEDURES USED

IP 37551: Onsite Engineering
IP 61726: Surveillance Observations
IP 62707: Maintenance Observations
IP 71707: Plant Operations
IP 71750: Plant Support Activities
IP 92700: Onsite Followup of Written Reports of Nonroutine Events at Power Reactor Facilities
IP 92901: Followup - Operations
IP 92902: Followup - Maintenance
IP 92903: Followup - Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

306/96014-01	VIO	Failure to Test the Redundant Diesel Generator
282/96014-02	VIO	Failure of Operators to Follow Surveillance Procedure
282/96010-03	NCV	Missed Surveillance of Low Pressure Auto-Start of Component Cooling Pumps Due to Inadequate Procedure
282(306)/96-18	LER	Missed Surveillance of Low Pressure Auto-Start of Component Cooling Pumps Due to Inadequate Procedure

Closed

282(306)/96-17	LER	Failure to Perform Section XI Testing on Chemical Feed Check Valves
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Discussed

282/96006-09	URI	Cable Tray Separation Discrepancies
282/96010-03	VIO	Failure to Perform Section XI Testing on Chemical Feed Check Valves

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
FR	Federal Register
IP	Inspection Procedure
ISFSI	Independent Spent Fuel Storage Installation
ISTS	Improved Standard Technical Specifications
JCO	Justification for Continued Operation
LER	Licensee Event Report
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
PDR	Public Document Room
SAR	Safety Analysis Report
SFPO	Spent Fuel Project Office
SP	Surveillance Procedure
URI	Unresolved Item
USAR	Updated Safety Analysis Report
VIO	Violation
WO	Work Order