APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-285/92-05 Operating License: DPR-40

Docket: 50-285

Licensee: Omaha Public Power District
444 South 16th Street Mall
Omaha, Nebraska 68102-2247

Facility Name: Fort Calhoun Station

Inspection At: Fort Calhoun Station, Blair, Nebraska

Inspection Conducted: February 2 through March 14, 1992

Inspectors: R. Mullikin, Senior Resident Inspector
R. Azua, Resident Inspector

Approved: _____ 3/27/92
P. H. Harrell, Chief, Project Section C Date

Inspection Summary

Inspection Conducted February 2 through March 14, 1992 (Report 50-285/92-05)

Areas Inspected: Routine, unannounced inspection of review of a previously identified inspection finding, onsite followup of events, operational safety verification, maintenance and surveillance activities, refueling activities, reliable decay heat removal during outages, and OSHA interface activities.

Results:

- Personnel in the areas of operations, radiological protection, and security were found to be knowledgeable of their responsibilities and performed their duties in a professional manner.
- One instance where a licensed operator altered the shutdown cooling system alignment to prevent the possibility of losing the operating pump during a surveillance test was an example of good attention to detail.
- The operation and support of the outage control center was observed to function according to the licensee's plans. Examples noted were during the raw water system outage and midloop operation.
- An individual was observed working while standing on a valve, instead of using proper scaffolding.

- The installation of a temporary diesel generator was considered a proactive approach to reducing risks during the outage.

- Maintenance was found to be performed in a coordinated, controlled manner with adherence to procedures. Good radiological protection practices were noted.

- The licensee's efforts for maintaining decay heat removal during the present refueling outage was found to be conservative. Management support for this effort was excellent. Strong licensee commitment to reactor and plant safety was apparent.

DETAILS

1. Persons Contacted

*R. Andrews, Division Manager, Nuclear Services
*W. Bateman, Supervisor, Procurement Quality Assurance
*G. Cook, Supervisor, Station Licensing
J. Chase, Outage Manager
A. Christensen, Outage Coordinator
R. DeMeulmeester, Outage Coordinator
S. Gambhir, Division Manager, Production Engineering
*J. Gasper, Manager, Training
*W. Gates, Division Manager, Nuclear Operations
*R. Jaworski, Manager, Station Engineering
*L. Kusek, Manager, Nuclear Safety Review Group
D. Lovett, Supervisor, Radiation protection
W. Orr, Manager, Quality Assurance and Quality Control
*T. Patterson, Manager, Fort Calhoun Station
*A. Richard, Assistant Manager, Fort Calhoun Station
B. Schmidt, Outage Coordinator
J. Sefick, Manager, Security Services
P. Sepcenko, Supervisor, Outage Projects
*C. Simmons, Station Licensing Engineer
F. Smith, Supervisor, Chemistry
R. Short, Manager, Nuclear Licensing and Industry Affairs
J. Tills, Outage Manager
D. Trausch, Supervisor, Operations
*S. Willrett, Manager, Nuclear Materials and Administration

The inspectors also contacted additional personnel during this inspection period.

*Denotes attendance at the monthly exit interview held on March 17, 1992.

2. Plant Status

The Fort Calhoun Station was in its 13th refueling outage during this entire inspection period. Fuel offload began on February 20, 1992, and was completed on February 23.

Major projects completed during this inspection period were the complete core offload, reactor vessel thermal shield inspection and repair, reactor vessel inservice inspection, steam generator eddy current testing, emergency Battery 1 replacement, ultrasonic testing of the off-loaded fuel, and the installation of a temporary diesel generator.

Eddy current testing was performed on both steam generators with no tubes requiring plugging. This is the fourth refueling outage in succession where this has occurred.

3. Review of a Previously Identified Inspection Finding (92701)

(Closed) Inspection Followup Item 285/9120-01: Breaker Close Circuit Fuse Supervision

This item concerned the possibility that the fuse or fuse holder could be inoperable on 480- and 4160-Vac breaker closing circuits and not be noticed until the equipment was started. The wiring for these breakers has the indicating lights powered from the tripping circuit. Thus, the starting circuit fuse could blow and the indicating lights would remain lit.

The licensee initiated Engineering Action Request 91-072 to evaluate the supervisory controls on engineered safeguards feature equipment and propose corrective action. The evaluation was completed on December 4, 1991, and proposed the following short- and long-term corrective actions:

- Establish a routine practice of performing a voltage or continuity check on the close circuit fuses on 4160- and 480-Vac circuit breakers after a breaker has been opened.

- Install appropriate supervisory elements in the circuit breaker close circuitry for engineered safeguards breakers.

The Plant Review Committee reviewed and approved, on January 10, 1992, the plant engineering recommendations. A weekly preventive maintenance task was initiated to measure the voltage on the closing coil side of the fuse of equipment that is not already in operation. The long-term modification has not been finalized and a proposed completion date had not been determined.

On November 14, 1991, Region IV requested assistance from the Office of Nuclear Reactor Regulation (NRR) concerning the breaker supervision issue. The NRR staff responded, on February 6, 1992, and stated that the design could be improved to provide indication of the power to the breaker closing coil, which represents sound engineering practice. However, the NRR staff concluded that the existing design meets the intent of the licensee's regulatory requirements with periodic testing to demonstrate the operation of the breaker closing circuit. The licensee's corrective actions are consistent with the NRR staff conclusions.

4. Onsite Followup of Events (93702)

a. Unplanned Reactor Protection System Actuation

On February 1, 1992, while in hot shutdown, a reactor trip signal was initiated due to a reactor coolant system low flow condition. The signal was received while operators were preparing to cool down and depressurize the reactor coolant system.

The operators were performing Procedure OI-RC-4, "Reactor Coolant System Normal Shutdown," when Reactor Coolant Pump RC-3A was shut down. According to procedure, the reactor trip channel should have been placed in bypass before the pump was shut down. However, due to personnel error, the pump was shut down prior to placing the channel in bypass. The safety significance of this event was minimal and a shutdown of a reactor coolant pump at power would have resulted in a reactor trip.

The inspectors will perform further review of this event during routine review of Licensee Event Report (LER) 92-005.

b. Containment Radiation Monitors RM-050 and -051 Found Valved Out

On February 19, 1992, the licensee discovered that the inboard isolation valves (PCV-742-E and -G) for Radiation Monitors RM-050 and -051 were closed. At the time of the event, the Fort Calhoun Station was in Day 19 of its refueling outage and the core was completely loaded, with a containment purge in progress. Upon discovery, the operators opened the valves restoring sample flow to the radiation monitors. A review of the control room alarm printer indicated that the valves had been shut for approximately 17 hours.

The licensee verified that, during the event, plant stack Radiation Monitors RM-060, -061, and -062 were operable and that no abnormal increase in stack activity occurred.

The inspectors will perform further review of this event during routine review of LER 92-007.

c. Four Safety Injection System Relief Valves Outside of Design Basis

On February 27, 1992, the licensee discovered that four relief valves on the safety injection system were set lower than the system design pressure. The four valves (SI-187, -309, -310, and -311) are installed in the low pressure discharge header, the shutdown cooling suction line, a crossconnect between two shutdown cooling heat exchangers, and a shutdown cooling purification line, respectively.

The licensee found the following information for the four relief valves:

Valve	Setpoint	Original Hydrostatic Test Pressure
SI-187	600 psi	500 psi
SI-309	350 psi	300 psi
SI-310	600 psi	500 psi
SI-311	600 psi	500 psi

The licensee determined that, although the relief valve setpoints were higher than the tested pressure, the system protected by these valves had never experienced pressures exceeding the tested pressures. In addition, the piping design pressure, based upon component ratings, were 975, 600, 975, and 975 psi, respectively. However, the actual design pressure was based upon the original hydrostatic test. The condition discovered had existed since original installation.

The inspectors will perform further review of this event during routine review of LER 92-008.

d. Inadvertent Ventilation Isolation Actuation Signal

On March 2, 1992, a ventilation isolation actuation signal occurred during a maintenance activity to replace a containment radiation high signal relay. During this maintenance, the fuses were pulled to the relay. However, the fuses were reinstalled without resetting the relay due to a procedural error. This caused a ventilation isolation actuation, which resulted in the control room ventilation system swapping to the filtered mode and the closure of the containment purge isolation valves.

The inspectors will perform further review of this event during routine review of LER 91-009.

e. Update on Chemical Discharges Into the Missouri River

The inspectors documented, in NRC Inspection Reports 50-285/91-05 and 50-285/91-23, two events where acidic waste from the waste lagoon was released into the Missouri River. The Nebraska Department of Environmental Control investigated the two events on February 3, 1992, and fined the Omaha Public Power District in the amount of $7500 for violations of Nebraska water quality standards

The licensee's corrective actions in the chemical discharges included training, procedure changes, and valve replacements and additions. There have been no further events of this type.

Conclusion

The licensee's response to plant events was prompt and demonstrated good safety and regulatory awareness.

5. Operational Safety Verification (71707)

a. Routine Control Room Observations

The inspectors observed operational activities throughout this inspection period that occurred during the refueling outage. Control room activities were observed to be well controlled. Control room

staffing was maintained for the applicable plant mode and professional conduct was observed. Operations interface with the outage control center was observed to be functioning properly.

During the performance of infrequently performed procedures and routine efforts, attention to detail by operators was noted in several instances. One such instance was observed when the operators, prior to performing a surveillance on one of the emergency diesel generators, altered the shutdown cooling alignment such that the low pressure safety injection pump in operation would not be affected in the event that the emergency diesel generator being tested became inoperable.

b. Plant Tours

The inspectors routinely toured various areas of the plant to verify that proper housekeeping was being maintained. Plant housekeeping was found to be maintained commensurate with the increase in work activities ongoing during the outage.

On February 27, 1992, while touring the auxiliary building, the inspector observed plant personnel removing heat tracing on the boric acid storage tank piping. The inspector noted one of the crew members standing on boric acid gravity feed Valve HCV-258. When the individual stepped down, upon completion of the work activities, he inadvertently moved the valve handwheel slightly. The individual then turned the handwheel back to its original position. The inspector noted a quality control inspector in the area and informed him of the observation. The quality control inspector informed plant management and further work was halted until proper scaffolding could be installed. The quality control inspector issued Corrective Action Report 92-044 to establish measures to prevent recurrence. The inspectors will review the licensee's corrective action in this matter during a future inspection.

c. Radiological Protection Program Observations

The inspectors verified that selected activities of the licensee's radiological protection program were implemented in conformance with facility policies, procedures, and regulatory requirements. Radiation and/or contaminated areas were properly posted and controlled. Health physics personnel were observed to be touring work areas to ensure that proper radiological protection practices and radiological control requirements were properly implemented. Radiation monitors were properly utilized to check for contamination.

d. Security Program Observations

The inspector observed various aspects of the licensee's security program. Guards were observed posted when security boundaries were nonfunctional. Escorts were noted to be maintaining proper control

of visitors. Isolation zones were found to be free of transient material. In addition, security personnel were observed performing routine surveillance tests on the metal detection and X-ray equipment located in the secondary access station. These tests were performed in accordance with approved plant security procedures.

Security personnel interviewed during this inspection period were found to be cognizant of their responsibilities and executed these in an efficient, professional manner.

e. Equipment Tagging

On March 5, 1992, the inspector reviewed the control room danger tag log book and selected Tagout 92-314 associated with an auxiliary feedwater modification. This tagout required 15 tags to be installed. The inspector located the equipment specified in the log book and found all the tags to be properly hung and that all valves and switches were in the specified position.

f. Observation of Management Activities

Throughout this inspection period, management involvement in outage activities was very visible. Management was involved in scheduling outage activities and evaluating the impact these activities may have on operating plant equipment and, ultimately, plant safety. It was also noted that, prior to the performance of an infrequently performed procedure, which could have had an impact on plant safety, licensee management was present to brief operations personnel on all aspects of the effort per the guidance in Standing Order G-92, "Conduct of Infrequently Performed Procedures." As part of these briefings, operators were given instructions on how to back out of a procedure in the event of a problem. Management's message in these briefings was clear in that, if operations personnel saw a need to back out of a procedure, management would not only support such a decision but encourage it. Management commitment to plant safety was apparent. In addition, management was noted touring the plant spaces on a routine basis.

g. Temporary Emergency Diesel Generator

The Fort Calhoun Station has two offsite power sources (161- and 345-kV) and two standby emergency diesel generators available upon a plant trip or during outages. The licensee has taken measures to prevent a total station blackout during the refueling outage. The licensee removed the 161-kV circuit from service to modify the 161-kV bus in the plant switchyard to accommodate a second supply from Omaha. This second 161-kV is projected to be installed in Fall 1992. A third diesel generator was rented, placed in the switchyard, and connected to the 161-kV bus via two step-up transformers. In addition, a 13.8-kV backfeed line from the Blair substation has also

been connected to the 161-kV bus via a single step-up transformer. These two power sources will be available in the event of the loss of the existing 161-kV circuit.

An operations memorandum was written to provide operators guidance on the use of these two additional power supplies. This memorandum directed the operators to use the 13.8-kV supply in the event of a station blackout. The third diesel generator is to be used in the event the 13.8-kV circuit is unavailable.

h. Raw Water System Outage

At 12 midnight on March 10, 1991, the licensee commenced an outage of the raw water system to replace the four discharge valves on the four component cooling water (CCW) heat exchangers, the check valve on the return to the discharge canal to the Missouri River, and the inlet valve to component cooling water Heat Exchanger AC-1C. Since the outlets of all four CCW heat exchangers tie into a common header, it was necessary to remove all four heat exchangers from service for the valve replacements.

The loss of the CCW heat exchangers eliminated the cooling water supply to the spent fuel pool heat exchanger. Thus, the licensee was concerned with the spent fuel pool temperature while the raw water outage was in effect. Through the use of the containment purge system, the containment temperature was reduced to 58°F. Then using the containment as a heat sink, CCW was cooled via the containment cooling units. Using the flow paths such that CCW flow was split between the containment cooling units and the spent fuel pool heat exchanger, the licensee was able to maintain some CCW cooling. It was anticipated, by the licensee, that this would suffice for the expected outage of 24 hours.

However, the licensee did prepare for the possibility that spent fuel pool temperature could rise above the maximum allowed temperature of 140°F. Spent fuel pool temperatures were monitored hourly both in the control room and in the outage control center. The initial pool temperature was 74°F. If the temperature reached 130°F, the licensee would attempt to restore raw water to the east header by blank flanging the discharge side of CCW Heat Exchangers AC-1B and -1C. This would only work if the modifications were completed on the other two heat exchangers. The licensee estimated that this would be completed by the time the spent fuel pool temperature reached the 130°F action level. The licensee also had some other potential actions which included opening up the auxiliary building roll-up doors to the radwaste building to increase cooling area and recirculate the spent fuel pool with the reactor cavity. These actions were outlined in Standing Order G-92.

The inspector witnessed the shift turnover briefing for the operations crew that would initiate the system outage. The briefing

was presented by the onshift outage manager. The outage manager briefed the crew on Standing Order G-92 and the contingencies that may occur. The briefing was found to be very comprehensive and well presented. Subsequent discussions with operators found them to be knowledgeable of current status on the raw water system outage work. An outage coordinator was present during most of the valve replacement work.

The valve modifications were completed and the raw water system placed back into service at approximately 2:30 p.m. on March 11. The spent fuel pool temperature reached a maximum of 108°F.

1. Followup on Personnel Errors by Licensed Operator Trainees

The inspectors documented, in NRC Inspection Report 50-285/91-24, that errors by licensed operator trainees resulted in three reportable events from the period June 26 through October 4, 1991. It was reported that the licensee was reviewing these events to determine the appropriate corrective action. The licensee's Nuclear Safety Review Group completed its review on December 23, 1991, and found no common root cause between the three events. However, recommendations from the review included:

- Evaluate the differences between the plant and the simulator synchroscope.
- Provide guidance to the on-the-job training evaluators who provide trainee oversight.
- Discuss and incorporate various electrical switch operating methods into training lesson plans for operators.

The licensee has been proactive in investigating these events for possible revisions to their licensed operator training program.

Conclusion

Personnel in the areas of operations, radiological protection, and security were found to be knowledgeable of their responsibilities and performed their duties in a professional manner.

One instance where an licensed operator altered the shutdown cooling system alignment to prevent the possibility of losing the operating pump during during a surveillance test was an example of good attention to detail.

The operation and support of the outage control center was observed to be functioning according to the licensee's plans. Examples noted were during the raw water system outage and midloop operation.

An individual was observed standing on a valve while performing work, instead of using proper scaffolding.

The installation of a temporary diesel generator was considered a proactive approach to reducing risks during the outage.

6. Maintenance Observations (62703)

The inspectors reviewed and/or observed selected station maintenance activities on safety-related systems and components:

a. Heated Junction Thermocouple

On February 1, 1992, the inspector witnessed the removal of the heated junction thermocouples from the reactor vessel. This work was performed in accordance with Maintenance Work Orders 918003 and 918099 and Procedure PE-RR-HJTC-1254, "HJTC Grayloc Flange Disassembly."

The inspector noted good radiological protection practices, beginning with a required briefing. During the briefing, the personnel involved reviewed the procedure and were cognizant of their responsibilities during this effort. Prestaging of equipment to be used and good coordination between personnel was noted. The personnel involved were found to be highly skilled and took all necessary safety precautions, such as using safety belts, in uncoupling, removing, and storing the heated junction thermocouples.

b. 4160-Volt Circuit Breaker Inspection

On February 25, 1992, the inspector witnessed performance of portions of the preventive maintenance Procedure EM-PM-EX-0200, "4160V Circuit Breaker Inspection." This effort was performed under Preventive Maintenance Orders 9200322 and 9200323.

The procedure and the preventive maintenance work orders were found to be approved, as designated by the appropriate signatures. Personnel requirements, as stated in the procedure, were met, with each worker having the proper training and qualifications to perform this effort, as identified through the personnel training records.

Breakers and other equipment were properly tagged prior to the performance of the procedure. Procedural compliance was noted throughout this effort.

c. Reactor Vessel Thermal Shield Inspection and Repair

During this outage, the licensee completed an inspection of the thermal shield. The actual inspection and repair was performed by ABB Combustion Engineering. The inspection consisted of a visual and a nondestructive examination of the 24 preloaded position pins, which couple the thermal shield to the core support barrel.

The results of the inspection indicated that a total of 10 positioning pins (6 on the bottom and 4 on the top) required repair. This was successfully completed.

This work, in addition to the reactor vessel inservice inspection, was the focus of an inspection by Region IV inspectors. The results of this inspection are documented in NRC Inspection Report 285/92-06.

Conclusion

Maintenance was found to be performed in a coordinated, controlled manner with adherence to procedures. Good radiological protection practices were noted.

7. Surveillance Observations (61726)

a. Containment High Pressure Switch Channel Calibration

On March 5, 1992, the inspector witnessed the performance of the surveillance test on containment high pressure Switch C/PC-742-1. The work was performed using Procedure IC-ST-VA-007, and satisfied the surveillance requirements of Technical Specification 3.1, Table 3-2, Items 4.a. The inspector noted that the instrumentation and control technicians coordinated with the control room via telephone and care was taken in the performance of the test. In addition, the inspector independently verified that all test results met acceptance criteria. A review of the completed test package showed that all required review and approvals were made.

The inspector noted an apparent discrepancy between the procedure and the test. Step 8.2 of the procedure required that the test performer ensure that there is no leakage after restoration. During the test, the test tap cap must be removed for the installation of a test pressure connection. However, the inspector noted that, with the containment hatch open, there was no differential pressure across the test cap, and thus, leakage would not be noticeable. This was brought to the licensee's attention and it was stated that these caps would be verified to be tight during the performance of the checklist when exiting the current outage. This satisfied the inspector's concern.

b. Emergency Diesel Generator

On February 14, 1992, the inspector witnessed operations personnel perform operability testing, per Operating Instruction OI-DG-1, "Diesel Generator No.1 (DG 1) Normal Operation." This test was performed to verify the operability of Emergency Diesel Generator 1 and its associated primary and secondary air start systems, as required by Technical Specification 3.7(1)c. and d. The inspector noted that attention to detail was apparent throughout the performance of the test. In addition, the inspector verified that the test results met the acceptance criteria.

Conclusion

Surveillance was performed in accordance with procedure with good attention to detail.

8. Refueling Activities (60710)

On February 20, 1992, the inspector witnessed a portion of the transfer of fuel from the reactor vessel to the spent fuel pool. Accompanying the inspector were two Region IV inspectors performing a fuel integrity inspection. The observations from this inspection by Region IV personnel will be documented in NRC Inspection Report 50-285/92-03. One observation noted by the Region IV inspectors was that tools being brought into the reactor cavity area were not always accounted for when exiting. There was a tool accountability log book that an individual must sign before entering this area. However, it was being done on an honor system and it was apparent that some individuals were forgetting to sign out when exiting. This was brought to the licensee's attention and it was stated that, in previous outages, a dedicated individual controlled the tool accountability log book. The licensee took prompt corrective action and reinstituted the process of having a dedicated individual control tool accountability. In addition, the licensee interviewed the individuals that had not logged out and concluded that all tools had been removed. The inspectors have observed that tool accountability was being properly maintained after this time.

Conclusion

Refueling activities were observed to be properly performed.

9. Reliable Decay Heat Removal During Outages (TI 2515/113)

On February 1, 1992, the Fort Calhoun Station began its scheduled refueling outage. Prior to and during the outage, the inspectors reviewed the licensee's efforts for maintaining reliable decay heat removal. This included reviewing operating instructions and abnormal operating procedures that would be or may be needed during this outage. These included:

Number	Title
AOP-11	Loss of Component Cooling Water
AOP-18	Loss of Raw Water
AOP-19	Loss of Shutdown Cooling
AOP-32	Loss of 4160 Volt or 480 Volt Bus Power
EOP-02	Loss of Offsite Power/Loss of Forced Circulation
EOP-07	Station Blackout
OP-01	Master Checklist for Startup or Trip Recovery
OP-06	Hot Shutdown to a Cold or Refueling Condition and Conduct of Shutdown Cooling Operations
OI-SC-1	Shutdown Cooling Initiation

OI-SC-2	Termination of Shutdown Cooling
OI-SC-3	Alternate Shutdown Cooling Utilizing Containment Spray Pumps
OI-SC-6	Shutdown Cooling System Abnormal Operation
OI-SC-A	Termination of Alternate Shutdown Cooling

These procedures were found to be technically adequate and were identified as having been reviewed and approved, as noted by the appropriate signatures.

The licensee also issued Standing Order G-92, "Conduct of Infrequently Performed Procedures," which is designed to provide management controls to ensure that infrequently performed procedures are properly planned, reviewed, directed, and executed, with the proper focus on reactor safety. This was evident during the preparation for and performance of midloop operations. The plant operators had undergone training in the simulator and were briefed on the events at other power plants that had caused a loss of decay heat removal capabilities. Procedure OP-06, "Hot Shutdown to a Cold or Refueling Condition and Conduct of Shutdown Cooling Operations," which was reviewed by the operators, required that a minimum of three power sources be available during midloop operations. The licensee management committed to maintaining one power source in excess of what was required in the procedures (this was true throughout the outage). During this effort, the licensee maintained at least four power sources, which included the 161- and 345-kV lines, plus the two emergency diesel generators. In addition, the licensee management made the operators aware (through briefings) that reactor safety was paramount and that, if any anomalies were to arise, the effort would have to be secured and the cause of the anomalies identified prior to continuing any further.

The licensee's commitment to maintain two or more power sources available throughout the outage resulted in the installation of a temporary backup diesel generator.

In an effort to minimize conditions that could lead to an unplanned, partial, or total loss of any of the offsite power sources (ac power), the licensee developed a Switchyard Activities Charter. This charter provided guidance on maintaining overall control, coordination, and communication between supervisory and lead personnel involved with switchyard work and the Fort Calhoun Station plant staff. Outage management, per the charter, is responsible for ensuring that switchyard activities are scheduled and integrated into the outage plan. Outage management is also responsible for identifying critical plant evolutions, where there could be a high potential for power loss between planned plant outage work and switchyard activities, and take the appropriate steps. One example of this was during midloop operations when the licensee suspended all work in the plant that could effect any of the power supplies and restricted access to the switchyard, emergency diesel generator rooms, and the switchgear room until the effort was completed.

The inspector noted that whenever the licensee removed an emergency diesel generator from service for maintenance and surveillance purposes, steps were taken to maintain the operability of its associated dc bus.

Conclusion

The licensee's efforts for maintaining decay heat removal during the present refueling outage was found to be conservative. Management support for this effort was excellent. Strong licensee commitment to reactor and plant safety was apparent.

10. OSHA Interface Activities (93001)

The inspectors, during routine tours of the plant, inspected for potential occupational safety concerns. Generally, plant personnel and the additional contractor personnel hired for the outage were observed obeying good safety practices. However, there was an observation made that was brought to the attention of the licensee's industrial safety officer.

On February 11, 1992, during the licensee's efforts to remove the heated junction thermocouples from the reactor vessel, the inspector observed a condition that was contrary to personnel safety. It was noted that, when the heated junction thermocouples were being transferred from the reactor vessel to the assigned storage area, no warning was issued to personnel working below that a crane was passing overhead. This condition was aggravated further by the fact that the load being transferred, even though in a container, was highly contaminated. Initial corrective action was to brief crew leaders on the importance of being aware of personnel safety during crane activities.

Conclusion

Generally, personnel were adhering to good industrial safety practices.

11. Summary of Open Items

The following is a synopsis of the status of all open items generated and closed in this inspection report.

Inspection Followup Item 285/9120-01 was closed.

12. Exit Interview

The inspectors met with Mr. W. G. Gates (Division Manager, Nuclear Operations) and other members of the licensee staff on March 17, 1992. The meeting attendees are listed in paragraph 1 of this inspection report. At this meeting, the inspectors summarized the scope of the inspection and the findings. During the exit meeting, the licensee did not identify as proprietary, any information provided to, or reviewed by, the inspectors.