

these windows to indicate that they were out of service and initiated ONE Form FX-91-1617.

This observation indicates a possible weakness in the design modification process with respect to alarm annunciator modification associated with design changes. Resolution of the ONE form is expected to identify and correct this possible weakness. The inspector will review this resolution during a future inspection. (Inspection Followup Item 445/9162-04)

#### 9.6 Main Feedwater Pump Controls

The inspector observed troubleshooting on main feedwater Pump 1B control circuitry for the throttle trip and control valves (Work Order C91-11732). The original work package was written for troubleshooting of main feedwater Pump 1A and had been revised to include Pump 1B. All necessary approvals had been obtained. Instrument and control technicians were working from the approved procedures as well as using circuit prints and the General Electric feedwater pump technical manual. No discrepancies during troubleshooting were observed. However, none of the technicians were wearing the required ear protection and one individual was without safety glasses.

#### 9.7 Summary of Findings

Maintenance activities observed were properly performed in accordance with work orders and plant procedures. The level of quality control involvement was appropriate. Communications with the control room operators and coordination with plant operations were excellent. The instance of lacking ear and eye protection indicates a need for improvement in this area. One Inspection Followup Item was identified regarding the design modification process.

#### 10. MONTHLY SURVEILLANCE OBSERVATION (61726)

The inspectors observed the surveillance testing of safety-related systems and components listed below to verify that the activities were being performed in accordance with the Technical Specifications. The applicable procedures were reviewed for adequacy, test instrumentation was verified to be in calibration, and test data was reviewed for accuracy and completeness. The inspectors ascertained that any deficiencies identified were properly reviewed and resolved.

The inspector witnessed portions of the following surveillance test activities:

##### 10.1 Emergency Diesel Generator

The inspector observed testing of emergency diesel generator slave Relay K609B (Work Order S91-2049, Procedures OPT-491A, -214A, and -467A, and SOP-711A). This test checked operability of slave Relay K609B by ensuring that the Train B emergency diesel generator received a start signal and then achieved rated voltage and speed. Personnel coordination and communications practices were good.

The inspector found the operator to be knowledgeable of system interfaces. He ensured that control room operators were informed of all safety equipment valve and switch position changes. The operator had the procedure open and referenced each step during the observed portion of the surveillance test.

#### 10.2 Slave Relay Testing

The inspector observed surveillance testing of slave Relay K601B (Procedure OPT-487A and SOP-711A, Work Order S91-2117). All applicable procedures were reviewed for adequacy. Pre-surveillance system alignment, testing, and portions of the system restoration were observed by the inspector. No discrepancies were identified; however, the inspector noted that communications between the operators regarding expected alarms during the test could be improved.

#### 10.3 Emergency Core Cooling Check Valve Testing

The inspector observed the performance of Procedure PPT-S1-8200, "ECCS Check Valve Operability Test." No discrepancies were identified.

#### 10.4 Service Water Valve Stroke Time Testing

As postwork testing following the refurbishment of the motor actuators for service water Valves 1-HV-4393 and -4394 under Work Orders C91-5719 and -5791, the licensee performed stroke time testing of the valves. These tests were performed using the applicable portions of Procedure OPT-207A. The operator performing these tests was very careful in using self-checking methods.

#### 10.5 Pressurizer Level Transmitter

The inspectors observed the calibration of the pressurizer level transmitter for Loop L461 under Work Order S91-2859 and Procedure INC-7738A. This evolution was properly conducted using good communications and with appropriate radiation protection coverage.

#### 10.6 Safety Injection Check Valves

The inspector observed a portion of measurement of reactor coolant system leakage through safety injection check valves (Work Order S91-2971 and Procedure PPT-S1-7007B). The check valves that were being tested were 8818C and 8818D which are on the discharge line from the Train B residual heat removal pump to cold leg injection. No discrepancies were identified. Corrected leak rate calculations for normal operating pressure were independently verified by the inspector.

The test engineer's communications with workers at the test rig and operators in the control room were clear and professional. The test procedure was utilized throughout the entire evolution.

#### 10.7 Safety Injection System

The inspector observed concurrent surveillance activities associated with the safety injection system. The surveillances consisted of safety injection

Relay K615 testing (Work Order S91-2495 and Procedure OPT-493A) and Train B safety injection system operability verification (Work Order S91-2871 and Procedure OPT-204A). The safety injection operability test checked operation of the pump and ensured correct system lineup. During the inspection, the inspector observed initial system lineups, test performance, data gathering, and system restoration.

The inspector noted that during this simultaneous surveillance, control room operator demeanor and communications were less formal than usual. Verbal system restoration orders from the relief reactor operator to the reactor operator were not repeated back for confirmation.

#### 10.8 Summary of Findings

The surveillance testing activities observed were performed by qualified personnel using appropriate procedures and administrative controls. Careful self-checking was observed and test coordination was excellent. With two exceptions, communication practices were excellent.

#### 11. COLD WEATHER PREPARATIONS (71714)

11.1 The inspector conducted reviews to determine whether the licensee had effectively implemented measures for protecting plant equipment from the detrimental effects of cold weather. The major licensee procedures dealing with cold weather preparations were reviewed. These procedures were:

- ° STA-634, "Freeze Protection Program,"
- ° TSP-522, "Freeze Protection Preparations Guideline," and
- ° ABN-912A, "Cold Weather Preparations/Heat Tracing and Freeze Protection System Malfunction."

These procedures and the status of their implementation were discussed with licensee personnel in mid-November 1991. An action plan for implementation of freeze protection was initiated in September 1991. Status of the preparations was included in weekly management reports and was discussed in daily management meetings during the refueling outage. The checklists and verification sheets of Procedure TSP-522 were reviewed by the inspector. These had been completed as necessary up until the time of the review. The required action items had been implemented or were scheduled to be implemented in the near future or upon the onset of extreme cold. The licensee's procedures had been updated to reflect plant modifications since last winter and to include lessons learned regarding freeze protection last winter.

#### 11.2 Summary of Findings

The licensee's procedural controls over cold weather preparations were found to be comprehensive and detailed. The inspector noted heavy management

involvement and interest in the implementation of the freeze protection program.

12. INSPECTION FOLLOWUP ITEMS

Inspection followup items are matters which have been discussed with the licensee which will be reviewed further by the inspector, and which involve some action on the part of the NRC or licensee or both. An inspection followup item disclosed during the inspection is discussed in paragraph 9.5.

13. EXIT MEETING (30703)

An exit meeting was conducted on December 19, 1991, with the persons identified in paragraph 1 of this report. The licensee did not identify as proprietary any of the materials provided to, or reviewed by, the inspectors during this inspection. During this meeting, the NRC inspectors summarized the scope and findings of the inspection and noted that an enforcement conference would be scheduled to discuss the two apparent violations related to safety system alignment in Mode 3.