ENCLOSURE 2

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Inspection Report: 50-445/95-17
50-446/95-17

Licenses: NPF-87
NPF-89

Licensee: TU Electric
Energy Plaza
1601 Bryan Street, 12th Floor
Dallas, Texas

Facility Name: Comanche Peak Steam Electric Station, Units 1 and 2

Inspection At: Glen Rose, Texas

Inspection Conducted: July 30 through September 9, 1995

Inspectors: A. T. Gody, Jr., Senior Resident Inspector
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Approved: _____ 10/4/95
Dennis Kirsch, Acting Chief, Project Branch B Date

Inspection Summary

Areas Inspected (Units 1 and 2): Routine, announced inspection, including onsite followup to events; plant operations; surveillance observations; maintenance; on-site engineering; plant support; plant operations, engineering and maintenance followup; and review of Licensee Event Reports (LERs).

Results (Units 1 and 2):

Plant Operations

- A failure to follow operating procedures for the refueling water purification system resulted in an inadvertent and unmonitored transfer of borated water from the refueling water storage tank to spent fuel pool (SFP) X-01 and an inadvertent entry into the 1-hour limiting condition for operation of Technical Specifications 3.5.4 and 3.1.2.6. The failure of operators to adequately monitor plant indications during the evolution, a lack of operator self-verification, and the failure to

include the auxiliary operator in the pre-evolutionary brief contributed to the event. (Section 2.1)

- Management involvement in the decision to place the Unit 1 turbine driven auxiliary feedwater pump in pull-to-lock and the decision to maintain the Unit 2 turbine driven feedwater pump in auto while performing shiftly blowdowns was reflective of appropriate consideration for personal safety while maximizing safety equipment availability. (Section 3.1)

- The licensee's approach to resolving Main Feedwater Pump 1B speed oscillations demonstrated balance between the need for power generation while minimizing the potential for an unplanned transient. (Section 3.2)

- Management involvement in correcting long-term minor problems associated with the storage of temporary non-plant equipment in safe zones was noted. (Section 3.3)

Maintenance

- Licensee management initiated an effort to improve the condition of fasteners which involved a comprehensive walkdown of the plant. Licensee management emphasized the philosophy of fixing rather than living with minor deficiencies. (Section 5.1)

Engineering

- The failure of engineering to implement timely and appropriate corrective actions when the SFP high level alarm setpoint discrepancies were identified in December 1992 contributed to the SFP overflow event. Had the SFP X-01 high level alarm setpoint been designed to alarm prior to pool overflow, operators would have recognized the inadvertent transfer of water earlier and may have averted entry into the 1-hour limiting condition for operation of Technical Specifications 3.5.4 and 3.1.2.6. (Section 2.1)

- Maintenance engineering thoroughly pursued maintenance-related reliability problems associated with diaphragm valves. (Section 6.1)

- System engineering involvement was noted in evaluating excessive coking deposits in emergency diesel generator prelube oil filters. (Section 6.2)

- Maintenance engineering was proactive in finding and investigating the cause of oil contamination but not timely in identifying all the sources or writing a ONE Form. (Section 6.3)

Plant Support

- The licensee demonstrated poor radiation protection work practices in the implementation of barriers for contaminated area boundaries and labeling of contaminated equipment (Sections 7.3 and 7.4).

- Guidance contained within the control of locked high radiation areas procedure was not descriptive on the use of barricades in lieu of lockable barriers. Licensee management recognized this weakness and intended to revise the procedure (Section 7.1).

Summary of Inspection Findings

One violation was identified 445/9517-01 (Section 2).
Violation 445/9341-01 was closed (Section 9).
Violation 446/9341-01 was closed (Section 9).
Violation 445/9341-02 was closed (Section 9).
Violation 446/9341-02 was closed (Section 9).
Violation 445/9341-03 was closed (Section 8).
Violation 446/9341-03 was closed (Section 8).
Violation 445/9341-04 was closed (Section 8).
Violation 446/9341-04 was closed (Section 8).
Violation 445/9341-05 was closed (Section 8).
Violation 446/9341-05 was closed (Section 8).
Violation 445/9341-06 was closed (Section 8).
Violation 446/9341-06 was closed (Section 8).
Violation 445/9341-07 was closed (Section 8).
Violation 446/9341-07 was closed (Section 8).
Inspection followup item 446/9413-01 was closed (Section 10.1).
LER 446/94-009 was closed onsite (Section 11).
LER 445/93-009 was closed onsite (Section 11).
LER 446/94-003 was closed onsite (Section 11).
LER 446/94-006-01 was closed onsite (Section 11).
LER 446/94-007 was closed onsite (Section 11).
LER 446/94-008 was closed onsite (Section 11).
LER 446/94-016 was closed onsite (Section 11).
LER 446/94-020 was closed onsite (Section 11).
LER 446/94-021 was closed onsite (Section 11).

Attachments:

- Attachment 1 - Persons Contacted and Exit Meeting
- Attachment 2 - List of Acronyms

1 PLANT STATUS

Unit 1 began the inspection period in Mode 1 at 100 percent power. On August 3, operators misaligned the purification system to the refueling water storage tank (RWST) which resulted in overfilling the SFP and partially draining the RWST (Section 2.1). On August 18, operators reduced power to 55 percent to investigate speed oscillations in main feedwater Pump 1V (Section 3.3). Power was restored to 100 percent on August 20. On August 26, power was reduced to 55 percent to continue to investigate speed oscillations in the pump. Power was returned to 100 percent on August 28.

Unit 2 began the inspection period in Mode 1 and remained at essentially 100 percent power throughout the period.

2 ONSITE FOLLOWUP OF EVENTS (93702)

2.1 SFP Overfill Event

On August 3, while operating the refueling water purification system to purify the Unit 1 RWST, an improper valve lineup resulted in overflowing SFP X-01 into the surface ventilation ducts and decreasing the RWST level below the minimum value allowed by Technical Specifications (TS).

2.1.1 Sequence of Events

On August 3, at 12:00 p.m., the Unit 1 supervisor and field support supervisor (FSS) held a pre-evolutionary briefing in the control room to discuss the purification of the Unit 1 RWST in accordance with System Operating Procedure (SOP)-506, "Spent Fuel Pool Cooling and Cleanup System." At 1:10 p.m., operators started the refueling water purification Pump X-02. A plant radwaste operator was contacted about water backing up in a fuel building drain and flowing onto the floor at 3:00 p.m. Within 17 minutes, the source of the water was identified by the licensee as coming from the overfill of SFP X-01 into the SFP X-01 ventilation ducts. The Unit 1 supervisor noted RWST level was 94 percent at 3:17 p.m., which was 2 percent lower than the 96 percent level at the beginning of the evolution, and entered the 1-hour limiting condition for operation (LCO) specified in TS 3.5.4 and 3.1.2.6 which required RWST level to be maintained above 95 percent as indicated on the control board. At 3:25 p.m., operators stopped flow from the RWST by securing refueling water purification Pump X-02 and closing Valves 1-8000A and 1-8000B. Eight minutes later, operators initiated blended flow makeup to the RWST and exited TS 3.5.4 and 3.1.2.6 at 4:16 p.m. when RWST level was restored to 95 percent. By 5:30 p.m., operators restored SFP X-01 level to normal.

2.1.2 Immediate Response to SFP Overfill

The inspectors responded to the SFP X-01 area and noted that SFP X-01 level was at the bottom of the exhaust ducts. Licensee personnel at the scene indicated that water had spilled into the ductwork, drained via the ductwork to the 810 foot level of the fuel building, and was directed to the floor

drain system, as designed, but had overflowed the floor drains. The inspectors questioned the licensee regarding the reason water had flowed out of the floor drain, and the licensee indicated that it appeared that the flow rate from SFP X-01 exceeded the floor drain capability. Radiation protection restricted fuel building access to limit the potential for spreading contamination and cleaned the spill. Contamination levels were no greater than 3,000 disintegrations per minute.

The inspectors observed that the FSS and an auxiliary operator (AO) were walking through the procedure for purifying the RWST, which had been completed earlier to determine if a valve mismanipulation or a leaking valve was the cause of the overfill event.

The inspectors observed control room activities. The inspectors noted that the licensee had appropriately entered TS 3.5.4 and 3.1.2.6 when RWST level dropped below 95 percent. Licensee management responded to the control room and was directly involved in supervising the investigation of the cause for the unexpected transfer of water from the RWST to SFP X-01 and the fuel building drains. The inspector observed that the licensee filled the RWST with blended flow from the reactor water makeup system rather than from SFP X-01 because the cause of the unexpected transfer was not known.

2.1.3 Operator Attentiveness and Plant Indications

The inspectors questioned operators on what alarms were received and what parameters were being monitored during the RWST purification process. Operators indicated that they had monitored RWST level initially but had not been continuously monitoring RWST level during the entire evolution and that the RWST low level and SFP high level alarms had not been received. The inspectors noted that the 2 percent change in RWST level would be difficult for operators to recognize because of the design and location of the control board level indicator.

2.1.4 Licensee Evaluation of the Event (Plant Incident Report-95-000765-00-00)

The inspectors reviewed the licensee's investigation of the event and found it to be comprehensive and thorough. The licensee found that operator self-verification was utilized to ensure that the intended action was correct during the performance of SOP-506. Step 5.12.1.U directed operators to "Ensure XSF-0025, SFP DEMIN X-02 SFP RET VLV LVG-11" was closed. The FSS, who was reading the procedure steps, inadvertently directed the AO to "OPEN Valve XSF-0025," rather than to ensure that Valve XSF-0025 was closed as the procedure directed. The licensee identified several contributing factors, which included: the AO was not included in the job prebriefing, nor did the FSS conduct a briefing with him prior to performing SOP-506; the AO did not verify that the steps he was performing would achieve the desired lineup; and the SFP X-01 high level alarm did not annunciate to provide an early warning to operators.

The licensee found that the condition where water could potentially enter the ventilation ducts prior to the high level setpoint being reached was previously identified by in an engineering calculation in December 1992. The licensee did not initiate design change paperwork (DCN-8026) to correct the problem until June 13, 1994, following a near-miss overflow event which occurred on March 18, 1994 (ONE Form 94-382). A work order (WO) was written (WO 2-94-071563) to implement the setpoint change, but when instrument and control technicians attempted the setpoint change on January 10, 1995, they found that it could not be implemented due to instrument design limitations. The licensee voided DCN-8026 when it was determined that a design modification (DM 95-009), which added extensions to raise the elevation of the openings of the SPF ventilation ducts, would alleviate the SFP X-01 high level alarm/duct opening height discrepancy.

2.1.5 Significance of TS 3.5.4 and 3.1.2.6 Entry

The RWST level dropped below the minimum required by TS 3.5.4 and 3.1.2.6 for approximately 59 minutes as indicated by the control board level indications. The safety significance of having less than the minimum required level is high, as reflected in the 1-hour LCO of TS 3.5.4 and 3.1.2.6. The 95 percent minimum specified level of the RWST was based on having a sufficient supply of borated water available for injection by the emergency core cooling system in the event of a loss of coolant accident considering control board instrument uncertainties.

The licensee concluded that there actually was sufficient borated water available for emergency core cooling system operation when instrument accuracies and computer information were taken into account. The inspector reviewed the licensee's evaluation of available water and agreed with the licensee's conclusion that sufficient water was available.

2.1.6 Corrective Actions

Licensee immediate actions included limiting fuel building access due to the water on the floor, restoration of RWST level, verification of the SFP high level alarm setpoint, and development of a procedure to transfer water from SFP X-01 to the RWST. The licensee developed 32 comprehensive and detailed corrective actions to preclude recurrence.

2.1.7 Conclusions

The inspectors observed that, had operators utilized self-verification in valve manipulations, the inadvertent transfer of water from the RWST to SFP X-01 may not have occurred. Additionally, the inspectors noted that a lack of operator attentiveness, in not monitoring RWST tank levels during the evolution, contributed to the length of time required to identify the valve mismanipulation.

The inspectors observed that, had the SFP X-01 high level alarm setpoint been below the level of the ventilation duct, operators may have been alerted to

and terminated the inadvertent transfer of water. Poor communications in the engineering department and inadequate design control and corrective actions associated with the SFP X-01 high level alarm setpoint discrepancy, discovered in 1992, contributed to the overflow event.

The inspectors concluded that the failure to follow SOP-506 was a violation of TS 6.8.1. The high significance of inadvertently decreasing RWST level, as indicated by control board indications, to less than the required 95 percent specified in TS 3.5.4 and 3.1.2.6, was reflected in the 1-hour TS LCO and the TS bases. The inspectors also concluded that the licensee initiated comprehensive corrective actions. The licensee's investigation was appropriately self-critical and thorough. In addition, the inspectors discussed some of the more significant findings of the licensee's investigation with plant management and found that the findings were given the appropriate level of attention and that managers were aware of the investigation findings (Violation 445/9517-01).

3 PLANT OPERATIONS (71707)

The inspectors conducted daily examinations of plant operations. The inspectors reviewed control room staffing and access, adherence to procedures, compliance with TS, and operator behavior and attentiveness to ascertain if the plant was being operated safely and in accordance with requirements. Logs for shift operations, clearances, and LCO were reviewed for accuracy and appropriate actions.

3.1 Turbine-Driven Auxiliary Feedwater Pump (TDAFWP) Pull-to-Lock

On August 3, the inspector noted that while performing shiftly blowdowns of the TDAFWP steam traps, the licensee momentarily placed the Unit 1 pump in pull-to-lock and declared the pump inoperable, but did not do the same for Unit 2. The inspector inquired why the licensee performed the same evolution differently for both units. The inspector learned that the licensee placed the Unit 1 pump in pull-to-lock as a personnel safety precaution, which was not required in Unit 2. In Unit 1, the steam traps were located in a tight space directly in front of the turbine. During an automatic start of the TDAFWP, the operator would not be able to retreat quickly and would be susceptible to burns from the hot water/steam which tended to be discharged through the traps during the start. Due to differences in layout, the steam traps in Unit 2 were not located in a confined area and, additionally, were located near the pump end of the TDAFWP rather than the turbine end. Therefore, the operator was not susceptible to the same personnel safety hazards.

The inspector concluded that the licensee's decision to place the TDAFWP in pull-to-lock and voluntarily enter the TS LCO in one unit and not in the other demonstrated management's involvement in operational decisions and also demonstrated the licensee's desire to provide a safe working environment while minimizing the out-of-service time for critical equipment.

3.2 Main Feedwater Pump (MFP) Speed Oscillations

On Friday, August 18, licensed operators noted that the Unit 1 Train B MFP 1B was operating at a slower speed than normal, which was approximately 1500 revolutions per minute slower than MFP 1A. The operator adjusted both pump controllers (MFP 1A and 1B), in both manual and automatic modes, in an attempt to balance pump loads but was unsuccessful. Later that evening, the licensee reduced power to approximately 55 percent following the reduction in electrical grid loads. The licensee then removed MFP 1B from service and performed troubleshooting activities on the speed controller. The licensee replaced several components and then restored the pump to service. By noon on August 20, power was restored to 100 percent and the controller appeared to be operating normally; however, approximately 40 minutes after the licensee closed the cabinet door, oscillations appeared.

The licensee reopened the cabinet door and the oscillations ceased. The licensee suspected that the MFP 1B controller suffered from a heat-related problem. Because of the increase in electrical grid loads expected at the start of a new work week, the licensee did not continue troubleshooting. On Friday, August 26, the licensee again reduced power to approximately 55 percent to continue troubleshooting. The licensee used heat guns to try to force any potentially weak cards to fail. After identifying two failed cards, licensee management decided to halt the troubleshooting and to concentrate on providing additional permanent cooling to the cabinets. Although the controllers were operating below the design temperature, the licensee concluded that the high operating temperatures were contributing to early card failures.

On August 28, the licensee restored the MFP and raised power to 100 percent. The licensee was unable to resolve why the controller cards were failing at a high frequency but intended to continue investigations. As an interim measure, the licensee opened the cabinet doors to all MFP speed controllers. The inspectors concluded that the licensee's efforts to improve the reliability of the MFP speed controllers were prudent. The inspectors will continue to follow the licensee's troubleshooting activities as part of future routine inspection activities.

3.3 Safe Zones

Periodically, during the inspection period, the inspectors noticed some storage problems in the radiologically controlled area. For example, a safe zone in the 810 foot hallway in Unit 2, labeled "Ladders Only" and "Max HT. 36["]," contained upright hand trucks (greater than 36 inches tall), brooms, push carts, etc. While the items did not have any safety significance, they did indicate a lack of attention-to-detail regarding signs. Near the end of this period, the inspectors noted that the licensee focussed noticeable effort in the area of compliance with plant procedures for storage of temporary nonplant equipment. The licensee issued a ONE Form regarding storage problems in the radiologically control area. Additionally, the licensee issued a memorandum delineating the housekeeping requirements contained in station

procedures (STA-661) and was in the process of reviewing and revising existing safe zones. The inspectors concluded that the licensee's actions were appropriate.

4 SURVEILLANCE OBSERVATIONS (61726)

The inspectors reviewed the effectiveness of surveillance activities by direct observation in order to ascertain that testing of safety-significant systems and components was being conducted in accordance with TS and other regulatory requirements. Specific surveillances observed are listed below and detailed observations follow.

- INC-7293A, Revision 5, "Analog Channel Operation Test and Channel Calibration Steam Pressure, Loop 1, Protection Set I, Channel 0514," performed on Unit 1.

- OPT-447A, Revision 0, "Mode 1, 3, and 4 Solid State Protection System, Train 'A' Actuation Logic Test," performed on Unit 1.

4.1 Analog Channel Operation Test on Steam Pressure, Loop 1, Protection Set I, Channel 0514

On August 29, the inspector observed I&C (instrumentation and control) technicians perform INC-7293A, Revision 5, "Analog Channel Operation Test (ACOT) and Channel Calibration Steam Pressure, Loop 1, Protection Set I, Channel 0514," on Unit 1. The purpose of the test was to verify the accuracy of the channel sensor and associated signal processing equipment.

The inspector attended the prejob briefing and concluded that it was thorough. The inspector noted that the technicians performing the activity presented the prejob briefing in lieu of the supervisor. Subsequent to the activity, the inspector questioned the I&C supervisor, who indicated that the maintenance guideline for prejob and postjob briefings allows the briefing conductor to be the individual who performs the work. The I&C supervisor stated that this only occurred during routine surveillances such as ACOTs, and that high risk activity briefings were conducted by the respective supervisors. The inspector concluded that this practice was appropriate and in accordance with licensee management expectations. The technicians verified that all the test equipment was calibrated and in proper working order. The technicians were to perform the same ACOT on four different pressure channels under four different WOs. The inspector noted that between ACOTs, the technicians removed all the test equipment, closed the protection set cabinet, returned the protection set cabinet keys, and properly stored the test equipment in its proper room before the next ACOT was to be performed. The inspector noted that this was a good work practice. Self-verification techniques were observed. Technicians and operators exhibited consistent repeat backs and concise communication. The inspector noted that the as-found and as-left data was appropriately obtained and documented, and that all test values obtained were within the required ranges.

4.2 Solid State Protection System, Train A Actuation Logic Test

On September 1, the inspector observed control room operators and AOs perform OPT-447A, "Mode 1, 3, and 4 Solid State Protection System, Train 'A' Actuation Logic Test," Revision 0, on Unit 1. The purpose of the test was to satisfy the actuation logic and master relay testing of Train A Solid State Protection System in Mode 1, including reactor trip and engineering safety feature actuation systems, to satisfy TS 4.3.1 and 4.3.2 surveillance requirements.

The inspector witnessed the prejob briefing, which was detailed and in accordance with management expectations for infrequent evolutions. Lessons learned from previous events during the performance of this test were discussed. The inspector noted that operator precautions were exercised, prerequisites were met, and procedural steps were performed in the required sequence. Operators were knowledgeable and were experienced in conducting the test. The AOs and control room operators utilized self-verification techniques and repeat-backs. I&C technicians appropriately supported operations during the surveillance. The test was performed with no discrepancies. The inspector concluded that operators performed the test in a controlled manner without exceeding the 2-hour time limit for the Train A reactor trip bypass breaker being closed.

5 MAINTENANCE OBSERVATIONS (62703)

To ensure safe operation of the plant and plant equipment, the inspectors conducted a review of the licensee's safety-significant maintenance activities. This review entailed the visual inspection of plant structures, systems and components, as well as interviewing maintenance personnel, to ensure reliable safe operation of the plant and compliance with regulatory requirements. The maintenance observed during the report period is listed below and inspector observations follow.

- Preventive maintenance activity on Unit 2 Containment Spray Pump (CSP) 2-01 motor in accordance with WO 3-95-306776-01.
- Preventive maintenance activity on Unit 2 CSP 2-03 motor in accordance with WO 3-95-306778-01.
- General maintenance activity on Unit 2 CSP 2-03 motor in accordance with WO 4-95-090109-00.
- Preventive maintenance activity on Unit 2 CSP 2-01/2-03 bearing cooler station service water (SSW) inlet strainer.

5.1 Fastener Initiative

During the inspection, the licensee began performing detailed plant walkdowns to identify loose fasteners on 6.9kV switchgear, 480V switchgear, motor control centers and other electrical equipment and to tighten and/or replace

fasteners. This initiative was the result of the NRC identification of a number of issues regarding loose fasteners in the plant. The inspectors observed that the licensee wrote work requests for fasteners that were unable to be fixed during the walkdown and those which required engineering evaluation. As a result of the walkdown, maintenance documented a number of junction box covers that could not easily be fixed to meet specifications on a ONE Form, and initiated a request for an engineering evaluation for "use as is." The inspectors observed that plant management emphasized the philosophy of not living with problems. Overall, the inspectors concluded that the licensee's initiative to perform the extensive and detailed walkdown was an aggressive and beneficial effort.

5.2 Unit 2 - Preventive Maintenance on CSPs 2-01/2-03 Service Water Bearing Cooler SSW Inlet Strainer

On September 1, the inspector observed mechanical maintenance workers clean the service water bearing cooler SSW inlet strainer on CSPs 2-01 and 2-03 in accordance with WO 3-95-301043-08. When the strainer was removed from the system, it was found partially clogged, on both the inside and the outside, with algae. No clams were found. The mechanics indicated that the strainer was clogged more than normal, but it was expected due to the high temperatures of the service water. The inspector verified that Quality Control was present and performed the required hold point inspections to ensure the cleanliness of the strainer and that the cover stud nuts were properly torqued. The inspector verified that the torque wrench was properly calibrated. The inspector concluded that the activity was performed well and in accordance with licensee procedures. Communication between maintenance and operations was appropriate.

6 ONSITE ENGINEERING (37551)

The inspectors assessed the effectiveness of the onsite engineering organization in identifying, resolving, and preventing plant problems. This assessment was accomplished through a review of licensee corrective actions, root cause determinations, safety committee involvement, and self-assessment in engineering.

6.1 Manually Operated Diaphragm Valve Failure

While transferring spent resin from the Unit 1 chemical and volume control system cation demineralizer to the spent resin storage tank on August 3, leaking diaphragm valves in the transfer system allowed water to discharge from the volume control tank and caused the level to drop. The licensee identified that Valve 1-8516 and Valve 1-8518 were probably the cause of the Volume Control Tank level decrease and readjusted the stop nut on each valve. The valves were 3-inch diameter manual diaphragm valves with remote operators manufactured by ITT Grinnell. The licensee reviewed the standard maintenance procedure used to perform maintenance on ITT Grinnell diaphragm valves (MSM-CO-8813) and concluded that the procedure provided vague directions on setting the stop nut position.

The inspectors reviewed MSM-CO-8813 and agreed with the licensee's conclusion that the procedure was vague. Step 8.3.3.34 stated, "CLOSE valve until it is just closed." The procedure then required that the stop nut be turned until it touched the top of the seal collar and then locked into position with the jam nut. The inspectors could not determine where the "just closed" position was located while operating a demonstration valve. As the disk neared the close position, the handwheel's resistance would slowly build until after the compressor had already begun to compress the diaphragm. The inspectors concluded that it was not possible to consistently shut the valve until it was "just closed."

The inspectors discussed the licensee's action plan with maintenance personnel. The inspectors learned that the licensee had formed a task team to resolve the procedure question. The task team had reviewed maintenance history and had determined that no diaphragm valve on site had failed due to a failure of the diaphragm. The team had initially concluded that the stop nut may have been causing more problems than it was preventing and that, perhaps, it should be removed; however, a search of the industry data base revealed that other utilities had experienced failures of the diaphragm. Because the stop nut was designed to prevent damage to the diaphragm due to over-compression, the licensee concluded that further investigation was required prior to deciding the appropriate corrective action.

The inspectors concluded that the licensee was pursuing the maintenance difficulties on diaphragm valves appropriately, considering all aspects of the maintenance, and intended to enhance the maintenance procedure to clarify the stop nut setting guidance.

6.2 Emergency Diesel Generator Prelube Oil Filter Clogging

On August 4, operators identified that the differential pressure (dp) across the Emergency Diesel Generator (EDG) 1-01 prelube oil filter was high. The prelube oil filter was opened, and handfuls of carbon-like material was retrieved in both the filter and the filter housing. System engineering inspected the filter debris, and determined that it was a normal type of coking deposit caused by the lube oil heater. Since the heater is one large unit with a high power density, instead of a series of heaters with low power densities, a larger amount of coking was expected.

The system engineer investigated the cause since this coking was in excess to what was normally expected from the large heater. The system engineer found that a work request was previously written in June 1995, due to a high dp of 20 psid across the prelube filter. The work request was not scheduled until July, and when maintenance personnel went to clean the filter, they found that the dp across the filter had dropped to 13 psid. Since 13 psid was not considered high, the work request was terminated. The system engineer indicated that he believed that the coking material fell from the filter which caused the dp to decrease. Since the work request was not worked as soon as the high dp was discovered, the amount of coking deposits increased over time in the filter housing, and excessive deposits were discovered.

System engineering proposed corrective actions, which included that when the filter dp reaches 20 psid and a green work request card is written, then the filter must be changed at the next available work window, regardless of what the filter dp is at the time the maintenance is performed. If the dp reaches 23 psid, then the filter should be changed as soon as possible. Another option considered by the licensee was to modify the power circuit to the heater to drop the voltage so the wattage density would be reduced, thereby reducing the coking, but maintaining the oil temperature.

The inspector questioned engineering as to whether the clogging of the prelube oil filter could affect the operability of EDG 1-01. The system engineer indicated that the prelube oil filter was rated for a 30 psid across the filter. Therefore, since the prelube oil system was considered an enhancement only and was not required for operability, and the prelube oil filter was performing as designed, operability was not affected. The inspector agreed with the licensee's conclusion that the excessive coking deposits on the prelube oil filter did not affect the operability of EDG 1-01. In addition, the inspector noted that the actions that system engineering considered to prevent further excessive coking deposits were appropriate.

6.3 Contaminated Oil Samples in Safety-Related Pumps

On September 1, the inspector observed several preventive maintenance activities associated with Unit 2 CSPs 2-01 and 2-03 in accordance with WOs 3-95-306778-01, 4-95-090108-00, and 4-95-090109-00. The activities involved changing CSP 2-03 pump outboard bearing oil, CSP 2-01 pump inboard bearing oil, and CSP 2-03 motor outboard bearing oil due to a high concentration of normal wear particles, a minor concentration of scuffing, and traces of rust particles.

The inspector noted an increase in the number of oil changes on safety-related pumps and motors. The inspector questioned maintenance engineering, who had already noted the increase in the number of condition directed oil changes. The oil changes were directed due to an increased wear particle concentration trend. Maintenance engineering found rust to be a common element among the oil samples, and that Texaco Regal R&O 32 or Texaco Regal R&O 46 were the types of oils that were contaminated.

Maintenance engineering investigated the source of the motor oil contamination and, on August 17, sampled all 15 Texaco Regal R&O 46 oil cans. Two of the 15 cans contained traces of rust particles. Three weeks later, on September 5, maintenance engineering sampled the Texaco Regal R&O 32 oil cans, and found 2 of the 10 cans contaminated with rust particles.

Maintenance engineering concluded that the identified concerns with the oil samples did not affect the operability of the equipment; however, to ensure maximum bearing life from an equipment reliability standpoint, the concerns needed to be addressed. The licensee planned to continue its investigation to determine the source of the contamination.

The inspectors observed that the time between sampling the Texaco Regal R&O 46 oil sources, on August 17, and the Texaco Regal R&O 32 oil sources, on September 5, was excessive and that the writing of ONE Form 95-871, on September 8, was not timely. Nevertheless, the inspectors concluded that maintenance engineering was proactive in identifying the increased rate of condition-directed oil changes, and investigating the source of contaminants.

7 PLANT SUPPORT ACTIVITIES (71750)

The inspectors observed licensee activities in the areas of plant security and radiological protection to ascertain if the licensee took appropriate measures to protect the plant, its staff, and the public.

7.1 Locked High Radiation Area Control

While touring the cask storage area in the fuel building (Room X-247) on August 28, the inspectors noted that a cask was posted as a locked high radiation area (LHRA) and that a flashing light was installed as a warning device. The inspectors also noted that a scaffold was installed to obtain access to the top of the cask and that the ladder on the scaffold did not appear to be barricaded to prevent access to the LHRA, although a scaffold bar was installed across the top of the ladder.

The inspectors discussed the situation with radiation protection (RP) personnel. The technicians stated that the cask had a steel plate covering the access hole and that the radiation levels were 3000 mr/hr on contact with the plate and 2500 mr/hr at 12 inches above the plate. The technicians stated that the plate had been installed on August 14, following dewatering operations. Following this discussion, the technicians initiated actions to replace the cask plug which would lower dose rates below LHRA levels.

Licensee TS 6.12.2, "High Radiation Area," requires that accessible areas with radiation levels greater than 1000 mR/h at 45 cm (18 in.) be provided with locked doors to prevent unauthorized entry. Areas where no enclosure exists and where no enclosure can be reasonably constructed, are required to be barricaded, conspicuously posted, and have a flashing light activated as a warning device.

The licensee procedure on the control of high radiation areas (STA-660) defined a LHRA as, "an area, accessible to individuals, in which radiation levels could result in an individual receiving a dose equivalent in excess of 1000 millirem in 1 hour at 30 centimeters from the radiation source . . . ." Section 6.2 of the procedure stated that, "if a LHRA has no enclosure which can be locked and no enclosure can be reasonably constructed around it, then that area shall be barricaded, conspicuously posted, and a flashing light activated as a warning device."

The inspectors concluded that licensee Procedure STA-660 adequately implemented the requirements of TS 6.12.2 and were more conservative in that the procedure required the additional controls be implemented at a lower dose

level than the TS; however, the inspectors noted that the procedure did not provide guidance regarding methods of barricading an area.

NRC Regulatory Guide 8.38, "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants," dated June 1993, stated that a barricade could be a rope, ribbon, or other firmly secured, conspicuous obstacle. The inspectors concluded that the scaffold bar adequately met this definition.

The inspectors discussed management's expectation for barriers with the RP manager. The RP manager stated that the configuration used in this particular situation did not meet his expectations for a barrier. The manager showed the inspectors a specially-built platform which had been constructed to be used instead of the scaffolding. The manager stated that a lockable device was being built and would be installed on the platform ladder for use during LHRA situations. The manager stated that the procedure for control of high radiation areas lacked guidance on what constituted an adequate barrier and that he intended to enhance the procedure to ensure that it provided sufficient guidance.

The inspectors concluded that the LHRA adequately met the requirements of the TS. Additionally, the inspectors concluded that the licensee took prompt action to reduce the dose rates by replacing the vault plug. Finally, the inspectors concluded that the licensee placed significant attention on the subject to ensure that management expectations were understood and followed.

7.2 Processing Floor Drain Tank 3

On September 7, the inspectors observed a radwaste operator process Floor Drain Tank 3 through the filter demineralizer system using Section 5.2.16 of the radwaste systems procedure manual (Procedure RWS-103). The operator had adjusted flow to maintain the strainer dp less than the limit of 24 psid. The operator had calculated that the dp was 21 psid. Step 5.2.16.6.2 of the procedure stated that the strainer dp was equal to "(Inlet Pressure) - (Outlet Pressure + 4 psig)." Four pounds were added to the outlet pressure to account for elevation differences between the pressure gage and the strainer outlet. The inspectors noted, and alerted the operator, that he had calculated the dp incorrectly. The operator had performed the calculation (Inlet Pressure - Outlet Pressure) + 4 psig or (107 psig - 90 psig) + 4 psig = 21 psid vice the correct calculation of (107 psig) - (90 psig + 4 psig) = 13 psid.

The inspector concluded that the incorrect calculation of the strainer dp was not significant. The inspector noted that the error did reduce the rate of processing of the tank and may have increased the frequency of maintenance on the strainer. The inspector also concluded that the calculation was not listed in the simplest and easiest to use manner. The licensee agreed and was considering simplifying the equation.

7.3 SFP Pump Rooms

On August 31, the inspector found a towel laying across a contamination boundary in the area surrounding SFP Cooling Water Heat Exchanger X-02. The inspector informed RP personnel, who subsequently removed the towel. RP indicated that there was no work in progress in the vicinity of the contamination area. The inspector noted that this was a poor practice, which departed from management expectations.

The inspector noted that the contamination area surrounding SFP Pump X-01, did not have a roped barrier around the area to prevent personnel from crossing the plane of the contamination boundary. Rather, radiological tape surrounded the area of the pump concrete base and it was properly posted. When questioned, the licensee indicated that it was a management expectation to install roped barriers if it was practical. RP toured the area and installed the rope boundary after it was determined to be practical.

7.4 Fuel Building

On August 31, the inspector toured the fuel building and observed two containers that housed stud tensioning equipment. The inspector observed that the contamination data portion of the radioactive material label on one of the containers had been "N/A'd", but the special instructions on the label stated "contaminated equipment, contact RP." The inspector questioned the lead RP technician on the status of the contaminated material inside the containers. The lead technician chose to change the radioactive material label to reflect more information on the contamination level of the material inside the containers. The inspector concluded that the lack of sufficient detail on the label of the containers was an isolated example of a poor work practice.

8 FOLLOWUP - PLANT OPERATIONS (92901)

8.1 (Closed) Violation 445/9341-03 and 446/9341-03: Improper Alignment of Refueling Gate Seal Pressurization Source

This violation involved the improper alignment of pressurization sources for the refueling gate seal which resulted in the depressurization of the seal. The main reasons for the violation included lack of training in seal operation and lack of procedure familiarity.

Corrective actions included revising the scope of outage refresher training to include refueling gate and seal operation. Realignment of the pressure source for the seals were designated as an "infrequent evolution" requiring a prejob brief. Procedure RFO-404, "Refueling Gate Operation," was initiated to provide specific instructions regarding gate, seal, and pressurization source operation.

The inspector reviewed the completed corrective actions and concluded that they were appropriately implemented.

8.2 (Closed) Violation 445/9341-04 and 446/9341-04: Failure to Obtain Authorization to Operate Plant Equipment

This violation involved the failure of contract personnel to properly obtain authorization from the shift supervisor prior to changing the pressurization source for the refueling gate seal.

Lessons learned memorandums were generated for Engineering, Operations, Work Control Center, and Outage Management to emphasize the role of supervisors in directing activities, effective communications, and procedure usage. These lessons learned were presented during licensed operator requalification training and general employee training regarding recent events. The designation of refueling gate seal pressurization source operation as an "infrequent activity" ensures that supervision is aware of and involved in the activity.

The inspector reviewed the documentation associated with the corrective actions and found that they had been satisfactorily completed.

8.3 (Closed) Violation 445/9341-05 and 446/9341-05: Failure to Establish Appropriate Controls to Conduct Licensed Activities

This violation involved the failure of the licensee to establish appropriate controls prior to shifting pressurization sources for the refueling gate seal to assure that the experience of personnel performing the task was adequate, that a briefing was conducted between all organizations involved in the task, and did not ensure that clear lines of responsibility were established.

The inspector reviewed the licensee's corrective actions which were the same as those discussed under Section 8.2, above.

8.4 (Closed) Violation 445/9341-06 and 446/9341-06: Procedure Inappropriate for Circumstances Surrounding Use of Instrument Air for Gate Seals

This violation involved Procedure SOP-506, "Spent Fuel Pool Cooling and Cleanup System," Revision 6, Attachment 10, which referenced the use of Instrument Air for inflating the lift gate seal when no Instrument Air was available and did not adequately describe the arrangement necessary to provide a reliable pressure source to the lift gate seal.

The inspector reviewed Procedure RFO-404, "Refueling Gate Operation," Revision 0, dated July 29, 1994. All of the concerns identified in the subject violation were adequately addressed within the scope of the procedure.

8.5 (Closed) Violation 445/9341-07 and 446/9341-07: Procedure was not Adequate to Prevent Sluicing of Water During Reactor Cavity Draindown

This violation involved Procedure SOP-110A, "Reactor Coolant Drain Tank System," which did not provide instructions sufficiently detailed to prevent opening drain valves on both sides of the refueling lift gate.

The inspector reviewed the changes to Procedure SOP-110A and Operations Department Administrative Procedures addressing the potential for sluicing water across the lift gate as well as the potential for water movement due to level differences when filling or draining equipment. Lessons learned, covering multiple drain paths from single components and cautions to be taken when draining equipment with multiple compartments such as the refueling cavity were also issued. The inspector concluded that the licensee's actions were sufficient to address the concerns identified in the violation.

9 FOLLOWUP - ENGINEERING (92903)

9.1 (Closed) Violation 445/9341-01 and 446/9341-01: Failure to Include Seals in the Quality Assurance Program

This violation involved the failure to include the refueling gate seals in an operational Quality Assurance Program.

The licensee's corrective actions included adding the refueling gates and seals to the Preventive Maintenance Program. Reviews were performed by system engineers to search for other equipment that should have been included in the Preventive Maintenance Program, but were not. No additional equipment was identified. Maintenance Engineering performed a review of equipment tag numbers added to the Master Equipment List since 1989, to assure that proper consideration had been given for addition to the Preventive Maintenance Program. Design Basis Documents were revised to provide applicable information for the refueling gates and seals.

The inspector reviewed the licensee's actions completed in response to this violation and verified that they had been completed and implemented appropriately.

9.2 (Closed) Violation 445/9341-02 and 446/9341-02: Failure to Provide Procedures and Equipment to Properly Operate Refueling Gate

This violation involved the failure of the licensee to provide design drawings or specifications for the safety-related function of the refueling gate. The subassembly used to inflate the refueling cavity lift gate seal was not adequately controlled and was modified in an uncontrolled manner.

As corrective actions, the licensee revised the design basis documents to include the applicable design basis information. Procedure RFO-404, "Refueling Gate Operation," was written to provide specific directions for gate operation as well as approved sources for seal pressurization, approved fittings and hoses, and attachment of hoses and fittings.

The inspector reviewed the changes to the design basis documents and the refueling gate operating procedure and found them to be responsive to the concerns raised in the violation.

10 FOLLOWUP - MAINTENANCE (92902)

10.1 (Closed) Inspection Followup Item 446/9413-01: Safety-Related Relays Found Out of Calibration

The licensee submitted an LER (446/94-006-01) to address this issue. The closure of the subject LER is addressed in Paragraph 11.4 of this report and also closes this followup item.

11 ONSITE FOLLOWUP OF WRITTEN REPORTS OF NONROUTINE EVENTS AT POWER REACTOR FACILITIES (92700)

11.1 (Closed) LER 446/94-009: TS 3.0.3 Entry Due to Inoperable Feedwater Isolation Valves

This LER was submitted following the licensee's discovery of two inoperable feedwater isolation valves (FWIV) in Unit 2 while in Mode 1 performing a plant startup. Licensee TS 3.7.1.6 allows one inoperable FWIV while in Modes 1, 2, and 3, but does not have a provision for more than one inoperable valve.

While the FWIVs are shut, the nitrogen accumulator pressure is normally below the alarm setpoint of 2100 psig due to the expansion of the nitrogen in the valve actuator. When the valve is opened, a hydraulic motor forces the actuator to move in the other direction which, in turn, repressurizes the nitrogen accumulator. During the plant startup, the operators thought that the low pressure alarms would clear when the valves were opened; however, when FWIVs 3 and 4 were opened, the nitrogen accumulator pressures were 1400 psig and 2000 psig respectively, and the alarms did not reset. The alarm response manual stated that the FWIV may not fulfill its design requirement to close within 5 seconds if nitrogen pressure was below 2040 psig (the low pressure alarm was set at 2100 psig).

The licensee performed an investigation and concluded that the root cause of the incident was that the integrated plant operating procedures lacked guidance for opening the FWIVs. Specifically, the procedures did not have a minimum nitrogen accumulator pressure requirement for the FWIVs prior to opening the valves. The licensee determined that nitrogen accumulator pressures $\geq$ 1250 psig while the FWIVs were shut would reset the low pressure alarms (2040 psig) when the valves were open. The licensee added steps to the operating procedures to verify the nitrogen accumulator pressures prior to opening the valves. Additionally, the licensee added a series of steps to open one FWIV, to verify that the low pressure alarm had cleared, and to verify that the nitrogen pressure was greater than 2040 psig prior to opening the next FWIV. Additionally, a note was added to the limitations/notes section of the procedure to remind operators of the requirements of TS 3.7.2.6. These steps were added to ensure that no more than one FWIV would be open and inoperable while in Mode 1.

The inspector reviewed the integrated plant operating procedures which involved plant startup for both units to verify that the licensee's corrective

actions had been completed. The inspector concluded that the licensee's corrective actions were appropriate and had been completed.

11.2 (Closed) LER 445/93-009: Personnel Errors Leading to Refueling Cavity Water Transients

This voluntary event report was initiated to address issues related to conditions that led up to the depressurization of a refueling gate seal inside the Unit 1 containment and allowed approximately 20,000 gallons of refueling water to spill into the reactor vessel which was opened to the atmosphere with the head removed. Additionally, while attempting to drain the vessel transfer area on the refueling cavity, approximately 4000 gallons of water was inadvertently sluiced into the reactor vessel area of the refueling cavity.

The licensee performed extensive reviews of personnel performance, configuration control, and material condition related to the refueling gate seals and their operation in this specific instance as well as their operation in general.

Numerous corrective actions were initiated in the reviewed areas. Procedures were revised to provide clear guidance regarding refueling gate operation and pressure sources. The refueling gate seals were placed into the preventive maintenance program. Various lessons learned memorandums were generated by different involved groups and distributed. Management expectations regarding initiation of corrective actions for identified deficiencies and supervisory involvement in the performance of routine activities were reinforced and additional training was provided in those subject areas. Design basis documents were revised to include the refueling gates and seals. Modifications to the seals were initiated to provide enhanced sealing capability. Modifications were completed to the service air system to provide oil-free air to containment.

The inspector reviewed the licensee's actions related to the above corrective actions. Additional corrective actions listed in the LER, but not listed above, were also reviewed. The licensee's actions were appropriate to address the issues identified in the LER, and completion of the proposed actions that were not complete at the time of the inspection should prevent recurrence of this event.

11.3 (Closed) LER 446/94-003: Initiation of Manual Reactor Trip Due to Main Turbine Load Swings

On March 5, 1994, with Unit 2 at approximately 75 percent power, load swings approaching 100 Mw(e) were observed on several occasions. Attempts to stabilize the load were unsuccessful and plant operators initiated a manual reactor trip.

Troubleshooting by the licensee could not determine a specific cause for the fluctuations. A number of potential causes were identified with the Electro-Hydraulic Control System and electrical system including electronic

failures, hydraulic failures, and grid fluctuations. Some of the actions taken as a result of this troubleshooting included pump gasket replacement, hydraulic fluid replacement, and bushing replacement in the #1 main turbine control valve. None of these factors were considered to be the definitive cause for the observed fluctuations.

On March 13, with the Unit at approximately 18 percent power, all four main turbine control valves abruptly went closed. The main generator tripped and the main turbine was manually tripped, but no safety systems actuated and the reactor did not trip. This event was caused by the failure of a linear motion transducer feedback coil (Collins Coil). The coil shorted, and had apparently been causing intermittent shorts, which accounted for the load swings observed on March 5, prior to the manual reactor trip. The coil was replaced and tested with no subsequent incidents of load swings.

The inspector reviewed the licensee's actions with regard to this event and concluded that they were appropriate.

11.4 (Closed) LER 446/94-006-01: Undervoltage Relays were Found to Be Out of Calibration Which Resulted in a Failure to Fully Satisfy TS Requirements

This issue involved the observation by the licensee that a number of undervoltage relays on safety-related buses exceeded TS limits for dropout voltage. The condition was first identified on Unit 2 in May 1994, and also on Unit 1 in March 1995. The licensee initiated an investigation following the identification of the condition on Unit 2 and concluded that the cause of the out-of-tolerance condition was a test equipment power supply that provided a distorted wave form during relay calibration. The conditions were identified with the Units in Mode 5, although the condition could have existed while the Units were at power. The licensee's safety evaluation of the event concluded that, given the maximum observed unsatisfactory relay setpoint value, the supplied voltage to safety-related loads was greater than the minimum required for starting and running the components.

The licensee's corrective actions included the verification that the use of a different power source with a nondistorted output would provide a signal that allowed proper calibration of the relays, and associated procedure changes to ensure that the correct power supplies are utilized. The relays were recalibrated utilizing the nondistorted power supply.

The inspector reviewed the licensee's investigation and evaluation and concluded that the final evaluation was thorough, and that the implementation of the stated corrective actions were sufficient to correct the problem and prevent recurrence.

11.5 (Closed) LER 446/94-007: Engineered Safety Feature Actuation Due to Hi-Hi Steam Generator Level

This event involved the opening of the main steam isolation valves with an existing dp which resulted in a momentary increase in steam flow which caused

an increase in steam generator level of sufficient magnitude to actuate the P-14 interlock on high-high steam generator level. No components repositioned because the unit was in Mode 4 preparing for entry into Mode 3.

The inspector reviewed the licensee's corrective actions which included procedure enhancements to Operating Procedure IPO-001A and IPO-001B to provide specific direction with regard to parameters required to be monitored prior to opening of a main steam isolation valve. The licensee's actions were appropriate for addressing the cause of the event and sufficient to preclude recurrence.

11.6 (Closed) LER 446/94-008: Entry into TS 3.0.3 Due to High Level on Two Safety Injection Accumulators

During heatup in Mode 3 on June 18, 1994, plant operators observed that two safety injection accumulators were above the upper limit on level allowed by TS due to backleakage through the accumulator discharge check valves. The licensee immediately decreased level in the two accumulators to restore level to within TS limits. In addition to restoring the level to within acceptable limits, the procedures concerning accumulator operation, SOP-202A and -202B, "Safety Injection Accumulators," were reviewed and revised to include a precaution regarding the potential for high levels due to plant heatup or check valve leakage.

The inspector reviewed the licensee's actions and concluded that they were appropriate for the event and sufficient to reduce the potential for recurrence.

11.7 (Closed) LER 446/94-016: Missed Refueling Machine Auxiliary Monorail Hoist Surveillance Due to Personnel Error

This event involved the use of a load indicator during refueling operations that had been properly calibrated and load tested, but had not been load tested within 100 hours immediately preceding use as required by TS. Operators had changed load indicators and placed the untested one in service without verifying that it had been tested within the preceding 100 hours. The operators involved were counseled and retrained, and permanent caution labels were ordered for both Units' monorail hoists to remind personnel that the load indicators needed to be tested prior to use.

The inspector reviewed the licensee's actions related to this event and concluded that they were appropriate and should prevent recurrence.

11.8 (Closed) LER 446/94-020: Engineered Safety Feature Actuation While Performing Testing on Train B Sequencer

During sequencer testing on November 9, 1994, a Blackout Sequencer actuation occurred on the Unit 2 train B blackout sequencer. The actuation was terminated when a reactor operator directed the technicians performing the testing to place the blackout sequencer block switch in the block position.

No specific cause for the actuation signal could be determined and attempts to recreate the signal were unsuccessful. The system and actuated components responded proper y to the signal, which was determined to be spurious. To preclude future spurious signals from inadvertently actuating the sequencer during testing, the procedures governing testing activities for the sequencers were revised to place the Sequencer Block Switch in the Block position prior to beginning testing.

The inspector reviewed the procedure changes and the post-actuation evaluation and concluded that the licensee had completed appropriate actions to investigate the event and prevent recurrence.

11.9 (Closed) LER 446/94-021: Missed Shiftly Routine Surveillance Due to Personnel Error

During the performance of surveillances while in Mode 4, shift supervision mistakenly assumed the time between surveillances started from when the unit entered Mode 4 as opposed to when the surveillances were last performed. The licensee identified the missed surveillance, performed the required action, and initiated a review to ensure no other surveillances were missed. A training request was initiated and processed to ensure that the correct interpretation of surveillance time requirements was incorporated into operator training and requalification programs. Also, a "lessons learned" was initiated to immediately notify operators of the incident and correct interpretation of the surveillance time requirements.

The inspector reviewed the licensee's actions and concluded that they were appropriate for the circumstances associated with this event.

ATTACHMENT 1

1 PERSONS CONTACTED

1.1 Licensee Personnel

D. E. Armstrong, Quality Control Supervisor
C. L. Beerck, Senior Maintenance Analyst
D. E. Buschbaum, Technical Compliance Manager
C. M. Carella for: D. M. Bozeman, Chemistry Manager
J. R. Curtis, Radiation Protection Manager
D. L. Davis, Nuclear Overvivew Manager
J. C. Finneran, Civil Engineering Manager
T. A. Hope, Regulatory Compliance Manager
R. T. Jenkins, Electrical Maintenance Manager
D. C. Kross, Shift Operations Manager
B. T. Lancaster, Plant Support Manager
M. L. Lucas, Maintenance Manager
H. A. Marvray, Maintenance Engineering
D. R. Moore, Operations Manager
J. C. Muffett, Station Engineering Manager
R. K. Ory for: R. J. Prince, Mechanical Maintenance Manager
N. G. Paleologos, Vice President, Nuclear Operations
S. F. Sawa, Unit 2 Outage Manager
S. L. Smith, Work Control Center Manager
D. W. Snow, Senior Regulatory Compliance Specialist
C. L. Terry, Group Vice President, Nuclear Production
B. D. Winters, Performance and Test Supervisor ?

The personnel listed above attended the exit meeting. In addition to the personnel listed above, the inspectors contacted other personnel during this inspection period.

1.2 NRC Personnel

A. T. Gody, Jr., Senior Resident Inspector
H. A. Freeman, Resident Inspector
V. L. Ordaz, Resident Inspector

2 EXIT MEETING

An exit meeting was conducted on August 3, 1995. During this meeting, the inspectors reviewed the scope and findings of the report. The licensee did not identify as "proprietary" any information provided to, or reviewed by, the inspectors.

ATTACHMENT 2

ACRONYMS

ACOT	analog channel operational test
AO	auxiliary operator
CSP	containment spray pump
dp	differential pressure
EDG	emergency diesel generator
FSS	field support supervisor
FWIV	feedwater isolation valve
I&C	instrumentation and control
LCO	limiting condition for operation
LER	licensee event report
LHRA	locked high radiation area
MFP	main feedwater pump
Mw	megawatt
NRC	Nuclear Regulatory Commission
ONE Form	problem identification process
PDR	public document room
RP	radiation protection
RWST	refueling water storage tank
SFP	spent fuel pool
SOP	system operating procedure
SSW	station service water
TDAFWP	turbine-driven auxiliary feedwater pump
TS	Technical Specification
WO	work order