

U.S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos. 50-206/87-27, 50-361/87-28, 50-362/87-29  
Docket Nos. 50-206, 50-361, 50-362  
License Nos. DPR-13, NPF-10, NPF-15  
Licensee: Southern California Edison Company  
P. O. Box 800, 2244 Walnut Grove Avenue  
Rosemead, California 92770

Facility Name: San Onofre Units 1, 2 and 3

Inspection at: San Onofre, San Clemente, California

Inspection conducted: October 4 through November 24, 1987

Inspectors: *P. H. Johnson* 12/22/87  
for F. R. Huey, Senior Resident Date Signed  
Inspector, Units 1, 2 and 3  
*P. H. Johnson* 12/22/87  
for J. E. Tatum, Resident Inspector Date Signed  
*P. H. Johnson* 12/22/87  
for A. L. Hon, Resident Inspector Date Signed  
Approved By: *P. H. Johnson* 12/22/87  
P. H. Johnson, Chief Date Signed  
Reactor/Projects Section 3

Inspection Summary

Inspection on October 4 through November 24, 1987 (Report Nos. 50-206/87-27, 50-361/87-28, 50-362/87-29)

Areas Inspected: Routine resident inspection of Units 1, 2 and 3 Operations Program including the following areas: operational safety verification, evaluation of plant trips and events, monthly surveillance activities, monthly maintenance activities, refueling activities, independent inspection, review of licensee event reports, and follow-up of previously identified items. Inspection procedures 30703, 37701, 61715, 61726, 62703, 71707, 71709, 71710, 71881, 90712, 92700, 92701, 92702, 92703, and 93702 were covered.

Results: In the areas examined, no violations or deviations were identified.

## DETAILS

### 1. Persons Contacted

#### Southern California Edison Company

- H. Ray, Vice President, Site Manager
- W. Moody, Deputy Site Manager
- \*H. Morgan, Station Manager
- \*M. Wharton, Deputy Station Manager
- \*D. Schone, Quality Assurance Manager
- D. Stonecipher, Quality Control Manager
- \*R. Krieger, Operations Manager
- \*D. Shull, Maintenance Manager
- \*J. Reilly, Technical Manager
- P. Knapp, Health Physics Manager
- W. Zintl, Compliance Manager
- D. Peacor, Emergency Preparedness Manager
- P. Eller, Security Manager
- W. Marsh, Operations Superintendent, Units 2/3
- J. Reeder, Operations Superintendent, Unit 1
- V. Fisher, Assistant Operations Superintendent, Units 2/3
- R. Joyce, Maintenance Manager, Units 2/3
- L. Cash, Maintenance Manager, Unit 1
- T. Mackey, Compliance Supervisor
- \*C. Couser, Compliance Engineer

\*Denotes those attending the exit meeting on November 24, 1987.

The inspectors also contacted other licensee employees during the course of the inspection, including operations shift superintendents, control room supervisors, control room operators, QA and QC engineers, compliance engineers, maintenance craftsmen, and health physics engineers and technicians.

### 2. Operational Safety Verification

The inspectors performed several plant tours and verified the operability of selected emergency systems, reviewed the Tag Out log and verified proper return to service of affected components. Particular attention was given to housekeeping, examination for potential fire hazards, fluid leaks, excessive vibration, and verification that maintenance requests had been initiated for equipment in need of maintenance.

#### a. Station Battery No. 2 Low Specific Gravity (Unit 1)

On October 18, 1987, while performing routine weekly surveillance on the pilot cells, the licensee found a low specific gravity reading on a pilot cell. According to the Technical Specification requirement, the licensee prepared to perform the quarterly surveillance on all of the cells. In order to obtain a true average specific gravity reading, the licensee first recirculated the

stratified electrolyte in the cells. While circulating cell #32, the hose between the cell and the pump came off and resulted in a loss of approximately two inches of electrolyte level. The maintenance person refilled the cell with distilled water to make up the loss. An equalizing charge was applied to cell #32.

After the quarterly surveillance was performed on all the cells, the licensee found that cell #32 showed specific gravity to be 1.187 while the average for all the cells was 1.205. This condition was outside the Technical Specification limit of 1.195 for an individual cell but was still within the allowable value of 1.185 (.020 below the average of 1.205). Thus, the licensee entered a seven day action while continuously charging and checking cell #32. At 1330, the specific gravity of cell #32 was 1.181, which was outside the allowable value, and a thirty-six hour action should have been entered. However, this condition was not recognized until 0830 on October 19, 1987, by the maintenance supervisor reviewing the data.

The licensee prepared to commence shutdown while replacing cell #32 with spare cell #59, whose specific gravity was within the specification. The replacement was successfully completed and the action statement was exited shortly before the time required to begin an orderly shutdown.

The licensee has revised the surveillance procedures so that conditions outside the Technical Specifications will be immediately recognized. Furthermore, in order to improve the overall specific gravity of all the cells, the licensee placed the battery on an extended period of equalizing charge according to vendor's recommendation and IEEE Standard 450-1980, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations."

This item is closed. (50-206/87-27-01).

b. ESF Single Failure Problems (Unit 1)

Background and Scope

In response to an NRC request, dated September 23, 1986, the licensee began to analyze the reactor protection system (RPS) for single failure. The NRC request was due to the failure of PT-459 on July 30, 1986, which revealed a single failure susceptibility of the RPS which had not been previously considered in the safety analysis. The licensee also expanded the single failure analysis to include engineered safety features (ESF). The licensee completed the RPS analysis and did not identify additional single failures. The licensee submitted results of the RPS analysis by a letter dated March 11, 1987, while continuing the ESF analysis.

On October 7, 1987, while the unit was at full power, the licensee notified the NRC that the ESF analysis revealed several additional scenarios wherein a single failure could prevent certain ESF systems from performing their required functions for design basis transients

and accidents. The licensee notified the NRC in accordance with 10 CFR 50.72(b)(ii)B. Following the initial notification, the licensee discussed the finding with the staff at NRC Region V and met with NRR staff in Bethesda, Maryland, on October 9, 1987, to provide the details and justification for continual operation. The NRR staff did not consider an immediate shutdown to be warranted, but requested a written submittal for further evaluation. The licensee submitted written reports on October 16, November 6, and December 1, 8, and 9, 1987. As stated in a December 11, 1987 letter to the licensee, NRR concluded that SCE's justification for operation for the remainder of the current cycle was acceptable.

The following is a brief summary of the scenarios and the interim compensatory measures implemented by the licensee:

#### Summary of the ESF Single Failure

- ° The feedwater isolation function is susceptible to single failure which could result in the diversion of flow from safety injection trains to the steam generators due to:
  - (1) failure of feed pump discharge valve closure and delayed closure of feedwater isolation and regulation valves;
  - (2) failure to isolate feedwater flow to the steam generators as a result of failure of a sequencer or a DC power train during a main steam line break or a LOCA.
- ° The safety injection system is susceptible to single failure which could result in loss of post-LOCA recirculation after a loss of offsite power and LOCA due to:
  - (1) loss of component cooling water pumps;
  - (2) loss of charging pumps caused by the suction valves failing to switch over from the volume control tank to the refueling water storage tank.
- ° The low temperature overpressure mitigation system is susceptible to single failure due to unplanned closure of the PORV from the dedicated safe shutdown panel without being immediately detected in the control room.

#### Compensatory Measures for Continued Safe Operation

While pursuing additional analyses and modifications to resolve these single failure susceptibilities, the licensee implemented the following actions to ensure safe operation of the plant:

- ° Administrative controls of the equipment alignments to minimize the single failure risk while allowing for normal plant operation.

- Additional training and special operation orders to enable the operators to promptly recognize these conditions and to take corrective action.
- Additional operators on each shift designated as Emergency Event Dedicated Operator whose primary function is to be ready to operate equipment locally should the single failure occur.

#### Inspection Findings

The inspector reviewed the licensee's actions including On-Site Review Committee meetings, operator training, special orders and administrative controls, shift crew compositions, etc. The inspector also walked down the equipment involved in the single failure analysis and the equipment needed to mitigate the failures, in order to evaluate their accessibility during an emergency. In response to the inspector's concern that some equipment had outstanding deficiency tags on them, the licensee identified a list of critical components related to the single failures. From this list, the licensee reviewed the outstanding maintenance orders and identified those needed to be worked on immediately and those that could wait until the next outage without affecting the reliability of the equipment. The inspector found the licensee's compensatory action measures to be adequate, pending long-term resolutions which are to be submitted to NRR and implemented during the fall 1988 refueling outage.

This item remains open pending additional inspector follow-up (50-206/87-27-02).

#### c. Outage Housekeeping (Unit 2)

During this refueling outage, the inspector observed that the licensee had made significant improvements in staging materials and maintaining control of housekeeping conditions. At the exit meeting, the inspector encouraged the licensee to continue to place emphasis in this area such that high standards of cleanliness could be achieved and maintained throughout the plant.

This item is closed (50-361/87-28-01).

#### d. Inadequate Attention to Operating Detail (Unit 2)

Following the completion of design change work and outage maintenance and surveillance activities on emergency diesel generator 2G002, the inspector observed several diesel generator starting evolutions for post maintenance testing. During the initial start, the inspector observed that the equipment operator followed his procedure step-by-step. During a subsequent start of the diesel generator, the inspector observed that the procedure was not used as rigorously and the equipment operator did not verify that each engine's lube oil pressure was greater than 35 psig as required by the operating procedure. The inspector also observed that the governor lube oil levels on the operable diesel generator

(2G003) were too high and outside of the acceptable indicating range. The inspector discussed these observations with the licensee at the exit meeting and stressed the importance of maintaining a high degree of formality during routine plant operations.

This item remains unresolved pending additional review by the licensee (50-361/87-28-02).

e. Reactor Coolant and LPSI Pump Seal Problems (Unit 2)

The licensee completed refueling on October 13, 1987. On October 19, fuel cycle 4 began as the unit entered Mode 5. Following Mode 4 entry on November 14, the licensee identified mechanical seal leakage on low pressure safety injection (LPSI) pump 2P-016 and a shaft seal leak on reactor coolant pump (RCP) 2P-004. After a more detailed evaluation, the licensee determined that the shaft seals on RCPs 2P-001 and 2P-004 were degraded and decided to replace all RCP seal packages prior to return to service. As a result of the deficiencies identified on LPSI 2P-016 and on the RCPs, the Unit 2 outage duration was tentatively extended to 105 days. As of the end of the inspection period, the licensee was planning to return the unit to service (close turbine generator output breakers) on December 12, 1987.

This item is closed (50-361/87-28-03).

f. Plant Startup Observations

During this report period, the inspector verified that the following procedures were being properly implemented:

- o S023-I-3.43 Refueling-Water Level Indicator (RWLI) Tubing Installation and Removal
- o S023-3-1.4 Filling and Venting the Reactor Coolant System
- o S023-3-2.6 Shutdown Cooling System Operation
- o S023-3-2.8.1 Refueling Cavity Draining Operations
- o S023-5-1.3 Plant Startup from Cold Shutdown to Hot Standby

3. Evaluation of Plant Trips and Events

a. Reactor Trip on October 11, 1987 (Unit 3)

On October 11, 1987, while the unit was at 80% power, the turbine tripped on low condenser vacuum, resulting in a reactor trip. The unit was at reduced power, with circulating water tunnels reversed for heat treatment of the intake structure, when a sudden influx of sea grass caused circulating water flow to decrease. In an effort to restore normal circulating water flow, the operator attempted to return the circulating water tunnels to normal alignment. During the conduct of this evolution, the turbine tripped on low vacuum, causing the reactor to trip. No anomalies in plant response were

identified. The licensee subsequently revised operating procedures to provide guidance for future events of this nature.

No violation or deviation was identified.

4. Monthly Surveillance Activities

The inspectors observed performance of the following surveillance activities during this report period:

Unit 1

- ° S01-12.3-10 Diesel Generator Load Test on the No. 1 Diesel Generator
- ° S01-12.3-26 Auxiliary Feedwater Pump Operability Test on the Motor Driven Auxiliary Feedwater Pump
- ° S01-II-1.1 Reactor Plant Monthly Calibration

Unit 2

- ° S023-3-3.12 Integrated ESF System Refueling Test
- ° S023-V-12.2.2.4 Core Protection Calculator (CPC) Channel D CEA Position - Response Time Test

Unit 3

- ° S023-V-12.10.3 Qualified Safety Parameters Display System (QSPDS) Test Channel B
- ° S023-3-3.5 CEA Monthly Operability Test

No violation or deviation was identified.

5. Monthly Maintenance Activities

a. Unit 1

The inspector observed part of the following maintenance activities during this inspection period:

- ° M087102102000 Replacing battery #2 cell #32 with spare cell #59.
- ° M087090693001 Bench testing of sticking ASCO solenoid SV-128 for the containment spray discharge valve CV-82.
- ° M087101568000 Overhauling hydraulic damper for main feedwater regulator FCV-456 actuator.

b. Unit 2

The inspector observed the following maintenance activities during this report period:

- ° M087100282 Tubing connection oil leak on auxiliary

- M087051265001 feedwater pump 2P-140. Replace packing shaft sleeves on auxiliary feedwater pump 2P-140.
- M087101674000 Design change work associated with MSIV 8204.
- M087101900000 Design change work associated with MSIV 8205.
- M087072773001 Diesel Generator 2G002 stator over-temperature indicator 2TI-E949 malfunction.

c. Unit 3

During this report period, the inspector observed efforts to troubleshoot the cause of spurious spiking on the main feedwater pump speed recorders. The cause of the problem was not immediately apparent, and strip chart recorders were hooked up for long term monitoring of this condition.

No violation or deviation was identified.

6. Engineered Safety Feature Walkdown

Unit 1

The inspector verified the proper system lineup of the containment ventilation and related systems. Procedure S01-4-40, "Containment Sphere Alignment" and related drawings, were used for the system walkdown.

No violation or deviation was identified.

7. Review of Licensee Event Reports (LERs)

The forwarding letter for NRC Inspection Report 50-361/87-09 expressed concern with regard to the thoroughness and level of detail contained in several of the LER's that had been issued. During this report period, the inspectors observed that the licensee has adapted a new format for documenting the details and root cause associated with an event or equipment failure. Under this new format, the licensee's LER's appeared to be thorough and well written.

- a. The following LER remains open pending additional licensee action to address the concerns noted below:

Unit 2

86-032 ESF Actuations During Power Transfers

The licensee issued this LER to document several ESF actuations that occurred during manual transfer of power sources. The inspector requested the licensee to evaluate the design adequacy with regard to power transfer capabilities. The inspector's concern stems from human factors considerations in that control room annunciation

could be misleading and confusing during loss of power scenarios.

- b. Through direct observations, discussion with licensee personnel, or review of the records, the following Licensee Event Reports (LERs) were closed:

Unit 1

87-015 ESF Design Fails to Meet Single Failure Criteria -- to be followed up as open item 50-206/87-27-02.

87-002 Yard Sump Effluent Monitor Found Isolated

As a result of informality in implementing the requirements for isolating equipment, isolation of yard sump monitor RIT-2101 was not properly documented. At the exit meeting, the licensee noted that continued emphasis on procedural compliance and formality of plant operations had precluded recurrence of this type of problem.

Unit 2

85-054 Delinquent Surveillance of Containment Penetration Conductor Overcurrent Protective Devices

Although previously closed in Inspection Report 361/85-35, the inspector reviewed the circumstances of this event further with the licensee. Due to inadequate review of Revision 3 to Procedure S023-I-2.47, four circuit breakers were inadvertently omitted from the surveillance procedure. This discrepancy was inadvertently corrected when Revision 4 was issued to the procedure. Subsequently, during a QA audit, the licensee identified that the surveillance testing for the four circuit breakers was outside of the 5 year surveillance interval. The licensee issued Corrective Action Report (CAR) SO-P-860 to address this discrepancy, but attention was not focused on the inadequate procedure review that resulted in this condition. The inspector discussed this matter with the licensee's QA organization, and CAR SO-P-1055 was issued to address this issue. The inspector emphasized this issue at the exit meeting and, following the exit, the licensee committed to take steps to improve the procedure revision process.

86-026 Air Ejector Radiation Monitor Inoperable

Due to inattention to detail during procedure revision, an incorrect step in the airborne radioactive monitor sample collection procedure was referenced while returning radiation monitor 2RE-7870 to service. This made the radiation monitor inoperable. Additional discussion

relative to this issue is contained in this paragraph under Unit 2 LER 85-054.

Unit 3

87-008 ESF Actuations During Technical Specification Surveillance

The licensee issued this LER to document several ESF actuations that occurred during power transfer. Additional discussion of this issue is contained in this paragraph under Unit 2 LER 86-032.

87-010 Spurious Actuation of the Fuel Handling Isolation System

The licensee reported that a spurious FHIS actuation occurred due to electrical noise induced by the CPIS circuitry. The CPIS circuitry is routed in common with the FHIS circuitry. The LER did not address the design adequacy of this circuit installation and routing, and the inspector requested the licensee to address this issue. The licensee stated that a design change would be implemented to separate the CPIS circuitry from the FHIS circuitry.

No violation or deviation was identified.

8. Follow-Up of Previously Identified Items

a. (Open) Open Item (50-206/86-49-01) Program for Trending Failed Surveillances

During the previous inspection, the inspector noted that the licensee did not have a formal program to trend failed surveillances. Personal knowledge and memory were relied on to identify systems whose repeated failure during surveillances may involve generic concerns. The licensee planned to enhance the post-surveillance review. Since then, the licensee has assigned an individual with QA experience to review the surveillance reports. However, a trending program was not yet implemented. The licensee committed to implement a formal trending program for the routine surveillances by December 15, 1987. This item remains open pending additional inspector review of the trending program.

b. (Open) Open Item (50-206/87-24-02) Failure of ASCO Solenoid Valves

The licensee continued the root cause determination of the four ASCO solenoid valves which recently failed. This effort was prolonged because to test the valve it was necessary to energize the solenoid for a week in order to simulate the in-service conditions. The licensee tentatively attributed the failure to a small amount of coating on the solenoid slug and housing. This substance, when

heated, could form a seal between the top of the slug and the housing and cause a pressure differential which holds the slug in place even after the solenoid is deenergized. The inspector observed a bench test on the SV-128 solenoid and will continue to review the licensee's root cause findings. Thus, this item remains open pending completion of additional inspector followup.

c. (Open) Open Item (50-361/86-11-01), Identification of Abandoned Electrical Circuits

The inspector reviewed the status of the licensee's actions with regard to this item. The licensee had taken action to enhance station procedures to provide guidance for deleting electrical circuits and cable pull ropes. The licensee also took steps to inspect electrical cabinets and identify existing abandoned electrical circuits on Units 2 and 3. The inspector discussed this issue with the licensee and noted that additional actions were necessary to address the following concerns:

- ° Although actions were taken to address the specific instances identified wherein cable pull ropes were left in conduit, guidance was not provided for identification and resolution of abandoned cable pull ropes that may still exist but have not been identified.
- ° Station procedures did not provide guidance for labeling of abandoned circuits that are not readily identifiable, or for updating records such as cable pull cards or circuit schedules.
- ° Actions were not taken to address applicability and corrective actions with regard to Unit 1.

The licensee stated that actions would be taken to address these concerns. This item remains open pending completion of licensee actions.

d. (Open) Open Item (50-361/86-19-03) Use of Uncalibrated Instruments

The licensee issued CAR SO-P-956 to address the inspector's observations regarding use of uncalibrated M&TE. In response to the CAR, a policy was developed to allow use of selected M&TE for reference only. The licensee's policy does not require M&TE used for reference only to be calibrated. For M&TE that does require calibration, electrical test technicians were reminded of their responsibility to return the equipment for calibration in accordance with the administrative requirements. The licensee's actions on this matter were inadequate as follows:

- ° Although the licensee allowed the use of selected uncalibrated M&TE for reference only, guidance had not been established to define those activities that are for reference only.

- The inspector has continued to identify instances wherein M&TE had not been returned for calibration such that the calibration was overdue. The licensee issued CAR SO-P-1068 to address this concern.

This item remains open pending licensee actions to resolve the inspector's concerns.

e. (Open) Open Item (50-361/86-27-01) Implementation of Compensatory Measures for Radiation Monitor Failures

The inspector had observed that a low sample flow condition through radiation monitors RT-7824 and RT-7825 would not cause annunciation in the control room. The licensee completed installation and acceptance of DCP 6460 to resolve this concern on Unit 3, but the DCP had not been completed on Unit 2. The inspector discussed this matter with the licensee, and requested that some consideration be given to establishing interim measures to monitor for low flow conditions as appropriate until the DCP has been completed. This item remains open pending the licensee's response to this matter.

f. (Open) Open Item (50-361/86-32-02) Operator Access to Locked Rooms

During a previous inspection, the inspector observed that operator access to safety related equipment was inhibited by a high radiation area lock. The inspector requested the licensee to review this matter to ensure that operational factors are taken into consideration when areas must be locked and access is inhibited. In response to this concern, the licensee assigned responsibility to operations department for control of high radiation area locks for selected areas. The licensee also indicated that the use of non-high radiation area locks would be discontinued. The inspector expressed the following concerns with respect to this resolution:

- The administrative program for controlling locked areas appeared to be fragmented. Several departments could have reason to lock an area, and a mechanism for keeping track of locked areas, the department responsible for locking the area, the associated hazardous condition, and key location did not exist.
- Although the licensee indicated that the use of non-high radiation locks would be discontinued, the inspector observed that several areas were still locked with such locks. For example, room 111 (Units 2 and 3), room 107 (Unit 3) and room 128 (Radwaste) were so locked.
- While it may be appropriate to assign responsibility for high radiation area locks to the operations department in some instances, it did not appear that definitive criteria had been established for implementing this policy.

This item remains open pending licensee action.

g. (Open) Open Item (50-361/86-38-02) Steam Generator Safety Valve Setpoints Out-of-Tolerance

The inspector reviewed the licensee's evaluation, which indicated that the following factors contributed to the out-of-tolerance conditions:

- (1) the effective area used in the pressure calculation lift assist device piston was inaccurate; and
- (2) the effective area used in the pressure calculation for the main steam safety valve seating surface was inaccurate.

As a result of using inaccurate parameters in the pressure calculation, the main steam safety valves were not properly set. Although it appeared that the licensee had a good understanding of why the main steam safety valves were not within tolerance, the licensee did not have a good understanding of why the effective areas used in the pressure calculation were not accurate. The inspector observed that the licensee should identify the mechanism which resulted in the use of inaccurate information in order to have a complete understanding of the shortcomings so appropriate corrective actions can be taken. The inspector also questioned the reportability of this issue, since some of the setpoints were set outside their Technical Specifications limits. The licensee agreed to pursue this matter. This item remains open.

h. (Closed) Open Item (50-362/86-25-01) Licensee's Program for Root Cause Determination

During a valid EFAS actuation, auxiliary feedwater isolation valve 3HV-4706 failed to open. The licensee's preliminary evaluation failed to identify that the breaker trip setting had been set incorrectly during plant construction, and the unit was returned to operation before this deficiency was identified and resolved. The inspector had previously expressed concern that the root cause determination appeared to be inadequate in this case, and that administrative control of maintenance activities conducted under a shift supervisor's accelerated maintenance (SSAM) may not receive adequate attention in this area. The inspector reviewed TCN 1-5 to General Procedure S0123-XV-5.0 titled, "Nonconforming Material, Parts or Components," which was subsequently issued to address root cause of equipment failure. Paragraph 6.9 of the procedure provided guidance for completing root cause assessments as part of the NCR process. The inspector reviewed several root cause evaluations that the licensee had completed as a function of the enhanced procedural requirements. These evaluations appeared to be well thought out and complete. Additional followup of the licensee's actions with regard to administrative controls associated with the SSAM will be documented under NRC unresolved item 50-361/87-23-01. This item is closed.

i. (Closed) Open Item (50-362/86-38-06) Requirements for Containment Integrity

The inspector observed that the licensee's Technical Specification did not require containment integrity to be established during reactor vessel head lift. This seemed to be a vulnerable condition in that a CEA (or several CEAs) could become stuck and inadvertently lifted during the reactor vessel head lift. This situation would constitute a core alteration which would require containment integrity to be established. The licensee discussed this matter with the inspector and stated that existing procedures would ensure that such situations are promptly identified and addressed should they occur. This item is closed.

j. (Closed) Open Item (50-362/86-38-07) Inadequate Protection for Refueling Seal Hoses

During the last Unit 3 refueling outage, the inspector observed that the refueling seal hoses were not protected from inadvertent damage where they were routed down along the refueling cavity. It appeared that a single event could sever both hoses and allow the refueling cavity seals to deflate. The licensee evaluated this condition and concluded that additional protection was not warranted for the refueling seal hoses for the following reasons:

- (1) The likelihood of inadvertent damage to the refueling seal hoses in this area of the refueling cavity is very remote.
- (2) Trying to provide protection for the hoses could jeopardize the integrity of the refueling cavity liner plate.
- (3) If a failure of the hoses did occur, the fuel in the reactor vessel would not be uncovered and sufficient time would exist to properly secure the fuel bundles that are in transit at the time of the failure. Resultant radiation levels in the area would not preclude access for making necessary repairs.

This item is closed.

9. Exit Meeting

On November 24, 1987, an exit meeting was conducted with the licensee representatives identified in Paragraph 1. The inspectors summarized the inspection scope and findings as described in this report.