



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W., SUITE 2900
 ATLANTA, GEORGIA 30323-0199

Report Nos.: 50-269/94-01, 50-270/94-01 and 50-287/94-01

Licensee: Duke Power Company
 422 South Church Street
 Charlotte, NC 28242-0001

Docket Nos.: 50-269, 50-270, 50-287, 72-4

License Nos.: DPR-38, DPR-47, DPR-55, SNM-2503

Facility Name: Oconee Nuclear Station

Inspection Conducted: January 2 - January 29, 1994

Inspector: P. E. Harmon 2/10/94
 P. E. Harmon, Senior Resident Inspector Date Signed

W. K. Poertner, Resident Inspector
 L. A. Keller, Resident Inspector
 P. G. Humphrey, Resident Inspector

Approved by: M. S. Lesser 2/16/94
 M. S. Lesser, Section Chief, Date Signed
 Reactor Projects Section 3A

SUMMARY

Scope: This routine, resident inspection was conducted in the areas of plant operations, surveillance testing, maintenance activities, and engineering and technical assistance. Activities were monitored during the Unit 3 End of Cycle 14 refueling outage.

Results: One violation was identified, which involved inadequate procedures controlling steam generator tube plug processes. Due to inadequate installation, 14 tube plugs separated from their respective tubes and were later recovered during refueling operations (paragraph 2d).

Two Unresolved Items were identified. One URI involved improperly sized orifice plates installed in High Pressure Injection lines (paragraph 2c). The second URI involved a temporary loss of power to Unit 3 during refueling activities (paragraph 3).

Refueling activities continued on Unit 3. The resident staff witnessed several major maintenance and modification activities and in general considered these activities to be well planned and executed.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *B. Peele, Station Manager
- S. Benesole, Regulatory Compliance Manager
- D. Coyle, Systems Engineering Manager
- J. Davis, Engineering Manager
- *B. Dolan, Safety Assurance Manager
- W. Foster, Superintendent, Mechanical Maintenance
- J. Hampton, Vice President, Oconee Site
- D. Hubbard, Component Engineering Manager
- C. Little, Superintendent, Instrument and Electrical (I&E)
- *D. Patterson, Regulatory Compliance
- *S. Perry, Regulatory Compliance
- *G. Rothenberger, Operations Superintendent
- R. Sweigart, Work Control Superintendent

Other licensee employees contacted included technicians, operators, mechanics, security force members, and staff engineers.

NRC Resident Inspectors

- *P. Harmon
- *W. Poertner
- *L. Keller
- *G. Humphrey

NRC Personnel

- *K. Kavanagh

*Attended exit interview.

On January 21, 1994, the Chairman of the NRC conducted a routine visit to the site, and held a press conference to discuss items of interest with the local media. The Regional Administrator, Region II, accompanied the Chairman on his tour and was also onsite to meet with licensee management, and resident inspectors.

2. Plant Operations (71707)

a. General

The inspectors reviewed plant operations throughout the reporting period to verify conformance with regulatory requirements, Technical Specifications (TS), and administrative controls. Control room logs, shift turnover records, temporary modification log and equipment removal and restoration records were reviewed routinely. Discussions were conducted with plant operations,

maintenance, chemistry, health physics, instrument & electrical (I&E), and engineering personnel.

Activities within the control rooms were monitored on an almost daily basis. Inspections were conducted on day and night shifts, during weekdays and on weekends. Inspectors attended some shift changes to evaluate shift turnover performance. Actions observed were conducted as required by the licensee's Administrative Procedures. The complement of licensed personnel on each shift inspected met or exceeded the requirements of TS. Operators were responsive to plant annunciator alarms and were cognizant of plant conditions.

Plant tours were taken throughout the reporting period on a routine basis. During the plant tours, ongoing activities, housekeeping, security, equipment status, and radiation control practices were observed.

b. Plant Status

Units 1 and 2 operated at 100 percent power throughout the inspection period. Unit 3 remained shutdown the entire reporting period for a scheduled refueling outage.

c. Unit 3 High Pressure Injection Orifice

On January 15, 1994, the licensee identified that the normal and emergency injection pressure breakdown orifice in the 3B2 injection line was a 7/8 inch (.875 inch) diameter orifice versus a .78 inch diameter orifice as documented in the system flow diagrams and design calculations. The increased orifice size would result in HPI flows in excess of calculated flow rates and could potentially result in pump runout concerns under certain design events or reduced flow rate into the RCS assuming a failure of an injection line.

The incorrect orifice was identified by the system engineer during maintenance activities to correct a leaking flange connection. The system engineer had questioned the higher flow rates seen on the Unit 3 high pressure injection (HPI) full flow tests when compared to the Unit 1 and 2 tests and decided to inspect the orifice during the scheduled maintenance activity. The licensee completed inspection of the three other orifice plates on Unit 3 and found that they were also 7/8 inch orifice plates. The licensee was still reviewing this item at the completion of the inspection period and had not completed an operability evaluation. This item is identified as Unresolved Item 287/94-01-01: Improperly Sized HPI Orifice Plates.

d. Steam Generator Tube Plugs Found in Unit 3 Reactor Vessel

On January 9, 1994, while performing a post-defueling video camera inspection of the Unit 3 reactor vessel, the licensee discovered eight steam generator tube plugs on the lower grid assembly of the reactor vessel. During the previous operating cycle there were no indications of higher primary-to-secondary leakage, Loose Parts Monitor alarms, or any other indications that tube plugs had separated from the steam generator tubesheet(s) and entered the RCS. Subsequent steam generator inspections revealed that there were 14 missing tube plugs from the bottom head of the 3B Once Through Steam Generator (OTSG). The 14 missing tube plugs were all part of a single batch of Inconel-690 rolled plugs installed during the previous Unit 3 refueling outage by the Babcock & Wilcox Nuclear Service Company (BWNS). A review of the audio and video records of the installation of this batch of tube plugs, conducted by BWNS, indicated that there were 33 plugs (including the 14 missing plugs) which may not have received the proper torque value. Proper torque assures adequate expansion of the plug in the steam generator tube. BWNS also reviewed all the available tapes for Steam Generator 3A and the Unit 1 & 2 steam generators for plugs that were installed during their last refueling outages. Only one additional questionable tube installation was identified. This was located in the upper tubesheet of Steam Generator 2B.

BWNS utilized a remote air motor control roll process to install the tube plugs in question. The tool used in this process was a "ROGER" (Remotely Operated Generator Examination and Repair) roll tool. The ROGER roll expansion tool consisted of a torque controlled air motor which drove the mandrel of the roll expander. When operating properly, the amount of torque delivered to the tube plug is achieved by adjustment of a clutch within the air motor assembly. Upon reaching the target torque, the clutch mechanism closes a valve within the air motor. When this valve closes, supply air will not enter the vanes of the air motor and the air motor turns off.

A device called the flow verification assembly was used to monitor the air flow (by use of a rotameter) and air pressure (using a pressure gauge) to the air motor. The rotameter was used to ensure the air motor reached the target torque and did not stop due to stalling out. When the target torque was reached and the clutch mechanism turns off the air supply to the air motor, the flow of air through the flow verification assembly stops, and the rotameter stops rotating. If the rotameter continues to rotate, then the air motor has stalled and the proper torque is not assured.

The flow verification assembly also monitors the air pressure delivered directly to the input of the air motor. This air

pressure is also monitored during the expansion process. The air pressure corresponding to the proper torque is determined during the calibration of the tool which is done prior to rolling any plugs. During the roll expansion process, the air pressure will read a dynamic level, usually 5 to 10 psi below the static air pressure. Upon reaching torque-out, the air pressure will increase back to the static pressure and remain there for approximately 3 seconds when the control computer shuts off the air supply to allow retraction of the tool.

Monitoring of the flow verification assembly to assure proper torque-out should have been done by the tooling operator during the installation process. As stated above, proper torque-out is assured when correct air pressure is indicated on a gage and zero air flow is indicated by a rotameter, on the air flow verification assembly. Video tapes of the installation of the 33 tubes in question revealed that the pressure gauge on the air flow verification assembly went to zero prematurely, following cut-out of the air motor. Additionally, the characteristic sound of proper torque-out could not be heard, and the roll times were considerably shorter for these plug installations.

The faulty installation of tube plugs in Steam Generator 3B occurred during a single shift by one crew. This crew installed a total of 52 plugs in the lower head of the Steam Generator 3B during this shift, of which 33 did not receive proper torque-out. According to BWNS, the individuals who performed the plug installations had received all required training for this process and were considered to be fully qualified to perform this task. The controlling procedure for this activity did not provide appropriate acceptance criteria for determining that proper torque out was achieved, independent verification accomplished or QC verification that proper torque-out was achieved. Furthermore, the video tapes were not reviewed by licensee or BWNS personnel following the activity to verify proper torque-out. Steam generator tube plugging is an activity that is important to safety both from the aspect of tube integrity and preventing debris hazards to the reactor coolant system. The inspectors concluded that the lack of independent verification and procedural guidance to determine proper torque-out was inappropriate and resulted in the failure to identify improperly installed steam generator tube plugs. This matter is identified as Violation 287/94-01-02: Inadequate Procedure for Steam Generator Tube Plugging Activities.

All 14 missing plugs were recovered. Two of these plugs were found trapped in the lower end fittings of fuel assemblies. The 14 missing plugs and the remaining questionable plugs for Steam Generator 3B were replaced. The questionable plug in the upper tubesheet of Steam Generator 2B will be replaced during the next Unit 2 refueling outage.

d. Plant Tours

During a tour of the Unit 3 Reactor Building on January 7, 1994, the inspector noted that large amounts of plastic had been used to bag mirror insulation during the outage, 3EOC14. The insulation had been removed from systems for work during the outage and was inserted in plastic bags to avoid the spread of contamination. However, the plastic material did not appear to be fire retardant.

Oconee Nuclear Site Directive 3.2.7, Control of Combustible Materials, was reviewed to evaluate the licensee's program to control fire loading in the reactor building. The inspector could not find where the directive specifically addressed the fire loading requirements in that area. The licensee confirmed that fire loading in the reactor building was not addressed in the site directives or procedures.

The licensee later informed the inspector that the omission of fire loading requirements for the reactor building was being corrected through a revision to the site directive. Based on the licensee's corrective actions, this issue will not be opened as an item for tracking.

f. Condenser Circulating Water (CCW) Piping Seismic Interactions

On January 18, 1994, the licensee identified a potential piping interaction in which the CCW pump discharge vents could be damaged in a seismic event by the metal restraints placed around the CCW intake piping to stabilize the lines while the piping is unwatered. The licensee commenced to increase Keowee lake level to above 798.1 feet to ensure gravity flow would be available to supply suction to the Low Pressure Service Water Systems until an evaluation could be completed to determine the seismic adequacy of the piping configuration. In parallel with these actions the licensee initiated exempt changes to modify the piping restraints to increase the clearance such that adequate clearance would be maintained during a seismic event. The licensee completed the exempt changes to the Unit 1 and 2 CCW systems at 5:00 p.m. on January 19, 1993. The licensee plans to modify the Unit 3 CCW restraints prior to completion of the Unit 3 refueling outage.

This item was identified during the initiation of the problem investigation process (PIP) to resolve drawing discrepancies in the CCW system flow diagrams identified by the system engineer. As a result of the PIP process, the seismic adequacy was also questioned. The licensee had not completed the past operability evaluation at the end of this reporting period. The inspectors plan to review this item further after the operability evaluation has been completed.

Within the areas reviewed, one violation for inadequate procedural guidance for steam generator tube plugging activities, and one URI concerning improperly sized HPI orifice plates were identified.

3. Unit 3 Loss of Power to the Main Feeder Buses

At approximately 2:06 p.m., on January 27, 1994, Unit 3 experienced a loss of electrical power to the main feeder buses (MFBs) which lasted for approximately 21 seconds, due to PCB-59 inadvertently opening. This resulted in a subsequent load shed of the non-vital loads from the Unit 3 MFBs. Approximately 21 seconds after the MFBs were deenergized, the E1 breaker closed and energized the number 1 MFB via the startup transformer. This action also energized the number 2 MFB since the MFBs were connected through the ES switchgear they supplied.

The unit was in cold shutdown with all fuel offloaded to the spent fuel pool. The spent fuel cooling pumps were load shed during this event. Power was restored to the spent fuel cooling pumps after approximately 4 minutes. There was no increase in spent fuel temperature. Both Keowee units started as expected but did not tie onto the MFBs because the buses were reenergized from the startup transformer path via the E1 breaker. Units 1 and 2 were unaffected by this event.

Prior to the loss of power event, power was being provided to the Unit 3 MFBs through the normal source breakers (N1 and N2) by backfeeding through the generator main transformer (3T) from the 525 KV switchyard via PCB-59. A preventive maintenance activity which involved replacing terminal strip lugs inside the number 4 Main Steam Stop Valve (MSSV) power cabinet was ongoing. A terminal lug was inadvertently grounded which created enough ground fault current to pick up the loss of load relay (62GX/3), in the same 125 Vac circuit as the stop valve lugs. Picking up the loss of load relay caused PCB-59 to open (per design).

The control room supervisor who approved the work order (94007093- 01) stated that he was unaware that this activity had the potential to pick up the loss of load relay. As of the end of the inspection period, the adequacy of the work control process for this activity was still under review. This matter is identified as Unresolved Item 287/94-01-03: Maintenance Activity Results in Loss Of Power.

Within the area inspected no violations were identified.

4. Maintenance and Surveillance Testing (62703), (61726)

a. CCW Relay Replacement (Work Order 9400122 02)

The inspector witnessed work in progress during the changeout of Control Relay, CCWPX2B. The changeout was a result of relay overheating caused by a contact that did not open when required. The work was performed per Work Order Task 9400122 02 which implemented a special temporary instruction for the activity,

TI/2/1/3000/14, Temporary Instruction and Electrical Procedure To Repair Damage Caused By Failed Coil For CCWPX2B.

The relay that was in the CCW control circuitry affected all of the Oconee Condenser Circulating Water Systems. To avoid a potential loss of the normal water flows to the units, the relay was replaced without de-energizing the circuit. This required close co-ordination with the operations personnel and detailed instructions for the activity.

The inspector reviewed the work activity and the required post maintenance testing, and determined that the activity had been carefully planned and implemented.

b. Control Rod Drive System Test (OP/0/A/1105/09)

On January 6, 1994, the inspector witnessed operator performance of test, OP/0/A/1105/09, Control Rod Drive System. The purpose of the test was to verify transfer of control rod power between the "normal" and "auxiliary" power supplies while on-line. The test was performed in conjunction with PT/0/A/600/15, Control Rod Movement, to verify operability of the rods with power from each supply.

During the test, computer indication for rod Number 9 in Group 4 did not respond to the rod movement and as a result a work request was initiated. However, rod movement was verified on the indicating meter.

The inspector determined that the test had been properly authorized, was performed in accordance with the procedures, and the activities were documented as required.

c. Calibration of LT-97 (Work Order 93057524 01)

Implementation of activities described in Work Order Task 93057524 were reviewed by the inspector on January 4, 1994. The work effort consisted of calibration of Differential Pressure Transmitter LT-97. The equipment is utilized for measuring the level in Flash Tank 3C2 and was calibrated per procedure IP/0/B/275/11A.

The inspectors determined the work performance and documentation was in accordance with the applicable procedures.

d. Turbine Driven Emergency Feedwater Test (PT/2/A/600/12)

In progress testing of the Unit 2 Turbine Driven Emergency Feedwater Pump was observed by the inspector. The test was performed to demonstrate operability of the pump as required by the Technical Specifications (TS Sections 3.4, 4.0.4, and 4.9.).

At the beginning of the test, an excessive amount of steam was being emitted from the drain line. The system engineer determined the steam was a result of condensation that had accumulated in the steam header prior to the pump start. The steam emission stopped as the pump continued to operate.

In addition, a cooling water leak was observed on the outboard pump bearing. A maintenance request was made to repair the leak. The packing was tightened which corrected the leak problem.

The inspector determined that the testing activity was performed in accordance with the procedure and deficiencies identified were properly dispositioned.

e. EPSL Startup Source Voltage Sensing Circuit Test (PT/3/A/0610/01B)

This test verified proper operation of the Emergency Power Switching Logic (EPSL) undervoltage sensing circuitry for 4160 Volt Startup Source (CT-3), proper operation of the Unit 3 Startup Breaker Anti-Recycle (STAR) logic, and tested the contact development for the new relays installed under TN/3/A/2886/0/0. The test was completed satisfactorily indicating the equipment operated as designed. The inspector noted good procedural compliance and good communications between the technicians in the field and the control room operators.

f. Condenser Circulating Water Pump Discharge Pressure Test (PT/1/A/0261/09)

The inspector reviewed PT/1/A/0261/09, Condenser Circulating Water Pump Discharge Pressure Test, which was performed on January 26, 1994. The stated purpose of this test procedure is to demonstrate the operability of the condenser circulating water pumps. The CCW pumps were operated in various pump combinations and the discharge pressures were recorded. The CCW pumps are considered operable if recorded discharge pressures are greater than 3.48 in. HG on the header with two CCW pumps operating. The test reviewed by the inspector was the initial performance of the procedure and was not a technical specification required test. The test was written as a result of isolating the continuous vacuum priming system to the CCW intake. The acceptance criteria was based on a design engineering calculation that determined that 3.48 inch HG would maintain air in solution and prevent air accumulation in the CCW intake piping that could adversely affect operation of the emergency condenser cooling water system.

The pressure values recorded met the acceptance criteria stated in the test procedure. However, the acceptance criteria did not account for operation at lower lake levels. The licensee has established administrative limits for lake levels based on CCW pump combinations required to maintain pressure above 3.48 inch HG. The administrative limit for three CCW pump operation is 789

feet. The lake level at the time the test procedure was performed was 797.49 feet. This item was discussed with the system engineer and he agreed to review the acceptance criteria to determine if normalizing the pressure indications would be appropriate.

g. Convert 3B CST Pump to Mechanical Seals (Work Order 92014350)

Implementation of activities described in Work Order 92014350 were reviewed by the inspector. The work effort observed consisted of reinstalling Condensate Storage Tank Pump 3B after converting the pump to mechanical seals as opposed to packing.

The inspectors found the work performance and documentation to be in accordance with the applicable procedures. The inspectors did note that the work activity was designated as non-QA. The Condensate Storage Tank can be used as a water source to makeup to the Upper Surge Tanks and is addressed in the Technical specifications. The inspectors are reviewing the design requirements of the emergency feedwater suction supplies and the water volumes required by the TS. This item will be reviewed in further resident inspection reports.

h. Reactor Coolant Leakage Verification (PT/1/A/600/10)

The inspector reviewed the performance of procedure PT/1/A/600/10 conducted on January 24, 1994. The procedure verifies reactor coolant system (RCS) unidentified leakage was less than 1 gpm (assuming .5 gpm evaporative losses) and calculated total combined RCS leakage to verify operability of the Standby Shutdown Facility Reactor Coolant Makeup Pump. The inspectors questioned the enclosure used to calculate total combined RCS leakage in that the enclosure did not take into account the assumed .5 gpm evaporative loss included in the unidentified leakage calculation. The licensee reviewed the item and revised the enclosure to account for evaporative losses. The revision was considered an enhancement of the procedure.

Within the areas reviewed, licensee activities were satisfactory and no violations were identified.

5. Engineering (71707)

Modification of Unit 3 EPSL to Automatically Close Standby Breakers in the Event Startup Breakers Fail to Close (TN/3/A/2886/0/0):

Prior to this modification, the Emergency Power Switching Logic (EPSL) would not automatically close the standby breakers if both startup breakers failed to close while there was adequate voltage present at the startup transformer. This modification installed a relay (3SBC3A, 3SBC3B) in each channel of EPSL, which is energized whenever both startup breakers are open coincident with undervoltage on both main feeder buses. These relays provide contacts which when closed help to

make up the circuit to energize the closing coils for the standby breakers. The inspector reviewed the modification package and observed cable and relay installation in the field. All activities observed were satisfactory.

No violations or deviations were identified.

6. Inspection of Open Items (92701) (92702)

The following open items were reviewed using licensee reports, inspection record review, and discussions with licensee personnel, as appropriate:

a. (Closed) IFI 269,270,287/92-09-04, CBAST Pump Testing.

This item involved apparent inadequacies in the licensee's testing of the Concentrated Boric Acid Storage Tank (CBAST) pumps. The inspectors were concerned that the testing performed may not be sufficient, in that only pump pressure and vibration were observed and recorded. The system did not have instrumentation which would allow flow determination. Without obtaining pump flow, degradation and performance could not be determined. After reviewing their program, the licensee agreed that pump flow should be obtained, but requested relief from that requirement. The relief request was denied, and the licensee modified the system on all three units to provide acceptable flow instrumentation. Testing was then performed which conformed to ASME Section XI requirements.

b. (Closed) URI 269,270,287/91-17-01, Density of HSM Reinforced Concrete.

An NRC inspector previously reviewed the licensee's records for construction of the Independent Spent Fuel Storage Facility, SNM 2503, and found that the concrete density did not meet the requirements of the facility's TS Section 5.5. The required density is a minimum of 145 pounds per cubic foot, which would ensure an acceptable compressive strength. Construction records indicated densities of various concrete building components of approximately 144 pounds per cubic foot. The licensee submitted a TS change which changed the requirements to a "Nominal" density requirement having the same compressive strength. The change was approved and implemented, clearing the inconsistency.

- c. (Closed) URI 269,270,287/92-24-01, Testing MG-6 Relay and Keowee Overhead Path.

Following an observed failure of a breaker to close in the Keowee Unit tie to the overhead emergency power path, the licensee found that a permissive relay, type Westinghouse MG-6, had failed. Further investigation determined that the relay had never been tested, that the failure could have existed for an indeterminate time, and the failure had resulted in Keowee Unit 2 being inoperable when it was aligned to the overhead path. This issue is further described in LER 269-92-014.

Following an Enforcement Conference conducted on November 8, 1993, the NRC concluded that violations of requirements had not occurred since the licensee had tested the relay originally and TS did not specifically require testing of the overhead path and the attendant MG-6 relay.

- d. (Closed) URI 269/93-03-03, Past Operability of Valve 1HP-97

During the performance of a periodic test, Check Valve 1HP-97 failed to fully seat when pressure was applied in the reverse flow direction. This item was further discussed in NRC Inspection Report 50-269,270,287/93-05 and a potential single failure concern was identified. The licensee performed a past operability evaluation for the valve failing to fully seat and determined that the valve had been past operable based on a mechanical inspection of the valve internals. The NRC Office of Nuclear Reactor Regulation reviewed the potential single failure concern and determined that the licensee met licensing requirements for Ocone.

7. Review of Licensee Event Reports (92700)

The below listed Licensee Event Reports (LER) were reviewed to determine if the information provided met NRC requirements. The determination included: adequacy of description, compliance with Technical Specification and regulatory requirements, corrective actions taken, existence of potential generic problems, reporting requirements satisfied, and the relative safety significance of each event. The following LERs are closed:

- a. (Closed) LER 269/92-05, Equipment Failure and Defective Procedure Result in Operation in Violation of Technical Specification. The issues raised by this LER were dispositioned under violations 92-14-01 & 02. These violations were closed in inspection report 93-20.
- b. (Closed) LER 287/91-07, Equipment Failure Closes Pneumatic Valve in Condensate Demineralizer System Causing Loss of Feedwater and

Reactor Trip. This event was documented in NRC Inspection Report 269,270,287/91-16.

- c. (Closed) LER 287/91-08, Excessive Reactor Coolant Leak, Reactor Trip, and Inadvertent Protective System Actuation Result from Management Deficiencies and Equipment Failures. This event was documented in NRC Inspection Reports 269,270,287/91-31 and 269,270,287/91-34.
- d. (Closed) LER 269/92-14, Equipment Failure Results in the Inoperability of Keowee Unit 2 Overhead Power Path and a Technical Specification Violation

This issue is discussed in the closure of URI 269,270,287/92-24-01 in paragraph 6 of this inspection report.

- e. (Open) LER 269/92-17, Inadequate Seismic Support Of Vital Instrumentation And Control Batteries Due To Unknown Cause, Possible Installation Deficiency.

The report identified three areas associated with the 125v battery banks where the installation of the equipment did not agree with the applicable vendor drawings. The deficiencies involved were: (1) a vertical support was missing on the Unit 2CB battery rail, (2) missing splice plates on Units 2 and 3 battery racks, and (3) battery cells located above the butt joints on the mounting racks.

The licensee evaluated the issues and determined that the battery rail with the missing vertical support was sufficient to meet the seismic criteria required for an operability determination. The determination was based on an engineering analysis that the test data from racks with seven vertical supports had sufficient margin such that those with six supports were acceptable.

The issue of missing splice plates where the support rails butt together was evaluated. The results of that evaluation revealed that the splice plates were necessary to seismically qualify the battery racks. As a result, the missing splice plates were installed and the installation was verified by the inspector.

The third issue involved battery cells located above the butt joints of the mounting rails. The vendor manual was revised by the licensee to allow batteries to be placed above the butt joints on racks with installed seismic protection. The inspector could not find the basis for the licensee's revision to the vendor manual even when considering the addition of the seismic structure.

This LER will remain as an open item based on the resolution of the third issue.

No violations or deviations were identified.

8. Exit Interview

The inspection scope and findings were summarized on January 31, 1994, with those persons indicated in paragraph 1 above. The inspectors described the areas inspected and discussed in detail the inspection findings. The licensee did not identify as proprietary any of the material provided to or reviewed by the inspectors during this inspection.

| <u>Item Number</u> | <u>Description/Reference Paragraph</u> |
|---------------------|--|
| URI 50-287/94-01-01 | Improperly Sized HPI Orifice Plates (paragraph 2.c). |
| VIO 50-287/94-01-02 | Inadequate Procedure for Steam Generator Tube Plugging Activities (paragraph 2.d). |
| URI 50-287/94-01-03 | Maintenance Activity Results in Loss Of Power (paragraph 3). |