



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

Report Nos.: 50-269/95-06, 50-270/95-06 and 50-287/95-06

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

Docket Nos.: 50-269, 50-270 and 50-287

License Nos.: DPR-38, DPR-47 and DPR-55

Facility Name: Oconee Units 1, 2 and 3

Inspection Conducted: March 26 - April 29, 1995

Inspector: P. E. Harmon (per tel con) 5/23/95
P. E. Harmon, Senior Resident Inspector Date Signed

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Reactor Projects Branch 3

SUMMARY

Scope: This routine, resident inspection was conducted in the areas of plant operations, maintenance and surveillance testing, onsite engineering, plant support, and inspection of open items.

Inspections were performed during normal and backshift hours and on weekends.

Results:

A violation was identified in the area of plant operations concerning inadequate corrective actions for controlling Keowee operating limits (paragraph 2.d). Knowledgeable of a probabilistic risk assessment study, operations personnel took conservative action to preclude a high risk maintenance situation (paragraph 2.f). Unit 2 tripped from 100 percent power due to a disturbance on the system grid (paragraph 2.c). Previously identified problems with slow rod drop times resulted in a shutdown of Unit 1 (paragraph 2.e).

ENCLOSURE 2

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In general, maintenance activities were accomplished in an acceptable manner with appropriate procedure use and adherence. One instance was observed where maintenance personnel were not using procedures appropriately (paragraph 3.a.(2)).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- B. Peele, Station Manager
- *E. Burchfield, Regulatory Compliance Manager
- *D. Coyle, Systems Engineering Manager
- *J. Davis, Engineering Manager
- T. Coutu, Operations Support Manager
- W. Foster, Safety Assurance Manager
- J. Hampton, Vice President, Oconee Site
- D. Hubbard, Maintenance Superintendent
- C. Little, Electrical Systems/Equipment Manager
- *J. Smith, 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.

*Attended exit interview.

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 logs, 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

Unit 1 operated at or near full power until April 27, 1995, when the Unit was taken off-line for control rod drive testing. The Unit remained shutdown the remainder of the reporting period for a control rod drive mechanism refurbishment outage.

Unit 2 operated at or near full power until April 8, 1995, when an observed loss of efficiency was attributed to a ruptured steam extraction expansion joint in the main condenser. The Unit continued operation with reduced secondary output until a fault on the transmission grid resulted in a generator lockout and subsequent reactor trip on April 14, 1995. The unit was restarted on April 16, 1995. On April 21, 1995, Unit 2 began experiencing problems with tube leaks in the main condenser. The unit continued to operate throughout the remainder of the reporting period while coping with power reductions for condenser water box outages as necessary for on-going condenser tube repair/plugging activities.

Unit 3 operated at or near full power throughout the inspection period.

c. Unit 2 Reactor Trip

The Unit 2 reactor tripped at 9:59 a.m., on April 14, 1995. The reactor trip was attributed to a main generator lockout that occurred as a result of a fault on the electrical grid system. The following is a sequence of the event:

- (1) A fault on the 100KV electrical transmission system occurred when a tree fell across the Pickens Black 100KV line.
- (2) A failed trip coil in the Pickens Black 100KV supply breaker prevented the breaker from opening and isolation of the fault. This resulted in system disturbances upstream of the 100KV lines and into the 230KV portion of the system grid.
- (3) The fault was detected by the Oconee Unit 2 main generator Loss of Field protective relays, which tripped the generator off-line prior to the fault being cleared by the Central and North Greenville substation breakers located between the failed 100KV breaker and the Oconee generating units. The circuit timer was set at 0.8 seconds for the generator trip signal. The licensee indicated that a modification would be proposed to change the generator trip signal timer to 30 seconds when the signal does not involve a loss of voltage. The increased time delay will allow time for generator recovery without damage to the generator and will serve to avoid unnecessary unit trips.

All 3 Oconee units were operating at the time of the Unit 2 trip. Units 1 and 2 were tied to the 230KV grid which was supplying the faulted 100KV system. Unit 3 was connected to the 525KV system and was less affected by the fault. Unit 2 experienced the most effect from the fault since it was operating with its generator voltage regulator in automatic and attempted to follow the grid load. This resulted in the generator lockout followed by a reactor trip. Unit 1 had previously experienced problems with operating the voltage regulator in the automatic mode and had switched control to manual prior to the event.

The inspectors were in the control room immediately following the reactor trip and observed operator responses. The unit trip was well controlled by the control room operators.

Control rod drop times were recorded on the events recorder at the time of the reactor trip and 12 rods required more than 1.40 seconds to drop into the core. One of the 12 rods (Group 2, Rod 6) had a drop time of 1.842 seconds, which is greater than the 1.66 seconds allowed by Technical Specification (TS) Section 4.7.1. Based on previous experience, the type A control rod drive mechanisms that exceed 1.40 seconds appear to significantly increase in drop times during the operating cycle. (Note: Units 1 and 2 have the type A control rod drive mechanisms). Unit 2 was restarted (critical) at 3:47 p.m., on April 15, 1995, with the inoperable rod as allowed by TS 3.5.2.

The inspectors reviewed the licensee's trip report and attended the Plant Operating Review Committee meeting for evaluating the trip and authorization for restart.

d. Inadequate Control of Keowee Load Limits

The licensee reported by Licensee Event Report (LER) 269/93-01 that under certain conditions the emergency power supplied by the Keowee Hydro Station to the Oconee Station could be lost. If an emergency start was initiated while a Keowee unit was generating to the system grid at high load, the Keowee unit could trip or load reject on overspeed. To prevent this problem, Procedure OP/O/A/2000/041, Keowee-Mode of Operation, was revised on January 15, 1993, to administratively limit the maximum output to 60 MW for a Keowee unit generating to the system grid.

On June 2, 1993, based on the results from load rejection tests and on revised calculation OSC-6003, "Keowee Operating Limits to Prevent Overspeed Due to Load Rejection", the licensee's Keowee Station Manager issued a memorandum to the Keowee Operators that raised the maximum permissible output of the Keowee unit generating to the grid, from 66 to 75 MW. Although calculations were performed to verify maximum load limits, the controlling procedure, OP/O/A/2000/041 was not revised. As a result, the Keowee units were operated for a period of time in excess of the

official limit. The failure to revise this procedure was identified as Violation 50-269,270,287/93-20-03: Failure to Follow Procedures at Keowee.

The 75 MW limit was later found to be in error by NRC reviewers and revised to 69 MW maximum. To ensure the 69 MW limit would not be exceeded due to the expected unit swing, an operational limit of 64 MW was imposed by procedure.

On March 15, 1995, the licensee revised calculation OSC-6003 to change the maximum operating limit for a Keowee Hydro Unit generating to the grid from 69 to 68 MW. Upon revising this calculation, the responsible engineer called Keowee Hydro Operations and advised them of the analysis results which changed the administrative operating limit from 64 to 63 MW. The Keowee operator agreed that the unit would be run at 63 MW or less until the procedure was changed (procedure limit was 64 MW). The procedure was changed on March 20, 1995. The resident staff reviewed the Keowee Operating Log for the period of March 15 - 20, 1995, and noted that on March 16 & 17, 1995, a Keowee Hydro Unit was operated at 64 MW. The inspectors concluded that attempting to change a Keowee operating limit based on a phone conversation between a system engineer and a Keowee operator was both inappropriate and ineffective, in that it did not include the proper chain of command and did not achieve the desired result. The inspectors determined that this was similar to Violation 93-20-03 in that the operating limit was inappropriately changed (the first time by memo, the second time by phone). The licensee has initiated a Duke-wide study of Engineering to Operations communication and whether it should be additionally formalized. The inspectors agree that more careful, formal communications are needed. However, both the engineer involved and the Keowee operators treated this issue as a Keowee issue rather than an Oconee issue. As a result, the Oconee shift supervisor was not contacted concerning the new limits. Keowee operations and chain of command has officially been integrated into Oconee Operations, but this incident indicates further efforts are needed. This matter is identified as Violation 50-269,270,287/95-06-01: Inadequate Corrective Action for Control of Keowee Operating Limits.

e. Unit 1 Shutdown

On April 27, 1995, Unit 1 was taken off-line to perform control rod drive trip time testing. Testing revealed that 5 control rods had trip times which exceeded the TS limit of 1.66 seconds.

The Unit had been operating with a conditional control rod operability determination based on a statistical analysis which determined that rod drop times would not exceed the Technical Specification limit of 1.66 seconds. The conditional operability statement expired on April 21, 1995. On March 30, 1995, the

licensee's Plant Operating Review Committee had reviewed this item and determined that the Unit 1 control rods would be considered operable for the remainder of the cycle. This decision was based on the unit starting the cycle with no inoperable control rods, and statistical analysis that showed that 1 rod may become inoperable due to slow drop times at the 95/95 confidence level during the cycle.

On April 14, 1995, Unit 2 tripped from 100 percent power. Review of the rod drop times identified that 1 control rod's drop time was greater than the Technical Specification limit of 1.66 seconds and that 11 control rods exceeded 1.4 seconds, the value that the licensee has established for replacing rod drives during a refueling outage (see paragraph 2.c). Based on the rod drop data obtained during the Unit 2 reactor trip, the licensee decided to re-evaluate the operability of the Unit 1 control rods. This decision was based on the knowledge that Unit 1 had been operating longer than Unit 2 and that a greater number of control rod drive mechanisms (CRDMs) had been refurbished during the Unit 2 refueling outage.

As a result of the re-evaluation, the licensee decided to take Unit 1 off-line on April 27, 1995, and perform rod drop time testing to confirm operability of the Unit 1 control rods. The testing identified five control rods with drop times greater than the Technical Specification limit of 1.66 seconds and four control rods with drop times greater than 1.5 seconds, but less than 1.66 seconds. After reviewing the Unit 1 rod drop data, the licensee commenced a reactor cooldown to cold shutdown to allow refurbishment of the slow CRDMs. At the end of the inspection period the Unit was in cold shutdown with the loops dropped. The licensee plans to refurbish nine CRDMs during the outage. The inspectors will follow the licensee's repair efforts during the next monthly inspection period.

f. Control of Scheduled Work

The inspectors noted that the operations shift manager had rejected work orders (WO) on March 30, 1995, for concurrence of work scheduled for the following Monday (April 3, 1995). One work order was for lubrication of the Unit #1 turbine driven emergency feedwater pump (WO 9501518-01, PM Lube: U1 TDEFWP And Turbine) and two others (WO 95026645-01, PM: 16 CYL Diesel Engine, and WO 95026646-01, PM: 12 Cyl Diesel Engine) involved preventive maintenance that required taking the standby shutdown facility (SSF) diesel generator out of service. The SSF generator is the power supply for the auxiliary service water pumps.

Although simultaneous removal of the equipment was allowed by TS, the shift manager's decision was based on his awareness of a Probabilistic Risk Assessment (PRA) that concluded the proposed configuration would put the plant in a high risk situation by the

elimination of two sources of emergency feedwater to the Unit 1 steam generators at the same time. The shift manager's decision was conservative since the PRA program had not been implemented at that time.

Within the areas reviewed, one violation was identified.

3. Maintenance and Surveillance Testing (62703 and 61726)

- a. Maintenance activities were observed and/or reviewed during the reporting period to verify that work was performed by qualified personnel and that approved procedures adequately described work that was not within the skill of the craft. Activities, procedures, and work orders (WO) were examined to verify that proper authorization and clearance to begin work were given, cleanliness was maintained, exposure was controlled, equipment was properly returned to service, and limiting conditions for operation were met.

Maintenance activities observed or reviewed in whole or in part are as follows:

- (1) Calibrate Reactor Protection System (RPS) Feedwater Pump (FDWP) Discharge Pressure Switches, Work Order 95005657

The inspectors witnessed calibration of the Unit 2 RPS FDWP Discharge Pressure Switches. The activity was performed in accordance with IP/O/A/0305/009, RPS Channel A Main Feedwater Pumps and Main Turbine Trips Calibration. The calibration was on an increased schedule, biweekly, due to drifts in the setpoints associated with the Static-O-Ring pressure switches.

The unit pressure switches were replaced with a different model of the Static-O-Ring switch. However, the new switches have not performed well and the licensee is evaluating their replacement.

The inspector determined the calibration activity was performed to acceptable standards.

- (2) Perform Preventive Maintenance On Condenser Circulating Water (CCW) Pump Motor 1C, Work Order 95027249

On April 17, 1995, the inspectors observed activities during the performance of preventive maintenance on the 1C CCW pump. The work instructions involved implementation of maintenance procedures MP/O/A/1840/040, Pumps-Motors-Miscellaneous Components, and MP/O/B/1300/037, Motor-CCW-Lubrication and Inspection. In addition, electrical tag-outs OPS-95-0693-1, 1C CCW Pump Breaker, and OPS-95-0693-6,

1C CCW Pump Motor Heater Breaker, were reviewed as part of the work package.

The inspectors noted that the completed steps in procedure MP/O/B/1300/037, had not been initialed. The procedure was required to be in use and the steps were to be initialed as they were accomplished. The inspectors questioned the craftsmen and were informed that the missed initials were an oversight. As a result, the completed steps were then initialed by the craftsmen.

The licensee performed an investigation of the event and took appropriate corrective actions, which included counselling the individuals involved. In addition, expectations for verbatim procedure compliance were stressed in maintenance team meetings. The inspectors consider the corrective actions to be appropriate for the circumstances.

The CCW pump motors are not presently classified as safety-related, but the licensee has committed to a future upgrade of the pump motors to a safety-related classification and to perform maintenance activities per safety-related procedures.

- (3) 3C Low Pressure Injection (LPI) Pump Vent Line Replacement, Work Order 95030288

Due to minor leaks in the weld area, the vent line for the 3C LPI Pump was replaced. The inspectors verified that the replacement flexible hose (stainless steel), welding rods, and work procedures were of the appropriate Quality Assurance classification. The inspectors concluded that procedural compliance for this activity was good. All activities observed were satisfactory.

- (4) Replace Capacitor Coupled Voltage Transformers (CCVTs) on 230KV Red Bus, Work Order 94062794

The CCVTs were replaced on the 230KV switchyard red bus per NSM-52950. The inspectors verified that appropriate precautions were taken to prevent an inadvertent red bus lockout. The inspectors verified that procedures were in place and were being followed. All activities observed were satisfactory.

- (5) Repair Seat Leak on Low Pressure Service Water (LPSW) Valve 304, Work Order 95031118

The inspectors reviewed the work request and observed work activities in progress associated with this corrective maintenance activity. The activity consisted of replacing the old globe valve installed in the system with a new globe

valve. The inspectors verified that procedures were in place and were being followed. The inspectors noted that the maintenance activity was well coordinated between operations and maintenance personnel and that the valve replacement was accomplished in an efficient and expedient manner. No discrepancies were noted.

- b. The inspectors observed surveillance activities to ensure they were conducted with approved procedures and in accordance with site directives. The inspectors reviewed surveillance performance, as well as system alignments and restorations. The inspectors assessed the licensee's disposition of any discrepancies which were identified during the surveillance.

Surveillance activities observed or reviewed in whole or in part are as follows:

- (1) Unit 3 Control Rod Movement, PT/3/A/600/15

The inspector witnessed the monthly performance test of the Unit 3 control rods. All equipment operated as expected. Operator communication and procedural compliance were good.

- (2) Control of Control Rod Drive Trip Time Testing, PT/0/A/0300/01

The inspectors monitored this surveillance activity conducted on April 27, 1995, during the Unit 1 shutdown to perform control rod drive trip time testing. The test was performed when reactor power was below 2 percent with all control rods fully withdrawn. The test consisted of manually tripping the control rods and determining rod drop times using the operator aid computer and the events recorder. The inspectors monitored the test in progress and reviewed the test results. The test identified that five control rods exceeded the Technical Specification required trip time of 1.66 seconds or less. The slowest rod dropped in 2.084 seconds as recorded on the events recorder. Based on the test results, the licensee initiated a reactor cooldown to cold shutdown to commence a control rod drive mechanism refurbishment outage.

Within the areas reviewed, licensee activities were satisfactory.

4. Onsite Engineering (37551 and 40500)

During the inspection period, the inspectors assessed the effectiveness of the onsite design and engineering processes by reviewing engineering evaluations, operability determinations, modification packages and other areas involving the Engineering Department.

a. Oconee Emergency Power Upgrade Project

Keowee Hydro Station was designed, constructed, and maintained to hydroelectric standards. The hydro station was not originally under the Nuclear Generation Department management and documentation and programmatic controls have not been consistent with nuclear industry standards. Over the years several events and internal/external assessments resulted in a growing list of commitment items. These included the May 15, 1992, Self-Initiated Technical Audit (SITA), October 1992 Loss of Offsite Power Event, Electrical Distribution System Functional Inspection, and the Design Basis Document (DBD) review program. In order to manage the list of commitment items, the licensee initiated the Oconee Emergency Power Upgrade Project. On September 29, 1994, the licensee presented their plans for this project to NRC Region II management.

The upgrade project provides for the engineering analyses, procedure upgrades, maintenance program development, and configuration documentation/upgrade for the Keowee Hydro Station and the Emergency Power Path of Oconee Nuclear Station. The licensee stated that this project will fully incorporate Keowee into the Oconee nuclear maintenance program and satisfy all open commitment items. The project is scheduled for completion no later than January 1996.

b. Review of SITA Items

During the inspection period, the inspectors confirmed that all NRC open items related to Oconee emergency power were addressed by the Emergency Power Upgrade Project. Additionally, the inspectors reviewed the status of the May 15, 1992, SITA. The inspectors noted that there were 86 SITA items (findings, followups, and document discrepancies) that required a written response with proposed corrective action to Duke's Quality Verification group in Charlotte. Thirty of these SITA items remained to be completed by Oconee. The inspectors reviewed the 30 open SITA items to determine if they were being appropriately dispositioned. The inspectors verified that all 30 open items were included in either the Emergency Power Upgrade Program or the Problem Investigation Process. A detailed review of several of the SITA items was conducted to determine the adequacy of the licensee's response. The results of this review were as follows:

- (1) SITA item 3.1.4-1, "The Keowee Station has not been Analyzed for Flooding" (Emergency Power Upgrade Project Item #26)

The SITA auditors identified a finding where the Keowee units could be incapacitated due to internal flooding. The source of flooding was listed as a break in the service water line, a fire hose or the drinking water system. The recommended corrective action from the audit team was to

assess the effect of flooding on the Keowee units. Oconee's response to this finding was that no flood analysis for the Keowee units was necessary. The basis for this position was that, according to the Oconee licensing basis, the flood does not occur simultaneously with nor subsequent to any other accident condition. Therefore if internal flooding rendered both Keowee units inoperable, the appropriate Technical Specification would be entered. The inspectors confirmed that the Oconee licensing basis does not postulate any mechanical passive failures coincident with, or subsequent to, a loss of offsite power (LOOP). The inspectors concluded that the licensee's position on this item was acceptable.

- (2) SITA item 3.8-1, "Problems Associated with the Integrated Systems Analysis (ISA) Report 81-04" (Emergency power upgrade project Item #30)

This finding was due to perceived problems associated with ISA Report 81-04. This report assessed the ability of the station to perform ten basic shutdown functions following a seismic event. The finding stated that basic assumptions in this report that certain initiating events were outside the licensing basis were incorrect. The Oconee site response was that this ISA Report does not represent a licensing or design basis document. Accordingly, the inspectors verified that ISA Report 81-04 was not intended to be used as a reference by licensee personnel.

Within the areas reviewed, licensee activities were satisfactory.

5. Plant Support (71750 and 40500)

a. Fire Protection

During the course of normal tours, the inspectors routinely examined facets of the licensee's fire protection plan. The inspectors reviewed transient fire loads, flammable materials storage, housekeeping, control of hazardous chemicals, ignition source/fire risk reduction efforts, and fire barriers.

b. Physical Protection

During this inspection, the inspectors toured the protected area and noted that the perimeter fence was intact and not compromised by erosion or disrepair. Isolation zones were maintained and were clear of objects which could shield or conceal an individual.

The inspectors observed that personnel and packages entering the protected area were searched either by special purpose detectors or by a physical patdown for firearms, explosives, and contraband. The processing and escorting of visitors was observed.

c. Radiological Protection Program

Radiation protection control activities were observed to verify that these activities were in conformance with the facility policies and procedures, and in compliance with regulatory requirements. These observations included:

- Entry to and exit from contaminated areas, including stepoff pad conditions and disposal of contaminated clothing
- Area postings and controls
- Work activity within radiation, high radiation, and contaminated areas
- Radiation Control Area (RCA) exiting practices
- Proper wearing of personnel monitoring equipment, protective clothing, and respirator equipment

d. Licensee Self-Assessment

On April 19, 1995, the inspectors attended the licensee's Corrective Action Continuous Improvement Team (CACIT) meeting. The meeting addressed the program status and implementation of corrective actions, performance goals, trend reviews, and effectiveness. Site senior management participated in the meeting and informed the committee that the number of overdue items were expected to be reduced to zero within the near future.

On April 20, 1995, the inspectors attended a Plant Operations Review Committee (PORC) meeting. The principal topic of the meeting was the slow rod drop times during the April 14, 1995, Unit 2 trip, and the implications for Unit 1. As discussed in paragraph 2.e above, the licensee decided to shut down Unit 1 in order to measure the control rod drop times. The inspectors concluded that the PORC encouraged an open discussion of the issues involved, with a proper focus on safety.

Within the areas reviewed, licensee activities were satisfactory.

6. Inspection of Open Items (92901, 92902 and 92903)

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

a. (Closed) Unresolved Item 50-270/95-03-03, Valve Configuration

This issue involved a mispositioned Unit 2 valve in the CCW system (2CCW-110) that was discovered on March 23, 1995. The valve had been closed for a hydrostatic leak test and was not reopened at

the completion of the test on November 4, 1994. The licensee had relied on a system realignment to return the valve to the required open position. However, the system realignment had been performed prior to completion of the hydrostatic test and the valve was not returned to its open position. This event was described as similar to an event discovered on August 15, 1994, when the licensee had found comparable valves misaligned in the CCW System on Units 1 and 3. The licensee had relied on a system realignment after a hydrostatic test to restore the valves to their required position. Again, the system had already been realigned prior to completion of the testing activities.

Corrective actions taken by the licensee as a result of the valve configuration problems identified on August 15, 1994, were implemented on March 14, 1995. This included change 26 to MP/O/A/1720/010, System/Component Hydrostatic Test Controlling Procedure, to require a listing of each component to ensure proper system realignment after completion of hydrostatic testing. Since the licensee identified the second occurrence and it was prior to implementation of actions designed to prevent recurrence of the previous event, associated corrective actions were determined by the inspectors to be acceptable. This item is closed.

b. (Closed) Unresolved Item 269,270,287/94-16-03, Engineered Safeguards Wiring Discrepancies

This item involved a design deficiency associated with the Engineered Safeguards cabinets. During post-modification testing conducted on Unit 1 during a scheduled refueling outage, the licensee identified that the manual control relays inside the engineered safeguards (ES) unit control modules were connected to the instrument ground system. The electrical circuit for manual control after an ES actuation are dependent on the instrument ground system, through the station ground system and the KRA regulated power panelboard neutral conductor, to the 120 volt vital power inverters neutral conductor. The instrument ground system, station ground system, and regulated power supply system are not considered safety-related. The electrical circuit relied on a common electrical cable in several locations to maintain an electrical circuit for manual control of ES components following an ES actuation.

The licensee modified the Unit 1 circuitry during the refueling outage and performed an operability evaluation on the Unit 2 and 3 ES systems. The operability evaluation determined that the ES systems were operable based on the fact that the grounding systems were passive and no credible single failure could be postulated for any design basis events. The inspectors verified that the Unit 2 and 3 ES systems were subsequently modified to correct the design deficiency. Unit 2 was corrected by Minor Modification 6710 and Unit 3 was corrected by Minor Modification 6711. Based on these actions, this item is closed.

7. Exit Interview

The inspection scope and findings were summarized on May 8, 1995, 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>Status</u>	<u>Description and Reference</u>
Violation 269,270, 287/95-06-01	Open	Inadequate Corrective Action for Control of Keowee Operating Limits (paragraph 2.d).
Unresolved Item 270/95-03-03	Closed	Valve Configuration (paragraph 6.a).
Unresolved Item 269,270,287/94-16-03	Closed	Engineered Safeguards Wiring Discrepancies (paragraph 6.b).