May 8, 1986

ENCLOSURE

APPENDIX TO SOUTH CAROLINA

ELECTRIC AND GAS COMPANY

V. C. SUMMER PLANT

SALP BOARD REPORT NO. 50-395/85-47

(DATED MARCH 12, 1986)

Enclosure

I. Meeting Summary

A. A meeting was held on March 18, 1986, at South Carolina Electric and Gas Company's Columbia, South Carolina, corporate office to discuss the SALP Board Report for the V. C. Summer facility.

B. Licensee Attendees:

J. A. Warren, Vice-Chairman and Chief Executive Officer
T. C. Nichols, Jr., President and Chief Operating Officer
E. H. Crews, Jr., Executive Vice President
D. A. Nauman, Vice President, Nuclear Operations
W. C. Mescher, President and Chief Executive Officer, Santee Cooper
William A. Williams, Jr., Special Assistant, Nuclear Operations, Santee Cooper
O. S. Bradham, Director, Nuclear Plant Operations
Dave Moore, Director, Quality and Procurement Services
John Connelly, Director, Nuclear Services
K. W. Nettles, Group Manager, Technical Services
D. A. Lavigne, Manager, Materials and Procurement
A. M. Paglia, Jr., Manager, Nuclear Licensing
H. T. Babb, Group Manager, Nuclear Engineering and Training
W. R. Baehr, Manager, Corporate Health Physics and Environmental Programs
F. J. Leach, Manager, Quality Assurance
S. R. Hunt, Manager, Nuclear Quality Control
R. M. McSwain, Manager, Media and Consumer Information
R. B. Whorton, Associate Manager, Licensing Systems

C. NRC Attendees:

R. D. Walker, Acting Deputy Regional Administrator, Region II (RII)
H. C. Dance, Chief, Reactor Projects Section 2B, RII
J. B. Hopkins, Project Manager, NRR
R. L. Prevatte, Senior Resident Inspector, Summer
P. C. Hopkins, Resident Inspector, Summer

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II. Errata Sheet - Summer SALP

Page	Line	Now Reads	Should Read
4	10	. . . September 1985. This inspection revealed degradation of management control in areas that included the lack of attention to nuclear system operating conditions, outdated and poorly controlled procedures, inadequate methods of tracking equipment status involving limiting conditions of operation, and a generally relaxed attitude toward procedure compliance.	. . . September 1985. This inspection revealed that the licensee was addressing the following four areas to correct this trend: procedure compliance, attention to detail, training, and overall attitude. Additionally, the inspectors noted an inadequacy in tracking of technical specifications required action statements, feedwater control problems during startup, minimum operator log entries regarding plant status, improved housekeeping needed in the control room, and not specifically addressing the root cause of an event. Twelve violations . . .

Basis for Change: To clarify the findings of the September 1985 inspection.

17	9	. . . selected valves; 100 percent eddy current testing of steam generator tubes; and three year . . .	. . . selected valves; selected eddy current testing of steam generator tubes; and three year . . .

Basis for Change: To correct the scope of the eddy current testing during the first refueling outage.

17	22	. . . rotopeening and 100 percent inspection of steam generator tubes, . . .	. . . rotopeening and 100 percent inspection of the hot leg tube sheet area of all three steam generators, sludge lancing and . . .

Basis for Change: To correct the scope of the eddy current testing during the second refueling outage.

IV. PERFORMANCE ANALYSIS

A. Plant Operations

1. Analysis

During the evaluation period, routine inspections were performed by the resident and regional staffs. The licensee's performance in the areas of housekeeping, control room behavior and discipline was satisfactory. The plant overall cleanliness was commendable. Operational staffing of key positions with knowledgeable personnel was considered adequate.

Personnel errors noted in the previous SALP continued to plague plant operations. A series of problems, violations, and the concern that a negative trend might be developing led to a special inspection in September 1985. This inspection revealed degradation of management control in areas that included the lack of attention to nuclear system operating conditions, outdated and poorly controlled procedures, inadequate methods of tracking equipment status involving limiting conditions of operation, and a generally relaxed attitude toward procedure compliance. Twelve violations were identified in four separate categories. These are violations of plant operational limits as noted in (a), (e) (h), and (k) below, safety related administrative requirements as noted in (b), (d), (f), (j), and (l) below, failure of operations personnel to maintain an awareness of plant status as noted in (b), (c), (f), (i), (j), and (k) below, inadequate procedures as noted in (g) below, and failure to follow procedures as noted in (i) below. Violations (f) and (g) below were issued because of the February 28, 1985 positive rate reactor trip incident which is discussed in Section K. An enforcement conference was held in Region II on October 8, 1985, to discuss the events associated with violation (a) below. A Civil Penalty was subsequently issued on January 6, 1986, and the licensee's response dated February 5, 1986, addressed the issues. Long term programmatic changes are still being reviewed.

To improve plant operations and address the above concerns, the licensee implemented changes to provide improved control over plant operations. These included assignment of a Duty Operations Manager to provide oversight and assistance during plant startup and shutdown; the addition of a seventh shift supervisor to provide administrative assistance to the duty shift supervisor; a control room enhancement program to provide a more professional atmosphere; and a team building program to improve communications and provide for identification and resolution of operations problems. Many of these changes are recent and insufficient time has elapsed to evaluate their overall impact on plant operations.

See Errata Sheet

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Twelve violations were identified in four separate categories. These are violations of plant operational limits as noted in (a), (e) (h), and (k) below, safety related administrative requirements as noted in (b), (d), (f), (j), and (l) below, failure of operations personnel to maintain an awareness of plant status as noted in (b), (c), (f), (i), (j), and (k) below, inadequate procedures as noted in (g) below, and failure to follow procedures as noted in (i) below. Violations (f) and (g) below were issued because of the February 28, 1985 positive rate reactor trip incident which is discussed in Section K. An enforcement conference was held in Region II on October 8, 1985, to discuss the events associated with violation (a) below. A Civil Penalty was subsequently issued on January 6, 1986, and the licensee's response dated February 5, 1986, addressed the issues. Long term programmatic changes are still being reviewed.

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H. Outages

1. Analysis

During the evaluation period, inspections were performed by the resident and regional staffs. Refueling activities observed from the control room, refueling floor, and spent fuel pool were found to be satisfactory.

The licensee commenced the first refueling outage on September 28, 1984. Major activities accomplished during the 83 day outage were completion of the TMI and Licensing Conditions modifications; inspection and maintenance of the main turbine, main generator rotor, and selected valves; 100 percent eddy current testing of steam generator tubes; and three year maintenance on reactor coolant pumps "A" and "B" seals. The activities associated with refueling occurred without major problems. Some problems were incurred during the outage with scheduling and interface conflicts. As a result, licensee management established an extensive "lessons learned" program with an action item list that required tracking and responses from affected areas.

The plant commenced the second refueling outage on October 5, 1985. This third fuel loading placed the core in an 18 month fuel cycle. Major work accomplished during this 72 day outage included changes to the condensate system to provide constant speed pumps and flow control valves, main turbine five year inspection, rotopeening and 100 percent inspection of steam generator tubes, sludge lancing and internal inspection of the steam generator secondary side, modifications to the isophase bus duct, removal of the boron injection tank, equipment upgrades for environmental qualification, and Appendix R modifications.

The licensee has strengthened the planning and scheduling group by adding SRO, HP, and administrative staff personnel to assist in scheduling. These changes significantly improved the interface between operations, maintenance, and health physics.

The second refueling outage demonstrated that management attention directed toward preventing problems that occurred in the first outage was successful. This outage showed good preplanning, coordination and prior training for the activities that were accomplished. The startup, low power physics testing, and power ascension after the outage was closely monitored by the staff and licensee management. The deliberate and methodical startup without problems was indicative of good management control.

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III. Licensee Comments

Licensee comments submitted in response to the V. C. Summer SALP Board Report follow: