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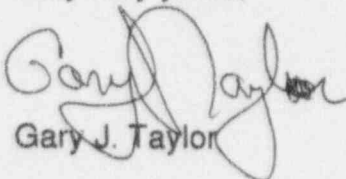
Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
REPLY TO NOTICE OF VIOLATION
NRC INSPECTION REPORT 97-03

Attached is the South Carolina Electric & Gas Company (SCE&G) response to the Notice of Violation delineated in NRC Inspection Report No. 50-395/97-03. SCE&G is in agreement with the violations and the enclosed response addresses the reasons and corrective actions being taken to prevent recurrence.

Should you have any questions, please call at your convenience.

Very truly yours,


Gary J. Taylor

cjm
Attachments

c:	J. L. Skolds	R. R. Mahan (w/o Attachment)
	L. A. Reyes	W. F. Conway
	A. R. Johnson	R. J. White
	NRC Resident Inspector	J. B. Knotts, Jr.
	S. F. Fipps	NSRC
	R. B. Clary	RTS (IE 970301 & IE 970303)
	Paulette Ledbetter	File (815.01)
		DMS (RC-97-0131)

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NUCLEAR EXCELLENCE - A SUMMER TRADITION!

ATTACHMENT I
REPLY TO NOTICE OF VIOLATION "A"
NUMBER 50-395/97003-03

I. RESTATEMENT OF NRC VIOLATION

Technical Specification (TS) 6.8.1.a requires that written procedures shall be established, implemented and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Paragraph 3.f.(3), of Appendix A to Regulatory Guide 1.33, states that the licensee should have instructions for the containment ventilation system.

System Operating Procedure (SOP) - 114, "Reactor Building Ventilation System," Revision 15, Section N, "Reactor Building Normal Pressure Control," Step 2.2 requires that valves PVG-6056 and PVG-6057 be opened to increase reactor building pressure.

Contrary to the above, on April 13, 1997, SOP-114 was not implemented to increase the reactor building pressure. Instead of opening the reactor building alternate purge supply isolation valves, PVG-6056 and PVG-6057, the operator opened the containment purge exhaust isolation valves, PVG-6066 and PVG-6067. This resulted in a reduction of reactor building pressure rather than an increase.

II. STATEMENT OF POSITION

South Carolina Electric & Gas Company (SCE&G) is in agreement with the violation as stated above.

III. REASON FOR THE VIOLATION

The correct procedure was being used by the operator during the April 13, 1997 event; however, self checking was not properly applied to ensure that the correct components were operated and that the intended result was achieved. It appears that the operator's inattention to detail resulted in performance of the wrong step in procedure SOP-114. Instructions for valve operation in either the supply or exhaust mode of ventilation operation are on the same (but opposite ends) page of the procedure.

IV. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

The slow decrease in Reactor Building pressure was observed by a control room operator approximately 25 minutes after the alignment error. The incorrect valve alignment was corrected at that time and the Reactor Building pressure was returned to its correct value. Technical Specification limits were not exceeded during the period.

V. CORRECTIVE ACTIONS TAKEN TO AVOID FURTHER VIOLATIONS

SCE&G initiated the following corrective actions in response to this event:

- The operator that made the valve alignment error on April 13 was counseled by management on his inattention to detail during the performance of SOP-114. This action was completed immediately after the procedure performance error.
- Caution tags have been temporarily placed on the containment purge exhaust isolation valve switches to prevent their inadvertent operation while additional changes to their operation at power are under consideration by management.
- Procedure SOP-114 is being revised to show a clear demarcation between the purge supply and exhaust sections.

VI. DATE FULL COMPLIANCE WILL BE ACHIEVED

SCE&G will be in full compliance by October 1, 1997.

ATTACHMENT II
REPLY TO NOTICE OF VIOLATION "B"
NUMBER 97003-01

I. RESTATEMENT OF NRC VIOLATION

10 CFR 50 Appendix B, Criterion V, Instructions, Procedures, and Drawings, and the Licensee's accepted Quality Assurance Program, "Operational Quality Assurance Plan," Section 4, "Procedures," require that activities affecting quality be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to the above, while performing activities affecting quality the licensee failed to prescribe documented procedures of a type appropriate to the circumstances as evidenced by the following examples:

1. On April 26, 1997, the licensee failed to establish operating procedures that would enable operators to maintain adequate control of Steam Generator (SG) levels. This contributed to a SG reaching the high-high SG level setpoint which caused a turbine trip.
2. On April 26, 1997, the licensee failed to establish an operating procedure that provided adequate operating instructions for response to a turbine trip. This contributed to an automatic reactor trip on low-low SG level.

II. STATEMENT OF POSITION

South Carolina Electric and Gas Company (SCE&G) is in agreement with the violation as stated.

III. REASON FOR THE VIOLATION

The procedural guidance contained in General Operating Procedure (GOP) -4, "Power Operation (Mode 1)," utilized by operations personnel, failed to specifically account for uncertainties associated with the use of main control board indication to ensure an adequate differential pressure (delta-p) was being maintained while in manual control. The feedwater control system design requires a combination of pump speed control for adequate delta-p and control

valve position in order to maintain proper feedwater flow control. The operator's actions to maintain delta-p at the program setting resulted in the feedwater flow control valves (FRVs) being driven to their full-open position. With the FRVs driven full open, they were unable to quickly respond in automatic to the increased feedwater flow resulting from an adjustment in feedwater delta-p.

Following the receipt of the turbine trip, operators utilized Abnormal Operating Procedure (AOP) -214.1, "Turbine Trip," for recovery. Although guidance is given which would account for a feedwater isolation scenario, the instructions failed to emphasize the time critical factors for feedwater flow control recovery. Subsequent operator actions failed to consider critical aspects of the feedwater isolation (P-14) which occurred due to high-high SG level, in time to prevent the reactor trip.

IV. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

- The response of the plant to the feedwater isolation (P-14) signal was verified to be per design.
- The calibration of the feed and steam pressure indications used for manual control of feedwater pump delta-p on the main control board was verified to be correct.
- Discussions were held with operations personnel to confirm their understanding of the need to maintain feedwater delta-p at an approximately 150# setting during manual operation. A successful plant startup was conducted on April 28, 1997.

V. CORRECTIVE ACTIONS TAKEN TO AVOID FURTHER VIOLATIONS

SCE&G initiated the following corrective actions in response to this event:

- Procedure changes will be made to GOP-4 to more clearly specify the feedwater delta-p requirements during initial power escalation. GOP-4 will be revised and simulator validation completed to include these requirements by the end of Refueling Outage 10, scheduled to begin in October 1997.

- Procedure changes will be made to AOP-214.1 to provide the operator with additional guidance for response to a potential feedwater isolation as the result of a turbine trip due to Hi-Hi SG Lvl. AOP-214.1 will be revised and simulator validation completed to include this guidance by the end of Refueling Outage 10, scheduled to begin in October 1997.
- Scenarios utilizing lessons learned from this event will be included in operator training. This action has been scheduled for implementation during the current licensed operator requalification cycle, to be completed by July 25, 1997. Additional training needs identified by the procedure changes above will be completed as part of the respective procedure change.

VI. DATE FULL COMPLIANCE WILL BE ACHIEVED

SCE&G will be in full compliance by the end of Refueling Outage 10, scheduled to begin in October 1997.