



South Carolina Electric & Gas Company
P.O. Box 88
Jenkinville, SC 29066
(803) 345-4040

John L. Skolds
Vice President
Nuclear Operations

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Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT 92-10

Attached is the South Carolina Electric & Gas Company (SCE&G) response to the two violations delineated in NRC Inspection Report No. 50-395/92-10.

Should you have any questions, please contact Mr. Charles McKinney at (803) 345-4723.

Very truly yours,

John L. Skolds

cjm
Attachment

c: O. W. Dixon
R. R. Mahan
R. J. White
S. D. Ebneter
General Managers
L. D. Shea
NRC Resident Inspector
J. B. Knotts Jr.
J. W. Flitter
NSRC
RTS (IE 921001 & IE 921002)
File (815.01)

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RESPONSE TO NOTICE OF VIOLATION
VIOLATION NUMBER 50-395/92-10-01

I. RESTATEMENT OF VIOLATION

Technical Specification 6.8 1.a requires that written procedures be established, implemented and maintained covering the applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2. Technical Specifications 6.8.1.b requires that written procedures be established, implemented and maintained covering surveillance and test activities of safety-related equipment control and area radiation monitoring system operation. Paragraph 2.2.2 of Station Administrative Procedure, SAP-205, "Status Control and Removal and Restoration", requires the implementation of a "Removal and Restoration Checksheet" anytime a system that is required to be operable, is found to be inoperable or made inoperable. Health Physics Procedure, HPP-904, "Use of the Radiation Monitoring System," provides instructions for control of radiation monitoring system setpoints, provides actual setpoint values and instructions for maintaining the correct setpoints.

Contrary to the above:

On May 3, 1992, actions were taken which defeated the degraded voltage protection for a 7.2 KV emergency bus which is required by Technical Specification 3.3.2 and applicable actions required by SAP-205 were not implemented for this inoperable train of an emergency safety feature actuation system.

On May 1, 1992, procedure HPP-904 was determined to be inadequate in that it failed to provide sufficient instructions or guidance for making adjustments to the radiation monitor setpoints. This resulted in an incorrect adjustment of the reactor building high range radiation monitors RM-G7 and RM-G18. The monitors were inoperable for two days before this condition was identified.

II. REASONS FOR THE VIOLATION

Example 1 - The violation resulted from a failure to understand the effects of removing power from the degraded voltage protective relay (DVR). SCE&G personnel reviewing the relay logic drawing failed to observe a general note that indicated that the "shelf state" (control power removed) of the recently upgraded DVRs would be opposite that shown on the drawing. The note was not conspicuous and reviewing personnel assumed the logic to be similar to other installed relays.

Operations personnel believed that removal of the fuse caused the contacts to be in the tripped condition and that with a valid degraded voltage condition the three out of three actuation logic would have been completed. Due to this assumption, the removal and restoration (R&R) checksheet (SAP-205) generated at the time did not consider the function of the protection relays to be inoperable.

Example 2: The violation resulted from an inadequate Health Physics (HP) procedure. HPP-904 was inadequate in that it failed to address responsibilities for adjustment of setpoints for the various monitors utilized at the Virgil C. Summer Nuclear Station (VCSNS).

When operations personnel requested that HP change the alarm setpoint log book, the HP Technician updated the book and then adjusted what he thought was the setpoint adjustment on the monitor. The technician was not aware of the difference in adjustments required for the Victoreen and NMC monitors utilized at the plant; therefore, he did not realize that with the internal adjustment required for the Victoreen monitor, I&C should be contacted to change the setpoint. The adjustment of the front panel meter zero changed the monitor indication but had no impact on the conservative setpoint.

III. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

Example 1: As noted in the NRC Inspection Report, during testing of a replacement relay on May 4, 1992, SCE&G recognized the difference in the logic and that actions taken on the previous day had defeated the degraded voltage protection for bus 1DA. Plant personnel replaced the defective relay and returned the protection function to an operable condition at 1830 hours on May 4. The function was inoperable for a total of 32.7 hours, which was within timeframes allowed by Technical Specifications.

Design Engineering performed a review of the relay function and considers the design to be adequate; in addition, it meets the single failure criteria for the plant design. The single failure criteria for the associated A or B bus allows one diesel generator and one bus to be inoperable while maintaining the design integrity of the safety system.

Example 2: As noted in the NRC Inspection Report, a review of the status of setpoints on May 3, 1992, determined that the actual alarm setpoints for the high range radiation monitors had not been changed on May 1 from the original setting of one R/hr to two R/hr. The monitors were declared inoperable and re-calibrated for one correct setpoints and front panel indication.

IV. CORRECTIVE ACTIONS TAKEN TO AVOID FURTHER VIOLATIONS

Example 1: Since the initial purchase of the relays and their installation at VCSNS in 1991, the manufacturer now provides an option for DC control power indication. This option is now being specified by SCE&G when ordering replacement relays for the plant. The new style relay will replace the currently installed DVRs through normal attrition. This feature will provide a visible indication on the availability of control power.

In addition to the above:

1. The electrical elementary drawings for the DVRs were revised and now provide a specific note on the degraded voltage relay contacts to indicate that the logic is shown with control power applied. This revision, as issued on July 13, 1992, clearly indicates the relay logic.
2. The operating experience information contained in this violation response will be placed in the required reading for Operations personnel by August 15, 1992.

Example 2: The following additional corrective actions are being taken:

1. MPP-904 was revised on May 21, 1992, to clearly designate which groups are responsible for adjustment of individual radiation monitor setpoints.
2. Plant personnel designated to perform an incident investigation of this violation are currently developing a report of the incident. This operating experience information will be placed in the required reading for Operations, I&C, and Health Physics personnel to emphasize the need for self checking and communication skills during the performance of tasks.

V. DATE FULL COMPLIANCE WILL BE ACHIEVED

Example 1: SCE&G will be in full compliance by August 15, 1992.

Example 2: SCE&G will be in full compliance by November 1, 1992.

RESPONSE TO NOTICE OF VIOLATION
VIOLATION NUMBER 50-395/92-10-02

I. RESTATEMENT OF VIOLATION

10 CFR, Appendix B, Criteria V, requires that activities affecting quality shall 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. General Maintenance Procedure GMP-100.005, Instrument and Controls General Maintenance Procedure, paragraph 3.5 requires obtaining an approved copy of the technical manual if further information is required.

Contrary to the above:

On May 20, 1992, maintenance personnel failed to reference the technical manual for replacement of a power supply in the power range neutron detector drawer. This resulted in a spike on a portion of the 120 volt instrumentation power system and caused a reactor trip.

II. REASON FOR THE VIOLATION

The failure to utilize the available technical information during the repair of the power supply in the power range neutron detector drawer is attributed to personnel error on the part of the I&C technicians. Replacement of the defective power supply module did not appear to be a complicated repair activity; therefore, the technicians did not review the precautions and component removal guidance contained in the technical manual.

III. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

Management has emphasized to I&C personnel the importance of using repair information contained in technical manuals, verifying whether equipment is de-energized, and work safety practices during the performance of their work. This action was completed on June 1, 1992.

IV. CORRECTIVE ACTIONS TAKEN TO AVOID FURTHER VIOLATIONS

The following actions have been initiated to avoid the occurrence of similar violations:

1. The generic maintenance and troubleshooting procedure (GMP-100.005) used by I&C is lacking clear and concise guidance. This deficiency will be corrected by August 1, 1992.

2. Additional troubleshooting and repair procedures will be developed for critical components to provide more specific guidance. Information contained in these procedures will be designed to reduce the reliance on vendor information. This action will be complete by January 1, 1993.
3. Enhancements to the craft training program in the areas of troubleshooting and repair techniques will be implemented. The review of this program and initiation of improvements will be completed by January 1, 1993.

V. DATE FULL COMPLIANCE WILL BE ACHIEVED

Full compliance will be achieved by January 1, 1993.