SCE&G
An SCANA Company

South Carolina Electric & Gas Company
P.O. Box 88
Jenkinsville, SC 29065
(803) 345-4040

John L. Skolds
Vice President
Nuclear Operations

March 25, 1993
Refer to: RC-93-0076

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
NRC INSPECTION REPORT NO. 50-395/93-03

Attached is the South Carolina Electric & Gas Company (SCE&G) response to the violation delineated in NRC Inspection Report No. 50-395/93-03.

SCE&G is not in agreement with violation 92-03-02. The basis for this disagreement is contained with the attached replay.

If you should have any questions, please call at your convenience.

Very truly yours,

John L. Skolds

RKM:lcd
Attachment

c: O. W. Dixon (w/o Attachment)
R. R. Mahan (w/o Attachment)
R. J. White
S. D. Ebneter
L. D. Shealy
NRC Resident Inspector
J. B. Knotts Jr.
J. W. Flitter
NSRC
CFS
RTS (IE 930302)
File (815.01)

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RESPONSE TO NOTICE OF VIOLATION
NUMBER 50-395/93-03-02

I. RESTATEMENT OF VIOLATION

Technical Specifications (T/S) 6.8.1.c requires that written procedures be established, implemented and maintained covering surveillance and test activities of safety-related equipment. Paragraph 4.4.7 of the Operational Quality Assurance Plan states that written test procedures shall include test methods and any special test equipment or calibrations required to conduct the test.

Contrary to the above:

On January 26 and 27, 1993, relays in safety-related switchgear 1DB1 and 1DB2 were tested without written procedures which addressed the connection of related test equipment to the switchgear. Jumpers were used to provide the 120 VDC power supply from the switchgear to the test equipment; however, the relay testing procedure did not provide any work instructions involving the switchgear.

II. SCE&G POSITION ON THE VIOLATION

SCE&G denies the violation as stated above.

III. BASIS FOR SCE&G POSITION

SCE&G Relay Department personnel use the 190 series of the electrical maintenance procedures to perform testing on safety-related switchgear relays. These procedures meet the requirements of T/S 6.8.1.c, as they have been established, implemented and maintained to cover surveillance and test activities of this safety-related equipment. These procedures meet the requirements of paragraph 4.4.7 of the Operational QA Plan, as they contain a description of the test objectives, the acceptance criteria, the prerequisites for performing the test, and include special test equipment or calibrations required to conduct the test. Therefore, SCE&G does not consider this as a failure to establish procedures as required by the previously mentioned technical specification or the Operational QA Plan.

Regulatory Guide (RG) 1.33 (Appendix A, Section 9) states "Skills normally possessed by qualified maintenance personnel may not require detailed step-by-step delineation in a procedure". As stated in the VCSNS FSAR, SCE&G's Operational QA Plan complies with the recommendations of RG 1.33. The Operational QA Plan (paragraph 4.2.1) states "Procedures are developed with detail such that a qualified person can safely perform the activity with acceptable results. The level of detail will depend on the complexity of the activity. These commitments are found in documents such as ANSI N18.7, the FSAR, Technical Specifications, etc." ANSI N18.7

(paragraph 5.2.7) states "Maintenance or modification of equipment shall be preplanned and performed in accordance with written procedures, documented instructions or drawings appropriate to the circumstance which conform to applicable codes, standards, specifications, and criteria. Skills normally posessed by qualified maintenance personnel may not require detailed step-by-step delineations in a written procedure." ANSI N18.7 is endorsed by RG 1.33.

The Inspection Report states that jumpers were used to connect test equipment to safety-related equipment. However, this is not the case, as DC voltage was jumpered directly to the relay at the same points on the relay as when the relay was installed in the switchgear. No test equipment was installed between the relay and the switchgear. The relay under test has no control function and thus, does not have any effect on the switchgear. The use of jumpers does not constitute a test or a surveillance. This is simply a means of providing a voltage source, and no special test equipment or calibration are required.

SCE&G considers the use of jumpers by SCE&G Relay Department personnel, to provide supply voltage to a relay under test, a skill of the craft which is not required to be covered by written procedure. SCE&G Relay Department personnel have been regularly applying this method at SCE&G plants for over 27 years, and at VCSNS for the past 13 years without incident. In fact, over 300 relays have been tested at VCSNS without a single mishap involving supply jumpers. Therefore, this demonstrates a high level of expertise in reading drawings and performing these tests. Latest revision site drawings are used to identify the location of the needed voltage, and a voltmeter is used to verify proper voltage. Jumpers are always placed on the downstream side of circuit protection devices (fuses, breakers, etc.) to limit the effect of a short circuit or other problem. The circuit location was verified by the Senior Engineer for the cases identified above. This is the standard method of supplying power for testing the relays. The Inspection Report suggested that the use of an external power supply should be considered. After further evaluation, SCE&G Relay Department personnel determined that use of an external power supply would enhance relay testing.

In the unlikely event that the jumpers were shorted, SCE&G Relay Department personnel would be aware of it immediately and could promptly restore the circuit. A short circuit of the jumpers would likely blow the fuse on the circuit powering the relays. However, this should not be of consequence as the overcurrent relays of the adjoining 7.2KV switchgear would provide a backup of protection should a fault occur while the transformer differential relays were not operating.

Proper removal of power jumpers after the test is completed is insured, as it is physically impossible to [illegible] the relay without removing the jumpers.

SCE&G does realize that relay testing could be improved by the use of an external power supply to obtain the 120VDC needed to perform relay testing. Based on this, an external power supply will be utilized for future relay testing.