Stephen A. Byrne Senior Vice President, Nuclear Operations 803.345.4622



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April 21, 2003 RC-03-0088

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

Ladies and Gentlemen:

- Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS) DOCKET NO. 50/395 OPERATING LICENSE NO. NPF-12 SUPPLEMENTAL RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING REQUEST TO USE ALTERNATIVES TO ASME BOILER AND PRESSURE VESSEL CODE, SECTION XI, RELIEF REQUEST RR-II-08 TO CLARIFY RESPONSE TO QUESTION 2.a - (0-C-02-3202)
- Reference: 1. SCE&G Letter to NRC (Document Control Desk), RC-03-0027, January 29, 2003, Response to Request for Additional Information Regarding Relief Request RR-II-08
  - NRC (K. R. Cotton) Letter to VCSNS, January 22, 2003, Request for Additional Information ISI Relief Request RR-II-08 (TAC NO. MB6647)
  - 3. SCE&G Letter to NRC (Document Control Desk), RC-02-0191, October 30, 2002, Request to Use Alternatives to ASME Boiler and Pressure Vessel Code, Section XI

South Carolina Electric & Gas Company (SCE&G) hereby submits the attached response to the referenced request for additional information (RAI) regarding relief request RR-II-08, RAI Question 2.a.

This supplemental letter offers additional clarification to Reference 1 concerning the RAI for Relief Request RR-II-08. These changes are in response to a telephone conversation between SCE&G, the NRC VCSNS Project Manager, Ms. Karen Cotton, and Mr. Raoul Hernandez.

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Document Control Desk 0-C-02-3202 RC-03-0088 Page 2 of 2

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Should you have any questions, please call Mr. Mel Browne at (803) 345-4141.

Very truly yours,

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Stephen A. Byrne

JT/SAB/dr Attachment

c: N. O. Lorick N. S. Carns T. G. Eppink (w/o Attachment) R. J. White L. A. Reyes K. R. Cotton K. M. Sutton A. R. Caban NRC Resident Inspector NSRC RTS (0-C-02-3202) File (810.19-2) DMS (RC-03-0088) Document Control Desk Attachment 0-C-02-3202 RC-03-0088 Page 1 of 1

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## South Carolina Electric & Gas Company (SCE&G) Virgil C. Summer Nuclear Station (VCSNS) Response to NRC Request for Additional Information (RAI) Regarding Inservice Inspection Relief Request RR-II-08

- 2. The staff has been authorizing an enhanced VT-1 with demonstrated capabilities of resolving a 1-mil wire or equivalent flaw for the specified inner nozzle radii. This is in keeping with the current rule published in the *Federal Register*, 67 FR 60541, dated September 26, 2002, regarding 10 CFR 50.55a(a)(b)(2)(xxi). The proposed alternative is relying only on the Code-requirements for VT-1 of ensuring the detection of cracks.
  - a. Discuss the demonstration used for comparing the effectiveness of the enhanced VT-1 and UT.

## **Response 2.a:**

SCE&G has not performed a physical comparative demonstration. It is believed that a direct visual inspection, an enhanced VT-1, of the component surface would provide comparable results to the ultrasonic examination of a cast high nickel based alloy in the thickness range of eight to ten inches in sound path. The use of a wire gauge, with bare wire elements no larger than 1 mil in diameter, at the inspection surface will be used to qualify the examination system visual resolution. The "1 mil" wire gauge must be readily detected in order for the system to be qualified for use.

This inspection activity will be implemented by the use of a dedicated, qualified procedure. The guidelines of a typical VT-1 activity will be detailed in the component specific procedure to include the aspects of personnel qualification, maximum distance requirements, lighting, detection of the "1 mil" wire gauge to verify resolution prior to each use, camera type and model, video recording, acceptance criteria and reporting. These specific procedural requirements will ensure the inspection system will be capable of accurate and repeatable defect detection along with substantial reduction in personnel radiation exposure.