



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

May 5, 2006

EA-06-046

South Carolina Electric & Gas Company  
ATTN: Mr. Jeffrey B. Archie  
Vice President, Nuclear Operations  
Virgil C. Summer Nuclear Station  
P. O. Box 88  
Jenkinsville, SC 29065

SUBJECT: FINAL SIGNIFICANCE DETERMINATION FOR A WHITE FINDING AND  
NOTICE OF VIOLATION (VIRGIL C. SUMMER NUCLEAR STATION - NRC  
INSPECTION REPORT 05000395/2006011)

Dear Mr. Archie:

The purpose of this letter is to provide you with the Nuclear Regulatory Commission's (NRC) final significance determination for a finding involving V. C. Summer Nuclear Station's shipment of radioactive material on May 26, 2005. The shipment contained a package with radiation levels on an external surface that exceeded applicable regulatory requirements. The finding was documented in NRC Integrated Inspection Report No.05000395/2006009, issued on March 9, 2006, and was assessed under the significance determination process as a preliminary White issue (i.e., an issue of low to moderate safety significance which may require additional NRC inspection). The cover letter to the inspection report informed South Carolina Electric and Gas Company (SCE&G) of the NRC's preliminary conclusion and provided SCE&G an opportunity to request a regulatory conference on this matter. In lieu of a regulatory conference, SCE&G provided a written response dated April 10, 2006.

In its written response, SCE&G advised that it did not challenge the preliminary White finding. In addition, SCE&G described the facts and circumstances associated with the event, and offered its perspectives of the issue for clarification. Among the perspectives discussed, was 1) SCE&G's concern regarding NRC interpretation of the term "accessible" within the context of the Inspection Manual Chapter 0609, Attachment D definition of the term (accessible area defined as an area that can reasonably be occupied by a major portion of an individual's whole body); 2) SCE&G's view that the location of the source (a discrete radioactive particle (DRP) located inside the SeaLand container near an external wall and approximately 10 feet above the road surface) was not reasonably accessible to any member of the public based on normal conditions of transport during the six hour trip to the processor's facility; and 3) the results of various calculations SCE&G performed made to show that the dose to an individual in direct contact with the package or to members of the public riding adjacent to the package in public or personal transportation (and at the approximate height of the particle) would be low, and below regulatory limits. SCE&G requested NRC consideration of these perspectives as it evaluates similar issues in the future. SCE&G did not contest the NRC's determination that the finding represented a violation of 10 CFR 71.5 and 49 CFR 173.441.

After considering the information developed during the inspection and the information provided in SCE&G's response of April 10, 2006, the NRC has concluded that the final inspection finding is appropriately characterized as White in the Public Radiation Safety cornerstone. In response to SGE&G's perspectives, the NRC provides the following: Although we agree that the likelihood of an individual accessing the DRP located 10 feet above the ground was unlikely, we also note that once the shipment is placed into commerce, it is subject to traffic mishaps, mechanical breakdowns, and other common events that could change the package's accessibility. In addition, the radiation limits are in place to protect not only the general public but also individuals involved in transportation associated activities, including first responders who might be called upon to respond to accidents, fire or mechanical breakdowns. Regarding SCE&G's perspectives on its calculated dose to members of the public for the particular circumstances of this event, the NRC appreciates this information and will consider this as a part of our periodic review of the Public Radiation Safety SDP.

You have 10 calendar days from the date of this letter to appeal the staff's determination of significance for the identified finding. Such appeals will be considered to have merit only if they meet the criteria given in NRC Inspection Manual Chapter 0609, Attachment 2.

The NRC has also determined that V. C. Summer's shipment of a package to an off site facility on May 26, 2005, with external surface contact radiation levels exceeding 200 millirem per hour, is a violation of 10 CFR 71.5 and 49 CFR 173.441(a), as cited in the attached Notice of Violation (Notice). The circumstances surrounding the violation are described in detail in the subject inspection report. In accordance with the NRC Enforcement Policy, the Notice of Violation is considered escalated enforcement action because it is associated with a White finding.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

For administrative purposes, this letter is issued as a separate NRC Inspection Report, No. 0500395/2006011, and the above violation is identified as VIO 0500395/2006011-01, White Finding Involving Failure to Properly Prepare a Radioactive Material Package for Shipment. Accordingly, Apparent Violation AV0500395/2006009-01 is closed.

Because plant performance for this issue has been determined to be in the regulatory response band, we will use the NRC Action Matrix, to determine the most appropriate NRC response for this event. We will notify you, by separate correspondence, of that determination.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS) which is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, any response should not include any personal privacy, proprietary, classified, or safeguards information so that it can be made available to the Public without redaction. The NRC also includes significant enforcement actions on its Web site at [www.nrc.gov](http://www.nrc.gov); select **What We Do, Enforcement**, then **Significant Enforcement Actions**.

SCE&G

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Should you have any questions regarding this letter, please contact Mr. Robert Haag, Chief, Plant Support Branch, Division of Reactor Safety, at (404) 562-4607.

Sincerely,

*/RA/*

William D. Travers  
Regional Administrator

Docket No.: 50-395  
License No.: NPF-12

Enclosure: Notice of Violation

cc w/encl:  
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Virgil C. Summer Nuclear Station  
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 E. Hayden, OPA  
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 R. Pascarelli, NRR  
 M. Johnson, OE  
 L. Trocine, OE  
 L. Plisco, RII  
 V. McCree, RII  
 H. Christensen, RII  
 C. Casto, RII  
 J. Shea, RII  
 R. Haag, RII  
 J. Zeiler, RII  
 S. Sparks, RII  
 C. Evans, RII  
 R. Hannah, RII  
 K. Clark, RII  
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 OEMAIL  
 OEWEB

PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE

ADAMS:  Yes      ACCESSION NUMBER: \_\_\_\_\_

OFFICE	ORA	DRS	OE				
SIGNATURE	/RA/	/RA/	/RA/ VIA D. STARKEY				
NAME	CEVANS	VMCCREE	MJOHNSON				
DATE	05/05/06	05/05/05	05/02/06				
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

## NOTICE OF VIOLATION

South Carolina Electric and Gas Company  
V. C. Summer Nuclear Plant  
Unit 1

Docket No.: 50-395  
License No.: NPF-12  
EA-06-046

During an NRC inspection completed on March 1, 2006, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 71.5 requires that NRC licensees ship radioactive materials in accordance with the applicable provisions of the Department of Transportation regulations found in 49 CFR 100-177.

49 CFR 173.441(a) requires that each package of radioactive material offered for transport must be designed and prepared for shipment so that under conditions normally incident to transportation, the radiation level does not exceed 200 millirem per hour at any point on the external surface of the package.

Contrary to the above, the licensee failed to properly design and prepare for shipment a package of radioactive material that was transported from the licensee's facility to an offsite waste processing vendor. Specifically, a package was shipped by V. C. Summer on May 26, 2005, and arrived at a waste processing vendor facility in Oak Ridge, Tennessee, on May 27, 2005, with contact radiation levels of 600 millirem per hour on the side external surface of the package approximately 10 feet from the ground.

This violation is associated with a White Significance Determination Process finding for Unit 1 in the public radiation safety cornerstone.

Pursuant to the provisions of 10 CFR 2.201, South Carolina Electric and Gas Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation; EA-06-046" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Enclosure

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 5<sup>th</sup> day of May 2006

Enclosure