



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

May 16, 2013

EA-13-009

Mr. Ronald A. Jones  
Vice President, New Nuclear Operations  
South Carolina Electric and Gas  
P.O. Box 88 (Mail Code P40)  
Jenkinsville, SC 29065-0088

**SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION UNIT 2, FINAL SIGNIFICANCE  
DETERMINATION OF A GREEN FINDING (INSPECTION REPORT  
05200027/2013-010)**

Dear Mr. Jones:

The purpose of this letter is to provide you the final results of our significance determination of the preliminary White finding (i.e., a finding with low to moderate safety significance) discussed in U.S. Nuclear Regulatory Commission's (NRC) Inspection Report number 05200027/2013-008, dated March 26, 2013 (ADAMS Accession # ML13085A058). The inspection examined construction activities associated with the Design/Engineering Cornerstone of the Construction Baseline Inspection Program. We identified a finding during the inspection, identified as Apparent Violation (AV) 05200027/2013-008-01, Anchorage and Spacing of Headed Shear Reinforcement in Structural Components of the Nuclear Island. The finding involved the failure to assure that applicable regulatory requirements were correctly translated into design specifications, drawings, procedures, and instructions. The inadequacy resulted in multiple instances where the design of anchorage and spacing of the headed shear reinforcement for structural components of the nuclear island (NI) did not comply with the provisions of the "Code Requirements for Nuclear Safety Related Concrete Structures (ACI 349-01)," as required by the Updated Final Safety Analysis Report (UFSAR). The finding was assessed using the Construction Significance Determination Process and was preliminarily characterized as White.

At your request, a Regulatory Conference was held on April 30, 2013, to discuss your views on this issue. A Meeting Summary that included a copy of the slide presentation made by you, was issued on May 8, 2013 (ADAMS Accession # ML13128A298).

During the meeting, you described your assessment of the significance of the finding and the corrective actions taken to resolve it. In addition, you also informed the NRC that a root cause analysis was in process and that additional corrective actions would be developed as needed. Based on your presentation, you indicated that while the design of portions of the nuclear island basemat and wall structures failed to meet the requirements of the UFSAR and ACI 349-01 for the design and spacing for shear reinforcement, the design function of the impacted structure was not impaired, even if completed as initially proposed. That is, the structures would have still performed their intended safety function.

The NRC has reviewed the information you provided on April 23, 2013, and the information discussed during the regulatory conference on April 30, 2013; and we have also conducted independent calculations. Based on these we have concluded that the finding should be characterized as Green, a finding of very low safety significance. The NRC has also determined that the finding is a violation of Criterion III, "Design Control" as discussed in inspection report 05200027/2013-008. The circumstances surrounding the violation were described in detail in that inspection report. The reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date for full compliance were well communicated to the agency during the Regulatory Conference held on April 30, 2013. Because this violation was of very low safety significance and it was entered into your corrective action program as PIP 0-L-12-0610, this violation is being treated as a non-cited violation (NCV), consistent with the Enforcement Policy. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position for the NCV 05200027/2013-010-01, Anchorage and Spacing of Headed Shear Reinforcement in Structural Components of the Nuclear Island.

For administrative purposes, this letter is issued as NRC Inspection Report Number 05200027/2013-010. Accordingly, AV 05200027/2013-008-01, Anchorage and Spacing of Headed Shear Reinforcement in Structural Components in the Nuclear Island, is being updated consistent with the regulatory positions described in this letter as NCV 05200027/2013-010-01 with a safety significance of Green.

You have 30 calendar days from the date of this letter to appeal the staff's significance determination for the Green finding or the NCV. An appeal of the Green finding will be considered to have merit only if it meets the criteria given in NRC Inspection Manual Chapter 2519P, Construction Significance Determination Process - Pilot.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and your response (if you choose to provide one), will be made available electronically for public inspection in the NRC Public Document Room or from ADAMS, accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,

**/RA/**

Jimi T. Yerokun, Director  
Division of Construction Inspection

Docket Nos. 05200027  
License Nos. NPF-93

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**/RA/**

Jimi T. Yerokun, Director  
Division of Construction Inspection

Docket Nos. 05200027  
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\*See previous page for concurrence

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ADAMS:  Yes    ACCESSION NUMBER:     SUNSI REVIEW COMPLETE     FORM 665 ATTACHED

OFFICE	RII:DCI/CIB2	RII:DCI/CIB2	RII:EICS	RII:DCI			
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DATE	5/10/2013	5/14/2013	5/14/2013	5/16/2013			
E-MAIL COPY	<b>YES</b> NO	<b>YES</b> NO	<b>YES</b> NO	<b>YES</b> NO			

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Letter to Ronal A. Jones from Jimi T. Yerokun dated May 16, 2013.

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