

**Ronald A. Jones**  
Vice President  
New Nuclear Operations



May 9, 2013  
NND-13-0291  
10CFR 50.55(e)

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555-001

Subject: 10CFR 50.55(e) Notification Regarding Control of Purchased  
Material, Equipment, and Services for AP1000 Project V.C.  
Summer Nuclear Station (VCSNS) Units 2 & 3.

This letter provides written notification by South Carolina Electric & Gas (SCE&G) in accordance with 10CFR 50.55(e)(4)(iii) pertaining to the control of material, equipment, and services associated with basic components by Stone & Webster, Inc, acting through its affiliate Shaw Nuclear Services and currently doing business under the name of its parent, Chicago Bridge and Iron (hereinafter CB&I) for the V.C. Summer Units 2 and 3, nuclear project.

The written notification pursuant to 10CFR 50.55(e) is for a failure to comply by CB&I, an agent of SCE&G, with the requirements of 10CFR 50 Appendix B, Criterion VII. It is concluded that Quality Assurance programmatic issues, as identified by a root cause analysis associated with NRC violation 05200027/2012-004-004, could have produced a defect in a basic component.

This written notification closes the interim report submitted on February 4, 2013 by SCE&G and is the follow up to an initial notification by SCE&G on April 10, 2013 (EN #48910).

Please address any questions to Mr. Alfred M. Paglia, Manager, Nuclear Licensing, New Nuclear Deployment, by telephone at 803-345-4191; or by email at [apaglia@scana.com](mailto:apaglia@scana.com).

Sincerely,

A handwritten signature in black ink, appearing to be "R. Jones", written over the word "Sincerely,".

Ronald A. Jones  
Vice President  
New Nuclear Operations

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MPO

JFS/RAJ/fs

Enclosure

c: Document Control Desk  
Victor McCree  
Denise McGovern  
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Jeffrey B. Archie  
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William A. Fox  
Joel Hjelseth  
Brian McIntyre  
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Tom Geer  
Alvis J. Bynum  
Kathryn M. Sutton  
William Hutchins  
Findlay Salter  
Chuck Baucom  
Curtis Castell  
Joanne Hyde  
Timothy Steadham  
Rahsean Jackson  
[VCSummer2&3ProjectMail@cbi.com](mailto:VCSummer2&3ProjectMail@cbi.com)  
[vcsummer2&3project@westinghouse.com](mailto:vcsummer2&3project@westinghouse.com)  
[DCRM-EDMS@SCANA.COM](mailto:DCRM-EDMS@SCANA.COM)

South Carolina Electric & Gas

NND-13-0291

Enclosure

Virgil C. Summer Nuclear Station (VCSNS) Units 2 & 3

10CFR 50.55(e) Notification

## Enclosure

### 10CFR 50.55(e) Notification:

#### Control of Purchased Material, Equipment, and Services for AP1000 Project V.C. Summer Units 2 & 3

- (i) Name and address of the individual or individuals informing the Commission.

Ronald A. Jones  
South Carolina Electric & Gas  
Vice President, New Nuclear Operations  
V. C. Summer Nuclear Station  
PO Box 88  
Mail Code 800  
Jenkinsville, SC 29065

- (ii) Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which contains a defect or fails to comply.

Procurement of safety-related components by Stone & Webster, Inc, acting through its affiliate Shaw Nuclear Services and currently doing business under the name of its parent Chicago Bridge and Iron (hereinafter CB&I) associated with V. C. Summer Units 2 & 3 AP1000 Nuclear Power Plant construction failed to comply with requirements of 10 CFR 50 Appendix B, Criterion VII, which states:

Measures shall be established to assure that purchased material, equipment, and services, whether purchased directly or through contractors and subcontractors, conform to the procurement documents. These measures shall include provisions, as appropriate, for source evaluation and selection, objective evidence of quality furnished by the contractor or subcontractor, inspection at the contractor or subcontractor source, and examination of products upon delivery. Documentary evidence that material and equipment conform to the procurement requirements shall be available at the nuclear power plant or fuel reprocessing plant site prior to installation or use of such material and equipment. This documentary evidence shall be retained at the nuclear power plant or fuel reprocessing plant site and shall be sufficient to identify the specific requirements, such as codes, standards, or specifications, met by the purchased material and equipment. The effectiveness of the control of quality by contractors and subcontractors shall be assessed by the applicant or designee at intervals consistent with the importance, complexity, and quantity of the product or services.

It has been concluded that the condition previously identified in NRC violation 05200027/2012004-004 is reportable after evaluation in accordance with 10CFR 50.55(e)(3)(iii)(C).

- (iii) Identification of the firm constructing or manufacturing the facility or supplying the basic component which fails to comply or contains a defect.

CB&I is conducting engineering, procurement, and construction activities for V.C. Summer Units 2 and 3, under contract to South Carolina Electric and Gas (SCE&G).

- (iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by the defect or failure to comply.

A root cause analysis (RCA) conducted by CB&I for CAR 2012-0874, concluded that the identified procurement problems were caused by the Shaw Nuclear Services procurement and quality oversight and inspection program that existed at the time, which did not include a sufficiently strategic, integrated, and graded approach to assure the required quality of material, equipment and services. For instance, the embedments supplied by the Joseph Oats Corporation to the Vogtle 3 and 4 project included deviations that were found to be reportable as defects in accordance with 10CFR Part 21, and these embedments were associated with the conditions evaluated in the CAR 2012-0874 RCA. Therefore, it is concluded that the QA program issues associated with 10CFR 50 Appendix B, Criterion VII, as identified by the RCA for CAR 2012-0874, could have produced a defect and this condition is reportable in accordance with 10CFR 50.55(e)(4)(iii). To date, there have been no defects identified in any basic components delivered to the V.C. Summer 2 & 3 site.

- (v) The date on which the information of such defect or failure to comply was obtained.

The RCA that identified the QA program issues was completed on December 6, 2012. An interim 10CFR 50.55(e) report was submitted on February 4, 2013 with subsequent initial notification made by SCE&G to NRC Operations Center on April 10, 2013 (EN #48910).

- (vi) In the case of a basic component which contains a defect or fails to comply, the number and location of all the basic components in use at the facility subject to the regulations in this part.

To date, no basic components delivered to the V.C. Summer 2 & 3 site have been found to contain defects.

- (vii) In the case of a completed reactor manufactured under part 52 of this chapter, the entities to which the reactor was supplied.

Not applicable.

- (viii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action

The corrective actions are described in the VCSNS Units 2 and 3 letter, NND-12-0635: reply to notice of violation 05200027/2012-004-004, dated December 13, 2012. Respective corrective actions were completed as of March 5, 2013.

- (ix) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to other entities.

None.