Ronald A. Jones
Vice President
New Nuclear Operations

September 29, 2014
NND-14-0594
10 CFR 50.55(e)

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

Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3
Combined License Nos. NPF-93 and NPF-94
Docket Nos. 52-027 & 52-028

Subject: 10 CFR 50.55(e) Report Regarding Results of Root Cause Analysis for Deviations Associated with the Welding Program for Sub-Modules Being Supplied by CB&I Lake Charles for V.C. Summer Units 2 & 3.

This letter provides a written notification in accordance with 10 CFR 50.55(e)(4)(iii) pertaining to the results of a root cause analysis for deviations associated with sub-modules being supplied by Chicago Bridge and Iron (CB&I) Lake Charles for the Virgil C. Summer Units 2 & 3 nuclear construction project.

The written notification pursuant to 50.55(e) is for a failure to comply by CB&I Lake Charles, a supplier to the V.C. Summer Nuclear Station Units 2 & 3 Construction Project, to meet the requirements of 10 CFR 50 Appendix B. CB&I Power, as an agent for SCE&G, has concluded that a significant breakdown in the Quality Assurance Program at CB&I Lake Charles, as identified by a root cause analysis for deviations associated with the welding program for sub-modules being supplied for the domestic AP1000 Nuclear Projects, could have produced a defect and this condition is reportable in accordance with 10 CFR 50.55(e)(3)(iii)(C). This letter is the follow up to the previously reported condition in EN 50442. See Enclosure for the detailed content of the notification.

Please address any questions to Mrs. April Rice, Manager, Nuclear Licensing, New Nuclear Deployment, by telephone at 803-941-9858; or by email at arice@scana.com.

Sincerely,

Ronald A. Jones
Vice President
New Nuclear Operations

JFS/RAJ/fs

Enclosure

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South Carolina Electric & Gas

NND-14-0594

Enclosure

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

10 CFR 50.55(e) Notification

Enclosure

10 CFR 50.55(e) Notification:

Significant Breakdown in the CB&I-Lake Charles (LC) Quality Assurance Program as identified by CB&I-LC Root Cause Analysis (RCA) 2013-1641

(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 Units 2 & 3
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 fails to comply or contains a defect.

CB&I Lake Charles (LC)
3191 West Lincoln Road
Lake Charles LA 70605

No basic components have been found that contain a defect or fail to comply with the Atomic Energy Act of 1954, as amended, or any applicable rule, regulation, order, or license of the Commission relating to substantial safety hazards. However, it has been concluded that the condition is reportable in accordance with 10 CFR 50.55(e)(3)(iii)(C).

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

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

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

A root cause analysis was performed for welding program deviations associated with the fabrication of sub-modules being supplied by CB&I Lake Charles facility for the V.C. Summer Units 2 and 3 and Vogtle Units 3 and 4 nuclear construction projects. The results of this root cause analysis have been evaluated in accordance with 10 CFR 50.55(e) and it has been concluded that the identified condition is reportable in accordance with the applicable reporting criterion, as described in 10 CFR 50.55(e)(3)(C), which states, "(C) Undergoes any significant

breakdown in any portion of the quality assurance program conducted under the requirements of Appendix B to 10 CFR part 50 which could have produced a defect in a basic component. These breakdowns in the quality assurance program are reportable whether or not the breakdown actually resulted in a defect in a design approved and released for construction, installation, or manufacture." The breakdown was determined to be relevant to the following four (4) Criteria of 10 CFR 50, Appendix B:

Criterion II. Quality Assurance Program,
Criterion V. Instructions, Procedures, and Drawings,
Criterion VII. Control of Purchased Material, Equipment, and Services, and
Criterion IX. Control of Special Processes.

No basic components have been found that contain a defect or fail to comply with the Atomic Energy Act of 1954, as amended, or any applicable rule, regulation, order, or license of the Commission relating to a substantial safety hazard. However, based on our best judgment, the criterion described in 10 CFR 50.55(e)(3)(C) as to whether a breakdown in the quality assurance program “could have” produced a defect has been met. Actions are in progress to verify that the sub-modules meet the applicable design requirements. This will ensure that the sub-modules conform to the applicable requirements prior to use.

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

The root cause analysis was completed on March 13, 2014. Subsequently, CB&I Lake Charles provided a letter to CB&I Power dated July 9, 2014 notifying CB&I Power that a potential programmatic breakdown of the CB&I Lake Charles quality program may have occurred and that an evaluation per 10CFR 50.55(e) may be required to determine if the condition constituted a significant breakdown the Quality Assurance Program. The date of this letter is considered the discovery date that CB&I Power obtained the information pertaining to the potential QA breakdown in order to perform an evaluation of the condition. The evaluation that determined the condition to be reportable was completed on September 4, 2014.

(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for, manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.

No basic components have been found that contain a defect or fails to comply with the Atomic Energy Act of 1954, as amended, or any applicable rule, regulation, order, or license of the Commission relating to substantial safety hazards.

(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.

Actions are in progress to verify that the sub-modules meet the applicable design requirements. This will ensure that the sub-modules conform to the applicable requirements prior to use. Additionally, actions based on the results of the CB&I Lake Charles root cause analysis are being identified and implemented via the CB&I Lake Charles corrective action program.

(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 purchasers or licensees.

None.