

Mark D. Rauckhorst
Construction Vice President
Vogtle 3&4

Southern Nuclear
Operating Company, Inc.
7825 River Road
Waynesboro, GA 30830

Tel 706.826.5500
Fax 706.826.5570
mdrauckh@southernco.com



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Docket No.: 52-025
52-026

ND-14-1419
10 CFR 50.55(e)

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

SUBJECT: 10 CFR 50.55(e) Report Regarding Results of Root Cause Analysis for
Deviations Associated with Welding Program Deviations for Sub-Modules
Being Supplied by CB&I Lake Charles for Vogtle Units 3&4

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

The written notification pursuant to 10 CFR 50.55(e) is for a failure to comply by CB&I Lake Charles, a supplier to the Vogtle 3&4 nuclear project, to meet the requirements of 10 CFR 50 Appendix B. CB&I Power, as an agent for Southern Nuclear, has concluded that the significant breakdown in the Quality Assurance Program at CB&I Lake Charles, as identified by the root cause analysis on deviations associated with welding program deviations for sub-modules being supplied for the AP1000 Domestic Nuclear Project Sites, 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 50441. See Enclosure for the detailed content of the notification.

If you have any questions, please contact Michael Yox, Site Licensing Manager, at 706-437-6459.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY

A handwritten signature in black ink, appearing to read "Mark D. Rauckhorst", written over a horizontal line.

Mark D. Rauckhorst

Enclosure: 10 CFR 50.55(e) Report Regarding Results of Root Cause Analysis for
Deviations Associated with Welding Program Deviations for Sub-Modules
Being Supplied by CB&I Lake Charles for Vogtle Units 3&4

cc:

Southern Nuclear Operating Company/ Georgia Power Company

Mr. S. E. Kuczynski (w/o enclosures)
Mr. J. A. Miller
Mr. D. A. Bost (w/o enclosures)
Mr. B. L. Ivey
Mr. M. D. Rauckhorst (w/o enclosures)
Mr. J. T. Gasser (w/o enclosures)
Mr. D. H. Jones (w/o enclosures)
Mr. J. R. Johnson (w/o enclosures)
Mr. D. R. Madison
Mr. D. M. Lloyd
Mr. B. H. Whitley
Mr. C. R. Pierce
Mr. D. L. Fulton
Mr. M. J. Yox
Mr. J. C. Harrelson
Ms. A. G. Aughtman
Mr. W. A. Sparkman
Mr. C. B. Meadors
Mr. J. P. Redd
Document Services RTYPE: VND.LI.L00
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Nuclear Regulatory Commission

Mr. V. M. McCree (w/o enclosures)
Mr. F.M. Akstulewicz (w/o enclosures)
Mr. M. Delligatti (w/o enclosures)
Mr. L. Burkhart (w/o enclosures)
Mr. D. H. Jaffe
Mr. R. G. Joshi
Ms. D. L. McGovern
Mr. B. M. Baval
Ms. R. Reyes
Ms. M. A. Sutton
Mr. M. E. Ernstes
Mr. G. Khouri
Mr. L. M. Cain
Mr. J. D. Fuller
Mr. C. B. Abbott
Mr. C. Huffman
Ms. S. Temple

Oglethorpe Power Corporation

Mr. M. W. Price
Mr. K. T. Haynes
Ms. A. Whaley

Municipal Electric Authority of Georgia

Mr. J. E. Fuller
Mr. S. M. Jackson

Dalton Utilities

Mr. D. Cope

CB&I

Mr. J. Simmons (w/o enclosures)

Ms. K. Stoner (w/o enclosures)

Mr. C. A. Castell

Westinghouse Electric Company, LLC

Mr. T. C. Geer (w/o enclosures)

Mr. S. W. Gray (w/o enclosures)

Mr. F. G. Gill

Mr. P. A. Russ

Mr. G. F. Couture

Mr. M. Y. Shaqqo

Mr. B. J. Bedford

Mr. M. P. Rubin

Ms. S. DiTommaso

Other

Mr. R. W. Prunty, Bechtel Power Corporation

Ms. K. K. Patterson, Tetra Tech NUS, Inc.

Dr. W. R. Jacobs, Jr., Ph.D., GDS Associates, Inc.

Mr. S. Roetger, Georgia Public Service Commission

Ms. S. W. Kernizan, Georgia Public Service Commission

Mr. K. C. Greene, Troutman Sanders

Mr. S. Blanton, Balch Bingham

ND-14-1419

Enclosure

10 CFR 50.55(e) Report Regarding Results of Root Cause Analysis for Deviations
a ssociated with Welding Program Deviations for Sub-Modules Being Supplied
by CB&I Lake Charles for Vogtle Units 3&4

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

Mark D. Rauckhorst
Southern Nuclear Operating Company, Inc.
Construction Vice President
Vogtle 3&4
7825 River Road
Waynesboro, GA 30830

- (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 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. 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.

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.

CB&I Power (formerly Shaw Power) is conducting engineering, procurement, and construction activities for Vogtle Units 3 and 4, under contract to Southern Nuclear Corporation (SNC).

- (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 VC Summer Units 2 and Vogtle Units 3 and 4 nuclear construction projects. The results of that 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 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 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 substantial safety hazards. Although, the criterion described in 10 CFR 50.55(e)(3)(C) is based on the judgment of whether the breakdown in the quality assurance program "could have" produced a defect. 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. This letter transferred responsibility for evaluating the conditions identified in accordance with 10 CFR 50.55(e), as potentially significant QA breakdown. This letter is considered the discovery date for CB&I Power to perform the 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.