

Part 21 (PAR)

Event # 51704

Rep Org: WECTEC LLC (FORMERLY CB&I)	Notification Date / Time: 02/01/2016 12:40 (EST)
Supplier: CB&I LAURENS	Event Date / Time: 02/01/2016 (EST)
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Region: 1	Docket #:
City: CHARLOTTE	Agreement State: Yes
County:	License #:
State: NC	
NRC Notified by: CURTIS CASTELL	Notifications: ERIC MICHEL R2DO
HQ Ops Officer: HOWIE CROUCH	PART 21/50.55 REACTORS EMAIL
Emergency Class: NON EMERGENCY	
10 CFR Section:	
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE	

PART 21 REPORT REGARDING DEVIATIONS OF PIPE SPOOLS FOR AP1000 PROJECTS

The following information is summarized from notification received by WECTEC, LLC via email:

"The basic components being supplied are piping spools to be used for various safety-related systems for the V. C. Summer and Vogtle AP1000@ projects. The pipe spools are classified as ASME Boiler and Pressure Vessel Code Section III.

"The specific conditions identified on various piping spools fall into four general categories:

- (1) Dimensional Length Deviations: These conditions include center-to-end and center-to-center lengths of straight pipe segments that exceed the minimum or maximum tolerances.
- (2) Bend Angle Deviations: These conditions include spool bend angles that exceed the minimum or maximum tolerances.
- (3) Minimum Wall Thickness Deviations: These conditions include pipe wall thickness below the applicable tolerance. These conditions typically have been found at some bends in the spools and at some ends of the pipe.
- (4) Other Conditions: These conditions include weld related attributes, potential carbon contamination, and tools marks."

Uninstalled pipe spools are in storage and will be inspected, repaired or replaced prior to installation. Installed products will be identified and issues resolved as appropriate.

Name and address of the individual or individuals informing the Commission:

David Durham
President

IE19
NRD

WECTEC LLC
128 S. Tryon St., Suite 1000
Charlotte, NC 28202



WECTEC LLC
128 South Tryon Street, Suite 1000
Charlotte, NC 28202

10 CFR 21.21

February 1, 2016

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

SUBJECT: 10 CFR PART 21 REPORT REGARDING DEVIATIONS OF PIPE SPOOLS FOR
AP1000® PROJECTS

The attachment to this letter provides a report in accordance with 10 CFR 21.21 pertaining to deviations of delivered pipe spools for the Vogtle Units 3 & 4 and V. C. Summer Units 2 & 3 AP1000® projects. This issue was previously described in an interim report submitted by CB&I Power (now WECTEC LLC) in a letter dated September 24, 2015 (NRC Log No. 2015-69-00, Accession No. ML15279A183).

If you have any questions pertaining to this information, please contact Curtis Castell, Licensing Manager, at 980-321-8314.

Sincerely,

David Durham
President
WECTEC LLC

cc: Regional Administrator, USNRC, Region II

Attachment

10 CFR PART 21 REPORT REGARDING DEVIATIONS OF PIPE SPOOLS FOR
AP1000® PROJECTS

This report is being provided in accordance with 10 CFR 21.21.

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

David Durham
President
WECTEC LLC
128 S. Tryon St., Suite 1000
Charlotte, NC 28202

(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.

The basic components being supplied are piping spools to be used for various safety-related systems for the V. C. Summer and Vogtle AP1000® projects. The pipe spools are classified as ASME Boiler and Pressure Vessel Code Section III. These piping spools are associated with several systems, including Chemical and Volume Control System (CVS), Passive Containment Cooling System (PCS), Passive Core Cooling System (PXS), Reactor Coolant System (RCS), Normal Residual Heat Removal System (RNS), Spent Fuel Pool Cooling System (SFS), Steam Generator System (SGS), Main Control Room Emergency Habitability System (VES), Liquid Radwaste System (WLS), and the Waste Water System (WWS).

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

The pipe spools are being supplied by CB&I Laurens, 366 Old Airport Road, Laurens, SC 29360. The procurement of the affected material is being conducted by the firm constructing the facility, which is WECTEC LLC (previously called CB&I Power), 128 South Tryon Street, Charlotte, NC 28202.

(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.

The specific conditions identified on various piping spools fall into four general categories:

- (1) Dimensional Length Deviations – These conditions include center-to-end and center-to-center lengths of straight pipe segments that exceed the minimum or maximum tolerances.
- (2) Bend Angle Deviations – These conditions include spool bend angles that exceed the minimum or maximum tolerances.

- (3) Minimum Wall Thickness Deviations – These conditions include pipe wall thickness below the applicable tolerance. These conditions typically have been found at some bends in the spools and at some ends of the pipe.
- (4) Other Conditions – These conditions include weld related attributes, potential carbon contamination, and tools marks.

Of the categories listed above, the fabrication tolerance deviations involving bend angles and length are considered unlikely to pose a substantial safety hazard. Significant dimensional deviations would not be expected to fit properly during on-site construction activities and would be identified as nonconforming and not able to be used. Deviations listed as “other conditions” and minimum wall thickness deviations are considered to be potentially the most significant. The deviations associated with minimum wall thickness that are below the ASME code-required minimum wall thickness have been conservatively judged to have the potential to introduce a substantial safety hazard and are considered defects.

Therefore, if left uncorrected, the described conditions could cause a substantial safety hazard for the V. C. Summer and Vogtle AP1000® nuclear projects. This report is also intended to bound any deviations that have not yet been evaluated or that are subsequently discovered during “extent of condition” reviews associated with the piping spools and materials supplied by CB&I Laurens.

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

The discovery date of these deviations is based on the date of the associated CB&I Power (now WECTEC LLC) Corrective Action Report (CAR). That CAR was initiated on July 29, 2015. An interim Part 21 report dated September 24, 2015, was submitted to the NRC that stated evaluation of this condition was expected to be completed by January 28, 2016. The interim report is identified as Accession No. ML15279A183 and Log No. 2015-69-00, on the NRC website. Additionally, the supplier, CB&I Laurens, closed an interim report associated with wall-thickness issues by letter dated September 22, 2015. This interim report closure by CB&I Laurens was based on transferring the requirement to perform the evaluation to the purchaser, CB&I Power (now WECTEC LLC), in accordance with 10 CFR 21.21(b). The CB&I Laurens closure letter is identified as Accession No. ML15279A182 and Log No. 2015-29-03, on the NRC website.

- (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.

The impacted materials are piping spools intended to be used for the V. C. Summer and Vogtle AP1000® projects. The total number and location of the nonconforming components are still

being determined. The majority of the affected piping spools are being maintained in storage prior to installation at the Vogtle and V. C. Summer sites. Actions will be completed to identify and resolve any nonconforming conditions associated with the affected components whether they are in storage or installed.

(vii) 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.

A corrective action report has been entered in the CB&I Power (now WECTEC LLC) Corrective Action Program that describes the issues that had been identified as of July 29, 2015. The actions necessary to correct the identified conditions, and the subsequently identified conditions, will be established and tracked to completion through a combination of the WECTEC LLC Corrective Action Program and by use of the Nonconformance and Disposition (N&D) process.

Additionally, the supplier, CB&I Laurens, has initiated corrective action reports for the identified conditions. These corrective action reports were classified as "significant conditions adverse to quality" and root cause analyses were performed. Corrective actions have been established and are being implemented via the CB&I Laurens Corrective Action Program to address the conditions that led to the piping spool deviations and defects.

(viii) 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.

These conditions have been identified by CB&I Power (now WECTEC LLC) prior to installation of the majority of the affected components and the components are being corrected. Any installed components that are impacted will be identified and resolved, as required. Therefore, there is no additional action or advice needed for the licensees at this time. The condition has also been evaluated by WECTEC LLC for potential 10 CFR 50.55(e) reporting by the affected Combined Operating License Holders. WECTEC LLC has recommended to the licensees that this condition also be reported under 10 CFR 50.55(e).

(ix) In the case of an early site permit, the entities to whom an early site permit was transferred.

Not applicable.