WECTEC

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10 CFR 21.21

September 28, 2016

52-025

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

SUBJECT: 10 CFR PART 21 REPORT REGARDING DEVIATIONS OF PIPE SPOOL FLANGES FOR VOGTLE UNIT 3 AP1000® PROJECT

The attachment to this letter provides a report in accordance with 10 CFR 21.21 pertaining to deviations of two flanges on pipe spools for the Vogtle Unit 3 AP1000® project.

If you have any questions pertaining to this information, please contact Curtis Castell, Licensing Manager, at 980-859-6373.

Sincerely,

David C Durham

David Durham
President
WECTEC LLC

cc: Regional Administrator, USNRC, Region II

Attachment

IE19
NRD

10 CFR PART 21 REPORT REGARDING DEVIATIONS OF PIPE SPOOL FLANGES FOR VOGTLE UNIT 3 AP1000® PROJECT

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
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(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 two flanges on Passive Core Cooling System pipe spools for the Vogtle Unit 3 AP1000® project. The pipe spools are identified as SV3-PXS-PLW-02X-2 and SV3-PXS-PLW-02Y-1.

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

The pipe spools and flanges were supplied by CB&I Laurens, 366 Old Airport Road, Laurens, SC 29360. The procurement of the affected material is being conducted by WECTEC LLC, 3735 Glen Lake Drive, Charlotte, NC 28208. The affected pipe spools and flanges were delivered to Aecon Industrial, 150 Sheldon Drive, Cambridge, Ontario, N1R 7K9 Canada, for use in fabrication of Mechanical Module Q223 for the Passive Core Cooling System.

(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 two flanges identified with deviations on Passive Core Cooling System pipe spools for the Vogtle Unit 3 AP1000® project had incorrect raised-face dimensions. This appears to have been caused by the two flanges being transposed due to an inadvertent fabrication error that occurred at the pipe spool supplier's facilities (CB&I Laurens). The error was subsequently discovered after delivery to the fabrication facility (Aecon Industrial).

This error resulted in conditions where the two flanged connections would not have met the design configuration. If the flanged connections had been assembled in the delivered configuration, it is not known if system integrity and operability would have been maintained during operation. The incorrect configuration could have also led to subsequent failure after installation and operation. Hydrostatic testing of these connections is required, but had not yet been performed because the condition was discovered prior to the assembly and testing of these

portions of the system. The condition is being corrected prior to the performance of that hydrostatic testing, therefore it is not known if the flanges in the incorrect configuration would have been able to pass hydrostatic testing.

Due to the possibility that system integrity and operability could have been impacted by the use of the incorrect flanges, it has been conservatively concluded that this condition should be reported under 10 CFR Part 21. This conservative conclusion is based on the possibility that the Passive Core Cooling System could have been adversely impacted by the identified deviations, if the deviations had been left uncorrected.

(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 Nonconformance and Disposition (N&D) report that describes the flange deviations. That N&D report was initiated on July 23, 2016. The evaluation for reportability of the identified conditions was completed on September 21, 2016, and the WECTEC Responsible Officer was informed on September 28, 2016.

(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 affected basic components are two pipe spools with incorrect flanges. Those pipe spools, identified as SV3-PXS-PLW-02X-2 and SV3-PXS-PLW-02Y-1, were physically located at the Aecon Industrial fabrication facilities in Cambridge, Ontario Canada, at the time of discovery of the described conditions. The spool SV3-PXS-PLW-02X-2 is associated with the Vogtle Unit 3 In-containment Refueling Water Storage Tank and Containment Recirculation to Direct Vessel Injection "B" and is an 8-inch nominal pipe size. The spool SV3-PXS-PLW-02Y-1 is associated with Vogtle Unit 3 Residual Heat Removal System to Direct Vessel Injection "B" and is an 8-inch nominal pipe size.

(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.

The actions necessary to correct the identified conditions have been established and are tracked to completion through the use of the associated N&D reports. The flange configuration was corrected and the Q223 Mechanical Module was delivered to the Vogtle Unit 3 site on September 23, 2016. A corrective action report has been entered into the Westinghouse/WECTEC system to further evaluate the circumstances that led to the identified deviations.

(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 were identified prior to installation of the affected components and the components have been corrected. Therefore, there is no additional action or advice needed for the affected licensee at this time.

The condition is associated with construction of the Vogtle Unit 3 AP1000® project and therefore is also considered to be reportable under 10 CFR 50.55(e) for that unit. 10 CFR 50.55(e)(8) states, "The requirements of § 50.55(e) are satisfied when the defect or failure to comply associated with a substantial safety hazard has been previously reported under part 21 of this chapter..." Therefore, this report under Part 21 is expected to satisfy the requirements of 10 CFR 50.55(e) for the Vogtle Unit 3 combined license holder.

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

Not applicable.