

Part 21 (PAR)

Event # 51078

Rep Org: AECOM ENERGY & INDUSTRIAL CONST.	Notification Date / Time: 05/18/2015 15:18 (EDT)
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Region: 1	Docket #:
City: PRINCETON	Agreement State: Yes
County:	License #:
State: NJ	
NRC Notified by: ART LEMBO	Notifications: JAMES DWYER R1DO
HQ Ops Officer: STEVE SANDIN	BRIAN BONSER R2DO
Emergency Class: NON EMERGENCY	MICHAEL KUNOWSKI R3DO
10 CFR Section:	NEIL OKEEFE R4DO
21.21(a)(2) INTERIM EVAL OF DEVIATION	PART 21/50.55 REACTORS EMAIL

INTERIM 10 CFR PART 21 REPORT REGARDING DEVIATIONS WHILE UTILIZING BENTLEY SOFTWARE STAAD.PRO ON SAFETY RELATED CALCULATIONS

"This letter provides an Interim report in accordance with 10 CFR 21.21(a)(2) pertaining to the identification of deviations associated with calculations that were supplied to various licensees. The deviations stemmed from recently identified errors in vendor supplied software that is used in various structural analysis and design applications.

"The software that was used, STAAD.Pro, is provided by Bentley Systems Incorporated. The present QA validated version of STAAD.Pro, V8i SELECT Series 4 Version 20.07.09.31, and prior versions have been used on various safety related calculations for nuclear power plants as well as a general analysis and design tool for non-safety related calculations for nuclear and non-nuclear power plants and facilities.

"In accordance with our [AECOM] Nuclear QA Program, URS Energy & Construction (an AECOM Company) became aware of the deviations as a result of our periodic review of vendor issued error reports; specifically, STAAD.Pro Critical Error Report SPRO5336 and STAAD.Pro Critical Error Report SPRO5682. The noted errors can create instances that generate incorrect internal forces and moments in a structural member at various locations along the member's length. The result can be non-conservative evaluations of structural members (i.e., can under estimate the stress level in the analyzed members) and can potentially result in the inadequate design of structural components.

"The software vendor is actively working to correct the noted deviations. Bentley anticipates that a modified version to STAAD.Pro will be issued in the third quarter of 2015. Alternate approaches are being pursued to accelerate completion of the evaluation of the noted deviation. We [AECOM] are notifying our clients of this issue and will provide follow-up written notification to the NRC within 30 days.

IE19
NRC

"If you have any questions concerning this information, please contact Steve Mannon, Director of Licensing, at 803-412-5145.

"At this time the potentially affected customers that have been notified concerning this issue are Exelon and DTE Energy. We [AECOM] are continuing our evaluation of potentially affected customers."



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10 CFR 21.21

May 18, 2015
Via Fax: NRC Operations Center
301-816-5151

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

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Sincerely,

Art Lembo
General Manager & President - Power
AECOM Energy & Industrial Construction