



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

June 30, 2009

Mr. David J. Bannister  
Vice President and CNO  
Omaha Public Power District  
Fort Calhoun Station  
444 South 16th St. Mall  
Omaha, NE 68102-2247

SUBJECT: FORT CALHOUN STATION, UNIT NO. 1 – SUMMARY OF CONFERENCE CALL REGARDING ISSUES RELATED TO THE CRACKING OF REPLACEMENT STEAM GENERATORS FOR SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3

Dear Mr. Bannister:

On May 21, 2009, the U.S. Nuclear Regulatory Commission (NRC) staff participated in a conference call with Omaha Public Power District (OPPD, the licensee) representatives regarding the licensee's actions in response to the cracking observed in the Mitsubishi Heavy Industries, Ltd. (MHI)-fabricated replacement steam generators (SGs) for Southern California Edison's (SCE's) San Onofre Nuclear Generating Station (SONGS), Unit 3. Notably, OPPD's Fort Calhoun Station, Unit 1 (FCS) is the only nuclear unit in the United States currently operating with MHI-fabricated SGs.

The licensee stated that:

Based on preliminary information from MHI and SONGS, the licensee believes that the situation is not applicable to FCS. This information includes the MHI Interim Part 21 Report dated May 12, 2009, along with direct communications between OPPD, MHI, and SCE.

The licensee identified three major differences between the SONGS, Unit 3 replacement SGs and the currently installed SGs at FCS that provide some initial indication that this issue may not apply to FCS, or that its significance would be substantially less:

- (1) The manufacturing process for the SONGS, Unit 3 replacement SGs applied an Inconel 52/152 (the weld wire equivalent of Inconel 690) buttering to the channel head after removing stainless steel cladding as part of the fabrication of the channel head-to-divider plate weld. In the case of the FCS replacement SGs, the stainless steel cladding was not removed and the divider plate was welded directly to the stainless steel cladding on the channel head.
- (2) Records reviewed by OPPD regarding the fabrication of FCS replacement SGs indicate that ultrasonic inspection techniques, capable of identifying fabrication defects like those observed in the SONGS, Unit 3 replacement SGs, were performed before the installation of the FCS replacement SGs. The fabrication

records show no evidence of any unacceptable defects based on these examinations of the FCS replacement SGs.

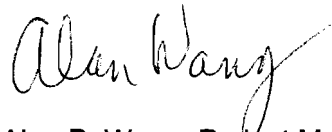
- (3) Finally, one important function of the divider plate-to-channel head weld is that it forms a connection between the tubesheet and the channel head which restrains deflection of the tubesheet during secondary side depressurization events (e.g., main steamline breaks). For SGs the size of the SONGS, Unit 3 replacement SGs, this is an important function for maintaining the integrity of the primary system. However, the FCS SGs are considerably smaller and their design is such that the divider plate is not required as a structural support for the tubesheet.

Based on this information, the NRC staff did not identify any issues that warranted immediate follow-up action. The staff will review additional information from SCE and MHI regarding the issues associated with the SONGS, Unit 3 replacement SGs and will contact OPPD if any additional information is required regarding the FCS SGs.

We thank you for your staff's support in discussing this matter with the NRC staff.

If you have any questions, please contact Lynnea Wilkins at 301-415-1377 or via e-mail at [Lynnea.Wilkins@nrc.gov](mailto:Lynnea.Wilkins@nrc.gov).

Sincerely,



Alan B. Wang, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-285

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Sincerely,

/RA/

Alan B. Wang, Project Manager  
Plant Licensing Branch IV  
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