

November 16, 2001

Mr. S. K. Gambhir
Division Manager - Nuclear Operations
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
Post Office Box 399
Hwy. 75 - North of Fort Calhoun
Fort Calhoun, NE 68023-0399

SUBJECT: FORT CALHOUN STATION, UNIT NO. 1 - CONTROL ELEMENT DRIVE
MECHANISM HOUSING CRACKING

Dear Mr. Gambhir:

On October 15, 2001, Omaha Public Power District (OPPD) provided the NRC staff its program to monitor transgranular stress corrosion cracking (TGSCC) in the control element drive mechanisms (CEDMs). The staff requested this information to better understand OPPD's position as to how it is addressing the potential for TGSCC in the CEDMs. The staff has reviewed this document and still has concerns regarding the potential for TGSCC in the CEDMs at the Fort Calhoun Station. OPPD has described the CEDM as three separate components: the CEDM seal housing, the CEDM upper housing, and the reactor vessel head nozzle. The NRC staff is not convinced that the limiting area for TGSCC will be what you describe as the CEDM seal housing. OPPD appears to have reached this conclusion based on its studies on the environmental conditions that exist in the CEDMs. In particular, OPPD has stated that the stagnant and highly oxygenated environmental condition that exist in the CEDMs are key elements in promoting TGSCC in the CEDMs. We believe other factors such as weld residual stress, surface cold work, counterbore geometry weld root condition, and temperature also make an important contribution to promoting TGSCC. Given due consideration to these factors may lead to other locations in the CEDM more susceptible to TGSCC than the seal housing area. We believe you need to investigate these factors further and address these factors for their potential impact on your current monitoring program and future inspection locations in the CEDM upper housing. This has been discussed with your staff and agreed that a response will be submitted within 60 days after receipt of this letter. If you have any questions regarding this request, please contact me at (301) 415-1445.

Sincerely,

/RA/

Alan B. Wang, Project Manager, Section 2
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-285

cc: See next page

Mr. S. K. Gambhir
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