Omaha Public Power District
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October 8, 1984
LIC-84-310

Mr. James R. Miller, Chief
U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Licensing
Operating Reactors Branch No. 3
Washington, D.C. 20555

Reference: Docket No. 50-285

Dear Mr. Miller:

Submittal of CESEC-III Code Topical

Your letter of May 11, 1984, containing the staff's safety evaluation of the District's reload core analysis methodology report contains a request for the District to submit a topical report for the CESEC-III Code. The District has considered your request and submits the following information.

The District's Transient and Accident Methods and Verification Topical Report, OPPD-NA-8303-P, references numerous CESEC topical reports which have been submitted to the NRC. Specifically, references 4.9 and 4.10 provided documentation of the CESEC-III code. The District believes that referencing a topical report, previously submitted to the NRC, on our docket is equivalent to submitting the report itself. Therefore, it is the District's position that we have satisfied the intent of submitting a topical report on the CESEC-III Code. It should be noted that the District neither owns nor leases the CESEC-III Code from Combustion Engineering (CE). Rather, the District utilizes a compiled version of the CESEC-III code on the CE computer system. It would be inappropriate for the District to directly submit the CESEC-III topical report since we are neither the authors of the topical report nor fully cognizant of the details contained in previous topical reports submitted by CE.

The staff's safety evaluation of the District's transient and accident analysis topical report requests the District demonstrate the applicability of the CESEC-III code to Fort Calhoun Station. This applicability is demonstrated by the fact that the CESEC code is a digital simulation of a CE (pressurized water reactor) Nuclear Steam Supply System (NSSS). The CESEC-III code models primary system components and secondary system components. The primary system components considered in the code include the reactor vessel, the reactor core, primary coolant loops, the pressurizer, the steam

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generators and the reactor coolant pumps. The secondary system component models include the secondary side of the steam generators, the main steam system, feedwater system and various steam control valves. In addition, the program models some of the control and plant protective systems. The Fort Calhoun reactor is a typical CE NSSS. It consists of a pressurized water reactor with two steam generators, four reactor coolant pumps, two hot legs and four cold legs. The Fort Calhoun reactor is nodalized in accordance with the schemes given in Reference 4.9 of the OPPD Transient and Accident Methods and Verification Topical Report. The CESEC-III code was designed for the typical CE NSSS and since Fort Calhoun Station is a typical CE NSSS, the CESEC code is, in essence, designed for the class of NSSS's of which Fort Calhoun Station is a member. In addition, the District's verification of the CESEC-III code demonstrates that the CESEC-III code can be properly applied to Fort Calhoun Station and can accurately simulate transients which occurred at the station. The District believes that this provides adequate demonstration that the CESEC-III code is applicable to Fort Calhoun Station.

Sincerely,

R. L. Andrews
Division Manager
Nuclear Production

RLA/JKG/rh-S

cc: LeBoeuf, Lamb, Leiby & MacRae
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Mr. E. G. Tourigny, NRC Project Manager

Mr. L. A. Yandell, Senior Resident Inspector