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

May 22, 1991

Docket No. 50-285

Mr. W. Gary Gates
Division Manager - Nuclear Operations
Omaha Public Power District
444 South 16th Street Mall
Mail Stop 8E/EP4
Omaha, Nebraska 68102-2247

Dear Mr. Gates:

SUBJECT: FORT CALHOUN STATION, UNIT NO. 1 STEAM GENERATOR TUBE RUPTURE (SGTR) EVENT DOSE ASSESSMENT METHODOLOGY (TAC NO. 66801)

The NRR staff has completed it's review of your September 30, 1987, submittal on Steam Generator Tube Rupture Event Methodology. You requested our review and comments on this methodology which, if approved, would be incorporated into "Omaha Public Power District's Nuclear Analysis, Reload Core Analysis Methodology, Transient and Accident Methods and Verification", as part of the Updated Safety Analysis Report (USAR), Chapter 14, Section 14. On July 28, 1988, and August 3, 1988, the NRC staff requested additional information concerning the steam generator overfill scenario and the worst case offsite dose scenario by postulating a break at the top of the tube bundle similar to the North Anna event. This information was provided in your January 25, 1989, response. You stated in your response that the Fort Calhoun plant is a non-Standard Review Plan plant which was licensed in 1973; and that treatment of neither the steam generator overfill nor an uncovered tube break was part of your original licensing basis.

You further stated in your January 25, 1989, submittal that (1) plant operation within the Fort Calhoun Technical Specifications will not lead to an uncovered tube bundle exposure with minimized break flow (as in the North Anna event), and (2) the Fort Calhoun Emergency Operating Procedure, EOP-04, "Steam Generator Tube Rupture" provides guidance to the control room operators to isolate all auxiliary feedwater systems from the affected steam generator in the event of a potential overfill condition.

You also discussed the basis for operator action times utilized in a SGTR scenario. The operator action times of isolating the affected steam generator were determined from discussions with the operators and the operator's response during the 1988 Radiological Emergency Response Exercise which utilized a SGTR scenario.

Since the licensee will maintain the plant operation within their Technical Specifications and follow EOP-04 to mitigate the steam generator overfill condition with adequate operator action times, the NRC staff finds the licensee response is acceptable from the reactor systems point of view.

In addition, the staff also finds the licensee's revised dose calculational method, the assumptions and parameters used, and the resulting offsite doses calculated to be acceptable.

Sincerely,

Wayne C Walker

Wayne C. Walker, Project Manager
Project Directorate IV-1
Division of Reactor Projects III, IV, and V
Office of Nuclear Reactor Regulation

cc: See next page

cc:

Harry H. Voigt, Esq.
LeBoeuf, Lamb, Leiby & MacRae
1333 New Hampshire Avenue, NW
Washington, D.C. 20036

Mr. Jack Jensen, Chairman
Washington County Board
of Supervisors
Blair, Nebraska 68008

Mr. Raymond P. Mullikin, Resident Inspector
U.S. Nuclear Regulatory Commission
Post Office Box 309
Fort Calhoun, Nebraska 68023

Mr. Charles B. Brinkman, Manager
Washington Nuclear Operations
Combustion Engineering, Inc.
12300 Twinbrook Parkway, Suite 330
Rockville, MD 20852

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
Office of Executive Director
for Operations
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Harold Borchert, Director
Division of Radiological Health
Nebraska Department of Health
301 Centennial Mall, South
Post Office Box 95 07
Lincoln, Nebraska 68509

Mr. T. L. Patterson, Manager
Fort Calhoun Station
Post Office Box 399
Fort Calhoun, Nebraska 68023

In addition, the staff also finds the licensee's revised dose calculational method, the assumptions and parameters used, and the resulting offsite doses calculated to be acceptable.

Sincerely,

Wayne C Walker

Wayne C. Walker, Project Manager
Project Directorate IV-1
Division of Reactor Projects III, IV, and V
Office of Nuclear Reactor Regulation

cc: See next page

DISTRIBUTION
Docket File
NRC & Local PDRs
PD4-1 Reading
BBoger
MVirgilio
TQuay
PNoonan
WWalker
OGC(MS15B18)
EJordan(MS3701)
ACRS(10)(MSP315)
PD4-1 Plant File
JLee(MS10D4)
LCunningham(MS10D4)
RJones(MS8E23)

OFC	:PD4-1/LA	:PD4-1/PM	:PD4-1/D	:	:	:
NAME	:PNoonan	:WWalker	:TQuay	:	:	:
DATE	:5/21/91	:5/21/91	:5/21/91	:	:	:

OFFICIAL RECORD COPY
Document Name: FC LTR/66801