your energy partner
OPPD
Omaha Public Power District

444 South 16th Street Mall
Omaha NE 68102-2247

May 30, 2002
LIC-02-0070

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

References:
1. Docket No. 50-285
2. NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity" (NRC-02-034)
3. Letter from OPPD (R. T. Ridenoure) to NRC (Document Control Desk) dated April 1, 2002, Response to NRC Bulletin 2002-01 "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity" (LIC-01-034)
4. Letter from OPPD (R. P. Clemens) to NRC (Document Control Desk) dated August 31, 2001, Response to NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles" (LIC-01-075)

SUBJECT: Fort Calhoun Station's (FCS) Clarifications to FCS Response to Bulletin 2002-01

Reference 3 provided the Fort Calhoun Station (FCS) response to Nuclear Regulatory Commission (NRC) Bulletin 2002-01 (Reference 2). On May 3, 2002, a follow-up telephone conference was initiated by the NRC, providing Omaha Public Power District (OPPD) an opportunity to clarify information provided in Reference 3. The purpose of this letter is to docket OPPD's responses to NRC questions discussed during the May 3, 2002 telephone conference.

The NRC's questions and OPPD's responses are contained in the Attachment to this letter.

It should be noted that subsequent to the May 3, 2002 telephone conference, OPPD completed the inspection of the reactor vessel head as committed in our response to NRC Bulletin 2001-01, Reference 4. The inspection visually confirmed the operability of the vessel head penetrations and the reactor vessel head. The results of this inspection were discussed with the NRC during a telephone conference on May 21, 2002 and will be submitted to the NRC within 30 days of the startup from the current refueling outage.

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I declare under penalty of perjury that the foregoing is true and correct. (Executed on May 30, 2002)

If you have any questions or require additional information, please contact Dr. R. L. Jaworski at (402) 533-6833.

Sincerely,

Ross T. Ridenoure
Division Manager
Nuclear Operations

RTR/RLJ/rlj

Attachment

c: E. W. Merschoff, NRC Regional Administrator, Region IV
A. B. Wang, NRC Project Manager
W. C. Walker, NRC Senior Resident Inspector
Winston & Strawn

Clarifications to FCS Response to NRC Bulletin 2002-01

NRC Question 1:

Pages 4 and 5 of your 15-day response to Bulletin 2002-01 includes a list of reactor vessel head inspections beginning with the 1983 modification to replace the original insulation. The overall conclusion for the seven inspections that are listed was that there was no significant accumulation of boric acid above or below the reactor vessel head insulation. Provide the results of your most recent 100% bare metal inspection, including a description of any deposits that were found on the reactor vessel head. In addition, discuss whether or not these deposits were cleaned from the reactor vessel head. If the deposits were not cleaned, describe the extent of any significant deposits (i.e., deposits that prevent seeing the bare metal of the head for an area greater than 1 square inch).

FCS Response to Question 1:

The only significant Control Element Drive Mechanism (CEDM) leak at Fort Calhoun Station (FCS) occurred in 1990. This leaking, spare housing (Number 9) produced an accumulation of boric acid on the reactor vessel head insulation and on the reactor vessel head in the localized vicinity of Penetration 9. Visual examination of the housings and reactor vessel head found no corrosion wastage. Boric acid deposits were cleaned from all accessible areas. This occurrence is documented in LER 90-028, "Leak through Control Element Drive Mechanism Housing," dated January 14, 1991. Further, cleaning of the FCS reactor vessel head was undertaken during the 1992 refueling outage under MWO 921251. No boric acid crystal build-up was reported around the nozzles or on the reactor vessel head in 1992.

NRC Question 2:

Discuss whether or not any leaks have occurred since the most recent 100% bare metal inspection, and include your assessment of the potential for those leaks to have reached the reactor vessel head. If leakage onto the reactor vessel head can not be ruled out, address whether or not the past inspections performed were sufficient to conclude that the integrity of the reactor vessel head is maintained.

FCS Response to Question 2:

No significant leaks have occurred since 1990. Routine refueling outage maintenance would have observed significant boric acid deposits due to Reactor Coolant System (RCS) leaks. No boric acid deposits have been observed or reported. FCS procedure, Reactor Coolant System (RCS) Leak Rate Test, OP-ST-RC-3001, is performed daily to track known and unknown RCS leakage rates at FCS. This procedure was responsible

for the investigation, which found the leakage in 1990 and this procedure will also be a good first indicator of RCS leaks in the future. The conclusion is that the FCS reactor vessel head integrity is assured.

NRC Question 3:

Discuss whether or not you plan to clean any deposits that are observed during the 2002 inspections of the reactor vessel head.

FCS Response to Question 3:

Future cleaning of the FCS reactor vessel head will be performed to address any inspection findings of active boric acid. FCS will eliminate any active corrosive environment on the reactor vessel head causing corrosion wastage. A dusting or light deposit which is dry, not active, will not be cleaned due to ALARA considerations.