

March 02, 2006

Mr. R. T. Ridenoure  
Vice President - Chief Nuclear Officer  
Omaha Public Power District  
Fort Calhoun Station FC-2-4 Adm.  
Post Office Box 550  
Fort Calhoun, NE 68023-0550

SUBJECT: FORT CALHOUN STATION, UNIT 1 - REQUEST FOR ADDITIONAL  
INFORMATION RELATED TO THE USE OF M5 FUEL CLADDING (TAC  
NO. MC8096)

Dear Mr. Ridenoure:

By letter dated August 11, 2005, Omaha Public Power District (OPPD/the licensee) submitted a license amendment request for the Fort Calhoun Station, Unit 1. The licensee requested a technical specification change that would permit the use of AREVA (Framatome ANP) M5 advanced alloy for fuel rod cladding and other structural components in the reactor core, beginning with Refueling Cycle 24.

The Nuclear Regulatory Commission (NRC) staff has completed a preliminary review of OPPD's submittal. The NRC staff has determined that additional information is needed to complete our review. A request for additional information (RAI) is enclosed. This request was discussed with Thomas Byrne of your staff on February 9, 2006, and it was agreed that a response would be provided within 30 days of receipt of this letter.

If you have any questions, please contact me at (301) 415-1445.

Sincerely,

**/RA/**

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

Docket No. 50-285

Enclosure: RAI

cc w/encl: See next page

March 02, 2006

Mr. R. T. Ridenoure  
Vice President - Chief Nuclear Officer  
Omaha Public Power District  
Fort Calhoun Station FC-2-4 Adm.  
Post Office Box 550  
Fort Calhoun, NE 68023-0550

SUBJECT: FORT CALHOUN STATION, UNIT 1 - REQUEST FOR ADDITIONAL  
INFORMATION RELATED TO THE USE OF M5 FUEL CLADDING (TAC  
NO. MC8096)

Dear Mr. Ridenoure:

By letter dated August 11, 2005, Omaha Public Power District (OPPD/the licensee) submitted a license amendment request for the Fort Calhoun Station, Unit 1. The licensee requested a technical specification change that would permit the use of AREVA (Framatome ANP) M5 advanced alloy for fuel rod cladding and other structural components in the reactor core, beginning with Refueling Cycle 24.

The Nuclear Regulatory Commission (NRC) staff has completed a preliminary review of OPPD's submittal. The NRC staff has determined that additional information is needed to complete our review. A request for additional information (RAI) is enclosed. This request was discussed with Thomas Byrne of your staff on February 9, 2006, and it was agreed that a response would be provided within 30 days of receipt of this letter.

If you have any questions, please contact me at (301) 415-1445.

Sincerely,

**/RA/**

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

Docket No. 50-285

Enclosure: RAI

cc w/encl: See next page

DISTRIBUTION:

PUBLIC	RidsNrrPMAWang	RidsNrrAcrsAcnwMailCenter
LPLIV R/F	RidsNrrLALFeizollahi	RidsRgn4MailCenter (DGraves)
RidsNrrDorlLplg (DTerao)	RidsOgcRp	Tford
RidsNrrDpr		

ACCESSION NO. **ML060550294**

OFFICE	LPL4/PM	LPL4/LA	LPL4/BC
NAME	AWang	LFeizollahi	DTerao
DATE			

OFFICIAL RECORD COPY

REQUEST FOR ADDITIONAL INFORMATION  
REGARDING THE USE OF M5 FUEL CLADDING  
OMAHA PUBLIC POWER DISTRICT  
FORT CALHOUN STATION  
DOCKET NO. 50-285

By letter dated August 11, 2005, Omaha Public Power District (OPPD/the licensee) submitted a license amendment request for the Fort Calhoun Station, Unit 1. The licensee requested a technical specification change that would permit the use of AREVA (Framatome ANP) M5 advanced alloy for fuel rod cladding and other structural components in the reactor core, beginning with Refueling Cycle 24. The Nuclear Regulatory Commission (NRC) staff has completed a preliminary review of OPPD's submittal. The NRC staff has determined that the following additional information is needed to complete our review.

1. Provide the calculated peak clad temperatures for both the M5 cladding (Mark-B-HTP fuel design) and the co-resident Zircaloy-4 cladding.
2. Does the loss-of-coolant accident (LOCA) Evaluation Model consider both the pre-LOCA and LOCA oxidation in demonstrating compliance with 10 CFR 50.46 requirements?
3. Is the non-M5 fuel cladding oxidation bounded by a number which is less than or equal to the 10 CFR 50.46 acceptance criteria of 17 percent?

Ft. Calhoun Station, Unit 1

cc:

Winston & Strawn

ATTN: James R. Curtiss, Esq.

1400 L Street, N.W.

Washington, DC 20005-3502

Chairman

Washington County Board of Supervisors

P.O. Box 466

Blair, NE 68008

Mr. John Hanna, Resident Inspector

U.S. Nuclear Regulatory Commission

P.O. Box 310

Fort Calhoun, NE 68023

Regional Administrator, Region IV

U.S. Nuclear Regulatory Commission

611 Ryan Plaza Drive, Suite 400

Arlington, TX 76011-4005

Ms. Julia Schmitt, Manager

Radiation Control Program

Nebraska Health & Human Services R & L

Public Health Assurance

301 Centennial Mall, South

P.O. Box 95007

Lincoln, NE 68509-5007

Mr. David J. Bannister, Manager

Fort Calhoun Station

Omaha Public Power District

Fort Calhoun Station FC-1-1 Plant

P.O. Box 550

Fort Calhoun, NE 68023-0550

Mr. Joe L. McManis

Manager - Nuclear Licensing

Omaha Public Power District

Fort Calhoun Station FC-2-4 Adm.

P.O. Box 550

Fort Calhoun, NE 68023-0550

Mr. Daniel K. McGhee

Bureau of Radiological Health

Iowa Department of Public Health

Lucas State Office Building, 5th Floor

321 East 12th Street

Des Moines, IA 50319

January 2006