

Fort Calhoun Station P.O. Box 550 Fort Calhoun, NE 68023

> April 21, 2008 LIC-08-0048

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

References: 1. Docket No. 50-285

2.

3.

EMF-2328(P)(A), Revision 0, "PWR Small Break LOCA Evaluation Model, S-RELAP5 Based," Framatome ANP, Inc., March 2001

EMF-2103(P)(A), Revision 0, "Realistic Large Break LOCA Methodology for Pressurized Water Reactors," Framatome ANP, Inc., April 2003

Letter from OPPD (H. J. Faulhaber) to NRC (Document Control Desk), "Annual Report for 2006 Loss of Coolant Accident (LOCA)/Emergency Core Cooling System (ECCS) Models Pursuant to 10 CFR 50.46," dated April 25, 2007 (LIC-07-0034)

Subject:

## Annual Report for 2007 Loss of Coolant Accident (LOCA)/Emergency Core Cooling System (ECCS) Models Pursuant to 10 CFR 50.46

In accordance with 10 CFR 50(46)(a)(3)(ii), the Omaha Public Power District (OPPD) is submitting the annual 10 CFR 50.46 summary report for 2007. This summary report updates all identified changes or errors in the LOCA/ECCS codes, methods, and applications used by AREVA (formerly Framatome ANP) to model Fort Calhoun Station (FCS), Unit No. 1. References 2 and 3, respectively, describe the Small Break (SB) and Large Break (LB) LOCA analysis methodology used by AREVA for the FCS Analysis of Record.

OPPD has received the 2007 AREVA 10 CFR 50.46 Annual Notification Report for the SB and LB LOCA Analyses that are subject to the reporting requirements of 10 CFR 50.46. 0.1 same of an tracterior

For 2007, there were no SB LOCA Analysis Peak Clad Temperature (PCT) 10 CFR 50.46 Model Assessment errors. Attachment 1 provides the 2007 SB

AUDZ MRR

U. S. Nuclear Regulatory Commission LIC-08-0048 Page 2

LOCA PCT Margin Utilization Summary for FCS, which is unchanged from the 2006 Annual Report (Reference 4). The PCT remains at 1537°F.

For 2007, there were no LB LOCA PCT 10 CFR 50.46 Model Assessment errors. Attachment 2 provides the 2007 LB LOCA PCT Margin Utilization Summary for FCS. The LB LOCA analysis was redone as a result of Cycle 24 neutronics parameter changes. The value of the PCT is now 1636°F.

In summary, the FCS PCT values for SB and LB LOCA remain less than the 10 CFR 50.46(b) (1) acceptance criteria of 2200°F.

If you should have any questions, please contact Tom Matthews at (402) 533-6938.

No commitments to the NRC are made in this letter.

Sincerely,

R. P. Clemens Division Manager Nuclear Engineering

Attachments:

- 1. FCS Small Break LOCA PCT Margin Utilization Summary
- 2. FCS Large Break LOCA PCT Margin Utilization Summary

LIC-08-0048 Attachment 1 Page 1

## Fort Calhoun Station Small Break LOCA 2007 Peak Clad Temperature Margin Utilization Summary

LICENSING BASIS	Clad Temperature (°F)
Analysis of Record	1537
MARGIN ALLOCATIONS (APCT)	
A. Prior Permanent ECCS Model Assessme	ents 0
B. 2007 10 CFR 50.46 Model Assessments (Permanent Assessments of PCT Margin	0 n)
LICENSING BASIS PCT + MARGIN ALLOCATIONS	S 1537

LIC-08-0048 Attachment 2 Page 1

## Fort Calhoun Station Large Break LOCA 2007 Peak Clad Temperature Margin Utilization Summary

LICENSING BASIS	Clad Temperature (°F)
Analysis of Record	1636
A. Prior Permanent ECCS Model Assessme	ents 0
B. 2006 10 CFR 50.46 Model Assessments	Ö
(Permanent Assessments of PCT Margin	))
LICENSING BASIS PCT + MARGIN ALLOCATIONS	1636