Omaha Public Power District

444 South 16th Street Mall
Omaha NE 68102-2247

November 21, 2001
LIC-01-0106

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

References:
1. Docket No. 50-285
2. Letter from NRC (L. R. Walker) to OPPD (S. K. Gambhir), "Fort Calhoun Station, Unit No. 1 - Issuance of Amendment," dated March 14, 2001 (NRC-01-019)

SUBJECT: Fort Calhoun Station Unit No. 1 License Amendment Request, "Additional Core Operating Limits Report (COLR) Analytical Methods"

Pursuant to 10 CFR 50.90, Omaha Public Power District (OPPD) hereby requests amendment to Technical Specification 5.9.5, which adds three topical report references, i.e., analytical methods, to the COLR. These methods have been previously reviewed and approved by the NRC and are acceptable for use in the Fort Calhoun reactor core design by either Framatome ANP or OPPD. OPPD concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

In order to expedite replacement of fuel with fuel assemblies manufactured by Framatome ANP as incorporated by Reference 2, OPPD requests approval of the proposed amendment by March 15, 2002, to be available for core loading during the spring 2002 refueling outage. The spring 2002 refueling outage is planned to start on May 4, 2002. Once approved, the amendment shall be implemented within 60 days.

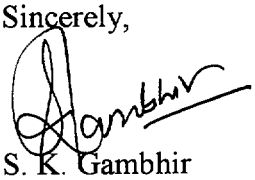
No licensee commitments will result from NRC approval of the proposed amendment.

I declare under penalty of perjury that the foregoing is true and correct. (Executed on November 21, 2001)

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

A001

Sincerely,



S. K. Gambhir
Division Manager
Nuclear Operations

SKG/RLJ/rlj

Attachments:
1. Fort Calhoun Station's Evaluation
2. Markup of Technical Specification pages

c: E. W. Merschoff, NRC Regional Administrator, Region IV
A. B. Wang, NRC Project Manager
W. C. Walker, NRC Senior Resident Inspector
B. E. Casari, Director - Environmental Health Division, State of Nebraska
Winston & Strawn

ATTACHMENT 1

Fort Calhoun Station's Evaluation for Amendment of Operating License

1.0 INTRODUCTION

2.0 DESCRIPTION OF PROPOSED AMENDMENT

3.0 BACKGROUND

4.0 REGULATORY REQUIREMENTS & GUIDANCE

5.0 TECHNICAL ANALYSIS

6.0 REGULATORY ANALYSIS

7.0 NO SIGNIFICANT HAZARDS CONSIDERATION (NSHC)

8.0 ENVIRONMENTAL CONSIDERATION

9.0 PRECEDENCE

10.0 REFERENCES

1.0 INTRODUCTION

This letter is a request to amend Operating License DPR-40 for the Fort Calhoun Station.

The Omaha Public Power District (OPPD) proposes to add three topical report references, i.e., analytical methods, to the Core Operating Limits Report (COLR) as required by Technical Specifications 5.9.5 for Fort Calhoun Station (FCS) Unit No. 1. This revision will allow OPPD to apply methodologies, previously NRC reviewed and approved, to future core designs. NRC approval of this amendment is requested by March 15, 2002, to support OPPD implementation of this amendment prior to core reloading on May 11, 2002.

2.0 DESCRIPTION OF PROPOSED AMENDMENT

The proposed amendment adds three references in the administrative controls, core operating limit report to allow the use of core design methodologies recently reviewed and approved by the NRC. These reload analysis methodologies, developed by Framatome ANP: 1) apply the S-RELAP5 code for pressurized water reactors (PWR) small break loss of coolant accidents (LOCA) evaluations (Reference 10.1); 2) document benchmarking of the PRISM code for PWR analysis (Reference 10.2); and 3) describe the standard review plan (SRP) Chapter 15 Non-LOCA methodology for PWRs (Reference 10.3).

3.0 BACKGROUND

Fort Calhoun Station is conducting a spring 2002 refueling outage. Forty (40) operating fuel assemblies are being replaced with new Framatome ANP assemblies. Utilization of the Framatome ANP methodologies will enable replacement of the maximum number of defective fuel assemblies and result in efficient, defect-free core operation.

The Fort Calhoun fuel integrity, status, and corrective actions have frequently been communicated to the NRC by OPPD through public meetings and submittals of Monthly Operating Reports and periodic performance indicator data.

For previous operating cycles, i.e., cycle 20 and earlier, OPPD developed the core loading pattern, and performed the physics, safety, transient/accident, and setpoint analysis using approved methods included by reference in Technical Specification 5.9.5. For operating cycle 21, which is scheduled to begin operation in June 2002, OPPD is only performing the core pattern development. In order to accommodate the refueling outage start date of spring 2002 from the fall 2002, it is necessary to have Framatome ANP perform the physics, safety, transient/accident, and setpoint analyses. Their methods must also be referenced in Technical Specification 5.9.5. Therefore, referencing of NRC approved topical report, Reference 10.2, arises because Framatome ANP utilizes the EMF-96 code

package for physics safety analyses. References 10.1 and 10.3 are being added because Framatome ANP utilizes S-RELAP5 methodology.

4.0 REGULATORY REQUIREMENTS & GUIDANCE

This amendment is required by the Fort Calhoun Technical Specification 5.9.5, which maintains a listing of the NRC approved methodologies acceptable for application to the Fort Calhoun core design analyses. This requirement assures NRC review of the proposed applications of methodology to maintain the design basis consistent with sections 50.46 and 50.55a of 10 CFR 50.

5.0 TECHNICAL ANALYSIS

5.1 Design Basis

The use of the NRC approved analytical methods ensures that core parameters remain within prescribed limitations defined by the plant's design basis and the updated final safety analysis report (UFSAR) accident analyses.

5.2 Risk Information

The proposed amendment does not involve application or use of risk-informed decisions.

6.0 REGULATORY ANALYSIS

The proposed amendment supports an administrative requirement that incorporates references to detailed descriptions of analytical methods, applicable standards, data, and results that have been reviewed and approved by the NRC.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

7.0 NO SIGNIFICANT HAZARDS CONSIDERATION

OPPD has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of Amendment," as discussed below:

1. **Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?**

   Response: No.

The proposed amendment incorporates three additional Framatome ANP topical reports for conducting core reload analyses. Since the intent of the amendment request is to add references to NRC-approved reload analysis methods, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. **Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?**

   Response: No.

   No new or different modes of operation are proposed as a result of these changes. The proposed revision does not change any equipment required to mitigate the consequences of an accident. The proposed addition of NRC-approved topical reports to the Technical Specification does not modify the manner in which the topical reports may be implemented. The plant will continue to operate within the limits specified by the Core Operating Limits Report and corrective actions will be taken in accordance with the Technical Specifications should these limits be exceeded. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. **Does the proposed change involve a significant reduction in a margin of safety?**

   Response: No.

   As required by Technical Specification 5.9.5, the analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC. The proposed change incorporates methodologies applicable for use with fuel supplied by Framatome ANP that have been approved by the NRC as documented by Safety Evaluation Reports (References 10.1, 10.2, and 10.3). Because Technical Specification 5.9.5 also requires that the core operating limits shall be determined and requires that all applicable limits of the safety analysis are met, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, OPPD concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

8.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment is confined to administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

9.0 PRECEDENCE

The analytical methods used to determine the core operating limits are required by FCS Technical Specification 5.9.5.b. These methods are limited to methods previously NRC reviewed and approved.

Revisions to the FCS analytical methods have been previously approved in FCS amendments 141, 144, 157, 178, and 196.

The methodologies being added to Technical Specification 5.9.5 were reviewed and approved by the NRC in References 10.1, 10.2, and 10.3.

The methodology of EMF-96-029(P) has been similarly applied and utilized by Millstone, Harris, and Robinson stations and accepted by the NRC in their license amendments.

10.0 REFERENCES

10.1 Letter, NRC to Framatome ANP, Richland, Inc., "Acceptance for Referencing of Licensing Topical Report EMF-2328(P)(A), Revision 0, "PWR Small Break LOCA Evaluation Model, S-RELAP5 Based" (TAC No. MA8022)," dated March 15, 2001

10.2 Letter, NRC to Siemens Power Corporation, "Acceptance for Referencing of Topical Report EMF-96-029(P)(A), Vols. 1 and 2, "Reactor Analysis System for PWRs" (TAC NO.DM95745)," dated October 29, 1996

10.3 Letter, NRC to Framatome ANP, Richland, Inc., "Acceptance For Referencing of Licensing Topical Report EMF-2310(P)(A), Revision 0, "SRP Chapter 15 Non-LOCA Methodology for Pressurized Water Reactors (TAC NO. MA7192)," dated May 11, 2001

ATTACHMENT 2

Markup of Technical Specifications

5.9.5 Core Operating Limits Report

21. EMF-2328(P)(A), "PWR Small Break LOCA Evaluation Model, S-RELAP5 Based," Framatome ANP, Inc., approved version as specified in the COLR.

22. EMF-96-029(P)(A) Volume 1, EMF-96-029(P)(A) Volume 2, EMF-96-029(P)(A) Attachment, "Reactor Analysis System for PWRs, Volume 1, Volume 2, and Attachment," Framatome ANP, Inc., approved version as specified in the COLR.

23. EMF-2310(P)(A), "SRP Chapter 15 Non-LOCA Methodology for Pressurized Water Reactors," Framatome ANP, Inc., approved version as specified in the COLR.