January 23, 1996

Mr. Donald Schnell
Senior Vice President - Nuclear
Union Electric Company
Post Office Box 149
St. Louis, Missouri 63166

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING UNION ELECTRIC COMPANY'S SEPTEMBER 6, 1995, REQUEST TO REVISE CALLAWAY PLANT TECHNICAL SPECIFICATIONS (TAC NO. M93704)

Dear Mr. Schnell:

The NRC staff has reviewed your September 6, 1995, request to increase the fuel enrichment at the Callaway Plant from 4.45 to 5.00 weight percent U-235 for fuel with integral fuel burnable absorbers (IFBAs) and from 3.85 to 4.10 weight percent U-235 for fuel without IFBAs and has identified areas where additional information is needed to complete the review. The information needed is detailed in the enclosure. Since NRC approval of the request is needed to support your October 1996 refueling outage, we request that you respond in writing to this request for additional information as soon as possible.

The requirements affect nine or fewer respondents and, therefore, are not subject to the Office of Management and Budget review under P.L. 96-511. If you have any questions, please contact me at (301) 415-1362.

Sincerely,

Original signed by:
Kristine M. Thomas, Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosure: Request for Additional Information

cc w/encl: See next page

DISTRIBUTION:

Docket File	PUBLIC
JRoe	EAdensam
WBateman	KThomas
EPeyton	ACRS, TWFN
PDIV-2 Reading	OGC, 015B18
WJohnson, RIV	JDyer, RIV
NWagner, SPLB	GHubbard, SPBL
CMcCracken, SPLB	

Document Name: CA993704.RAI

OFC	LA:PD4-2	PM:PD4-2
NAME	EPeyton	KThomas:pk
DATE	1/23/96	1/23/96

OFFICIAL RECORD COPY

January 23, 1996

Mr. Donald Schnell
Senior Vice President - Nuclear
Union Electric Company
Post Office Box 149
St. Louis, Missouri 63166

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING UNION ELECTRIC COMPANY'S SEPTEMBER 6, 1995, REQUEST TO REVISE CALLAWAY PLANT TECHNICAL SPECIFICATIONS (TAC NO. M93704)

Dear Mr. Schnell:

The NRC staff has reviewed your September 6, 1995, request to increase the fuel enrichment at the Callaway Plant from 4.45 to 5.00 weight percent U-235 for fuel with integral fuel burnable absorbers (IFBAs) and from 3.85 to 4.10 weight percent U-235 for fuel without IFBAs and has identified areas where additional information is needed to complete the review. The information needed is detailed in the enclosure. Since NRC approval of the request is needed to support your October 1996 refueling outage, we request that you respond in writing to this request for additional information as soon as possible.

The requirements affect nine or fewer respondents and, therefore, are not subject to the Office of Management and Budget review under P.L. 96-511. If you have any questions, please contact me at (301) 415-1362.

Sincerely,

Original signed by:
Kristine M. Thomas, Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 40-483

Enclosure: Request for Additional Information

cc w/encl: See next page

DISTRIBUTION:

Docket File	PUBLIC
JRoe	EAdensam
WBateman	KThomas
EPeyton	ACRS, TWFN
PDIV-2 Reading	OGC, 015B18
WJohnson, RIV	JDyer, RIV
NWagner, SPLB	GHubbard, SPBL
CMcCracken, SPLB	

Document Name: CA993704.RAI

OFC	LA:PD4-2	PM:PD4-2
NAME	EPeyton	KThomas:pk
DATE	1/23/96	1/23/96

OFFICIAL RECORD COPY

cc w/encl:
Professional Nuclear
Consulting, Inc.
19041 Raines Drive
Derwood, Maryland 20855

Gerald Charnoff, Esq.
Thomas A. Baxter, Esq.
Shaw, Pittman, Potts & Trowbridge
2300 N. Street, N.W.
Washington, D.C. 20037

Mr. H. D. Bono
Supervising Engineer,
Site Licensing
Union Electric Company
Post Office Box 620
Fulton, Missouri 65251

U.S. Nuclear Regulatory Commission
Resident Inspector Office
8201 NRC Road
Steedman, Missouri 65077-1302

Mr. G. L. Randolph, Vice President
Nuclear Operations
Union Electric Company
P.O. Box 620
Fulton, Missouri 65251

Manager - Electric Department
Missouri Public Service Commission
301 W. High
Post Office Box 360
Jefferson City, Missouri 65102

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
Harris Tower & Pavilion
611 Ryan Plaza Drive, Suite 400
Arlington, Texas 76011-8064

Mr. Ronald A. Kucera, Deputy Director
Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102

Mr. Neil S. Carns
President and Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, Kansas 66839

Mr. Dan I. Bolef, President
Kay Drey, Representative
Board of Directors Coalition
for the Environment
6267 Delmar Boulevard
University City, Missouri 65130

Mr. Lee Fritz
Presiding Commissioner
Callaway County Court House
10 East Fifth Street
Fulton, Missouri 65151

Mr. Alan C. Passwater, Manager
Licensing and Fuels
Union Electric Company
Post Office Box 149
St. Louis, Missouri 63166

Mr. J. V. Laux, Manager
Quality Assurance
Union Electric Company
Post Office Box 620
Fulton, Missouri 65251

Enclosure

CALLAWAY PLANT, UNIT NO. 1

DOCKET NO. 50-483

REQUEST FOR ADDITIONAL INFORMATION REGARDING SEPTEMBER 6, 1995 SUBMITTAL

In support of the Union Electric Company's amendment request of September 6, 1995, information is required that demonstrates that the thermal-hydraulic characteristics of the Callaway spent fuel pool (SFP) are in conformance with previously accepted criteria or with present NRC guidelines for the fuel enrichment changes that have been requested. Therefore, the following information is requested:

1. Describe the licensing bases for the Callaway SFP and related systems, making reference to licensing documents and correspondence as applicable, and explain what impact the proposed changes in fuel enrichment will have on these licensing bases. Identify any relevant assumptions and other licensing basis considerations such as postulated accident conditions, single-failure considerations, and environmental effects on equipment in the vicinity of the SFP.

2. If not included in the response to 1 above, provide the following information:

   a. The worst-case decay heat load that will result from spent fuel stored in the SFP as a consequence of a normal core offload and a full core offload. For each, specify the bases for the results obtained, including the number and types of spent fuel elements stored.

   b. The worst-case bulk temperatures of the SFP coolant and the bases for these temperatures for a normal core offload and for a full core offload.

   c. The minimum time to reach bulk boiling in the SFP coolant after reaching the worst-case temperatures in the case of a normal core offload and a full core offload.

   d. The maximum (worst-case) fuel cladding temperature that could be reached for fuel stored in the SFP.

3. Discuss to what extent coolant boiling may result from storage of spent fuel in the SFP and to what degree voids resulting from such boiling have been included in the criticality analysis for the proposed changes in fuel enrichment.

4. Explain what is meant by "thermal hydraulic constraints" and their resolution (see pages 1 and 2 of Attachment 3 to the September 6, 1995, submittal).

5. Describe how the fuel pool cleanup system will be protected in the event of high SFP coolant temperatures.