

August 23, 1990

Donald F. Schnell Senior Vice President Nuclear

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Mail Station P1-137 Washington, D. C. 20555

Gentlemen:

ULNRC-2274

DOCKET NUMBER 50-483 CALLAWAY PLANT THIMBLE PLUG REMOVAL

During the upcoming refueling outage (Refuel 4), Union Electric plans to remove some of the thimble plugging devices from the Callaway Plant. A safety evaluation per 10CFR50.59 has been performed to support the complete or partial removal of the thimble plugs. No license amendment is required; however, the attachment contains revisions to Technical Specification Bases 3/4.2.2 and 3/4.2.3 that reflect an all-VANTAGE 5 core with the thimble plugs removed.

The main effect of thimble plug removal is an increase in the core bypass flow. For the Cullaway Plant, removal of all of the thimble plugging devices causes the design value of the core bypass flow to increase from 6.3% to 8.6%. This increase in bypass flow can be accommodated by the allocation of 3.1% DNBR margin. With an all VANTAGE 5 core (i.e., no transition core DNBR penalty), there is more than sufficient DNBR margin built into the existing Callaway safety analyses to absorb this penalty.

If you have any questions on the attached Bases changes, please contact us.

Very truly yours,

Donald F. Schnell

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STATE OF MISSOURI )

CITY OF ST. LOUIS )

Donald F. Schnell, of lawful age, being first duly sworn upon oath says that he is Senior Vice President-Nuclear and an officer of Union Electric Company; that he has read the foregoing document and knows the content thereof; that he has executed the same for and on behalf of said company with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

Donald F. Schnell Senior Vice President Nuclear

SUBSCRIBED and sworn to before me this 23Mday of August, 1990.

BARBARA J. PFAF NOTARY PUBLIC, STATE OF MISSOURI MY COMMISSION EXPIRES APRIL 22, 1993

ST. LOUIS COUNTY

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