



**UNION ELECTRIC COMPANY**

1901 Gratiot Street, St. Louis

Donald F. Schnell  
Vice President

November 15, 1985

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Mr. Denton:

ULNRC-1210

DOCKET NUMBER 50-483  
CALLAWAY PLANT, UNIT 1

CALLAWAY LICENSE CONDITIONS C(12)

- References: 1) ULNRC-1003 dated December 28, 1985  
2) NRC Letter from B. J. Youngblood to  
D. F. Schnell dated July 30, 1985

Callaway License Condition C(12) deals with the use of Residual Heat Removal (RHR) suction relief valves for Low Temperature Over-Pressure Protection (LTOP). In Reference 1 Union Electric proposed a modification to add an alarm circuit to valves BB-PV-8702A and EJ-HV-8701B. The alarms will provide assurance that the RHR system is properly isolated from the Reactor Coolant System (RCS) when the plant is returned to operating pressure following use of the RHR relief valves for LTOP. NRC subsequently approved this modification in Reference 2.

During the course of completing the detailed design of this modification it was determined the modification as proposed in Reference 1 would perform its intended function, but would produce alarms that could not be cleared, even with correct valve alignment. This is because the alarms would be generated above the interlock activation setpoint of 682 psig, when power was removed from the valves, as procedurally required. In order to remedy this situation, Union Electric proposes modified alarm circuits which will alarm only if either valves BB-PV-8702A or EJ-HV-8701B is open at pressures above the interlock setpoint. A single annunciator window will represent these two alarm circuits, but they will be alarmed individually on the Balance of Plant Computer.

The newly proposed alarm circuits do not affect the analysis provided in Reference 1 with regard to compliance to Standard Review Plans 5.2.2 and 5.4.7 and the corresponding Branch Technical Positions RSB 5-2 and 5-1. In the previously approved design, valve position was provided indirectly by an auxiliary relay at the motor control center and was therefore not available when power was removed from the valves. The newly proposed circuits are an improvement due to this design not relying on

8511200165 851115  
PDR ADOCK 05000483  
PDR

Mailing Address: P.O. Box 149, St. Louis, MO 63166

Acc'd  
1/3

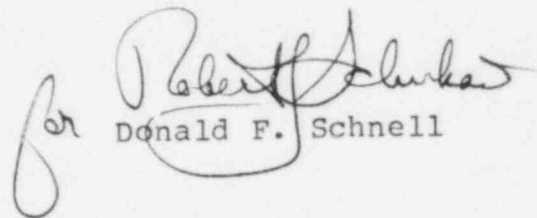
Rec'd w/attach # 150.00

power to the valve actuator to provide the alarm. This is because the valve position inputs for the alarms now come directly from valve stem mounted limit switches and power is provided by the annunciator system. An alarm response procedure will direct the operator to verify valve closure upon receipt of this alarm. The attached sketch depicts the alarm circuits which are currently proposed.

License Condition C(12) established an implementation schedule of 1 year following NRC approval. The newly proposed alarm circuits require new cables be run to the valves in containment and therefore require an outage to complete that portion of the modification. The only scheduled outage for Callaway prior to July 30, 1986 is the Refuel-1 outage which will begin on March 1, 1986. Work to be performed during Refuel-1 is in the final stages of planning and therefore NRC approval of this modification is requested by December 1, 1985.

We regret that additional effort on your part will be required to close License Condition C(12), but we do appreciate an expeditious review of this request. Enclosed is a check for the \$150.00 application fee required by 10 CFR 170.12. If there are any questions, please contact us.

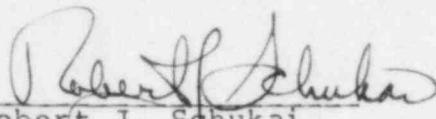
Very truly yours,

  
for Donald F. Schnell

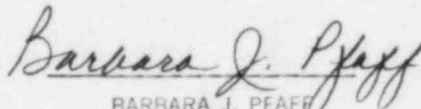
DS/bjk

STATE OF MISSOURI )  
 ) S S  
CITY OF ST. LOUIS )

Robert J. Schukai, of lawful age, being first duly sworn upon oath says that he is General Manager-Engineering (Nuclear) for 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.

By   
Robert J. Schukai  
General Manager-Engineering  
Nuclear

SUBSCRIBED and sworn to before me this 15<sup>th</sup> day of November 1985.

  
BARBARA J. PFAFF  
NOTARY PUBLIC, STATE OF MISSOURI  
MY COMMISSION EXPIRES APRIL 22, 1989  
ST. LOUIS COUNTY.

cc: Gerald Charnoff, Esq.  
Shaw, Pittman, Potts & Trowbridge  
1800 M. Street, N.W.  
Washington, D.C. 20036

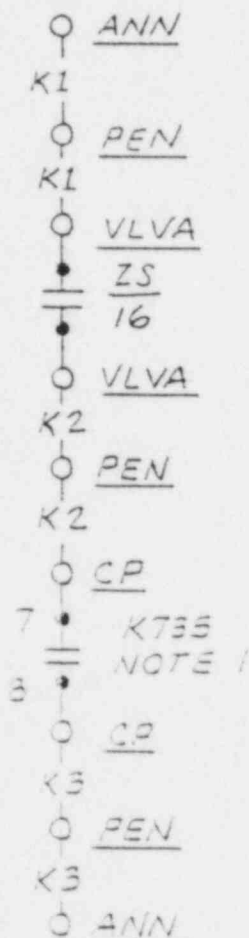
Nicholas A. Petrick  
Executive Director  
SNUPPS  
5 Choke Cherry Road  
Rockville, Maryland 20850

G. C. Wright  
Division of Projects and  
Resident Programs, Chief, Section 1A  
U.S. Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Bruce Little  
Callaway Resident Office  
U.S. Nuclear Regulatory Commission  
RR#1  
Steedman, Missouri 65077

Tom Alexion  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Mail Stop P-316  
7920 Norfolk Avenue  
Bethesda, MD 20014

BB-PV-8702A, EJ-HV-8701B ALARM CIRCUIT  
(TYPICAL)



ANNUNCIATOR CIRCUIT

TABLE B

ANN. REF. DWG BECHTEL V.P. NO.	J-108-299
ANNUNCIATOR POINT	BBZA8702
ANNUNCIATOR LOC- <u>ANN</u>	RK045B
CONTROL PNL - <u>CP</u>	SB032D
VALVE NO. - <u>VLVA</u>	BBPV8702A
PENETRATION - <u>PEN</u>	ZSE233
ANNUNCIATOR SCHEME NO.	4BBR12B

TABLE C

ANN. REF. DWG BECHTEL V.P. NO.	J-108-299
ANNUNCIATOR POINT	EJZA8701
ANNUNCIATOR LOC- <u>ANN</u>	RK045A
CONTROL PNL - <u>CP</u>	SB029D
VALVE NO. - <u>VLVA</u>	EJHV8701B
PENETRATION - <u>PEN</u>	ZNE277
ANNUNCIATOR SCHEME NO.	1EJR05C