



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 1 TO FACILITY OPERATING LICENSE NO. NPF-30

UNION ELECTRIC COMPANY

CALLAWAY PLANT, UNIT 1

DOCKET NO. STN 50-483

1.0 INTRODUCTION

By letter, dated August 1, 1984, Union Electric Company (the licensee) requested an amendment to Facility Operating License No. NPF-30 for operation of the Callaway Plant in Callaway County, Missouri.

The amendment would modify Table 3.3-1 of the Callaway Technical Specifications (TS) to include an additional footnote.

2.0 EVALUATION

The additional footnote allows manual blocking of both source range doubling channels in order for the licensee to perform a normal plant startup, i.e., Modes 2 and 3. The source range monitors are utilized to provide alarm and protection for inadvertent boron dilution during Modes 2 (below P-6 setpoint), 3, 4 and 5 operations. One of the design functions of these monitors is to automatically switchover the charging pumps suction from the volume control tank (containing zero ppm boron solution) to the refueling water storage tank (containing 2000 ppm boron solution). The block switches are provided on the main control board. Blocking is also annunciated on the main control board. The licensee stated that the blocking action would only bypass the automatic switchover associated with the charging pump suction. The reactor trip and all other alarms generated from the source range channels would not be affected. The licensee indicated that the system design would permit manual blocking of this function below the P-6 setpoint, but that the switchover function would be reinstated automatically when the intermediate range channels decrease below the P-6 setpoint during shutdown.

8412060582 841129  
PDR ADOCK 05000483  
PDR

Based on our review of the licensee's safety evaluation and our safety evaluation with regard to the boron dilution events, the staff concludes that the blockage of the source range monitor automatic switchover function in accordance with approved procedures for both blocking and unblocking during startup and startup abortions will not affect the safe operation of the Callaway plant and is acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant change in the types or significant increase in the amounts of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

### 4.0 CONCLUSION

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

Date: November 29, 1984

Principal Contributors:

V. T. Leung, RSB  
J. A. Stevens, LB#1