

Docket No.: STN 50-483

NOV 29 1984

Mr. D. F. Schnell
Vice President - Nuclear
Union Electric Company
P. O. Box 149
St. Louis, Mo. 63166

Dear Mr. Schnell:

Subject: Callaway Plant, Unit 1 - Amendment No. 1 to License NPF-30

The Commission has issued the enclosed Amendment No. 1 to Operating License NPF-30 for the Callaway Plant, Unit 1. The amendment consists of a change to the Technical Specifications in response to your application dated August 1, 1984, which requested an additional provision to allow for blockage of both source range flux doubling switchover signals in order to perform a reactor startup.

The amendment approves a modification to Table 3.3-1 of the Callaway Technical Specifications consisting of an additional footnote.

A copy of the related Safety Evaluation is enclosed. The notice of issuance will be included in the Commission's next regular monthly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY:

LSI

B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

Enclosures:

1. Amendment No. 1 to NPF-30
2. Safety Evaluation Report

cc: See next page

LB#1:DL *gas*
JStevens *gab*
11/29/84

AD: *Sand*
DC *Witchfield*
11/29/84

AD: *DL*
TNovak
11/29/84

LB#1:DL *avol*
PO'Connor
11/29/84

LB#1:DL *BJ*
BJYoungblood
11/29/84

OELD
Robert Brown
11/29/84

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CALLAWAY

NOV 29 1984

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NOV 29 1984

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

NOV 29 1984

UNION ELECTRIC COMPANY

DOCKET NO. 50-483

CALLAWAY PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 1
License No. NPF-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Union Electric Company (the licensee), dated August 1, 1984, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public; and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Operating License No. NPF-30 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 1, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, except where otherwise stated in specific license conditions.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY:

B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

Attachment:
Change to the Technical
Specifications

Date of Issuance:

LB#1:DL
JStevens: kab
11/29/84

AD:SA
DC Muchfield
11/29/84

LB#1:DL
MRushbrook
11/29/84

AD:L:DL
TNovak
11/29/84

LB#1:DL
PO'Connor
11/29/84

LB#1:DL
BJYoungblood
11/29/84

OELD
11/29/84

ATTACHMENT TO LICENSE AMENDMENT NO. 1

OPERATING LICENSE NO. NPF-30

DOCKET NO. STN 50-483

Revise Appendix A, as follows:

REMOVE

3/4 3-2
3/4 3-5

INSERT

3/4 3-2
3/4 3-5

TABLE 3.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
1. Manual Reactor Trip	2	1	2	1, 2	1
	2	1	2	3*, 4*, 5*	10
2. Power Range, Neutron Flux					
a. High Setpoint	4	2	3	1, 2	2#
b. Low Setpoint	4	2	3	1###, 2	2#
3. Power Range, Neutron Flux High Positive Rate	4	2	3	1, 2	2#
4. Power Range, Neutron Flux, High Negative Rate	4	2	3	1, 2	2#
5. Intermediate Range, Neutron Flux	2	1	2	1###, 2	3
6. Source Range, Neutron Flux					
a. Startup	2	1	2	2###*	4
b. Shutdown	2	1	2	3**, 4, 5	5
7. Overtemperature ΔT					
Four Loop Operation	4	2	3	1, 2	6#
8. Overpower ΔT					
Four Loop Operation	4	2	3	1, 2	6#
9. Pressurizer Pressure-Low	4	2	3	1	6#
10. Pressurizer Pressure-High	4	2	3	1, 2	6#

TABLE 3.3-1 (Continued)

TABLE NOTATIONS

*Only if the Reactor Trip System breakers happen to be in the closed position and the Control Rod Drive System is capable of rod withdrawal.

**The boron dilution flux doubling signals may be blocked during reactor startup in accordance with approved procedures.

#The provisions of Specification 3.0.4 are not applicable.

##Below the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.

###Below the P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.

ACTION STATEMENTS

ACTION 1 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in HOT STANDBY within the next 6 hours.

ACTION 2 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

- a. The inoperable channel is placed in the tripped condition within 1 hour,
- b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 2 hours for surveillance testing of other channels per Specification 4.3.1.1, and
- c. Either, THERMAL POWER is restricted to less than or equal to 75% of RATED THERMAL POWER and the Power Range Neutron Flux Trip Setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER within 4 hours; or, the QUADRANT POWER TILT RATIO is monitored at least once per 12 hours per Specification 4.2.4.2.

ACTION 3 - With the number of channels OPERABLE one less than the Minimum Channels OPERABLE requirement and with the THERMAL POWER level:

- a. Below the P-6 (Intermediate Range Neutron Flux interlock) Setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 Setpoint; or
- b. Above the P-6 (Intermediate Range Neutron Flux interlock) Setpoint but below 10% of RATED THERMAL POWER, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above 10% of RATED THERMAL POWER.



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.

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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:

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