

September 5, 1990

Docket No. 50-483

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Mr. Donald F. Schnell
Senior Vice President - Nuclear
Union Electric Company
Post Office Box 149
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Dear Mr. Schnell:

SUBJECT: ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT,
CALLAWAY PLANT (TAC NO. 76517)

Enclosed is a copy of an "Environmental Assessment and Finding of No Significant Impact" for your information. This environmental assessment relates to your letters dated April 12, 1990 and July 7, 1990 regarding your application for amendment to Technical Specification Tables 2.2-1, 3.3-4 and 4.3-1 and associated Bases to accommodate the replacement of the current Resistance Temperature Detector (RTD) bypass system with an RTD/thermowell system mounted directly into the hot and cold legs of the reactor coolant system.

The environmental assessment has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Original Signed By:

Anthony T. Gody, Jr., Project Manager
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

LA:PD33
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Callaway Plant
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UNITED STATES NUCLEAR REGULATORY COMMISSIONUNION ELECTRIC COMPANYDOCKET NO. 50-483ENVIRONMENTAL ASSESSMENT AND FINDING OFNO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-30, issued to Union Electric Company, (the licensee), for operation of the Callaway Plant, located in Callaway County, Missouri.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action

The proposed amendment would include revisions to the Technical Specification Tables 2.2-1, 3.3-4 and 4.3-1 and associated Bases to accommodate the proposed replacement of the current Resistance Temperature Detector (RTD) bypass system with an RTD/thermowell system mounted directly into the hot and cold legs of the reactor coolant system.

The proposed action is in accordance with the licensee's application for amendment dated April 12, 1990, as supplemented by a letter dated July 7, 1990.

The Need for the Proposed Action

Experience has demonstrated that the current RTD bypass design has two significant drawbacks:

- (1) **Lack of Reliability:** Plant shutdowns have been required due to leakage from equipment related to the RTD bypass manifold arrangement or because of flow reductions in the bypass piping due to valve problems.

- (2) High Radiation Dose: A significant number of crud traps exist in the bypass piping, resulting in increased Man-rem accumulation while work is being done on or near the RTD bypass manifold system.

The proposed RTD system would eliminate all the bypass piping and its associated problems while providing the capability of replacing RTDs without draining down the reactor coolant system.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the proposed revision to the TSs. The proposed amendment would accommodate the replacement of the current RTD bypass system with an RTD/thermowell system mounted directly into the hot and cold legs of the reactor coolant system. The replacement of the current RTD bypass system with a direct measurement RTD system with its subsequent removal of the bypass manifold piping would not significantly increase the probability or consequences of any accidents previously analyzed. No significant changes in the types or amounts of radiological effluents during normal operation or postulated accidents that may be released offsite are incurred by this proposed modification. As a result, no significant increase in the individual or cumulative occupational radiation exposure is noted.

Therefore, since the proposed changes do not increase the probability or consequences of accidents, no changes are being made in the types or amounts of any radiological effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure, the Commission concludes that this proposed action would result in no significant radiological environmental impact.

The Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the Federal Register on June 14, 1990 (55 FR 24172). No request for hearing or petition for leave to intervene was filed following this notice.

With regard to potential nonradiological impacts, the proposed change to the TS involves a system located within the restricted area as defined by 10 CFR Part 20. The proposed change will not result in a measurable change to the nonradiological plant effluents and therefore will not have any environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed amendment.

Alternative to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated. The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operational flexibility.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statements for the Callaway Plant dated January 1982.

Agencies and Persons Consulted

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

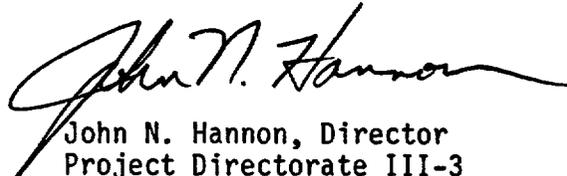
The Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated April 12, 1990 and supplement dated July 7, 1990, which are available for public inspection at the Commission's Public Document Room, 2120 L Street, N.W., Washington, D.C. and at the Callaway County Public Library, 710 Court Street, Fulton, Missouri 65251 and the John M. Olin Library, Washington University, Skinker and Lindell Boulevards, St. Louis, Missouri 63130.

Dated at Rockville, Maryland, this 5th day of September 1990.

FOR THE NUCLEAR REGULATORY COMMISSION



John N. Hannon, Director
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation