



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 2 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 October 3, 1984, as supplemented December 6, 1984 and December 27, 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 4.11-1 of the Callaway Technical Specifications (TS) to include two additional Batch Waste Release Tanks.

2.0 EVALUATION

The licensee requested the addition of two 100,000 gallon tanks for the purpose of storing liquid waste generated from the secondary cooling sludge water. This waste water originates from the condenser hot well and is used as the working fluid to transport resins from the condensate demineralizers into the condensate demineralizer regeneration system, and also to carry acid and caustic into the same system. As this sludge water leaves the condensate demineralizer regeneration system, it contains amounts of dissolved solids and conductivity that is unacceptable for returning to the condenser hot well without additional treatment. The secondary liquid waste system possesses the flexibility to either process this water through an evaporator and/or demineralizer so that it can be returned to the condenser hotwell, or to directly discharge the untreated water to the river.

In a telephone conversation on December 19, 1984, Union Electric stated that if this stream contains radioactivity, as determined by sampling and/or monitoring of the secondary waste discharge, it would be redirected through the secondary waste evaporators and demineralizers at which time it would then be returned to the condenser hot well. However, because there normally is insignificant radioactivity in this stream, Union Electric has chosen, for financial considerations, to by-pass the secondary waste evaporator and demineralizers and discharge the water to the environment while making up the loss of condensate by cheaper methods.

To ensure releases are within technical specification radioactivity and NPDES limits, Union Electric will add storage tanks (two 100,000 gallon tanks) in parallel with the two existing secondary liquid waste monitor tanks (15,000 gallons each) to provide sufficient time for sampling and analyses prior to discharge.

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The staff finds the design change to add two 100,000 gallon discharge monitor tanks and the associated Technical Specification change to be acceptable. This conclusion is based on the following facts:

- a) Even though the secondary waste evaporator and demineralizers are by-passed, there will only be an insignificant increase in radioactivity release via this stream.
- b) All secondary waste is sampled and monitored for radioactivity prior to and during releases.
- c) Releases of secondary waste pollutants (such as radioactivity, chemicals and total dissolved solids) is limited by Technical Specification and NPDES limits.
- d) Proper tank protection features meeting the requirements of Regulatory Guide 1.143 for radioactive waste treatment systems are provided.
- e) All radioactive effluents are limited by Technical Specifications. This amendment does not affect these limits.

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). An environmental assessment was prepared for this amendment request (49FR50848) in which it was determined that an environmental impact statement was not required for this action.

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: February 4, 1985

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