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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 69 TO FACILITY OPERATING LICENSE NO. NPF-30

UNION ELECTRIC COMPANY

CALLAWAY PLANT, UNIT 1

DOCKET NO. 50-483

1.0 INTRODUCTION

In a letter dated November 22, 1991, the licensee identified overly conservative Technical Specifications (TSs) requirements, based on guidance provided in Generic Letter 87-09. GL 87-09 acknowledges that it is overly conservative to restrict operational mode changes under conditions which provide an acceptable level of safety for unlimited continued operation. The referenced TSs are 3/4.3.2, Engineered Safety Features Actuation System Instrumentation, and 3/4.7.6, Control Room Emergency Ventilation System (CREVS).

The Control Room Emergency Ventilation System provides the control room with a conditioned atmosphere following various Design Basis Accidents (DBAs) such as Loss of Coolant Accident (LOCA), fuel handling accident, rod ejection, main steamline break and steam generator tube rupture. This system ensures that the instrumentation and equipment located in the control room will be maintained within their design temperatures and that the control room will remain habitable.

The CREVS consists of two separate and redundant trains which recirculate the control room air. The system initiates filtered ventilation of the control room following receipt of an actuation signal. The CREVS design basis is established by the consequences of the limiting DBA which is a LOCA in MODEs 1, 2, 3, and 4 and a fuel handling accident in MODEs 5 and 6. The LOCA analysis assumes that only one train of the CREVS is functional due to a single failure which disables the other train.

During refueling outages, train-related work typically begins as soon as the refueling pool is flooded for fuel movement. Normally the "B" safety train work is completed first, followed by the "A" safety train work. The refuel sequence normally consists of offload, work required during offload, and reload. Train-related work normally includes the following systems: Diesel Generators (D/G), Essential Service Water (ESW), Component Cooling Water (CCW), Residual Heat Removal (RHR), Centrifugal Charging Pump (CCP) and Electrical Buses associated with a particular train. When the first train

work is completed, it is restored before going to the next train. With fuel loaded and train work completed, the refuel pool can be drained and the vessel head replaced.

The licensee stated that problems arise with the start of fuel movement back for the reload. With fuel offloaded, the plant is considered to be in a no-mode condition. The first element back into the vessel causes entry into Mode 6. Since one of the safety trains is out of service and T/S 3.7.6 requires both trains of the CREVS operable, the transition from no-mode to Mode 6 is difficult (no ESW available from out-of-service train to associated CREVS). This problem was avoided in refueling number 4 by restoring the out-of-service train of ESW long enough to put the first assembly in the vessel. The ESW system was then taken back out of service; however, had work started or a problem been discovered with this safety train, movement of the first fuel assembly could not start.

The licensee requested an amendment to revise the action statements of TSs 3/4.3.2 and 3/4.7.6 such that an exception to TS 3.0.4 is allowed which permits continued unit operation for an unlimited perind of time. The licensee stated that entry into one of the above action statements as currently written would restrict operating mode changes due to TS 3.0.4. This could result in a delay in fuel loading. The licensee, therefore, proposes the change on the basis that the action statement establishes an acceptable level of safety for continual unit operation, hence, mode changes need not be restricted.

2.0 EVALUATION

The CREVS and its actuation instrumentation function to maintain control room habitability. The revised actions would allow continued operation for an unlimited period of time after the CREVS has been placed in its emergency (recirculation) mode of operation.

The proposed change would add the stipulation to TS 3.3.2 (Table 3.3-3, ACTION 26) and 3 7.6 (MODEs 5 and 6, ACTION a.) that the provisions of Specification 3.0.4 are not applicable. The proposed change would allow Callaway Plant to make operational MODE changes in MODEs 5 and 6 while operating in accordance with existing ACTIONS, which allow continued operation for an unlimited time period. This change is consistent with the guidance provided in Generic Letter 87-09, which acknowledges that it is overly conservative to restrict operational MODE changes under conditions which provide an acceptable level of safety for unlimited continued operation. This proposed change will thereby eliminate a situation that could result in a delay in fuel loading.

Based on the guidance provided in the generic letter, the staff finds these changes, as proposed by the licensee, acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Missouri State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to 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 increase in the amounts, and no significant change in the types, of any effluent 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 (57 FR 2602) 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 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.

5.0 CONCLUSION

The staff has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: March 26, 1992