



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 155 TO

FACILITY OPERATING LICENSE NO. NPF-6

ENTERGY OPERATIONS, INC.,

ARKANSAS NUCLEAR ONE, UNIT NO. 2

DOCKET NO. 50-368

1.0 INTRODUCTION

By letter dated October 27, 1993, Entergy Operations, Inc. (the licensee) submitted a request for changes to the Arkansas Nuclear One, Unit No. 2 (ANO-2) Technical Specifications (TSs). The requested changes would relocate the requirement of TS 4.5.2.g.1 to verify the correct position of each electrical and/or mechanical position stop for the Emergency Core Cooling System (ECCS) throttle valves within 4 hours of each valve stroking operation or maintenance on the valve, to procedures that control the maintenance and operation of these valves.

2.0 EVALUATION

Proper operation of the open position stop (or limit switch) on the ECCS throttle valves is required to assure proper flow balance between the injection flow paths and to prevent physical damage to the valve or operator during any full stroke operation. Proper initial setting, maintenance, and periodic reverification of proper setting of torque, torque bypass, position limits, and overload switches on safety-related motor-operated valves (MOVs) at ANO-2 are controlled by commitments made by the licensee in response to Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance," issued June 28, 1989, and its supplements.

The licensee has taken the position in the past that typical evolutions that would require position stop verification in accordance with TS 4.5.2.g.1 include valve or actuator maintenance or modification, calibration, and stroking the valve to its calibrated full open position. They also note that GL 89-10 requires that licensees develop programs regarding verification of switch settings to identify potential MOV degradations or misadjustments after maintenance or adjustment of each MOV, and periodically thereafter, but the GL does not specifically require verification of switch settings following each valve stroking operation.

The licensee's maintenance history review has shown that there was no evidence that stroking an ECCS throttle valve to the open position stop affects future operation of the position stop. Based on the maintenance history review and a

9401280134 940114
PDR ADDCK 05000368
P PDR

review of GL 89-10, the licensee now believes that verification of position switch settings should be performed following maintenance or adjustment of the ECCS throttle valves and periodically thereafter, but that this verification is not required following normal valve stroke operations.

GL 89-10 states that MOV switch setting verification procedures should be implemented after maintenance or adjustment of each MOV. With respect to periodic verification of switch settings, GL 89-10 states that the surveillance interval should be based on the licensee's evaluation of the safety importance of each MOV as well as its maintenance and performance history. GL 89-10 also states that this surveillance interval should not exceed 5 years or three refueling outages, whichever is longer, unless a longer interval can be justified for a particular MOV. GL 89-10 further states that MOV switch settings need not be verified each time the ASME Code stroke-time test is performed. ANO-2 TS 4.5.2.g.2 already specifies verification of the correct position of each electrical and/or mechanical position stop for the ECCS throttle valves at a more frequent interval than 5 years or three refueling outages - at least once per 18 months.

The NRC staff agrees that, by design, valve stroking operations should not affect the position of the open position stop, and this is supported by the licensee's maintenance history review. In addition, the licensee stated that post-maintenance verification of the position stop settings will be maintained in the plant operating procedures following approval of this change, and controlled by their commitments to GL 89-10 and the criteria set forth in 10 CFR 50.59. Finally, the staff notes that the relocation of TS 4.5.2.g.1 to procedures and the retention of TS 4.5.2.g.2 (which is renumbered as TS 4.5.2.g with this change), is consistent with NUREG-1432, "Improved Standard Technical Specifications for Combustion Engineering Plants" issued in September of 1992. Based on the above, the staff concludes that the proposed change is acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (58 FR 64606).

Accordingly, the 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 the amendment.

5.0 CONCLUSION

The Commission 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 the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. Alexion

Date: January 14, 1994