



SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 46 TO FACILITY OPERATING LICENSE NPF-35 AND AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE NPF-52 DUKE POWER COMPANY, ET AL.

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-413 AND 50-414

I. INTRODUCTION

By letters dated May 26 and 27, 1988, Duke Power Company, et al. (the licensee), proposed amendments to the operating licenses for Catawba Nuclear Station, Units 1 and 2, which would revise Technical Specifications (TS) Table 3.3-10. The change is to reduce the total number of channels for the power operated relief valve (PORV) block valve position indicator from 2/valve to 1/valve. The change is applicable to Catawba Unit 2 only, however, Unit 1 is included administratively because the TSs for both units are combined in one document.

The licensee requested that the proposed amendments be granted on an emergency basis. Catawba Units 1 and 2 were placed in a seven day Action Statement (Action a. of TS 3.3.3.6) at 1650 hours on Friday, May 20, 1988, when the existence of a second independent channel of position indication was called into question. Subsequently, a second position indication per valve was identified and appropriate surveillances were performed. Two of the three non-safety position indicators at Catawba Unit 2 did not pass the surveillance test. These non-safety indicators cannot be repaired or replaced with the unit on-line.

On May 27, 1988, at 1355, a trip occurred at Catawba Unit 2. Subsequently, the Ticensee supplemented its May 26, 1988 letter to inform the staff that absent the approval of this emergency TS change, the restart of Unit 2 would be delayed approximately 1 to 2 days.

Telephone authorization was granted on an emergency basis on May 27, 1988, and confirmed by letter dated May 27, 1988.

II. EVALUATION

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The licensee stated in its May 26, 1988, submittal that each of the three pressurizer PORVs has an associated motor operated block valve which is safety related. In accordance with NUREG-0737 Item II.G.1, they are capable of being supplied from either the offsite power source or the emergency power source when offsite power is not available. One channel of safety related position indication is provided for each block valve by means of control room indicating lights associated with the valve control switch. Each block valve has a second non-safety related position indication channel which was provided in the design for maintenance and test purposes but was not intended to be used as accident monitoring instrumentation nor relied upon during an accident. No credit was taken for this non-safety indication in the design of the system or in any accident analyses.

Regulatory Guide 1.97, "Instrumentation For Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident," Revision 2, December 1980, does not include any recommendations for PORV block valve position indication. There are no other requirements for two channels of indication per PORV block valve. The Catawba Final Safety Evaluation Report does not include a second channel for indication.

Based on its review, the staff agrees with the licensee's assessment and finds that the reduction in the total number of channels for Catawba Unit 2 PORV block valve position indicator from 2/valve to 1/valve is acceptable.

III. FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The State of South Carolina was informed by telephone on May 27, 1988, of the staff's no significant hazards consideration determination. The State contact had no comments on the determination.

The staff has reviewed the licensee's request for the above amendments and determined that should this request be implemented, it would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated because the accident analysis takes credit only for the safety related PORV block valve position indication. The second channel is not safety related and is not relied upon during any accident scenario. Therefore, changing the requirement from two indicators per valve to one indicator per valve will have no effect on the probability or consequences of the accidents previously analyzed. Also, the licensee's proposed amendments would not (2) create the possibility of a new or different kind of accident from any accident previously evaluated because the design and modes of operation of the station will not be affected by changing the total number of PORV block valve position indicators required by the TSs. The second channel of position indication is not safety related and is not relied upon in the accident analyses. As such, no new or different kind of accident would be possible. Finally, the proposed amendments would not (3) involve a significant reduction in a margin of safety because of the reasons stated above in items (1) and (2).

Accordingly, the Commission finds that this request does not involve a significant hazards consideration.

IV. FINDINGS OF EMERGENCY WARRANTING AN AMENDMENT WITHOUT NOTICE

The licensee's application for the TS change has been timely. The licensee states that Catawba Units 1 and 2 were placed in a seven day Action Statement (Action a. of TS 3.3.3.6) on Friday May 20, 1988, when the existence of a second independent channel of position indication was called into question. Subsequently, a second position indication per valve was identified and surveillances were performed. Two of the three non-safety position indicators in Catawba Unit 2 did not pass the surveillance test. These indicators cannot be repaired or replaced with the unit on-line. The licensee's request for emergency amendments resulted from these surveillance tests performed in accordance with TS 3.3.3.6. The non-safety channels in Catawba Unit 1 passed the tests and the licensee could not reasonably predict the outcome of the test for Catawba Unit 2.

The licensee's letter dated May 26, 1988, outlines the sequence of events (from September 25, 1987 till May 26, 1988) that led to the emergency TS amendment request.

On May 27, 1988, at 1355, a trip occurred at Catawba Unit 2. Subsequently, the licensee supplemented its May 26, 1988 letter to inform the staff that absent the approval of this emergency TS change, the restart of Unit 2 would be delayed approximately 1 to 2 days.

The staff finds that failure to grant the proposed changes in a timely manner would increase the outage time of the Catawba Unit 2. We also find that the licensee could not reasonably have avoided this situation, that the licensee has responded in a timely manner, and has not delayed its application to take advantage of the Emergency License Amendments provisions of 10 CFR 50.91. Accordingly, the staff concludes that the licensee has satisfied the requirements of 10 CFR 50.91(a)(5), and that a valid emergency exists.

V. ENVIRONMENTAL CONSIDERATION

These amendments involve changes to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendments involve 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 exposure. The Commission has made a final no significant hazards consideration finding with respect to this amendment. Accordingly, the amendments meet 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 these amendments.

VI. CONCLUSION

and.

We have concluded, based on the considerations discussed above, that: (1) the amendment does not (a) significantly increase the probability or consequences of an accident previously evaluated, (b) create the possibility of a new or different kind of accident from any previously evaluated or (c) significantly reduce a safety margin and, therefore, the amendment does not involve significant hazards consideration; (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations, and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

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