



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 32 TO FACILITY OPERATING LICENSE NPF-52  
DUKE POWER COMPANY, ET AL.  
DOCKET NO. 50-414  
CATAWBA NUCLEAR STATION, UNIT 2

INTRODUCTION

By letter dated December 4, 1987, Duke Power Company, et al., (the licensee) proposed that License Condition 2.C.(8)(b) of Catawba Unit 2 Facility Operating License NPF-52 be amended to (1) allow an extension of time for the resolution of the Safety Parameter Display System (SPDS) issue, and (2) make it consistent with NRC staff's conclusions contained in a September 4, 1987, letter to the licensee (from J. H. Sniezek, NRC, to H. B. Tucker, Duke). The extension would be for one complete cycle of operation.

EVALUATION

In NPF-52 issued on May 15, 1986, license condition 2.C.(8)(b) regarding SPDS stated that:

"Prior to startup following the first refueling outage, Duke Power Company shall add to the existing SPDS and have operational the following SPDS parameters: (a) residual heat removal flow, (b) containment isolation status, (c) stack radiation measurements, (d) primary coolant system hot leg temperature, and (e) steam generator or steamline radiation. The actual value of these and all other SPDS variables should be displayed for operator viewing in easily and rapidly accessible display formats."

Supplement 1 to NUREG-0737 required licensees to install an SPDS which provides a concise display of critical plant variables to control room operators to aid them in rapidly and reliably determining the safety status of the plant.

In February 1986, the NRC staff issued the low-power Facility Operating License, NPF-48, for Catawba Unit 2 along with Supplement 5 to the Safety Evaluation Report. Supplement 5 concluded that the Catawba SPDS does not fully meet the applicable requirements of Supplement 1 to NUREG-0737, but did not identify any serious safety concerns with the existing system. Thus, the staff concluded that the Catawba SPDS may be operated as an interim implementation until startup following the first refueling outage.

The SER identified five parameters and the backup display as modifications needing to be made to the Catawba SPDS. These requirements were imposed as License Condition 2.C.(9)(b) of the low-power Facility Operating License, NPF-48, and later as License Condition 2.C.(8)(b) in the full-power Facility Operating License, NPF-52.

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On March 25, 1986, the licensee identified the requested changes as a plant-specific backfit and requested that the NRC staff prepare a backfit analysis. By letter dated June 13, 1986, the staff denied the licensee's backfit claim. On March 26, 1987, the licensee appealed the staff's denial of the backfit claim. By letter dated September 4, 1987, the staff concluded that 4 of the 5 parameters identified in Supplement 5 along with the backup displays should be added. One of the five parameters previously required, hot leg temperature, was already included as an input into SPDS.

The licensee stated that a proposed resolution of the SPDS issue is in preparation, and that the four additional parameters would be added along with changes to the backup display. With NRC staff acceptance of this proposed resolution, modifications to the SPDS, including operator training and procedure revision, could be completed within six months. As currently scheduled, the Catawba Unit 2 first refueling outage should be completed by late February 1988.

The SPDS is not a safety-grade system and is not intended to fulfill the post-accident monitoring requirements of Regulatory Guide 1.97. All parameters, including the additional parameters, are already provided in the control room. Therefore, the staff concludes that extension of the date for modification of the Catawba Unit 2 SPDS until startup following the second refueling outage is acceptable because it does not involve any adverse safety considerations.

Based on the above discussion, the modified License Condition 2.C.(8)(b) would state that:

"Prior to startup following the second refueling outage, Duke Power Company shall add to the existing SPDS and have operational the following SPDS parameters: (a) residual heat removal flow, (b) containment isolation status, (c) stack radiation measurements, and (d) steam generator or steamline radiation. The actual value of these and all other SPDS variables should be displayed for operator viewing in easily and rapidly accessible display formats.

#### ENVIRONMENTAL CONSIDERATION

The amendment involves changes to the use of facility components 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 effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational exposures. The NRC staff has made a determination that the amendment involves no significant hazards consideration, and there has been no public comment on such finding. 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.

CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (52 FR 49224) on December 30, 1987. The Commission consulted with the state of South Carolina. No public comments were received, and the state of South Carolina did not have any comments.

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

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Dated: February 16, 1988

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