



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NPF-35  
AND AMENDMENT NO. 132 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

1.0 INTRODUCTION

By letter dated September 1, 1995, as supplemented by letter dated October 17, 1995, Duke Power Company (DPC), et al. (the licensee), submitted a request for changes to the Catawba Nuclear Station, Units 1 and 2, Technical Specifications (TS). The requested changes would revise TS 6.9.1.9 to include references to updated or recently approved methodologies used to calculate cycle-specific limits contained in the Core Operating Limits Report. The subject references have previously been reviewed and approved by the NRC staff. Therefore, these additions to the TS are administrative in nature. The October 17, 1995, letter provided clarifying information that did not change the scope of the September 1, 1995, application and the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

Specifically, the amendments:

- (1) Propose to change report number "DPC-NF-2010P-A" to "DPC-NF-2010A." This eliminates the "P" designator for proprietary information. This is appropriate since DPC-NF-2010-A is not a proprietary report.
- (2) Add three additional reports to the TS 6.9.1.9 list of approved reports as follows:
  - Item number 13 - DPC-NE-2005P-A, as approved.

The staff issued its evaluation of the Duke Power Company Topical Report DPC-NE-2005P-A, "Thermal Hydraulic Statistical Core Design Methodology" by letter from G. M. Hojahan, NRC, to H. B. Tucker, DPC, dated February 27, 1995. This report documents the development of core thermal-hydraulic analysis based upon the statistical core design methodology using the VIPRE-01 computer code for the Catawba, McGuire and Oconee Nuclear Stations. The staff concluded that the report is acceptable for referencing in license applications to the extent specified and under the limitations delineated in the report and the associated NRC evaluation. On these bases, the staff finds this proposed revision to TS 6.9.1.9, to add report DPC-NE-2005P-A, as approved, to be acceptable.

- Items number 14 and number 15 - BAW-10162P-A and BAW-10183P.

The staff issued its evaluation of the Babcock & Wilcox (B&W) Topical Report BAW-10162P, "TACO3 - Fuel Pin Thermal Analysis Computer Code" by letter from A. C. Thadani, NRC, to J. H. Taylor, B&W, dated August 14, 1989. The revised TACO3 code, addressed by this evaluation, was developed to provide predictions of the thermal and mechanical performance of pressurized water reactor fuel rods experiencing variable power histories up to a particular burnup level. The staff's review concluded that the Topical Report provided an acceptable basis for changes to the B&W TACO3 computer code.

The staff issued its evaluation of the B&W Topical Report BAW-10183P, "Fuel Rod Gas Pressure Criterion" by letter dated February 22, 1994, from A. C. Thadani, NRC, to J. H. Taylor, B&W. The BAW-10183P report describes a fuel rod gas pressure criterion that the B&W Fuel Company (BWFC) would apply to existing fuel designs to allow the rod pressure to exceed system pressure under certain conditions. The staff's review concluded that the Topical Report provides an acceptable basis for the fuel rod gas pressure criterion for licensing applications.

By letter dated May 4, 1994, DPC requested that NRC review and approve the transfer of the fuel performance code TACO3 from BWFC to DPC for reload licensing applications. The transfer includes the approved Topical Reports BAW-10162P and BAW-10183P, as approved. The NRC staff concluded, in a letter from H. N. Berkow, NRC, to M. S. Tuckman, DPC, dated April 3, 1995, that DPC has the technical capability to perform TACO3 analyses for reload licensing applications and therefore, the use of TACO3 by DPC for the Catawba, McGuire, and Oconee Nuclear Stations is acceptable.

The proposed revision in DPC's application of September 1, 1995, adds the references for the two methodology reports, BAW-10162P-A and BAW-10183P, as approved, to TS 6.9.1.9. On the basis of its review of the licensee's submittals summarized above, the NRC staff finds that this proposed revision to TS 6.9.1.9 is acceptable.

The inclusion of these approved methodologies ensures that the core operating limits shall be determined so that all applicable limits of the safety analysis are met. Therefore, the proposed TS changes are acceptable.

### 3.0 STATE CONSULTATION

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

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendments change recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22d(c)(10). Pursuant to 10

CFR 51.22(b), no environmental impact statement or environmental assessment need to be prepared in connection with the issuance of the amendments.

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

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Date: November 2, 1995