



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 181 TO FACILITY OPERATING LICENSE NPF-35
AND AMENDMENT NO. 173 TO FACILITY OPERATING LICENSE NPF-52

DUKE ENERGY CORPORATION, ET AL.

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-413 AND 50-414

1.0 INTRODUCTION

By letter dated August 4, 1999, Duke Energy Corporation (the licensee) submitted a request to amend the facility operating licenses NPF-35 and NPF-52 for Catawba Nuclear Station, Units 1 and 2. The proposed amendment would revise various areas of the joint Technical Specifications (TS, Appendix A of the facility operating licenses) and associated Bases pages. Two of those areas are addressed in this safety evaluation (Sections 2.1 and 2.2 below).

2.0 DISCUSSION AND EVALUATION

2.1 Section 3.3.2, "Engineered Safety Feature Actuation System (ESFAS) Instrumentation"

The licensee proposed to revise CONDITIONS Q and R, both of them are concerned with the Nuclear Service Water System (NSWS) instrumentation. The purpose of the NSWS instrumentation is to isolate the NSWS from Lake Wylie and align it to the Standby Nuclear Service Water Pond (SNSWP, formed by a Class 1 seismically designed dam), close certain crossover valves in the NSWS, and start the NSWS pumps.

CONDITION Q applies to the case of one inoperable NSWS Suction Transfer-Low Pit Level channel. In addition to the REQUIRED ACTIONS Q.1, Q.2.1 and Q.2.2 that exist currently, the licensee proposed to add a new one, Q.2 that reads: "Align the Nuclear Service Water System for Standby Nuclear Service Water Pond [SNSWP] recirculation," with a required COMPLETION TIME of 4 hours. This new requirement would align the NSWS suction and discharge in its safety configuration, i.e. the SNSWP. (Current REQUIRED ACTIONS Q.2.1 and Q.2.2 will be renumbered Q.3.1 and Q.3.2.) The licensee stated that the SNSWP heatup analysis assumes accident initiation with the pond at its upper temperature limit of 91.5 degrees F at 568 feet elevation (TS SR 3.7.9.2). Even at these initial conditions, the accident loads of one unit plus the shutdown loads of the other unit would not cause the pond temperature to exceed the limit required for accident mitigation and equipment qualification concerns. That is, the previous thermal analysis done for the SNSWP would not be invalidated by operation under the proposed REQUIRED ACTION Q.2. The addition of the new Q.2 would provide added operational flexibility. The proposed change is consistent with the REQUIRED ACTION and COMPLETION TIME that is currently allowed by Section 3.3.2 of the TS, CONDITION R, and is therefore acceptable.

CONDITION R currently applies to only two NSWS "Suction Transfer - Low Pit Level channels in one or more pits inoperable." There is thus no specified condition for three inoperable channels of this function; the affected unit would have to enter TS 3.0.3 (i.e., leading to shutdown) should three channels become inoperable. This requirement would force the plant to enter an unnecessary shutdown. The licensee traced the current wording deficiency as having occurred inadvertently during the TS conversion to the improved format (Amendment Nos. 173 and 165). The deficiency did not exist in the TS before the conversion. The licensee proposed to correct CONDITION R to refer to "Two or more NSWS Suction Transfer - Low Pit Level channels in one or more pits inoperable." The staff agrees that this change only corrects an error, and is acceptable.

2.2 Section 5.3.1, Regarding Unit Staff Qualification

The licensee proposed to delete the sentences that read:

The licensed Operators and Senior Reactor Operators shall also meet or exceed the minimum qualifications of the supplemental requirements specified in Section A and C of Enclosure 1 of the March 28, 1980, NRC letter to all licensees. However, the experience and other considerations described in Duke Power Company's letters dated August 28, 1985, and July 8, 1986, are acceptable for the six and two applicants for SRO licenses identified therein, respectively.

The licensee stated that Catawba is in compliance with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 55, "Operators' Licenses;" Catawba's operator licensing program meets all requirements of this regulation. Therefore it is not necessary to include requirements in the Technical Specifications.

The staff had previously reviewed the licensee's operator licensing program. The staff will, through its operator licensing program, ensure that the licensee continues to meet 10 CFR Part 55 requirements. Thus the staff agrees that the above statement is unnecessary and may be deleted from the Catawba Technical Specifications.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

TS Section 3.3.2 The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 radiation exposure. The staff has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (64 FR 48861 dated September 8, 1999). Accordingly, the revisions of TS Section 3.3.2 meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

TS Section 5.3.1 The amendments change an administrative requirement. Accordingly, the revisions of TS Section 5.3.1 meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10)(ii).

In conclusion, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

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 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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