



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 171 TO FACILITY OPERATING LICENSE NPF-35

DUKE ENERGY CORPORATION, ET AL.

CATAWBA NUCLEAR STATION, UNIT 1

DOCKET NO. 50-413

1.0 INTRODUCTION

On August 6, 1998, Duke Energy Corporation (the licensee) determined that Surveillance Requirement (SR) 4.8.1.1.2.i.2 of the Catawba Nuclear Station, Unit 1, Technical Specifications (TS) was not being met. SR 4.8.1.1.2.i.2 requires the performance, every 10 years, of a pressure test of those portions of the diesel fuel oil system, associated with the emergency diesel generators (EDGs), designed to Section III, subsection ND of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code) at a test pressure equal to 110 percent of the system design pressure.

By letter dated August 6, 1998, the licensee requested that the NRC exercise discretion not to enforce compliance with the actions required by SR 4.8.1.1.2.i.2. The letter documented information previously discussed with the staff in a telephone conversation on August 6, 1998. As a result of its review, the staff verbally granted enforcement discretion on August 6, 1998, and affirmed later by a Notice of Enforcement Discretion (NOED) letter dated August 7, 1998 (98-6-013). The NOED will expire upon issuance of an amendment to revise SR 4.8.1.1.2.i.2.

By separate letter dated August 6, 1998, the licensee submitted a request for amendment, on an exigent basis, to delete SR 4.8.1.1.2.i.2 from the TS of both Catawba units. The staff's evaluation of the licensee's amendment request is for Unit 1 only. The amendment request for Unit 2 does not meet the criteria for issuance under exigent circumstances, and will be acted on separately.

2.0 DISCUSSION AND EVALUATION

The EDG fuel oil system provides for the storage of a 7-day supply of fuel oil for each EDG and supplies the fuel oil to the engine when the EDG is needed. Major components in the fuel oil system include the fuel oil storage tanks, the fuel oil day tank, pumps, valves, filters, strainers, and piping. SR 4.8.1.1.2.i.2 requires the performance, every 10 years, of a pressure test of those portions of the diesel fuel oil system, associated with the EDGs, designed to Section III, subsection ND of the ASME Code at a test pressure equal to 110 percent of the system design pressure.

The licensee, however, had conducted the surveillance at Unit 1, and planned to conduct the surveillance at Unit 2, in accordance with ASME Section XI, Code Case N-498-1, which was granted for use at Catawba Unit 1 and 2 by the NRC in its letter dated February 13, 1995.

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This relief from ASME Code requirements, in Code Case N-498-1, permits the use of VT-2 visual examination in conjunction with a system pressure test on Class 3 systems in lieu of hydrostatic testing. TS 4.0.5 requires that "Inservice Inspection of ASME Code Class 1, 2, and 3 components...shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR Part 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR Part 50, Section 50.55a(g)(6)(i)." The approval to use Code Case N-498-1 is one of the reliefs granted by the staff.

Given application of Code Case N-481-1 to the diesel fuel oil system, hydrostatic testing of the system to the requirements in SR 4.8.1.1.2.i.2 is unnecessary. Accordingly, the licensee's proposal to delete SR 4.8.1.1.2.i.2 from the TS is acceptable because a staff-approved diesel fuel oil system surveillance procedure (Code Case N-498-1) will continue to be used.

3.0 STATEMENT OF EXIGENT CIRCUMSTANCES

The Commission's regulation, as stated in 10 CFR 50.91, provides special exceptions for the issuance of an amendment when the usual 30-day public notice cannot be met. One type of special exception is an exigency. An exigency exists when the staff and the licensee need to act quickly and time does not permit the staff to publish a Federal Register notice allowing 30 days for prior public comment, and the staff also determines that the amendment involves no significant hazards consideration.

In accordance with 10 CFR 50.91(a)(6)(i)(A), the staff issued a Federal Register notice on August 17, 1998 (63 FR 43962), providing notice of an opportunity for hearing and proposing that the requested amendments involve no significant hazards consideration. The public was allowed 14 days after the date of publication of that notice to provide comments. No comments were received.

The licensee's August 6, 1998, submittal requested that amendments be issued on an exigent basis. Thus, the licensee provided a timely request for issuance of an amendment for Unit 1, i.e., on the same day that the licensee requested and obtained an NOED.

Catawba Unit 1 was issued its operating license December 6, 1984. The licensee performed its diesel fuel oil system surveillance on March 2, 1995, within the schedule permitted by the TS. The surveillance was performed in accordance with Code Case N-498-1 which, as stated previously, was approved for use at Catawba by the staff on February 13, 1995. Since performance of the surveillance, the licensee did not realize that the surveillance was not in compliance with SR 4.8.1.1.2.i.2. The error was recently discovered on August 6, 1998, as a result of the licensee's ongoing review of surveillance procedures against requirements in preparation for implementation of the Improved Technical Specifications (a separate licensing action currently under staff review). There had been no occasion for earlier discovery. Upon such discovery, the licensee took timely action to request an NOED and an amendment to the TS. The staff believes the licensee took timely actions to request the NOED and the amendment.

NRC Inspection Manual Part 9900, "Operations - Notices of Enforcement Discretion," requires that "Follow-up license amendments for NRR [Office of Nuclear Reactor Regulation]-issued NOEDs should be processed on an emergency or exigent basis, as appropriate. If an exigent amendment is issued, it should be noticed in the Federal Register. The follow-up TS amendment should be issued within 4 weeks of the issuance of the NOED unless otherwise justified by any special circumstances."

On the basis of the above discussion, the staff has determined that exigent circumstances exist, that the licensee used its best efforts to make a timely application, and did not cause the exigent situation.

4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards considerations, if operation of the facility, in accordance with the amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

In its analysis of the issue of no significant hazards consideration, as required by 10 CFR 50.91(a), the licensee has provided the following:

First Standard

Implementation of this amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated. Approval of this amendment will have no significant effect on accident probabilities or consequences. The diesel generator fuel oil system is not an accident initiating system; therefore, there will be no impact on any accident probabilities by the approval of this amendment. Each unit's diesel generator fuel oil system is currently fully capable of meeting its design basis accident mitigating function. Therefore, there will be no impact on any accident consequences.

Second Standard

Implementation of this amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated. No new accident causal mechanisms are created as a result of NRC approval of this amendment request. No changes are being made to the plant which will introduce any new accident causal mechanisms. This amendment request does not impact any plant systems that are accident initiators, since the diesel generator fuel oil system is an accident mitigating system.

Third Standard

Implementation of this amendment would not involve a significant reduction in a margin of safety. Margin of safety is related to the confidence in the ability of the fission product barriers to perform their design functions during and following an accident situation. These barriers include the fuel cladding, the reactor coolant system, and the containment system. The performance of these fission product barriers will not be impacted by implementation of this proposed amendment. The diesel generator fuel oil system for each unit is already capable of performing as designed. No safety margins will be impacted.

The NRC staff has evaluated the amendment against the three standards of 10 CFR 50.92(c), and on the basis of the licensee's analysis, the NRC staff concludes that the amendment meets the three criteria of 10 CFR 50.92(c). Therefore, the staff has made a final determination that the proposed amendment does not involve a significant hazards consideration.

5.0 STATE CONSULTATION

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

6.0 ENVIRONMENTAL CONSIDERATION

The amendment 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 made a final finding that the amendment involves no significant hazards consideration. 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.

7.0 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.

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Date: September 9, 1998