

Docket Nos.: 50-413
and 50-414

March 24, 1987

Mr. H. B. Tucker, Vice President
Nuclear Production Department
Duke Power Company
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

Subject: Issuance of Amendment No. 23 to Facility Operating License NPF-35
and Amendment No. 13 to Facility Operating License NPF-52 - Catawba
Nuclear Station, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 23 to Facility Operating License NPF-35 and Amendment No. 13 to Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications in response to your application dated April 9, 1986, and supplemented February 13, 1987.

The amendments modify Technical Specification 3/4.7.7 and its bases to change the allowed outage time of the auxiliary building filtered exhaust system to make it consistent with the Standard Technical Specification. The amendments are effective as of the date of issuance.

A copy of the related safety evaluation supporting Amendment No. 23 to Facility Operating License NPF-35 and Amendment No. 13 to Facility Operating License NPF-52 is enclosed.

Notice of issuance will be included in the Commission's next bi-weekly Federal Register notice.

Sincerely,

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Kahtan Jabbour, Project Manager
PWR Project Directorate No. 4
Division of PWR Licensing-A

Enclosures:

1. Amendment No. 23 to NPF-35
2. Amendment No. 13 to NPF-52
3. Safety Evaluation

cc w/encl:
See next page

DISTRIBUTION:
See attached page

PWR#4: DPWR-A
MDuncan/rad
03/10/87

KNT
PWR#4/DPWR-A
KJabbour
03/09/87

PWR#4/DPWR-A
BJYoungblood
03/23/87

Mr. H. B. Tucker
Duke Power Company

Catawba Nuclear Station

cc:

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March 24, 1987

AMENDMENT NO. 23 TO FACILITY OPERATING LICENSE NPF-35 -
CATAWBA NUCLEAR POWER STATION, UNIT 1
AMENDMENT NO. 13 TO FACILITY OPERATING LICENSE NPF-52 -
CATAWBA NUCLEAR POWER STATION, UNIT 2

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Docket Nos. 50-413/414

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

DUKE POWER COMPANY

NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION

SALUDA RIVER ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-413

CATAWBA NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 23
License No. NPF-35

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Catawba Nuclear Station, Unit 1 (the facility) Facility Operating License No. NPF-35 filed by the Duke Power Company acting for itself, North Carolina Electric Membership Corporation and Saluda River Electric Cooperative, Inc., (licensees) dated April 9, 1986, and supplemented February 13, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachments to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-35 is hereby amended to read as follows:

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PDR ADOCK 05000413
P PDR

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 23, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Duke Power Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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Kahtan Jabbour, Project Manager
PWR Project Directorate No. 4
Division of PWR Licensing-A

Attachment:
Technical Specification Changes

Date of Issuance: March 24, 1987

[Signature]
PWR#4/DPWR-A
MDunCan/rad
03/10/87

KNT
PWR#4/DPWR-A
KJabbour
03/09/87

[Signature]
OGC-Bethesda
MYoung
03/17/87

[Signature]
PWR#4/DPWR-A
BJYoungblood
03/27/87

Appointed revision to SE and amits. check state SE before issuance



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

DUKE POWER COMPANY

NORTH CAROLINA MUNICIPAL POWER AGENCY NO. 1

PIEDMONT MUNICIPAL POWER AGENCY

DOCKET NO. 50-414

CATAWBA NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 13
License No. NPF-52

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Catawba Nuclear Station, Unit 2 (the facility) Facility Operating License No. NPF-52 filed by the Duke Power Company acting for itself, North Carolina Municipal Power Agency No. 1 and Piedmont Municipal Power Agency (licensees) dated April 9, 1986, and supplemented February 13, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachments to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-52 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 13, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Duke Power Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

151

Kahtan Jabbour, Project Manager
PWR Project Directorate No. 4
Division of PWR Licensing-A

Attachment:
Technical Specification Changes

Date of Issuance: March 24, 1987

PWR#4/DPWR-A
MDuncan/rad
03/10/87

KNT
PWR#4/DPWR-A
KJabbour
03/09/87

*Why my noted comments to SE
2-amended, check STATE
& SEC before issuance*
OGC-Bethesda
mlyoung
03/11/87

[Signature]
PWR#4/DPWR-A
BJYoungblood
03/12/87

ATTACHMENT TO LICENSE AMENDMENT NO. 23

FACILITY OPERATING LICENSE NO. NPF-35

DOCKET NO. 50-413

AND

TO LICENSE AMENDMENT NO. 13

FACILITY OPERATING LICENSE NO. NPF-52

DOCKET NO. 50-414

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

Amended
Page

3/4 7-17
B 3/4 7-4

Overleaf
Page

3/4 7-18
B3/4 7-3

PLANT SYSTEMS

3/4.7.7 AUXILIARY BUILDING FILTERED EXHAUST SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7 Two independent trains of the Auxiliary Building Filtered Exhaust System shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one train of the Auxiliary Building Filtered Exhaust System inoperable, restore the inoperable train to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.7 Each train of the Auxiliary Building Filtered Exhaust System shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 continuous hours with the heaters operating;
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire, or chemical release in any ventilation zone communicating with the same by:
 - 1) Verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% (Unit 1), 0.05% (Unit 2) and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d* of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 30,000 cfm \pm 10%;
 - 2) Verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1%; and

*The requirement for reducing refrigerant concentration to 0.01 ppm may be satisfied by operating the system for 10 hours with heaters on and operating.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 3) Verifying a system flow rate of 30,000 cfm \pm 10% during system operation when tested in accordance with ANSI N510-1980.
- c. After every 720 hours of carbon adsorber operation, by verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1%;
- d. At least once per 18 months by:
- 1) Verifying that the pressure drop across the combined HEPA filters, charcoal adsorber banks, and moisture separators of less than 8 inches Water Gauge while operating the system at a flow rate of 30,000 cfm \pm 10%.
 - 2) Verifying that the system starts on a Safety Injection test signal, and directs its exhaust flow through the HEPA filters and charcoal adsorbers,**
 - 3) Verifying that the system maintains the ECCS pump room at a negative pressure relative to adjacent areas,
 - 4) Verifying that the filter cooling bypass valves can be manually opened, and
 - 5) Verifying that the heaters dissipate 40 \pm 4 kW.
- e. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% (Unit 1), 0.05% (Unit 2) in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 30,000 cfm \pm 10%; and
- f. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% (Unit 1), 0.05% (Unit 2) in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 30,000 cfm \pm 10%.

**This surveillance need not be performed until prior to entering HOT SHUTDOWN following the Unit 1 first refueling.

PLANT SYSTEMS

BASES

3/4.7.3 COMPONENT COOLING WATER SYSTEM

The OPERABILITY of the Component Cooling Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analyses.

3/4.7.4 NUCLEAR SERVICE WATER SYSTEM

The OPERABILITY of the Nuclear Service Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analysis.

3/4.7.5 STANDBY NUCLEAR SERVICE WATER POND

The limitations on the standby nuclear service water pond level and temperature ensure that sufficient cooling capacity is available to either: (1) provide normal cooldown of the facility, or (2) mitigate the effects of accident conditions within acceptable limits.

The limitations on minimum water level and maximum temperature are based on providing a 30-day cooling water supply to safety-related equipment without exceeding its design basis temperature and is consistent with the recommendations of Regulatory Guide 1.27, "Ultimate Heat Sink for Nuclear Plants," March 1974.

3/4.7.6 CONTROL ROOM AREA VENTILATION SYSTEM

The OPERABILITY of the Control Room Area Ventilation System ensures that: (1) the ambient air temperature does not exceed the allowable temperature for continuous-duty rating for the equipment and instrumentation cooled by this system, and (2) the control room will remain habitable for operations personnel during and following all credible accident conditions. Operation of the system with the heaters operating to maintain low humidity using automatic control for at least 10 continuous hours in a 31-day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rems or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix A, 10 CFR Part 50. ANSI N510-1980 will be used as a procedural guide for surveillance testing.

PLANT SYSTEMS

BASES

3/4.7.7 AUXILIARY BUILDING FILTERED EXHAUST SYSTEM

The OPERABILITY of the Auxiliary Building Filtered Exhaust System ensures that radioactive materials leaking from the ECCS equipment within the auxiliary building following a LOCA are filtered prior to reaching the environment. Operation of the system with the heaters operating to maintain low humidity using automatic control for at least 10 continuous hours in a 31-day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The operation of this system and the resultant effect on offsite dosage calculations was not taken credit for in the safety analyses. However, the operation of this system and the resultant effect on the NRC staff's offsite dose calculations was assumed in the staff's SER, NUREG-0954. ANSI N510-1980 will be used as a procedural guide for surveillance testing.

3/4.7.8 SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the Reactor Coolant System and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads.

Snubbers are classified and grouped by design and manufacturer but not by size. For example, mechanical snubbers utilizing the same design features of the 2-kip, 10-kip, and 100-kip capacity manufactured by Company "A" are of the same type. The same design mechanical snubbers manufactured by Company "B" for the purposes of this Technical Specification would be of a different type, as would hydraulic snubbers from either manufacturer.

A list of individual snubbers with detailed information of snubber location and size and of system affected shall be available at the plant in accordance with Section 50.71(c) of 10 CFR Part 50. The accessibility of each snubber shall be determined and approved by the Catawba Safety Review Group. The determination shall be based upon the existing radiation levels and the expected time to perform a visual inspection in each snubber location as well as other factors associated with accessibility during plant operations (e.g., temperature, atmosphere, location etc.), and the recommendations of Regulatory Guides 8.8 and 8.10. The addition or deletions of any hydraulic or mechanical snubber shall be made in accordance with Section 50.59 of 10 CFR Part 50.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 23 TO FACILITY OPERATING LICENSE NPF-35
AND AMENDMENT NO. 13 TO FACILITY OPERATING LICENSE NPF-52
CATAWBA NUCLEAR STATION, UNITS 1 AND 2
DUKE POWER COMPANY, ET AL.

INTRODUCTION

By letter dated April 9, 1986, and supplemented February 13, 1987, Duke Power Company, et al., (the licensee) proposed changes to Technical Specification (TS) 3/4.7.7 and its bases for Catawba Nuclear Station, Units 1 and 2. The changes would increase the outage time of the auxiliary building filtered exhaust system from 24 hours to 7 days, and make the TS consistent with the Standard Technical Specification (STS). Because the February 13, 1987, submittal clarified certain TS requirements, the substance of the changes noticed in the Federal Register and the proposed no significant hazards determination were not affected.

EVALUATION

TS 3/4.7.7 for Catawba Nuclear Station, Units 1 and 2, regarding the "Auxiliary Building Filtered Exhaust System" corresponds to the "ECCS Pump Room Exhaust Air Cleanup System" of the STS. The requirements of the STS are intended for a plant that has two independent trains. As shown by the FSAR and the licensee's April 9, 1986, letter, each Catawba Unit does have two independent trains. Nevertheless, the previous Catawba TS impose special requirements, as though there is only a single train; that is, only 24 hours are allowed for returning a train to operable status. The licensee has proposed changes that are consistent with the STS requirements which allow 7 days to return an independent train to service if the other train is operable. Furthermore, the licensee proposed to clarify the bases for this TS. The staff has reviewed the proposed changes to the TS and bases and concluded that they are consistent with the guidelines of the Standard Review Plan Section 6.5.1 and STS. Therefore, the changes are acceptable.

ENVIRONMENTAL CONSIDERATION

The amendments involve a change in use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in requirements. 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 exposures. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there have been no public comments on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR Section 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 amendments.

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PDR

CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (51 FR 30565) on August 27, 1986, and 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.

Principal Contributors: Kahtan Jabbour, PWR#4/DPWR-A
Charles Willis, PSB/DPWR-A

Dated: March 24, 1987