

Docket Nos.: 50-413
and 50-414

February 18, 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. 22 to Facility Operating License NPF-35
and Amendment No. 12 to Facility Operating License NPF-52 - Catawba
Nuclear Station, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 22
to Facility Operating License NPF-35 and Amendment No.12 to Facility Operating
License NPF-52 for the Catawba Nuclear Station, Units 1 and 2. These amend-
ments consist of changes to the Technical Specifications in response to your
application dated April 29, 1986.

The amendments modify the Technical Specifications to delete the maximum fuel
rod weight limit of 1,619 grams of uranium from the Design Features Section.
The amendments are effective as of their date of issuance.

A copy of the related safety evaluation supporting Amendment No.22 to
Facility Operating License NPF-35 and Amendment No.12 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. 22 to NPF-35
2. Amendment No.12 to NPF-52
3. Safety Evaluation

cc w/encl:
See next page

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BJ
PWR#4/DPWR-A
BJYoungblood
02/ 17 /87

Mr. H. B. Tucker
Duke Power Company

Catawba Nuclear Station

cc:

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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. 22
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 29, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's 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:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 22, 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: February 18, 1987

MD
PWR#4/DPWR-A
MDuncan/rad
02/15/87

KNT
PWR#4/DPWR-A
KJabbour
02/04/87

MY
OGC-Bethesda
M Young
02/11/87

BJ
PWR#4/DPWR-A
BJYoung/Tood
02/11/87



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. 12
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 29, 1986 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's 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. 12, 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: February 18, 1987

MD
PWR#4/DPWR-A
MDuncan/rad
02/5/87

KNJ
PWR#4/DPWR-A
KJabbour
02/04/87

MM
OGC-Bethesda
M. Young
02/11/87

BJ
PWR#4/DPWR-A
BJYoung/ood
02/17/87

ATTACHMENT TO LICENSE AMENDMENT NO. 22

FACILITY OPERATING LICENSE NO. NPF-35

DOCKET NO. 50-413

AND

TO LICENSE AMENDMENT NO. 12

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 page is identified by Amendment number and contains vertical lines indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

Amended
Page

5-6

Overleaf
Page

5-5

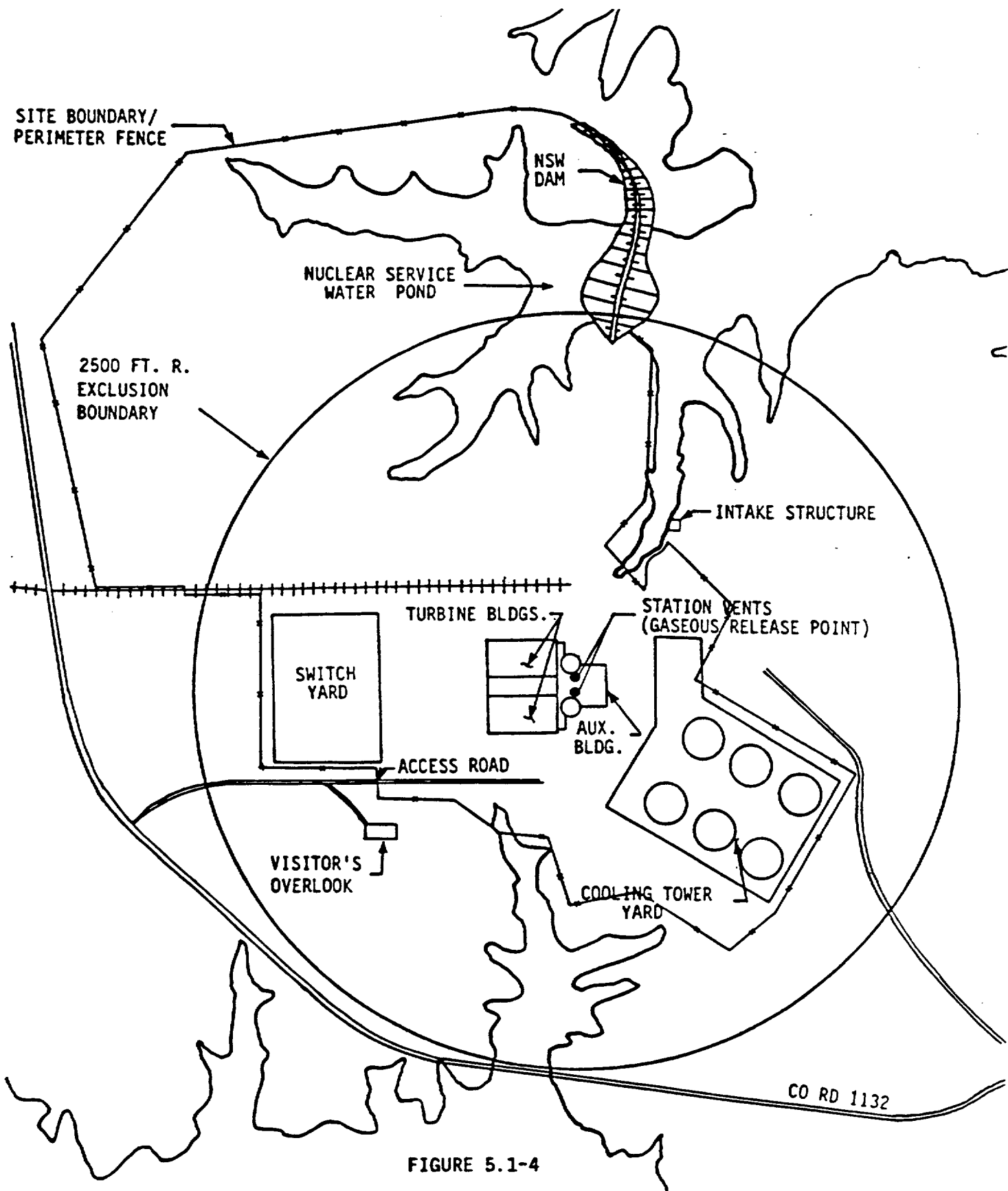


FIGURE 5.1-4

UNRESTRICTED AREA AND SITE BOUNDARY FOR RADIOACTIVE GASEOUS EFFLUENTS

DESIGN FEATURES

DESIGN PRESSURE AND TEMPERATURE

5.2.2 The reactor containment vessel is designed and shall be maintained for a maximum internal pressure of 15 psig and a temperature of 328°F.

5.3 REACTOR CORE

FUEL ASSEMBLIES

5.3.1 The core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with Zircaloy-4. Each fuel rod shall have a nominal active fuel length of 144 inches. The initial core loading shall have a maximum enrichment of 3.5 weight percent U-235. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum enrichment of 3.5 weight percent U-235.

CONTROL ROD ASSEMBLIES

5.3.2 The core shall contain 53 full-length control rod assemblies. The full-length control rod assemblies shall contain a nominal 142 inches of absorber material of which 102 inches shall be 100% boron carbide and remaining 40-inch tip shall be 80% silver, 15% indium, and 5% cadmium. All control rods shall be clad with stainless steel tubing.

5.4 REACTOR COOLANT SYSTEM

DESIGN PRESSURE AND TEMPERATURE

5.4.1 The Reactor Coolant System is designed and shall be maintained:

- a. In accordance with the Code requirements specified in Section 5.2 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,
- b. For a pressure a 2485 psig, and
- c. For a temperature of 650°F, except for the pressurizer which is 680°F.

VOLUME

5.4.2 The total water and steam volume of the Reactor Coolant System is 12,040 ± 100 cubic feet at a nominal T_{avg} of 525°F.

5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological tower shall be located as shown in Figure 5.1-1.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 22 TO FACILITY OPERATING LICENSE NPF-35
AND AMENDMENT NO. 12 TO FACILITY OPERATING LICENSE NPF-52
CATAWBA NUCLEAR STATION, UNITS 1 AND 2
DUKE POWER COMPANY, ET AL.

INTRODUCTION

By letter dated April 29, 1986, Duke Power Company, et al., (the licensee) proposed a change to Technical Specification (TS) 5.3.1, "Fuel Assemblies," to delete the maximum fuel rod weight limit of 1,619 grams of uranium from the Design Features Section.

Recent changes by Westinghouse to the fuel design, including chamfered pellets with a reduced dish and a nominal density increase have increased fuel weights slightly. The weight increase has caused the fuel rod weight to exceed the 1,619 gm limit. The proposed change will delete the weight limit from the TS to allow use of the slightly heavier fuel.

EVALUATION

The important safety related parameters which are indirectly affected by fuel weight, such as reactor criticality, power level, power distribution and the rate of decay heat production, are all regulated by requirements in the Limiting Condition for Operation Sections of the TS. In addition, the fuel weight is implicitly included in the nuclear design analysis performed for each reactor operating cycle and used to evaluate conformance with established limits for Design Basis Events. For the slight weight increase reported by the licensee and any similar possible small fuel weight increase without a significant change in fuel design, there is no impact on the safety analysis. A significant change in the fuel design would be the subject of review and changes to the other governing TS.

Based on its review, the staff concludes that there will be no significant safety impact in deleting the maximum fuel weight from TS 5.3.1. The staff also finds this action preferable to changing the TS each cycle to accommodate the applicable weight, or to specifying an artificial upper value of the weight to bound future variations. Therefore, the proposed change is acceptable.

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ENVIRONMENTAL CONSIDERATION

The amendments involve a deletion of facility design values for components located within the restricted area as defined in 10 CFR Part 20. However, this deletion does not alter the Limiting Conditions for the TS Operation Sections. Thus, there is no change 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.

CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (51 FR 30566) 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
Margaret Chatterton, RSB/DPWR-A

Date: February 18, 1987

February 18, 198

AMENDMENT NO. 22 TO FACILITY OPERATING LICENSE NPF-35 -
CATAWBA NUCLEAR POWER STATION, UNIT 1
AMENDMENT NO. 12 TO FACILITY OPERATING LICENSE NPF-52 -
CATAWBA NUCLEAR POWER STATION, UNIT 2

DISTRIBUTION: w/enclosures:

Docket Nos. 50-413/414

NRC PDR

Local PDR

NSIC

PRC System

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