

January 23, 1996

Distribution

Docket File

Mr. William R. McCollum  
Site Vice President  
Catawba Nuclear Station  
Duke Power Company  
4800 Concord Road  
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SUBJECT: ISSUANCE OF AMENDMENTS - CATAWBA NUCLEAR STATION, UNITS 1 AND 2  
(TAC NOS. M93366 AND M93367)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 142 to Facility Operating License NPF-35 and Amendment No. 136 to Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated August 17, 1995.

The amendments revise TS Surveillance Requirement (SR) 4.2.5.2 to delete the requirement to calibrate the reactor coolant system (RCS) flowrate measurement instrumentation within 7 days prior to the performance of the flow measurement. Catawba Units 1 and 2 now utilize an RCS flowrate measurement method based on a one-time calibration of the cold leg elbow differential pressure taps as requested in the licensee's January 10, 1994, application and as approved in License Amendments 128 and 122 for Units 1 and 2, respectively. The January 10, 1994, application did not include a proposal to delete that portion of SR 4.2.5.2 which specifies that the measurement instrumentation shall be calibrated within 7 days prior to the performance of the flowrate measurement. This portion of the SR is now deleted since it only applies to the precision calorimetric heat balance method of RCS flowrate measurement.

A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by:

Robert E. Martin, Senior Project Manager  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

- Enclosures: 1. Amendment No. 142 to NPF-35  
2. Amendment No. 136 to NPF-52  
3. Safety Evaluation

cc w/encl: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 23, 1996

Mr. William R. McCollum  
Site Vice President  
Catawba Nuclear Station  
Duke Power Company  
4800 Concord Road  
York, South Carolina 29745-9635

SUBJECT: ISSUANCE OF AMENDMENTS - CATAWBA NUCLEAR STATION, UNITS 1 AND 2  
CALIBRATION OF REACTOR COOLANT SYSTEM FLOWRATE MEASUREMENT  
INSTRUMENTATION (TAC NOS. M93366 AND M93367)

Dear Mr. McCollum:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 142 to Facility Operating License NPF-35 and Amendment No. 136 to Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated August 17, 1995.

The amendments revise TS Surveillance Requirement (SR) 4.2.5.2 to delete the requirement to calibrate the reactor coolant system (RCS) flowrate measurement instrumentation within 7 days prior to the performance of the flow measurement. Catawba Units 1 and 2 now utilize an RCS flowrate measurement method based on a one-time calibration of the cold leg elbow differential pressure taps as requested in the licensee's January 10, 1994, application and as approved in License Amendments 128 and 122 for Units 1 and 2, respectively. The January 10, 1994, application did not include a proposal to delete that portion of SR 4.2.5.2 which specifies that the measurement instrumentation shall be calibrated within 7 days prior to the performance of the flowrate measurement. This portion of the SR is now deleted since it only applies to the precision calorimetric heat balance method of RCS flowrate measurement.

A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script that reads "Robert E. Martin".

Robert E. Martin, Senior Project Manager  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

Enclosures: 1. Amendment No. 142 to NPF-35  
2. Amendment No. 136 to NPF-52  
3. Safety Evaluation

cc w/encl: See next page

Mr. W. R. McCollum  
Duke Power Company

cc:

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

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. 142  
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 August 17, 1995, 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, 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 amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - 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 attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-52 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 142, 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 and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



L. A. Wiens, Acting Director  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Technical Specification Changes

Date of Issuance: January 23, 1996



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

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. 136  
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 August 17, 1995, 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, 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 amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - 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.

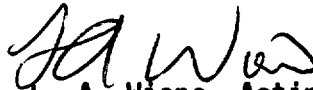
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-35 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 136 , 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 and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



L. A. Wiens, Acting Director  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Technical Specification Changes

Date of Issuance: January 23, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 142

FACILITY OPERATING LICENSE NO. NPF-35

DOCKET NO. 50-413

AND

TO LICENSE AMENDMENT NO. 136

FACILITY OPERATING LICENSE NO. NPF-52

DOCKET NO. 50-414

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the areas of change.

Remove Page

3/4 2-14

Insert Page

3/4 2-14



## POWER DISTRIBUTION LIMITS

### 3/4.2.5 DNB PARAMETERS

#### LIMITING CONDITION FOR OPERATION

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2. Within 24 hours of initially being within the region of prohibited operation specified on Figure 3.2-1, verify that the combination of THERMAL POWER and Reactor Coolant System total flow rate are restored to within the regions of restricted or permissible operation, or reduce THERMAL POWER to less than 5% of RATED THERMAL POWER within the next 2 hours.

#### SURVEILLANCE REQUIREMENTS

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- 4.2.5.1 Each of the parameters of Table 3.2-1 shall be verified to be within their limits at least once per 12 hours.
- 4.2.5.2 The Reactor Coolant System total flow rate indicators shall be subjected to a CHANNEL CALIBRATION at least once per 18 months.
- 4.2.5.3 The Reactor Coolant System total flow rate shall be determined by measurement at least once per 18 months.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 142 TO FACILITY OPERATING LICENSE NPF-35  
AND AMENDMENT NO. 136 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 August 17, 1995, Duke Power Company, et al. (the licensee or DPC), submitted a request for changes to the Catawba Nuclear Station, Units 1 and 2, Technical Specifications (TS). The requested changes would revise TS Surveillance Requirement (SR) 4.2.5.2 to delete the requirement to calibrate the reactor coolant system (RCS) flowrate measurement instrumentation within 7 days prior to the performance of the flow measurement. Catawba Units 1 and 2 now utilize an RCS flowrate measurement method based on a one-time calibration of the cold leg elbow differential pressure taps as requested in the licensee's January 10, 1994, application and as approved in License Amendments 128 and 122 for Units 1 and 2, respectively. The January 10, 1994, application did not include a proposal to delete that portion of SR 4.2.5.2 which specifies that the measurement instrumentation shall be calibrated within 7 days prior to the performance of the flowrate measurement. This portion of the SR is now deleted since it applies only to the precision calorimetric heat balance method of RCS flowrate measurement.

2.0 EVALUATION

The requested change revises SR 4.2.5.2 to delete the second sentence, "The measurement instrumentation shall be calibrated within 7 days prior to the performance of the flow measurement." Amendment Nos. 128 and 122 for Units 1 and 2, respectively, issued on February 17, 1995, deleted the modifier "calorimetric" from the term "... the calorimetric flow measurement." As noted above, these amendments reflected the changeover in the method of determining RCS flowrate for TS 4.2.5 from the prior precision heat balance method to a method based on use of the RCS cold leg elbow differential pressure taps. The elbow tap indication was and continues to be used to provide reactor trip (RTS) on low RCS flow. The TS requirements for its use in this manner are included in TS Table 2.2-1, RTS Instrumentation Trip Setpoints, Table 3.3-1, RTS Instrumentation, and Table 3.3-2, RTS Instrumentation Response Times. The SRs, including channel check and calibration and analog channel operational test, are included in TS Table 4.3-1, RTS Instrumentation Surveillance Requirements.

The licensee states that the only instrumentation being calibrated pursuant to the subject requirement, while performing the calorimetric flow measurement, is the data logger for RCS temperatures. This instrumentation is no longer used with the cold leg elbow tap measurement method. As noted above, the RCS loop flowrate transmitters (the cold leg elbow tap differential pressure transmitters) calibration requirements are already included in TS 4.3.1.1 (Table 4.3-1), wherein they are required to be calibrated at refueling outages. The licensee therefore concludes that the subject requirement was never intended to apply to the RCS flowrate transmitters and should have been proposed for deletion in the licensee's application in support of Amendments 128 and 122 for Units 1 and 2, respectively.

The staff has reviewed the licensee's submittal and agrees with their conclusion that the subject requirements applied only to the prior method of determining RCS flowrate and not to the currently approved method based on use of the RCS cold leg elbow tap differential pressures. Therefore, the proposed TS change to delete the subject statement, "The measurement instrumentation shall be calibrated within 7 days prior to the performance of the flow measurement" is acceptable.

The staff also notes that deletion of the subject statement is consistent with the "Standard Technical Specifications for Westinghouse Plants," NUREG-1431 (SR 3.4.1.4).

### 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 surveillance requirements. 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 Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (60 FR 65676 dated December 20, 1995). Accordingly, the amendments meet 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 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.

**Principal Contributor:** R. Martin

**Date:** January 23, 1996