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

November 4, 1981

LICENSE AUTHORITY FILE COPY

Dockets Nos. 50-269, 50-270
and 50-287

Posted
Amdt. 103
to DPR-47

Mr. William O. Parker, Jr.
Vice President - Steam Production
Duke Power Company
P. O. Box 33189
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Parker:

The Commission has issued the enclosed Amendments Nos. 103 , 103 , and 100 to Licenses Nos. DPR-38, DPR-47 and DPR-55 for the Oconee Nuclear Station, Units Nos. 1, 2 and 3. These amendments consist of changes to the Station's common Technical Specifications (TSs) in response to your request dated October 28, 1981, as supplemented on October 29, 1981.

These amendments revise the TSs to allow full power operation of Oconee Nuclear Station Unit 2 with the Axial Power Shaping Rods in the fully inserted position.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Philip C. Wagner

Philip C. Wagner, Project Manager
Operating Reactors Branch #4
Division of Licensing

Enclosures:
1. Amendment No. 103 to DPR-38
2. Amendment No. 103 to DPR-47
3. Amendment No. 100 to DPR-55
4. Safety Evaluation
5. Notice

cc w/enclosures:
See next page

Duke Power Company

cc w/enclosure(s):

Mr. William L. Porter
Duke Power Company
P. O. Box 33189
422 South Church Street
Charlotte, North Carolina 28242

Oconee County Library
501 West Southbroad Street
Walhalla, South Carolina 29691

Honorable James M. Phinney
County Supervisor of Oconee County
Walhalla, South Carolina 29621

cc w/enclosure(s) & incoming dtd.:
10/28/81, 10/29/81

Office of Intergovernmental Relations
116 West Jones Street
Raleigh, North Carolina 27603

Regional Radiation Representative
EPA Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30308

Resident Inspector
U.S. Nuclear Regulatory Commission
Route 2, Box 610
Seneca, South Carolina 29678

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
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Washington, D. C. 20036

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

DUKE POWER COMPANY

DOCKET NO. 50-269

OCONEE NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 103
License No. DPR-38

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Duke Power Company (the licensee) dated October 28, 1981, as supplemented October 29, 1981, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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;

   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 amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Facility Operating License No. DPR-38 is hereby amended to read as follows:

   3.B Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No.103 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 4, 1981

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

DUKE POWER COMPANY

DOCKET NO. 50-270

OCONEE NUCLEAR STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 103
License No. DPR-47

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Duke Power Company (the licensee) dated October 28, 1981, as supplemented October 29, 1981, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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;

   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 amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Facility Operating License No. DPR-47 is hereby amended to read as follows:

   3.B Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 103 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 4, 1981

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

DUKE POWER COMPANY

DOCKET NO. 50-287

OCONEE NUCLEAR STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 100
License No. DPR- 55

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Duke Power Company (the licensee) dated October 28, 1981, as supplemented October 29, 1981, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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;

   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 amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Facility Operating License No. DPR-55 is hereby amended to read as follows:

   3.B Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No.100 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 4, 1981

ATTACHMENT TO LICENSE AMENDMENTS

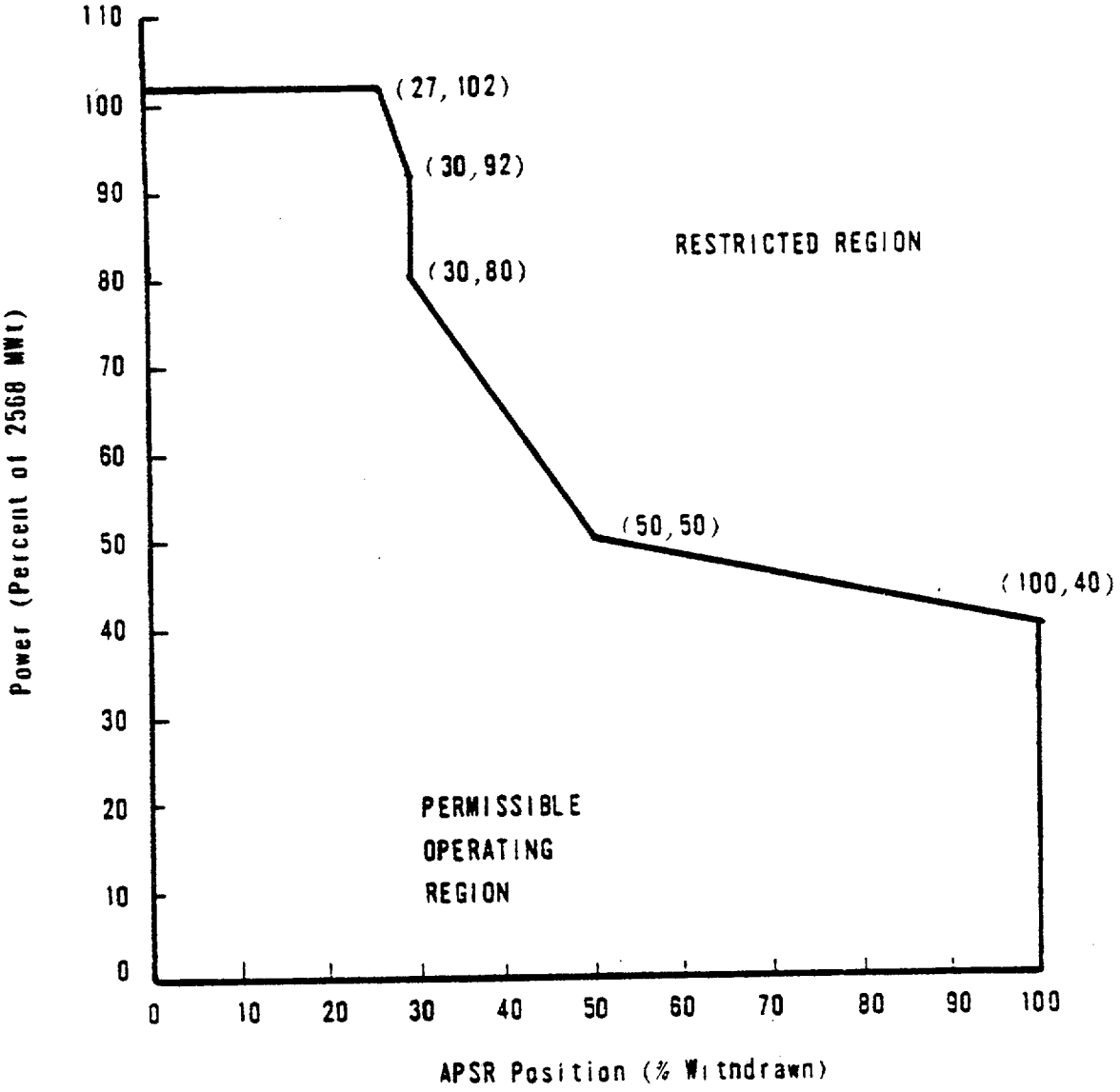
AMENDMENT NO.103 TO DPR-38

AMENDMENT NO.103 TO DPR-47

AMENDMENT NO.100 TO DPR-55

DOCKETS NOS. 50-269, 50-270 AND 50-287

Replace page 3.5-25a of the Appendix "A" Technical Specifications with the attached page. The revised page is identified by amendment numbers and contains a vertical line indicating the area of change.



APSR POSITION LIMITS FOR OPERATION
FROM 150 ± 10 EFPD TO
390 + 10 EFPD
Unit 2 - 30
OCONEE NUCLEAR STATION
Figure 3.5.2-4B2

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 103 TO FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 103 TO FACILITY OPERATING LICENSE NO. DPR-47

AMENDMENT NO. 100 TO FACILITY OPERATING LICENSE NO. DPR-55

DUKE POWER COMPANY

OCONEE NUCLEAR STATION, UNITS NOS. 1, 2 AND 3

DOCKETS NOS. 50-269, 50-270 AND 50-287

1.0 Introduction

By letter dated October 28, 1981, Duke Power Company (Duke) requested a change to the common Oconee Nuclear Station (ONS) Technical Specifications (TSs). This change would allow full power operation of Unit 2 with the Axial Power Shaping Rods (APSRs) in the fully inserted position. The change affects only Unit 2, but since the ONS has common TSs, a license amendment to all three licenses is needed.

2.0 Background and Discussion

The APSRs are used to control the axial power distribution in the reactor core. The construction of these rods is similar to that of the safety and regulating control rods with the major difference being that the active poison region of the APSRs occupies only the lower 36 inches of the rods. In the course of conducting startup testing to return Oconee 2 to operation following a maintenance outage, two APSRs were found to be binding at approximately 76% withdrawal. Duke believes the cause of this binding to be ovalization of the cladding similar to that found in Oconee 1.

The major concern Duke has is the possibility of an APSR undergoing interference to the point where it would bind at some partially withdrawn position which could result in fuel handling problems during refueling. Oconee 2 presently has approximately 36 effective full power days (EFPD) remaining in Cycle 5 operation. Therefore, Duke requested a change to the APSR position limits to allow Oconee 2 to operate at full power with the APSRs fully inserted. Duke committed to: 1) determine the cause of the binding, 2) perform a careful evaluation if the cause is the same as that discovered in Oconee 1, and 3) provide the NRC with the findings of their evaluation.

3.0 Evaluation

The current ONS TS limits associated with APSR position (contained on Figure 3.5.2-4B2) for Oconee 2 operation require the APSRs to be withdrawn 6% from the fully inserted position for full power operation. Operation up to 80% of full power operation is permissible with the APSRs in the fully inserted position. Because of the concern mentioned above, Duke, by letter dated October 28, 1981, requested a change to allow full power operation with the APSRs in the fully inserted position.

The present requirement for 6% withdrawal of the APSRs was discussed by Duke in a supplemental letter dated October 29, 1981. This letter states that the reason for the required slight withdrawal is twofold: 1) to prevent unacceptable power peaking toward the end of fuel cycle, and 2) to prevent the APSRs from becoming trapped in the fully inserted position by power imbalance and peaking considerations.

The analysis performed by B&W indicated unacceptable power peaking could occur if the APSRs were fully inserted in the core early in the fuel cycle. Reexamination of the analysis indicates that for end of cycle, accounting for the control rod and APSR positioning that has been maintained during this cycle, unacceptable power peaking should not occur with the APSRs fully inserted. (The power peaking limitations define the linear heat rate values used as initial assumptions in the LOCA analyses performed in accordance with Appendix K to 10 CFR 50.46.) Therefore, operation with the APSRs in the fully inserted position will not violate the limits used in the LOCA analyses.

We have reviewed this information and the existing TSs. Since TS limitations will remain unchanged for Xenon Reactivity (3.5.2.6) and Power Imbalance (3.5.2.7), assurance is maintained that unacceptable core power configurations will not develop. In addition, no reactor protective features will be changed because the APSRs are not included in the automatic shutdown system. Therefore, based on the considerations discussed above and the fact that only a short period of operation remains during Cycle 5 operation, we find the proposed change to the ONS Unit 2 APSR position limits to be acceptable.

4.0 Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

5.0 Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: November 4, 1981

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKETS NOS. 50-269, 50-270 AND 50-287

DUKE POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 103 , 103 , and 100 to Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55, respectively, issued to Duke Power Company, which revised the Technical Specifications (TSs) for operation of the Oconee Nuclear Station, Units Nos. 1, 2 and 3, located in Oconee County, South Carolina. The amendments are effective as of the date of issuance.

These amendments revise the TSs to allow full power operation of Oconee Nuclear Station Unit 2 with the Axial Power Shaping Rods in the fully inserted position.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration

and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated October 28, 1981, as supplemented on October 29, 1981, (2) Amendments Nos. 103 , 103 , and 100 to Licenses Nos. DPR-38, DPR-47 and DPR-55, respectively, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Oconee County Library, 501 West Southbroad Street, Walhalla, South Carolina. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 4th day of November 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing