



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20566

October 7, 1980

Docket Nos. 50-269, 270

& 281

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

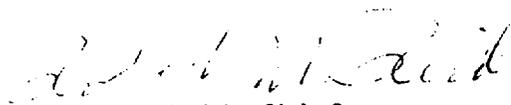
Dear Mr. Parker:

The Commission has issued the enclosed Amendments Nos. 87, 87, and 84 for 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 and are in response to your submittal dated July 22, 1980.

These amendments revise the Technical Specifications for Oconee Units 2 and 3 by modifying the reactor vessel pressure-temperature operating limit curves to enable the extension of reactor vessel operation from 4 to 5 effective full power years.

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

Sincerely,

  
Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Licensing

Enclosures:

1. Amendment No. 87 to DPR-38
2. Amendment No. 87 to DPR-47
3. Amendment No. 84 to DPR-55
4. Safety Evaluation
5. Notice of Issuance

cc: w/enclosure  
See next page

8010210040

Duke Power Company

cc w/enclosure(s):

Mr. William L. Porter  
Duke Power Company  
P. O. Box 2178  
422 South Church Street  
Charlotte, North Carolina 28242

Oconee Public Library  
201 South Spring Street  
Walhalla, South Carolina 29691

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

Director, Technical Assessment  
Division  
Office of Radiation Programs  
(AW-459)  
U. S. Environmental Protection Agency  
Crystal Mall #2  
Arlington, Virginia 20460

U. S. Environmental Protection Agency  
Region IV Office  
ATTN: EIS COORDINATOR  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

Mr. Francis Jape  
U.S. Nuclear Regulatory Commission  
P. O. Box 7  
Seneca, South Carolina 29678

Mr. Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation Division  
Suite 420, 7735 Old Georgetown Road  
Bethesda, Maryland 20014

Manager, LIS  
NUS Corporation  
2536 Countryside Boulevard  
Clearwater, Florida 33515

J. Michael McGarry, III, Esq.  
DeBevoise & Liberman  
1200 17th Street, N.W.  
Washington, D. C. 20036

cc w/enclosure(s) & incoming dtd.:

7/22/80

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



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. 87  
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 July 22, 1980, 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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 87 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Licensing

**Attachment:**  
Changes to the Technical  
Specifications

Date of Issuance: October 7, 1980



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. 87  
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 July 22, 1980, 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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 87 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: October 7, 1980



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. 84  
License No. DPR-55

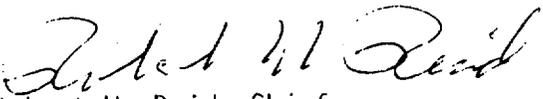
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Duke Power Company (the licensee) dated July 22, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 84 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Licensing

Attachment:  
**Changes to the Technical  
Specifications**

Date of Issuance: October 7, 1980

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 87 TO DPR-38

AMENDMENT NO. 87 TO DPR-47

AMENDMENT NO. 84 TO DPR-55

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

Revise Appendix A as follows:

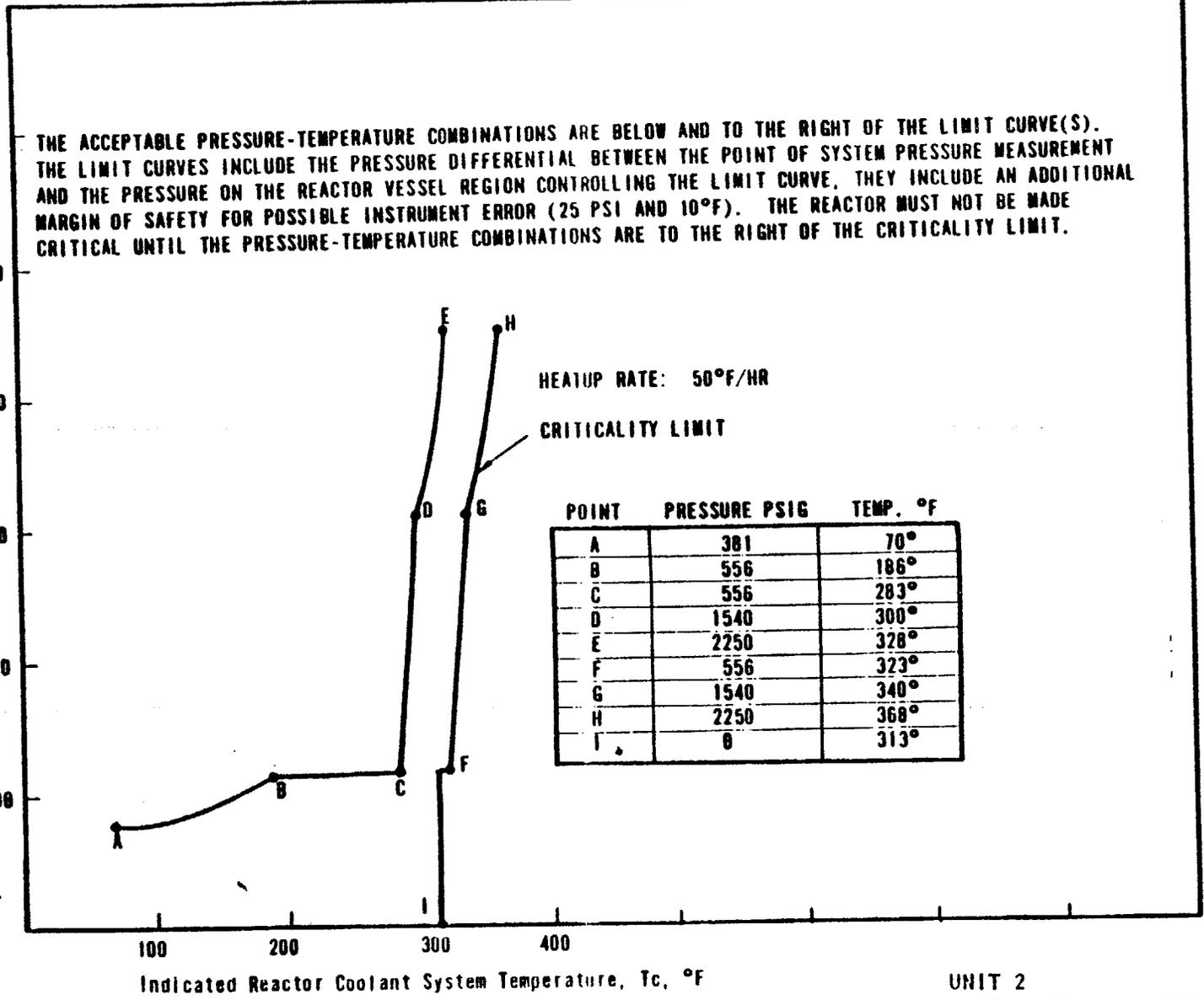
Remove Pages

3.1-6a  
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Insert Pages

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Indicated Reactor Coolant System Pressure, psig. (Loop with Pressurizer)

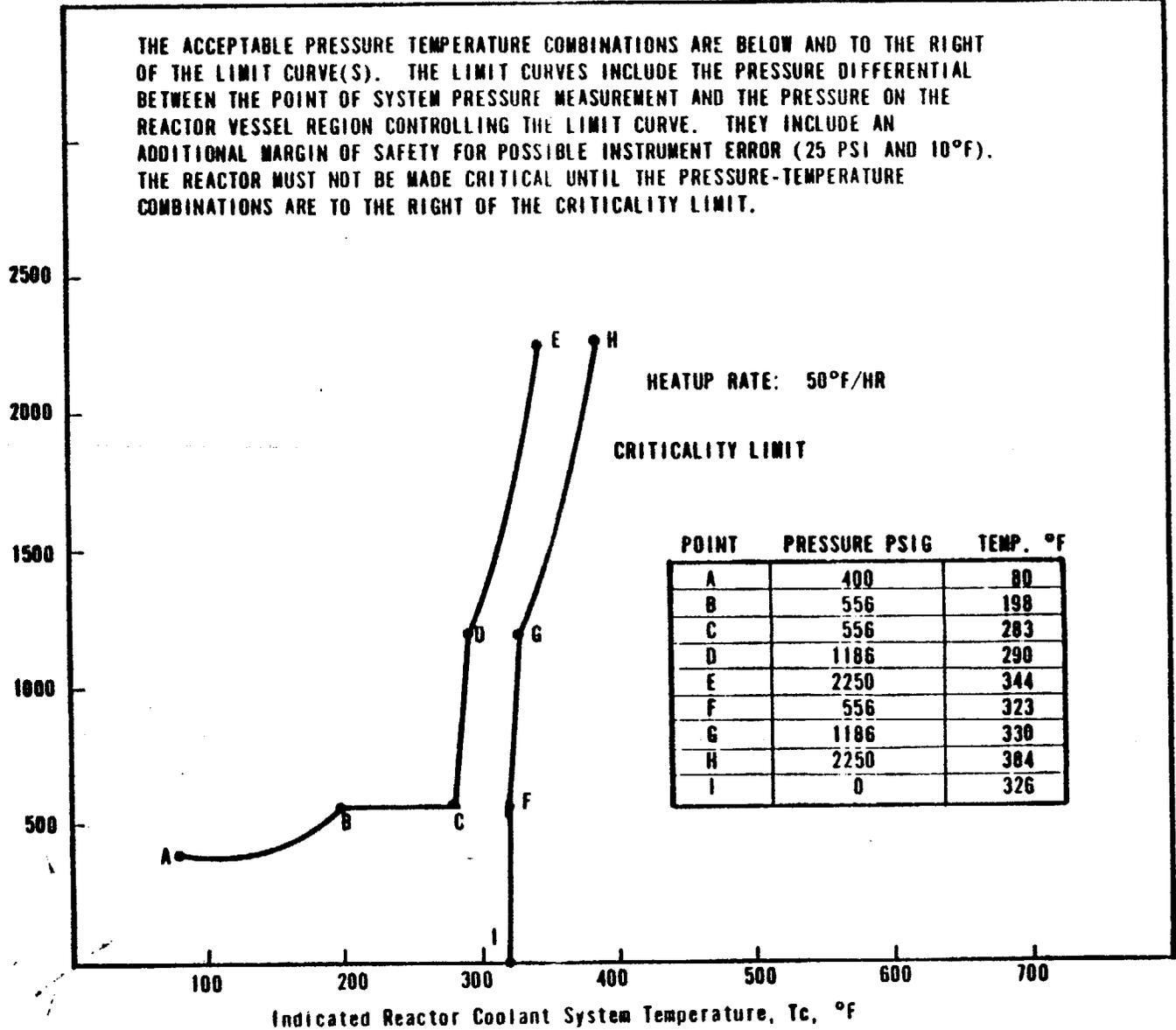


UNIT 2  
REACTOR COOLANT SYSTEM  
NORMAL OPERATION HEATUP LIMITATIONS  
APPLICABLE FOR FIRST 5.0 EFY  
OCONEE NUCLEAR STATION



Figure 3.1.2-1B

Indicated Reactor Coolant System Pressure, psig (Loop with Pressurizer)



UNIT 3  
 REACTOR COOLANT SYSTEM  
 NORMAL OPERATION HEATUP LIMITATIONS  
 APPLICABLE FOR FIRST 5.0 EFPY  
 OCONEE NUCLEAR STATION



Figure 3.1.2-1C

Indicated Reactor Coolant System Pressure, psig. (Loop with Pressurizer)

1. WHEN THE DECAY HEAT REMOVAL (DH) SYSTEM IS OPERATING WITH NO RC PUMPS OPERATING, THE INDICATED DHR SYSTEM RETURN TEMPERATURE TO THE REACTOR VESSEL SHALL BE USED.
2. A MAXIMUM STEP TEMPERATURE CHANGE OF 75°F IS ALLOWABLE WHEN REMOVING ALL RC PUMPS FROM OPERATION WITH THE DH SYSTEM OPERATING. THE STEP TEMPERATURE CHANGE IS DEFINED AS THE RC TEMP (PRIOR TO STOPPING ALL RC PUMPS) MINUS THE DH RETURN TEMP (AFTER STOPPING ALL RC PUMPS) THE 100°F/HR RAMP DECREASE IS ALLOWABLE BOTH BEFORE AND AFTER THE STEP TEMP CHANGE.

2500  
2000  
1500  
1000  
500

COOLDOWN RATE: 100°F/HR

POINT	PRESSURE PSIG	TEMP. °F
A	181	80
B	556	170
C	556	215
D	980	224
E	2250	378

THE ACCEPTABLE PRESSURE-TEMPERATURE COMBINATIONS ARE BELOW AND TO THE RIGHT OF THE LIMIT CURVE(S). THE LIMIT CURVES INCLUDE THE PRESSURE DIFFERENTIAL BETWEEN THE POINT OF SYSTEM PRESSURE MEASUREMENT AND THE PRESSURE ON THE REACTOR VESSEL REGION CONTROLLING THE LIMIT CURVE. THEY INCLUDE AN ADDITIONAL MARGIN OF SAFETY FOR POSSIBLE INSTRUMENT ERROR (25 PSI AND 10°F)

100 200 300 400 500 600 700  
Indicated Reactor Coolant System Temperature, Tc, °F

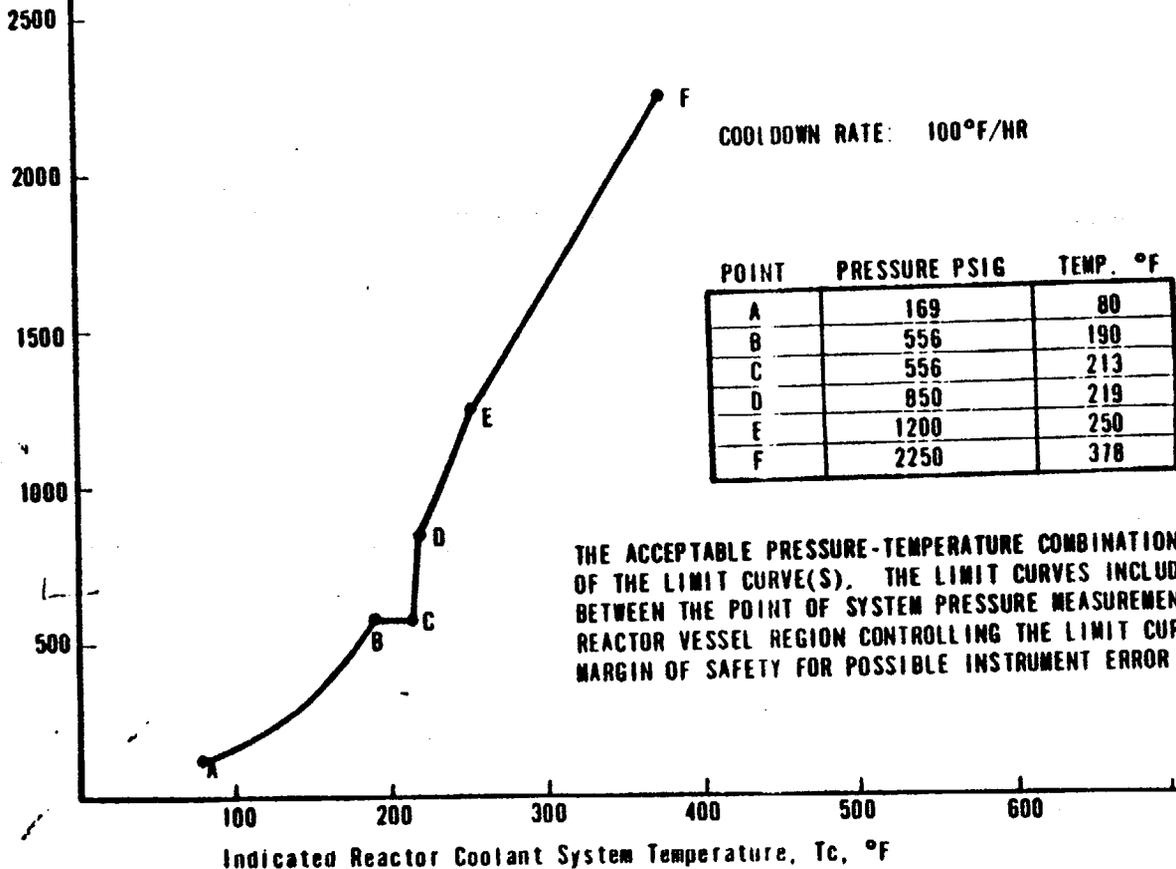
UNIT 2  
REACTOR COOLANT SYSTEM  
NORMAL OPERATION COOLDOWN LIMITATIONS  
APPLICABLE FOR FIRST 5.0 EFPY  
OCONEE NUCLEAR STATION



Figure 3.1.2-28

Indicated Reactor Coolant System Pressure, psig. (Loop with Pressurizer)

1. WHEN THE DECAY HEAT REMOVAL (DH) SYSTEM IS OPERATING WITH NO RC PUMPS OPERATING, THE INDICATED DHR SYSTEM RETURN TEMPERATURE TO THE REACTOR VESSEL SHALL BE USED.
2. A MAXIMUM STEP TEMPERATURE CHANGE OF 75°F IS ALLOWABLE WHEN REMOVING ALL RC PUMPS FROM OPERATION WITH THE DH SYSTEM OPERATING. THE STEP TEMPERATURE CHANGE IS DEFINED AS THE RC TEMP. (PRIOR TO STOPPING ALL RC PUMPS) MINUS THE DH RETURN TEMP (AFTER STOPPING ALL RC PUMPS). THE 100°F/HR RAMP DECREASE IS ALLOWABLE BOTH BEFORE AND AFTER THE STEP TEMP. CHANGE.



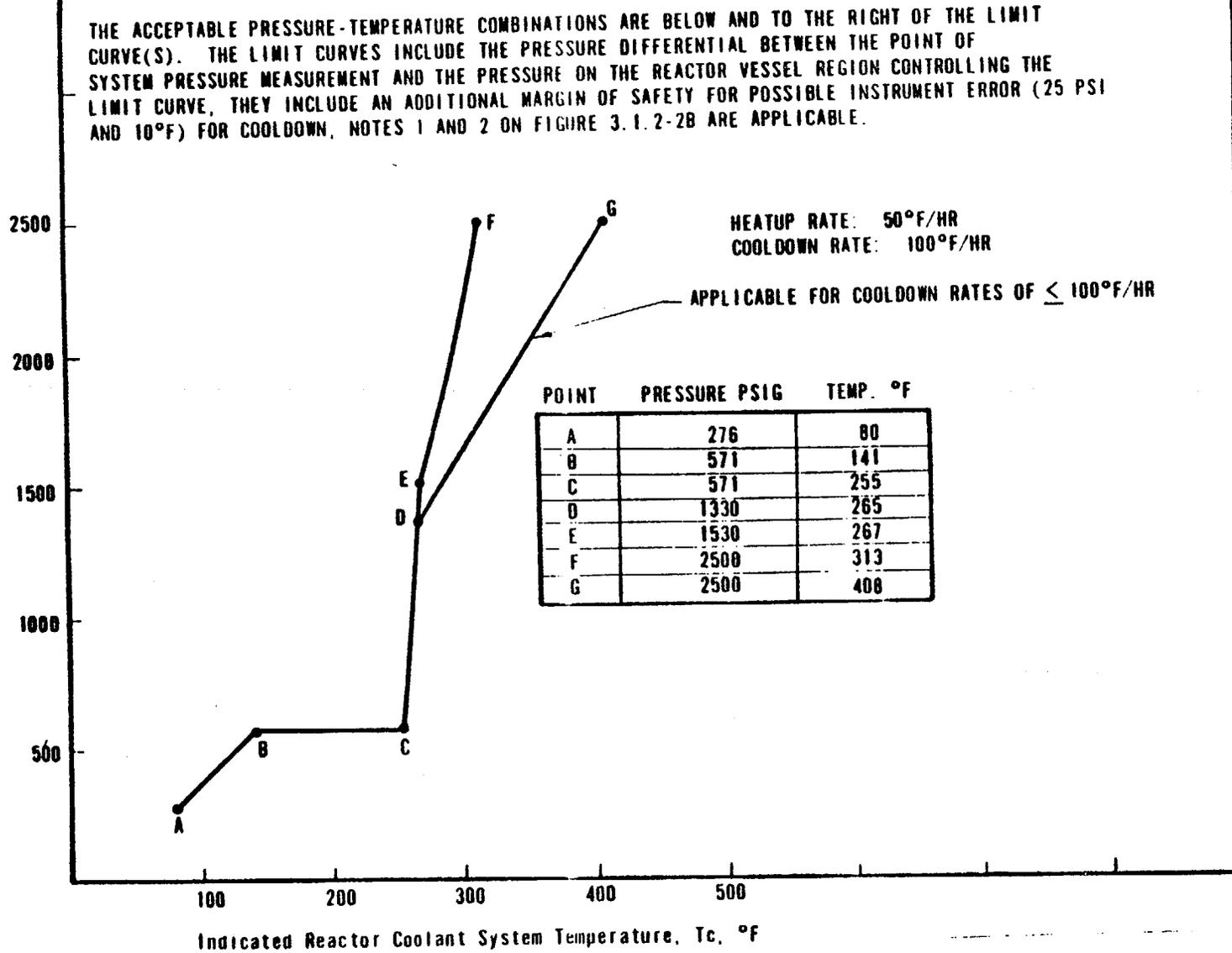
THE ACCEPTABLE PRESSURE-TEMPERATURE COMBINATIONS ARE BELOW AND TO THE RIGHT OF THE LIMIT CURVE(S). THE LIMIT CURVES INCLUDE THE PRESSURE DIFFERENTIAL BETWEEN THE POINT OF SYSTEM PRESSURE MEASUREMENT AND THE PRESSURE ON THE REACTOR VESSEL REGION CONTROLLING THE LIMIT CURVE. THEY INCLUDE AN ADDITIONAL MARGIN OF SAFETY FOR POSSIBLE INSTRUMENT ERROR (25 PSI AND 10°F)

UNIT 3  
 REACTOR COOLANT SYSTEM  
 NORMAL OPERATION COOLDOWN LIMITATIONS  
 APPLICABLE FOR FIRST 5.0 EFY  
 OCONEE NUCLEAR STATION



Figure 3.1.2-2C

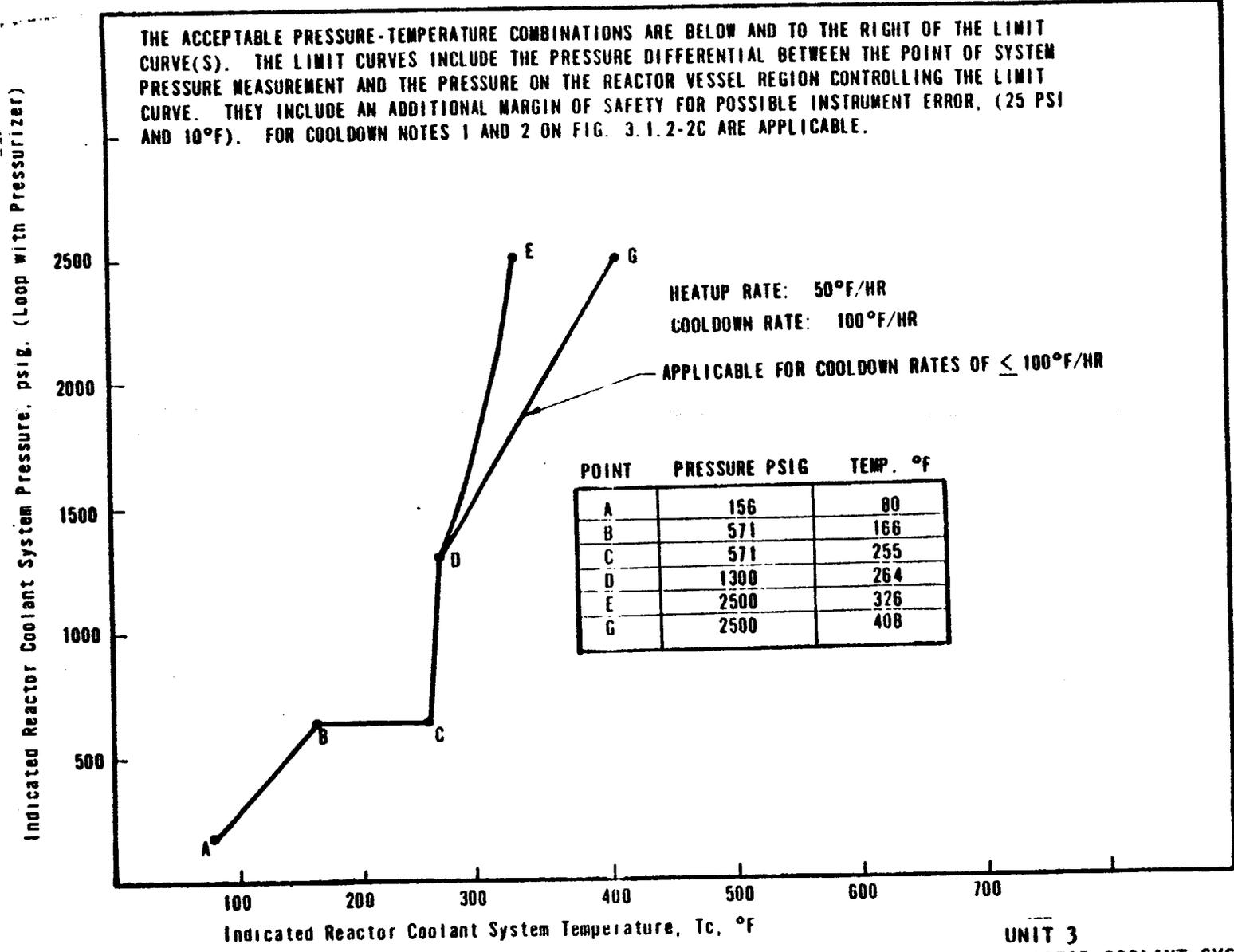
Indicated Reactor Coolant System Pressure, psig. (Loop with Pressurizer)



UNIT 2  
REACTOR COOLANT SYSTEM  
INSERVICE LEAK AND HYDROSTATIC TEST  
HEATUP AND COOLDOWN LIMITATIONS  
APPLICABLE FOR 5.0 EPFY  
OCONEE NUCLEAR STATION



Figure 3.1.2-3B



UNIT 3  
 REACTOR COOLANT SYSTEM  
 INSERVICE LEAK AND HYDROSTATIC TEST  
 HEATUP AND COOLDOWN LIMITATIONS  
 APPLICABLE FOR FIRST 5.0 EFY  
 OCONEE NUCLEAR STATION



Figure 3.1.2-3C



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 87 TO FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 87 TO FACILITY OPERATING LICENSE NO. DPR-47

AMENDMENT NO. 84 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

Introduction

By letter dated July 22, 1980, the Duke Power Company (the licensee) submitted proposed changes to the Station's common Technical Specifications (TSs) modifying the reactor vessel pressure-temperature operating limit curves for Oconee Units Nos. 2 and 3.

Background

The pressure-temperature operating limit curves for Units 2 and 3 were developed for the first 4 effective full power years (EFPY) from the first reactor vessel material surveillance capsules removed from the reactor vessels after about one year of operation. For Oconee Unit 2 the 4 EFPY curves will become invalid in early to mid-October 1980, necessitating the need for this amendment.

The licensee proposed extending the current operating limits to accommodate the predicted future effect one EFPY of operation would have on the fracture toughness of the reactor vessel. The licensee conservatively used the methodology of Regulatory Guide 1.99, Revision 1, to perform his evaluation.

Evaluation

The licensee has proposed that the current pressure-temperature limits for Units 1 and 2 be revised by increasing the allowable temperatures by 15° F to account for an increase in fluence corresponding to one EFPY. This would make the revised curves applicable for 5 EFPY instead of 4 EFPY.

We have evaluated the information submitted by the licensee and have concluded that his proposed revision will account for the increase in fluence that will result from an additional one EFPY of exposure, and that the revised curves will be in conformance with Appendix G, 10 CFR Part 50. Conformance with 10 CFR Part 50, Appendix G, constitutes an acceptable basis for satisfying the requirements of

NRC General Design Criterion 31, Appendix A, 10 CFR Part 50, and thus the revised operating limits are acceptable.

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.

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: October 7, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKETS NOS. 50-269, 50-270 AND 50-287DUKE POWER COMPANYNOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY  
OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 87, 87 and 84 to Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55, respectively, issued to Duke Power Company, which revised the Technical Specifications 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 Station's Common Technical Specifications as applicable only to Oconee Units 2 and 3 by modifying the reactor vessel pressure-temperature operating limit curves to enable the extension of reactor vessel operation from 4 to 5 effective full power years.

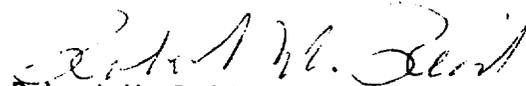
The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR 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 Section 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 July 22, 1980, (2) Amendments Nos. 87, 87, and 84 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, 201 South Spring 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 7th day of October 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Licensing