



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

December 10, 1980

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

RECEIVED
OPERATING REACTORS BRANCH
DIVISION OF LICENSING
DEC 19 1980
AM 8 52

Mr. William O. Parker, Jr.
Vice President - Steam Production
Duke Power Company
P. O. Box 2178
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Parker:

The Commission has issued the enclosed Amendments Nos. 89, 89, and 86 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 submittals dated June 24, 1980 and October 14, 1980.

These amendments revise the Technical Specifications by providing a re-definition of the term Operable and the addition of general Limiting Conditions for Operation.

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. 89 to DPR-38
2. Amendment No. 89 to DPR-47
3. Amendment No. 86 to DPR-55
4. Safety Evaluation
5. Notice of Issuance

cc w/enclosures: See next page

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Duke Power Company

cc w/enclosure(s):

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Honorable James M. Phinney
County Supervisor of Oconee County
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Division
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Washington, D. C. 20460

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6/24 & 10/14/80

Office of Intergovernmental Relations
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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. 89
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 June 24, 1980, as supplemented October 14, 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:

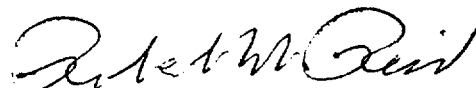
3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 89 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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3. This license amendment is effective as of the date of its 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: December 10, 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. 89
License No. DPR-47

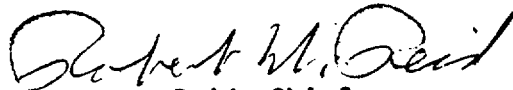
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duke Power Company (the licensee) dated June 24, 1980, as supplemented October 14, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and 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:

3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 89 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



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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 10, 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. 86
License No. DPR-55

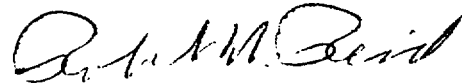
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duke Power Company (the licensee) dated June 24, 1980, as supplemented October 14, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and 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:

3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 86 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



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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 10, 1980

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 89 TO DPR-38

AMENDMENT NO. 89 TO DPR-47

AMENDMENT NO. 86 TO DPR-55

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

Revise Appendix A as follows:

Remove Pages

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1-2

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3.1-1

Insert Pages

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1-2

3.0-1

3.1-1

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2 <u>SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS</u>	2.1-1
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2.2 SAFETY LIMITS, REACTOR COOLANT SYSTEM PRESSURE	2.2-1
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3 <u>LIMITING CONDITIONS FOR OPERATION</u>	3.0-1
3.0 LIMITING CONDITION FOR OPERATION	3.0-1
3.1 <u>REACTOR COOLANT SYSTEM</u>	3.1-1
3.1.1 <u>Operational Components</u>	3.1-1
3.1.2 <u>Pressurization, Heatup, and Cooldown Limitations</u>	3.1-3
3.1.3 <u>Minimum Conditions for Criticality</u>	3.1-8
3.1.4 <u>Reactor Coolant System Activity</u>	3.1-10
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3.1.6 <u>Leakage</u>	3.1-14
3.1.7 <u>Moderator Temperature Coefficient of Reactivity</u>	3.1-17
3.1.8 <u>Single Loop Restrictions</u>	3.1-19
3.1.9 <u>Low Power Physics Testing Restrictions</u>	3.1-20
3.1.10 <u>Control Rod Operation</u>	3.1-21
3.2 HIGH PRESSURE INJECTION AND CHEMICAL ADDITION SYSTEMS	3.2-1
3.3 EMERGENCY CORE COOLING, REACTOR BUILDING COOLING, REACTOR BUILDING SPRAY AND LOW PRESSURE SERVICE WATER SYSTEMS	3.3-1

1.2.7 Refueling Operation

An operation involving a change in core geometry by manipulation of fuel or control rods when the reactor vessel head is removed.

1.2.8 Startup

The reactor shall be considered in the startup mode when the shutdown margin is reduced with the intent of going critical.

1.3 OPERABLE

A system, subsystem, train, component or device shall be considered OPERABLE when it is capable of performing its intended safety functions. Implicit in this definition shall be the assumption that all essential auxiliary equipment required in order to assure performance of the safety function is capable of performing its related support function(s). Auxiliary equipment includes but is not limited to normal or emergency electrical power sources, cooling and seal water, instrumentation and controls, etc. If either the normal or emergency power to system, subsystem, train, component or device is not available it is considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided:

(a) the alternate power source is available, and (b) the redundant system is operable.

1.4 PROTECTIVE INSTRUMENTATION LOGIC

1.4.1 Instrument Channel

An instrument channel is the combination of sensor, wires, amplifiers and output devices which are connected for the purpose of measuring the value of a process variable for the purpose of observation, control and/or protection. An instrument channel may be either analog or digital in nature.

1.4.2 Reactor Protective System

The reactor protective system is shown in Figures 7-1 and 7-6 of the FSAR. It is that combination of protective channels and associated circuitry which forms the automatic system that protects the reactor by control rod trip. It includes the four protective channels, their associated instrument channel inputs, manual trip switch, all rod drive protective trip breakers and activating relays or coils.

1.4.3 Protective Channel

A protective channel as shown in Figure 7-1 of the FSAR (one of three or one of four independent channels, complete with sensors, sensor power supply units, amplifiers and bistable modules provided for every reactor protective safety parameter) is a combination of instrument channels forming a single digital output to the protective system's coincidence logic. It includes a shutdown bypass circuit, a protective channel bypass circuit and reactor trip module and provision for insertion of a dummy bistable.

3

LIMITING CONDITIONS FOR OPERATION

3.0

LIMITING CONDITION FOR OPERATION

Specification

In the event a Limiting Condition for Operation (LCO) and/or associated Action requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the affected unit shall be placed in at least Hot Shutdown within the next 12 hours, and in at least Cold Shutdown within the following 24 hours unless corrective measures are completed that permit operation under the permissible Action statements for the specified time interval as measured from initial discovery or until the reactor is placed in a mode in which the specification is not applicable. Exceptions to these requirements shall be stated in the individual specifications.

Bases

This specification delineates the ACTION to be taken for circumstances not directly provided for in the ACTION statements of existing LCOs and whose occurrence would violate the intent of the specification. For example, Specification 3.3.1 requires that two independent trains of the High Pressure Injection (HPI) System be operable and provides explicit Action requirements if one train of the HPI System is inoperable. Under the terms of Specification 3.0, if more than one train of the HPI System is inoperable, the affected unit is required to be in at least Hot Shutdown within the following 12 hours and in at least Cold Shutdown within the following 24 hours. It is assumed that the unit is brought to the required mode within the required times by promptly initiating and carrying out the appropriate Action statement.

3.1 REACTOR COOLANT SYSTEM

Applicability

Applies to the operating status of the reactor coolant system.

Objective

To specify those limiting conditions for operation of the reactor coolant system components which must be met to ensure safe reactor operation.

Specification

3.1.1 Operational Components

a. Reactor Coolant Pumps

1. Whenever the reactor is critical, single pump operation shall be prohibited, single-loop operation shall be restricted to testing, and other pump combinations permissible for given power levels shall be as shown in Table 2.3-1.
2. Except for test purposes and limited by Specification 2.3, power operation with one idle reactor coolant pump in each loop shall be restricted to 24 hours. If the reactor is not returned to an acceptable RC pump operating combination at the end of the 24-hour period, the reactor shall be in a hot shutdown condition within the next 12 hours.
3. The boron concentration in the reactor coolant system shall not be reduced unless at least one reactor coolant pump or one low pressure injection pump is circulating reactor coolant.

b. Steam Generator

1. One steam generator shall be operable whenever the reactor coolant average temperature is above 250°F.

c. Pressurizer Safety Valves

1. All pressurizer code safety valves shall be operable whenever the reactor is critical.
2. At least one pressurizer code safety valve shall be operable whenever all reactor coolant system openings are closed, except for hydrostatic tests in accordance with the ASME Section III Boiler and Pressure Vessel Code.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 89 TO FACILITY OPERATING LICENSE NO. DPR-38
AMENDMENT NO. 89 TO FACILITY OPERATING LICENSE NO. DPR-47
AMENDMENT NO. 86 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 letters dated June 24 and October 14, 1980, the Duke Power Company (the licensee or DPC) submitted proposed changes to the Station's common Technical Specifications (TSs) that redefine the term Operable and add a general Limiting Condition for Operation (LCO).

Background

By letter dated April 10, 1980, the NRC requested all power reactor licensees to submit proposed TSs related to preserving the single failure criterion for systems that are relied upon in the licensees' Final Safety Analysis Report (FSAR). By and large, the single failure criterion is preserved in the TSs by properly defining the term OPERABLE and by specifying LCOs that require all redundant components of safety related systems to be OPERABLE. Our April 10 letter transmitted Model TSs for use by the licensees.

Evaluation

The NRC Model TSs consisted of three sections: (1) a definition of Operable, (2) an LCO providing an Action Statement for circumstances in excess of those addressed in an existing Station TS, and (3) an LCO concerning unavailability of emergency power or normal power. DPC combined the definition of Operable with the LCO concerning power availability. The combination was carried out in an acceptable manner.

The NRC staff requested the licensee to revise the definition of Operable to implicitly state that a system is capable of performing its specified function when all necessary instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system to perform its function are also capable of performing their related support function. We have reviewed the licensee's

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definition and have determined that it is consistent with our request and is therefore acceptable.

DPC also proposed an additional TS 3.0-Limiting Condition for Operation, for the Oconee Station. This proposed TS is an almost verbatim use of our Model TS, described as (2) above. The Model was written for a single unit station; the licensee modified it for a multi-unit station.

We conclude that the redefinition of OPERABLE and the addition of LCOs, described above, will aid in preserving the safety related systems single failure criterion and are thus 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: December 10, 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. 89, 89 and 86 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 by providing a redefinition of the term operable and the addition of general Limiting Conditions for Operation.

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.

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