



REGULATOR DOCKET FILE COPY

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

August 1, 1980

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

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. 84, 84, and 81 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 (TSs) and are in response to your submittal dated July 16, 1980. Your request of July 16 was stated to be an emergency need due to a power shortage in your service area. We provided oral authorization on July 16, 1980, to temporarily amend the TSs; we provided written confirmation on July 17, 1980, of our oral authorization. This license amendment is the formal package required to followup our actions of July 16 and 17, 1980.

These amendments revise the Technical Specification related to an emergency, temporary request to extend the allowable period of inoperability of the "2B" High Pressure Injection Pump by 48 hours for Unit 2.

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. 84 to DPR-38
2. Amendment No. 84 to DPR-47
3. Amendment No. 81 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):

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

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Director, Technical Assessment  
Division  
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U. S. Environmental Protection Agency  
Crystal Mall #2  
Arlington, Virginia 20460

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

7/16/80  
Office of Intergovernmental Relations  
116 West Jones Street  
Raleigh, North Carolina 27603

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



**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. 84  
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 16, 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.

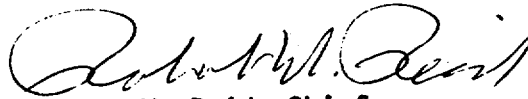
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-38 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 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 July 16, 1980.

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: August 1, 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. 84  
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 16, 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.

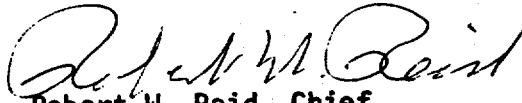
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-47 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 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 July 16, 1980.

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: August 1, 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. 81  
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 16, 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.

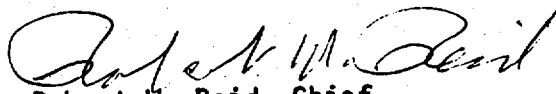
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-55 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 81, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective July 16, 1980.

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: August 1, 1980



ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 84 TO DPR-38

AMENDMENT NO. 84 TO DPR-47

AMENDMENT NO. 81 TO DPR-55

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

Revise Appendix A by replacing page 3.3-2 with the enclosed revised page. Page 3.3-1 is also provided to maintain document completeness. The changes on the revised page are indicated by a marginal line.

3.3 EMERGENCY CORE COOLING, REACTOR BUILDING COOLING,  
REACTOR BUILDING SPRAY, AND LOW PRESSURE SERVICE  
WATER SYSTEMS

Applicability

Applies to the emergency core cooling, reactor building cooling, reactor building spray, and low pressure service water systems.

Objective

To define the conditions necessary to assure immediate availability of the emergency core cooling, reactor building cooling, reactor building spray and low pressure service water systems.

Specification

3.3.1 High Pressure Injection (HPI) System

- a. Prior to initiating maintenance on any component of the HPI system, the redundant component shall be tested to assure operability.
- b. When the reactor coolant system (RCS), with fuel in the core, is in a condition with temperature above 350°F and reactor power less than 60% FP:
  - (1) Two independent trains, each comprised of an HPI pump and a flowpath capable of taking suction from the borated water storage tank and discharging into the reactor coolant system automatically upon Engineered Safeguards Protective System (ESPS) actuation (HPI segment) shall be operable.
  - (2) Test or maintenance shall be allowed on any component of the HPI system provided one train of the HPI system is operable. If the HPI system is not restored to meet the requirements of Specification 3.3.1.b(1) above within 24 hours, the reactor shall be placed in a hot shutdown condition within 12 hours. If the requirements of Specification 3.3.1.b(1) are not met within 24 hours following hot shutdown, the reactor shall be placed in a condition with RCS temperature below 350°F within an additional 24 hours.
- c. For Unit 2, when reactor power is greater than 60% FP:
  - (1) In addition to the requirements of Specification 3.3.1.b(1) above, the remaining HPI pump shall be operable and valves HP-99 and HP-100 shall be open.
  - (2) HPI Pump Operability
    - (a) Tests or maintenance shall be allowed on any one HPI pump, provided two trains of HPI system are operable.

- \* (b) If the inoperable HPI pump is not restored to operable status within 72 hours, reactor power shall be reduced below 60% FP within an additional 12 hours.

(3) HPI Flowpath Operability

- (a) If one automatic HPI flowpath becomes inoperable, then either restore the inoperable flowpath to operable status within one hour, or reactor power shall be reduced to below 60% FP within an additional 2 hours.

d. For Units 1 and 3, when reactor power is greater than 60% FP:

- (1) In addition to the requirements of Specification 3.3.1.b(1) above, the remaining HPI pump and valves 3HP-409 and 3HP-410 shall be operable and valves HP-99 and HP-100 shall be open.
- (2) Tests or maintenance shall be allowed on any component of the HPI system, provided two trains of HPI system are operable. If the inoperable component is not restored to operable status within 72 hours, reactor power shall be reduced below 60% FP within an additional 12 hours.

3.3.2 Low Pressure Injection (LPI) System

- a. Prior to initiating maintenance on any component of the LPI system, the redundant component shall be tested to assure operability.
- b. When the RCS, with fuel in the core, is in a condition with pressure equal to or greater than 350 psig or temperature equal to or greater than 250°F:
  - (1) Two independent LPI trains, each comprised of an LPI pump and a flowpath capable of taking suction from the borated water storage tank and discharging into the RCS automatically upon ESPS actuation (LPI segment), together with two LPI coolers and two reactor building emergency sump isolation valves (manual or remote-manual) shall be operable.
  - (2) Tests or maintenance shall be allowed on any component of the LPI system provided the redundant train of the LPI system is operable. If the LPI system is not restored to meet the requirements of Specification 3.3.2.b(1) above within 24 hours, the reactor shall be placed in a hot shutdown condition within 12 hours. If the requirements of Specification 3.3.2.b(1) are not met within 24 hours following hot shutdown, the reactor shall be placed in a condition with RCS pressure below 350 psig and RCS temperature below 250°F within an additional 24 hours.

3.3.3 Core Flood Tank (CFT) System

When the RCS is in a condition with pressure above 800 psig both CFT's shall be operable with the electrically operated discharge valves open



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 84 TO FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 84 TO FACILITY OPERATING LICENSE NO. DPR-47

AMENDMENT NO. 81 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 telecopied letter dated July 16, 1980, the Duke Power Company (licensee) requested an expedited temporary Technical Specification (TS) change for the Oconee Nuclear Station, Unit No. 2 (Oconee-2). The proposed change would revise TS 3.3.1, High Pressure Injection (HPI) System, Section c.(2)(b). This request was authorized on July 16, 1980. The licensee confirmed their July 16, 1980, telecopied request with a formal submittal dated July 16, 1980. This Safety Evaluation documents our review.

Background

The HPI motor 2B failed a bearing at 10:22 PM on July 13, 1980. The TS section referenced above would require the motor and pump to be restored to service by 10:22 PM July 16, 1980, or Oconee-2 reduced to 60% full power within an additional 12 hours. Due to the subsequent failure of the replacement motor, the original motor had to be repaired. These procedures used up most of the 72 hours allowed by the TS before power reduction would commence. Due to the severe hot weather in the Oconee service area and the marginal ability of the electrical utilities in the area to meet their power demands, the licensee requested an additional 48 hours, commencing at 10:22 PM on July 16, 1980, before power reduction would be started.

Evaluation

Of the remaining two HPI pumps, the "A" pump was in operation for system make-up and reactor coolant pump seal injection flow. The "C" pump was in standby; this pump was verified operable on June 14, 1980, pursuant to an oral report from the NRC Resident Inspector. The licensee stated all power supplies, instrumentation and controls, and auxiliary support systems for the HPI system were operable.

Three HPI pumps are required to be operable only for the assumed occurrence of (1) a limiting single failure in the HPI system, and (2) a postulated break in the primary cold leg piping of between 0.04 and 0.10 sq. ft. in the vicinity of the HPI nozzle for which the HPI flow is assumed lost and failure of one of the pumps.

Otherwise, only one HPI pump, assuming single failure of the remaining pump, would be required. With Pump "A" operating and Pump "C" on standby, it is required that valve HP-26 which is normally closed, open on receipt of an engineered safeguards (ES) signal. To reduce the probability of this valve failing to open on signal, an operator would be stationed to ensure the valve does open on receipt of an ES signal.

As the request is only for a duration of 48 hours of additional time, the low probability of the most limiting small break (0.04 to 0.10 sq. ft.), and the compensating factor of stationing an operator to verify the opening of valve HP-26, we conclude that this temporary TS change is 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: August 1, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSION

7590-01

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. 84, 84, and 81 to Facility Operating Licenses Nos. DPR-38, DPR-47, and DPR-55, respectively, issued to Duke Power Company (the licensee), which revised the Station's common Technical Specifications for operation of the Oconee Nuclear Station, Units Nos. 1, 2 and 3, located in Oconee County, South Carolina.

These amendments were authorized July 16, 1980. They revise the Technical Specifications for Unit No. 2 by extending on an emergency temporary basis the allowable period of inoperability of the "2B" High Pressure Injection Pump by 48 hours. The urgency associated with this action was due to a power shortage in the Oconee service area.

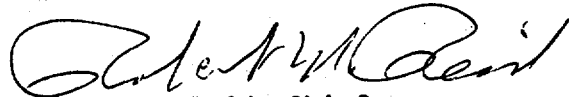
The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR 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 issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated July 16, 1980, (2) the Commission's letter to the licensee dated July 17, 1980, (3) Amendments Nos. 84, 84 , and 81 to Licenses Nos. DPR-38, DPR-47 and DPR-55, respectively, and (4) 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), (3) and (4) 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 1st day of August 1980.

FOR THE NUCLEAR REGULATORY COMMISSION



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