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

April 30, 1984

Posted
Amdt. 128
to DPR-47

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

Mr. Hal B. Tucker
Vice President - Steam Production
Duke Power Company
Post Office Box 33189
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

The Commission has issued the enclosed Amendments Nos. 128, 128, and 125 to Facility Operating 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 February 13, 1984.

These amendments revise the TSs to establish a degraded mode for the Emergency Condenser Cooling Water (ECCW) System. Such a degraded mode would allow for continued operation of the Oconee units for a limited period of time (seven days) if the ECCW System becomes inoperable.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance of the enclosed amendments will be included in the Commission's monthly notice.

Sincerely,

John F. Stolz

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

Enclosures:
1. Amendment No. 128 to DPR-38
2. Amendment No. 128 to DPR-47
3. Amendment No. 125 to DPR-55
4. Safety Evaluation

cc w/enclosures:
See next page

Duke Power Company

cc w/enclosure(s):

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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. 128
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 February 13, 1984, 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. 128 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: April 30, 1984

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. 128
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 February 13, 1984, 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. 128are 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: April 30, 1984

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. 125
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 February 13, 1984, 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. 125are 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

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 30, 1984

ATTACHMENTS TO LICENSE AMENDMENTS

AMENDMENT NO. 128 TO DPR-38

AMENDMENT NO. 128 TO DPR-47

AMENDMENT NO. 125 TO DPR-55

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

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

Remove Page	Insert Page
3.4-2	3.4-2

3.4.3 The 16 main steam safety relief valves shall be operable.

3.4.4 A minimum of 72,000 gallons of water per operating unit shall be available in the upper surge tank, condensate storage tank, and hot-well. A minimum of 5 ft. (=30,000 Gal.) shall be available in the upper surge tank.

3.4.5 Emergency Condenser Cooling Water (ECCW) System

a. The RCS shall not be heated above 250°F unless the ECCW System is operable.

b. If the ECCW System becomes inoperable during operation above 250°F, and the system is not restored to operable status in seven days, then the unit shall be brought to hot shutdown within an additional 12 hours and below 250°F in another 12 hours.

3.4.6 The controls of the emergency feedwater system shall be independent of the Integrated Control System.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 128 TO FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 128TO FACILITY OPERATING LICENSE NO. DPR-47

AMENDMENT NO. 125TO 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 February 13, 1984, Duke Power Company (the licensee) proposed changes to the Technical Specifications (TSs) of Facility Operating Licenses Nos. DPR-38, DPR-47, and DPR-55 for the Oconee Nuclear Station, Units Nos. 1, 2 and 3. These amendments would consist of changes to the Station's common TSs.

The present TSs require the emergency condenser circulating water (ECCW) system to be operable all the time. For maintenance to be performed, the system would have to be declared inoperable, and all three Oconee units would have to shutdown. The licensee has proposed changes to the TSs to allow for continued operation of the Oconee units for a limited period of time (seven days) if the ECCW system becomes or is declared inoperable. The ECCW system is a unique design feature at Oconee that allows for continued condenser circulating water flow by gravity following a loss of all station power except station batteries. This feature allows closed loop recirculation of condensate which might normally be vented to the atmosphere through the main steam relief valves as at other nuclear plants.

2.0 Discussion

The main feedwater system and the turbine bypass system are normally used for decay heat removal and cooldown above 250°F. In the event the main feedwater system is inoperable, the emergency feedwater system assures the capability to remove decay heat and cooldown the reactor coolant system to the operating conditions for switch over to decay heat removal by the Decay Heat Removal system.

Normally, decay heat is removed by steam relief through the turbine bypass system to the condenser. Condenser cooling water flow is provided by a siphon effect from Lake Keowee through the condenser for final heat rejection to the Keowee Hydro Plant tailrace. The condenser cooling water (CCW) system provides for cooling of the condensers during normal and emergency operation of the plant. The CCW system also has an emergency discharge line to the Keowee Hydro tailrace. This discharge line is connected to all three condensers of each Oconee unit and is called the Emergency Condenser Cooling Water (ECCW) system. This feature allows lake water to flow through the condenser tubes due to gravitational

forces only, in the absence of forced flow. Thus, the ECCW system allows continued use of the condenser for heat removal following the unlikely event of a complete loss of offsite and onsite power.

The ECCW system is normally closed by a power-to-close valve. To perform maintenance on the valve, the system would have to be declared inoperable and all three Oconee units would have to shutdown per TSs, since the valve is on discharge pipe common to all three unit condensers.

As stated earlier, the ECCW will maintain a source of coolant flow to the condenser in the unlikely event in which all station power except station batteries is lost. Even if the CCW or the ECCW systems cannot provide coolant flow to the condensers, then steam produced in the steam generators will be relieved to the atmosphere through the main steam relief valves.

3.0 Evaluation

The ECCW provides for continued circulating water flow following a loss of all AC power at the plant and is utilized in conjunction with the turbine driven AFW pumps to remove decay heat from the plant without venting to the atmosphere. The ECCW consists of a single train which takes flow from the lake and by gravity provides cooling for the condenser. Maintenance therefore is a problem. With the ECCW inoperative, the three Oconee units could utilize the turbine driven AFW pumps to remove decay heat from the plant by venting steam from the steam generators through the main steam relief valves. The condensate storage tank, upper surge tank and the condenser hotwell contain an eleven hour supply of feedwater for the steam generators, which is well beyond the two hour duration of the loss of AC power required by Standard Review Plan (SRP) 10.4.9.

The requested inoperative period for the ECCW, seven days, appears to be a reasonable period to allow maintenance of the system. We, therefore, find the proposed TS changes 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) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) 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: April 30, 1984

Principal Contributor:
P. Hearn