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

June 9, 1981

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

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. 98, 98, and 95 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) in response to your requests dated March 18 and May 15, 1981.

These amendments revise License Condition 3.E. and the common TSs related to facility fire protection modifications. Clarification is also provided for the Fire Protection Safety Evaluation which was issued on August 11, 1978. These amendments and the clarification represent completion of previous NRC review effort related to fire protection features and do not involve any conflicts with the requirements of Appendix R to 10 CFR Part 50.

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

Sincerely,

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

Enclosures:
1. Amendment No. 98 to DPR-38
2. Amendment No. 98 to DPR-47
3. Amendment No. 95 to DPR-55
4. Safety Evaluation
5. Notice

cc w/enclosures: See next page

Duke Power Company

cc w/enclosure(s):

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Charlotte, North Carolina 28242

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

U. S. Environmental Protection Agency
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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. 98
License No. DPR-38

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

   A. The applications for amendment by Duke Power Company (the licensee) dated March 18 and May 15, 1981, comply 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 applications, 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 License Conditions 3.B and 3.E. and to the Technical Specifications as indicated in the attachment to this license amendment. Paragraphs 3.B. and 3.E. of Facility Operating License No. DPR-38 are hereby amended to read as follows:

   3.B Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 98, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3.E. Fire Protection

The licensee is authorized to proceed with and is required to complete the modifications identified in Table 3.1 of the NRC's Fire Protection Safety Evaluation Report on the Oconee Nuclear Station dated August 11, 1978, and as subsequently amended. The modifications shall be completed on the schedule specified in Table 3.1, except for Item 3.1.14, "Dedicated Safety Shutdown Facility", which shall be completed 30 months after NRC approval of design.

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: June 9, 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. 98
License No. DPR-47

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

   A. The applications for amendment by Duke Power Company (the licensee) dated March 18 and May 15, 1981, comply 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 applications, 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 License Conditions 3.B and 3.E. and to the Technical Specifications as indicated in the attachment to this license amendment. Paragraphs 3.B. and 3.E. of Facility Operating License No. DPR-47 are hereby amended to read as follows:

   3.B Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 98, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3.E. Fire Protection

The licensee is authorized to proceed with and is required to complete the modifications identified in Table 3.1 of the NRC's Fire Protection Safety Evaluation Report on the Oconee Nuclear Station dated August 11, 1978, and as subsequently amended. The modifications shall be completed on the schedule specified in Table 3.1, except for Item 3.1.14, "Dedicated Safety Shutdown Facility", which shall be completed 30 months after NRC approval of design.

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: June 9, 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. 95
License No. DPR-55

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

   A. The applications for amendment by Duke Power Company (the licensee) dated March 18 and May 15, 1981, comply 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 applications, 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 License Conditions 3.B and 3.E. and to the Technical Specifications as indicated in the attachment to this license amendment. Paragraphs 3.B. and 3.E. of Facility Operating License No. DPR-55 are hereby amended to read as follows:

   3.B Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 95, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3.E. Fire Protection

The licensee is authorized to proceed with and is required to complete the modifications identified in Table 3.1 of the NRC's Fire Protection Safety Evaluation Report on the Oconee Nuclear Station dated August 11, 1978, and as subsequently amended. The modifications shall be completed on the schedule specified in Table 3.1, except for Item 3.1.14, "Dedicated Safety Shutdown Facility", which shall be completed 30 months after NRC approval of design.

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: June 9, 1981

ATTACHMENTS TO LICENSE AMENDMENTS

AMENDMENT NO. 98 TO DPR-38

AMENDMENT NO. 98 TO DPR-47

AMENDMENT NO. 95 TO DPR-55

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

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment numbers and contain vertical lines indicating the area of change.

Remove Pages	Insert Pages
vi	vi
3.17-1	3.17-1
3.17-2	3.17-2
3.17-3	3.17-3
3.17-4	3.17-4
3.17-5	3.17-5
--	3.17-6
--	3.17-7
--	3.17-8
--	3.17-9
4.19-1	4.19-1
4.19-2	4.19-2

LIST OF TABLES

3.17 FIRE PROTECTION AND DETECTION SYSTEMS

Applicability

This specification applies to the operability of fire protection and detection systems when equipment protected by those systems is required to be operable.

Objective

To assure the operability of fire protection and detection systems which protect systems and equipment required for safe shutdown.

Specification

3.17.1 The minimum fire detection instrumentation for each fire detection zone shown in Table 3.17-1 shall be operable. The fire detection instruments located within the containment are not required to be operable during the performance of Type A Containment Leakage Rate Tests. When this specification is determined not to be met, appropriate action shall be taken consisting of one or more of the following:

1. Within 1 hour, a fire watch patrol shall be established to inspect an accessible zone with the inoperable instrumentation at least once per hour.

2. The inoperable instrumentation shall be restored to operable status within 14 days or a report shall be submitted to the Commission within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrumentation to operable status. Continued operation of the affected unit is permitted provided that this condition is met. Operation under this specification is not considered to be in a degraded mode and thus is not reportable under Technical Specification 6.6.2.1.b (2).

3.17.2 The Fire Suppression Water System shall be operable. This system shall consist of 2 High Pressure Service Water (HPSW) pumps with a design capacity of 6000 gpm each and automatic initiation logic, and the associated piping and valves supplying water to the sprinkler systems and fire hose stations. The HPSW pumps shall be aligned to the high pressure fire header. When this specification is determined not to be met, appropriate action shall be taken consisting of the following:

1. The inoperable equipment shall be restored to operable status within 7 days or a report shall be submitted to the Commission within the next 30 days outlining the plans and procedures to be used to provide for the loss of redundancy in this system. Continued operation of the affected unit is permitted provided that this condition is met. Operation under this specification is not considered to be in a degraded mode and thus is not reportable under Technical Specification 6.6.2.1.b (2).

2. With no Fire Suppression Water System operable, in lieu of the above, the following action shall be taken.

   a. Within 24 hours a backup Fire Suppression Water System shall be established. If a backup Fire Suppression Water System cannot be established within 24 hours, place the reactor in Hot Standby within the next twelve (12) hours and in cold shutdown within the following forty-eight (48) hours.

   b. Within 24 hours the Commission shall be notified by telephone, and in writing no later than the first working day following the event.

   c. Within 14 days of the event, a report shall be submitted to the Commission outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to operable status.

3.17.3 The sprinkler and spray systems in safety related areas listed in Table 3.17-1 shall be operable. If a system is determined to be inoperable, the following corrective action shall be taken.

1. A continuous fire watch with backup fire suppression equipment shall be established in the area within 1 hour.

2. The sprinkler or spray system shall be restored to operable status within 14 days or a report shall be submitted to the Commission within the next 30 days outlining the cause of inoperability and the plans for restoring the system to operable status. Continued operation of the affected unit is permitted provided that this condition is met. Operation under this specification is not considered to be a degraded mode and thus is not reportable under Technical Specification 6.6.2.1.b (2).

3.17.4 The automatic CO_2 system provided for the generators at the Keowee Hydro Station shall be operable. If the system is determined to be inoperable the following corrective action shall be taken:

1. A continuous fire watch with backup fire suppression equipment shall be established in the area within 1 hour.

2. The CO_2 system shall be restored to operable status within 14 days or a report shall be submitted to the Commission within the next 30 days outlining the cause of inoperability and the plans for restoring the system to operable status. Continued operation of the affected reactor unit is permitted provided that this condition is met. Operation under this specification is not considered to be in a degraded mode and thus is not reportable under Technical specification 6.6.2.1.b (2).

3.17.5 The fire hose stations listed in Table 3.17-1 shall be operable or the following action shall be taken:

1. If a fire hose station listed in Table 3.17-1 is inoperable, an additional equivalent capacity fire hose of length sufficient to reach the unprotected area shall be provided at an operable hose station within 1 hour.

2. If the inoperable fire hose station cannot be restored to operable status within 14 days, continued operation of the affected unit is permitted provided that within the next 30 days a report is submitted to the Commission outlining the cause of the inoperability, actions taken, and the plans for restoring the system to operable status. Operation under this specification is not considered to be a degraded mode and is not reportable under Technical Specification 6.6.2.1.b(2).

3.17.6 All fire barrier penetrations (including cable penetration barriers, fire doors, fire dampers) protecting safety related areas shall be operable.

If a fire barrier protecting a safety-related area is determined to be inoperable, the operability status of the fire detection instrumentation for the affected safety related area(s) shall be determined within 1 hour, and the following action shall be taken:

1. If the fire detection instrumentation for the affected area(s) is operable, a fire watch patrol shall be established to inspect the area at least once per hour.

2. If the fire detection instrumentation is inoperable, a continuous fire watch shall be established within the next hour on at least one side of the affected penetration fire barrier. The non-functional fire barrier penetration(s) shall be restored to functional status within 7 days.

3. If the non-functional fire barrier penetration(s) cannot be restored to functional status within 7 days, continued operation of the affected unit is permitted provided that within the next 30 days, a report is submitted to the Commission outlining the cause of the inoperability and the plans for restoring the system to operable status. Operation under this specification is not considered to be a degraded mode and is not reportable under Technical Specification 6.6.2.1.b(2).

Bases

Operability of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to operability.

The operability of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The fire suppression system consists of the water system spray and/or sprinklers, fire hose stations, and penetration fire barriers. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service.

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued operation of the nuclear plant.

The functional integrity of the penetration fire barriers ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. This design feature minimizes the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishment. The penetration fire barriers are a passive element in the facility fire protection program and are subject to periodic inspections.

During periods of time when a barrier is not functional, a fire watch patrol will be required to inspect the affected area frequently as a precaution in addition to the fire detection instrumentation in the area. If fire detection instrumentation in the area is not operable, a continuous fire watch is required to be maintained in the vicinity of the affected barrier until the barrier is restored to functional status.

TABLE 3.17-1

A. Fire Detection Instrumentation

ELEV	UNIT	EQUIPMENT/LOCATION PROTECTED	DETECTORS PROVIDED/OPERABLE
REACTOR CONTAINMENT			
796, 850	1	Reactor Bldg Penetrations	(2 Strings / 8 Detectors) / (1 String / 4 Detectors)
845	1	Reactor Coolant Pumps	(2 Strings / 8 Detectors) / (1 String / 4 Detectors)
830	1	Reactor Bldg Cooling Units	(2 Strings / 6 Detectors) / (1 String / 3 Detectors)
796	2	Reactor Bldg Penetrations	(2 Strings / 8 Detectors) / (1 String / 4 Detectors)
796	2	Reactor Coolant Pumps	(2 Strings / 8 Detectors) / (1 String / 4 Detectors)
796	2	Reactor Bldg Cooling Units	(2 Strings / 6 Detectors) / (1 String / 3 Detectors)
796	3	Reactor Bldg Penetrations	(2 Strings / 8 Detectors) / (1 String / 4 Detectors)
796	3	Reactor Coolant Pumps	(2 Strings / 8 Detectors) / (1 String / 4 Detectors)
796	3	Reactor Bldg Cooling Units	(2 Strings / 6 Detectors) / (1 String / 3 Detectors)
BLOCKHOUSE			
796	1-2	Switchgear B1t, B2T	2/1
796	1-2	CT-4 Transformer	2/1
796	3	Switchgear 3B1t, 3B2T	2/1
4160 VOLT SWITCHGEAR			
796	1	4160V Switchgear (1TC, 1TD, 1TE)	2/1
796	2	4160V Switchgear (2TC, 2TD, 1TE)	2/1
796	3	4160V Switchgear (3TC, 3TD, 3TE)	2/1
EMERGENCY FEEDWATER PUMP TURBINE			
771	1	EFWP Turbine	1/1
771	2	EFWP Turbine	1/1

Amendments Nos. 98, 98 & 95

TABLE 3.17-1 (cont'd)

ELEV	UNIT	EQUIPMENT/LOCATION PROTECTED	DETECTORS PROVIDED/OPERABLE
771	3	EFWP Turbine	1/1
CABLE ROOM			
809	1	Cable Room	6/4
809	2	Cable Room	6/4
809	3	Cable Room	7/4
PUMP ROOMS			
758	1	Between LPI Pumps 1A&1C	1/1
758	1-2	Between LPI Pumps 1B&2B	1/1
758	2	Between LPI Pumps 2A&2C	1/1
758	3	LPI 3A Pump	1/1
758	3	Between LPI Pumps 3B&3C	1/1
758	1	Between HPI Pumps 1A&1B	1/1
758	1-2	Between HPI Pumps 1C&2C	1/1
758	2	Between HPI Pumps 2A&2B	1/1
758	3	HPI Pump 3C	1/1
758	3	Between HPI Pump 3A&3B	1/1
PENETRATION ROOMS			
822	1	East Penetration Room	3/2
809	1	Above MCC's (1XH, 1XI, 1XJ)	3/2
822	2	East Penetration Room	3/2
809	2	Above MCC's (2XH, 2XI, 2XJ)	3/2
822	3	East Penetration Room	5/3
822	1	West Penetration Room	3/2
822	1	West Penetration Room	3/2
822	3	West Penetration Room	3/2
CONTROL ROOMS			
822	1-2	Control Room Area (Includes Computer Room, I&E Shop, Baily Cabinet)	9/6

TABLE 3.17-1 (cont'd)

ELEV	UNIT	EQUIPMENT/LOCATION PROTECTED	DETECTORS PROVIDED/OPERABLE
822	3	Control Room Area (Includes Computer Room, Electrical Shop, Bailey Cabinet)	7/4
CABLE SHAFT			
822	1	Unit 1 Cable Shaft	1/1
822	2	Unit 2 Cable Shaft	1/1
822	3	Unit 3 Cable Shaft	1/1
833	3	Cable Shaft 5th Floor	1/1
BATTERY ROOM			
809	3	Control Battery Room	2/1
KEOWEE HYDRO STATION			
700		Control Room	4/2
688		Battery Room	4/2
700		Mechanical Equipment Gallery	3/2
700		Main Lube Oil Storage Room	1/1
701		Generator #1	6/4
701		Generator #2	6/4
710		Operating Floor	6/4

B. Sprinkler And Spray Systems

SPRINKLER SYSTEMS	
Turbine Driven Emergency FDW Pump	Units 1, 2, and 3
Transformers	CT-1
	CT-2
	CT-3
	CT-4
	CT-5

TABLE 3.17-1 (cont'd)

SPRINKLER SYSTEMS

Cable Room	Units 1, 2, and 3
Equipment Room	Units 1, 2, and 3
Cable Shaft (3rd Level)	Units 1, 2, and 3
Cable Shaft (4th & 5th Level)	Units 1, 2, and 3

EMULSIFIRE/SPRAY SYSTEMS

Keowee Hydro Station

Main Lube Oil Storage Room

Main Transformer

C. Fire Hose Stations

Location No.	Valve No.	Area or Component Protected
3-D-28	1HPSW-194	1&2 Blockhouse, 1&2 3rd Floor Switchgear
AX-34	1HPSW-437	#1 Cable Spread Room
AX-35	1HPSW-436	#1 Cable Spread Room
AX-33	2HPSW-436	#2 Cable Spread Room
AX-32	2HPSW-437	#2 Cable Spread Room
AX-30	3HPSW-436	#3 Cable Spread Room
AX-31	3HPSW-437	#3 Cable Spread Room
5-M-31	2HPSW-304	1&2 Control Room, 1&2 Emergency Shutdown Panels
TOH-3	3HPSW-338	2 Control Room, #3 Emergency Shutdown Panel
1-J-28	2HPSW-242	#1 First Floor Motor Control Centers, HPSW Pumps, 1&2 LPSW Pumps
1-J-43	3HPSW-345	#3 1st Floor Motor Control Centers
1-B-19	1HPSW-163	#1 EFWP
1-D-39	2HPSW-246	#2 EFWP
1-D-53	3HPSW-336	#3 EFWP
AX-23	1HPSW-438	#1 Equipment Room
AX-24	1HPSW-439	#1 Equipment Room
AX-25	2HPSW-438	#2 Equipment Room
AX-26	2HPSW-439	#2 Equipment Room
AX-27	3HPSW-438	#3 Equipment Room
AX-28	3HPSW-439	#3 Equipment Room
AX-13	1HPSW-448	1&2 HPI Pumps, 1&2 LPI Pumps
AX-14	1HPSW-449	3 HPI Pumps, 3 LPI Pumps
1-J-47	3HPSW-349	3 LPSW Pumps
AX-36	1HPSW-445	#1 West Penetration Room
AX-45	1HPSW-444	#1 East Penetration Room
AX-42	2HPSW-444	#2 East Penetration Room
AX-43	2HPSW-445	#2 West Penetration Room
AX-29	3HPSW-444	#3 East Penetration Room
AX-44	3HPSW-445	#3 West Penetration Room

TABLE 3.17-1 (cont'd)

C. Fire Hose Stations

Location No.	Valve No.	Area or Component Protected
3-J-28	2HPSW-241	1&2 3rd Floor Switchgear
3-M-43	3HPSW-339	3 3rd Floor Switchgear, 600V Load Center
AX-22	1HPSW-440	1 Battery Room
AX-20	2HPSW-440	2 Battery Room
AX-18	3HPSW-440	3 Battery Room
Keowee Hydro Station		
Operating Deck (NW)	NA	Operating Floor
Operating Deck (NE)	NA	Operating Floor
Operating Deck (SW)	NA	Operating Floor
Operating Deck (SE)	NA	Operating Floor
Control Room	NA	Control Room
Mechanical Equipment Gallery	NA	Mechanical Equipment Gallery

4.19 FIRE PROTECTION AND DETECTION SYSTEM

Applicability

This specification applies to fire protection and detection systems which protect systems and equipment required for safe shutdown.

Objective

To verify the operability of fire protection and detection systems.

Specification

4.19.1 Fire Detection Systems

a. Each of the fire detection instruments listed in Table 3.17-1 shall be tested for operability at least once per 6 months by performance of a Channel Functional Test, except as noted in part b.

b. The testing interval for detectors specified in Table 3.17-1 which are inaccessible during power operation may be extended until such time as the detectors become accessible for a minimum of 36 hours. The testing interval shall not extend past a refueling outage.

4.19.2 The Fire Suppression Water System shall be documented operable as follows:

a. Monthly

1. A functional test of the high pressure service water pump and associated automatic valve shall be performed.

2. Proper alignment of valves shall be verified.

3. A visual inspection of the fire hose stations listed in Table 3.17-1 shall be performed.

b. Annually

1. Each high pressure service water pump shall be tested to verify flow of 3000 gpm.

2. The sprinkler systems listed in Table 3.17-1 which protect safety-related systems shall be functionally tested, except in the cable spreading rooms, equipment rooms, and cable shafts.

3. The sprinkler system spray headers and nozzles, listed in Table 3.17-1, which protect safety-related systems, shall be inspected.

4. The fire hose stations shall receive a maintenance inspection to include removal and reracking of the hoses and inspection of coupling gaskets.

c. Refueling

1. A visual inspection of each nozzle's spray area will be conducted to verify the spray pattern is not obstructed.

d. At least once per 3 years:

1. A system flow test shall be performed on the fire suppression water system in accordance with Chapter 5, Section II of the Fire Protection Handbook, 14th Edition, NFPA.

2. The fire hose station valve listed in Table 3.17-1 shall be partial-stroke tested.

3. Each fire hose shall be subjected to a hydrostatic test at a pressure at least 50 psig greater than the maximum pressure at the station.

4.19.3 The high pressure CO_2 System for the generators at the Keowee Hydro Station shall be demonstrated operable as follows:

a. Monthly

1. Each valve in the flow path will be verified to be in its correct position.

b. Semiannually

1. The CO_2 storage tank weight shall be verified to be at least 90% of the full charge weight.

c. Refueling

1. The system shall be verified to actuate manually and automatically, upon receipt of a simulated action signal.

2. A flow test will be performed through headers and nozzles to assure no blockage.

4.19.4 Penetration fire barriers which protect safety-related equipment shall be verified functional by visual inspection at a refueling frequency and prior to declaring a penetration fire barrier functional following repairs or maintenance.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 98 TO FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 98 TO FACILITY OPERATING LICENSE NO. DPR-47

AMENDMENT NO. 95 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 March 18, 1981, Duke Power Company (DPC) requested that License Condition 3.E. of Facility Operating Licenses DPR-38, DPR-47 and DPR-55 for the Oconee Nuclear Station, Units 1, 2 and 3 (ONS) respectively, be modified to be consistent with the requirements of 10 CFR 50.48. In addition, DPC submitted proposed changes to the common Technical Specifications (TSs) for the ONS by letter dated May 15, 1981, in response to an NRC request dated October 7, 1980.

During a telephone conversation, a number of misunderstandings and interpretation problems related to the August 11, 1978, Fire Protection Safety Evaluation Report (SER) were discussed with the NRC staff. By letter dated May 15, 1981, DPC submitted the results of the review of the SER.

2.0 Discussion and Evaluation

2.1 License Condition 3.E.

On February 17, 1981, Paragraph 50.48(c) of 10 CFR Part 50 became effective. Item (4) of 10 CFR 50.48(c) requires, in part, that fire protection modifications related to dedicated shutdown systems be implemented 30 months after NRC approval of final design. License Condition 3.E, which was included in the ONS licenses by License Amendments issued on August 11, 1978, requires detailed design information on shutdown systems to be submitted within 15 months from NRC approval of the system concept. By letter dated March 18, 1981, DPC requested License Condition 3.E. be revised to reflect the requirement of 50.48(c)(4).

The design description of the Oconee Standby Shutdown Facility (SSF) was submitted on March 28, 1980, and is under NRC staff review. The SSF is currently under construction and is expected to be completed within the time required by 10 CFR 50.48(c)(4). We have reviewed the DPC request and find that the proposed revision will clarify NRC requirements and remove any confusion or contradiction of the regulation requirements. Since this change will ensure compliance with a regulation, we conclude that it is acceptable.

2.2 Technical Specifications

In addition to the License Condition mentioned above, the Amendments issued on August 11, 1978, contained a Safety Evaluation Report (SER) related to the completion of certain fire protection related modifications. Section 7 of the SER stated that the TSs would require upgrading upon completion of the modifications to incorporate limiting conditions for operation and surveillance requirements for newly installed equipment. (The TSs governing the previously existing fire protection equipment were issued by License Amendments on February 13, 1978.) By letter dated October 7, 1980, the NRC requested DPC to submit an application for amendment to upgrade the fire protection related TSs to reflect the changes made in this area at the ONS in accordance with our August 11, 1978 SER. We requested that the applicable model TSs be implemented by administrative controls as quickly as possible and that the proposed revisions to the TSs be submitted by January 15, 1981. DPC, by letters dated January 15, March 16, and April 16, 1981, stated that the proposed TSs were being reviewed and presented revised dates for submittal. By letter dated May 15, 1981, DPC submitted proposed, upgraded TSs for the fire protection features installed in the ONS.

We have reviewed the proposed changes and additions to the TSs related to the fire protection features at the ONS and find that they adequately address the NRC concerns and are in substantial agreement with the Standard TSs for B&W reactors, which were provided as guidance for their preparation. The DPC application proposes to include, in the common ONS TSs, the CO_2 fire suppression system for the turbine-generators at the Keowee Hydro Station, a number of fire detectors, sprinkler and spray systems and fire hose stations, which were installed in accordance with the NRC staff's fire protection SER issued on August 11, 1978. Based on the above, we conclude that the proposed additions and revisions to the TSs are acceptable.

2.3 Clarification of August 11, 1978 SER Requirements

As mentioned above, the Fire Protection SER issued by the NRC on August 11, 1978, required DPC to complete stated modifications to enhance the fire protection features at the ONS. As a result of a detailed comparison of the completed fire protection related modifications and the NRC's SER, it was determined that some misunderstandings existed on what was actually required. During a telephone conference between members of the NRC and DPC staffs on May 5, 1981, these misunderstandings were substantially resolved. The areas of confusion were: a) HVAC Room Doors, b) Water Flow Alarms, c) Communication Systems, d) Sprinkler and Spray Systems, and e) Miscellaneous Fire Doors and Hatches. By letter dated May 15, 1981, DPC submitted verification of the statements made during the May 5, 1981, telephone conference. We have reviewed this letter and find the clarification provided to be acceptable for the following reasons.

a. The doors between the cable spreading rooms and their associated HVAC rooms need not function as fire doors since the HVAC rooms can be included in the fire zone of the cable spreading room.

b. The water flow alarms need a uniqueness in that an alarm for each system must be provided. It is not our intent that a unique alarm tone be provided. Since separate alarms have been provided, this is acceptable.

c. The communications systems have been shown to be adequate by installing fixed repeaters for communications inside the containment. It is not a requirement that these repeaters be operable except for those times when the containment is accessible.

d. The sprinkler and spray systems installed in the equipment and cable spreading rooms in accordance with Section 3.1.16 need not meet the NFPA standards as indicated in Section 4.3.1.5. for spray density. The NRC accepted a density of 0.1 GPM per sq. ft. for these systems because of the other fire protection modifications specified in Sections 5.4.6 and 5.7.6.

e. The fire doors and hatches have been alarmed to the guard facility instead of the control room as indicated in the SER. This is acceptable since the intent (as indicated in Appendix R to 10 CFR 50) is to have the fire doors alarmed in a continuously manned area. DPC has also agreed to inspect those fire doors which are normally open with automatic closure mechanisms daily to verify that the doorways are not obstructed from closing. These inspections will ensure compliance with 10 CFR 50, Appendix R. Lastly, the combination of a fire door and an alarmed security-pressure door between the turbine and auxiliary buildings is acceptable because the pressure door will also function as a fire door and the installed fire door will normally be closed.

Since these clarifications are intended to remove any confusion which exists as to the intent of the August 11, 1978 SER and since the clarified requirements are in accordance with the provisions of Appendix R to 10 CFR Part 50, the staff has concluded that they are acceptable.

3.0 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.

4.0 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: June 9, 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. 98, 98 and 95 to Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55, respectively, issued to Duke Power Company, which revised the licenses and 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 License Condition 3.E. and the common TSs related to facility fire protection modifications. Clarification is also provided for the Fire Protection Safety Evaluation which was issued on August 11, 1978. These amendments and the clarification represent completion of previous NRC review effort related to fire protection features and do not involve any conflicts with the requirements of Appendix R to 10 CFR Part 50.

The applications for the amendments comply 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 applications for amendments dated March 18, 1981, and May 15, 1981, (2) Amendments Nos. 98, 98 , and 95 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 9th day of June 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

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