NRC FORM 195 (2-76)

U.S. NUCLEAR REGULATORY COMMISSION

DOCKET NUMBER 50-269/270/287

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TO: Mr Rusche	FROM: Duke Pwr Co Charlotte, NC W O Parker JR	DATE OF DOCUMENT 11-8-76 DATE RECEIVED 11-1-76

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DESCRIPTION

Ltr notarized 11-1-76...trans the following:

PLANT NAME: Oconee 1-3

ENCLOSURE

AMDT to OL/Change to Tech Specs: Consisting of revisions with regard to miscelaneous topics with the intent to update & improve existing tech specs.....

(40 cys encl rec'd)

ACKNOWLEDGED

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NRC FORM 195 (2-76)

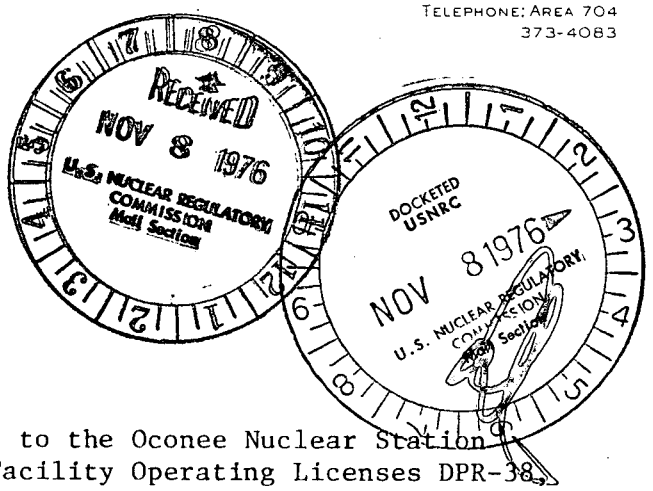
2

DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

November 1, 1976



Mr. Benard C. Rusche, Director
Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Re: Oconee Nuclear Station
Docket Nos. 50-269, -270, -287

Dear Sir:

Pursuant to 10CFR50, §50.90, an amendment to the Oconee Nuclear Station Technical Specifications, Appendix A to Facility Operating Licenses DPR-38, -27, and -55 is requested. These proposed changes concern several miscellaneous topics and are intended to update and improve the Oconee Technical Specifications. Replacement pages for these proposed changes are attached.

The proposed changes to the Technical Specifications and the justifications are as follows:

1. Specification 3.2.2 requires availability of redundant sources of concentrated soluble boric acid, requiring in particular that at least one of two sources in addition to the borated water storage tank be available and operable. This specification has been changed to allow a 24 hour period to restore operability of at least one of these two sources should they become unavailable; or a one hour period in which to restore the borated water storage tank to operability in the event it becomes unavailable. This change will provide more operating flexibility by allowing for a reasonable period in which to implement corrective actions should one or more sources of soluble boric acid become unavailable. Specification 3.3.6 has accordingly been changed as indicated on the attached replacement page to provide compatibility between Specification 3.2 and 3.3 in the event that requirements of Specification 3.3.1(f) are not met.

2. A proposed change to Technical Specification 3.5.2.5.b allows a two hour period for restoration of control rod group overlap in the event the prescribed limit of 25% + 5% between two sequential groups is exceeded. Provided that the required shutdown margin limits are maintained, this is considered a reasonably conservative time period in which to initiate appropriate corrective action.

3. Specification 3.5.2.5.d(2) has been reworded to require that the xenon reactivity pass its final maximum or minimum peak prior to increasing reactor power above the power level cutoff, rather than stating that

the xenon reactivity shall be asymptotically approaching the value for operation at the power level cutoff. This change is not a change in operational procedures but rather, provides for a clearer understanding of the intent of this specification.

4. Specification 3.5.1.4 currently prohibits the use of the key-operated shutdown bypass switch during power operation. Operation of this switch is required during power operation in conjunction with the channel bypass switch to perform complete calibrations of the Reactor Protective System. Operation of this switch with the channel bypass switch has no significance since the channel trip relay is locked in the untripped state. The use of a key-operated shutdown bypass switch alone would result in a channel trip.

5. Specifications 6.6.2.2 c and d require the submission of a written report whenever a measured level of radioactivity in any environmental medium exceeds the control station value by a factor of ten or four respectively. Numerous reports concerning this subject have been submitted during the past year. Since the Oconee low level radioactive waste discharge is diluted only by the relatively low volume created by the Keowee dam leakage and the resulting radioactive concentrations downstream have been in accordance with levels predicted in the Oconee Final Environmental Statement, it is considered that these reports serve no useful function. It is requested that the reporting requirements be revised to require this report when measured and control samples exceed a factor of 50 in order to provide a meaningful report.

6. Technical Specifications 3.5.2.7, Table 4.11-1, 6.4.1, 6.5.2 and Figure 6.1-1 have been revised as indicated to reflect recent administrative changes and are self explanatory.

Very truly yours,

William O. Parker, Jr.

MST:ge

WILLIAM O. PARKER, JR., being duly sworn, states that he is Vice President of Duke Power Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this request for amendment of the Oconee Nuclear Station Technical Specifications, Appendix A to Facility Operating Licenses DPR-38, -47 and DPR-55; and that all statements and matters set forth therein are true and correct to the best of his knowledge.

William O. Parker, Jr., Vice President

ATTEST:

John C. Goodman, Jr.
Assistant Secretary
(Seal)

Subscribed and sworn to before me this 1st day of November, 1976.

Edna B Farmer
Notary Public
(Notarial Seal)

My Commission Expires:
October 24, 1977

3.2 HIGH PRESSURE INJECTION AND CHEMICAL ADDITION SYSTEMS

Applicability

Applies to the high pressure injection and the chemical addition systems.

Objective

To provide for adequate boration under all operating conditions to assure ability to bring the reactor to a cold shutdown condition.

Specification

The reactor shall not be critical unless the following conditions are met:

3.2.1 Two high pressure injection pumps per unit are operable except as specified in 3.3.

3.2.2 One source per unit of concentrated soluble boric acid in addition to the borated water storage tank is available and operable. This can be either:

a. The boric acid mix tank containing at least the equivalent of 450 ft^3 of 10,600 ppm boron as boric acid solution at a temperature of at least 10°F above the crystallization temperature. System piping and valves necessary to establish a flow path from the tank to the high pressure injection system shall also be operable and shall have at least the same temperature requirement as the boric acid mix tank. One associated boric acid pump shall be operable. If the daily average air temperature in the vicinity of this tank and associated flow path piping is less than 85°F, at least one channel of heat tracing shall be in operation for this tank and piping.

b. The concentrated boric acid storage tank containing at least the equivalent of 550 ft^3 of 8700 ppm boron as boric acid solution with a temperature of at least 10°F above the crystallization temperature. System piping and valves necessary to establish a flow path from the tank to the high pressure injection system shall be operable and shall have the same temperature requirement as the concentrated boric acid storage tank. One associated boric acid pump shall be operable. If the daily average air temperature in the vicinity of this tank is less than 70°F, at least one channel of heat tracing shall be in operation for this tank and associated piping.

Transfer between the boric acid mix tank and the concentrated boric acid storage tank is permitted, provided the contents of one tank meet the requirements specified above immediately prior to and after transfer. If neither sources of concentrated soluble boric acid in Specification 3.2.2 a and b is available, but the borated water storage tank is available and operable, at least one of these sources shall be restored to operability within 24 hours or the reactor shall be placed in a hot shutdown condition within an additional 12 hours. If at least one source of soluble boric acid

as indicated by Specification 3.2.2 a and b is available but the borated water storage tank is neither available nor operable, it shall be restored to operability within one hour or the reactors shall be placed in a hot shutdown condition within 12 hours and in a cold shutdown condition within an additional 24 hours.

3.3.6 Exceptions to 3.3.5 shall be as follows:

(a) Both core flooding tanks shall be operational above 800 psig.

(b) Both motor-operated valves associated with the core flooding tanks shall be fully open above 800 psig.

(c) One pressure instrument channel and one level instrument channel per core flood tank shall be operable above 800 psig.

(d) One reactor building cooling fan and associated cooling unit shall be permitted to be out of service for seven days provided both reactor building spray pumps and associated spray nozzle headers are in service at the same time.

(e) If the requirements of Specification 3.3.1(f) are not met, the borated water storage tank shall be considered unavailable and action shall be initiated in accordance with Specification 3.2.

3.3.7 Prior to initiating maintenance on any of the components, the duplicate (redundant) component shall be tested to assure operability.

Bases

The requirements of Specification 3.3 assure that, before the reactor can be made critical, adequate engineered safety features are operable. Two high pressure injection pumps and two low pressure injection pumps are specified. However, only one of each is necessary to supply emergency coolant to the reactor in the event of a loss-of-coolant accident. Both core flooding tanks are required as a single core flood tank has insufficient inventory to reflood the core.(1)

The borated water storage tanks are used for two purposes:

(a) As a supply of borated water for accident conditions.

(b) As a supply of borated water for flooding the fuel transfer canal during refueling operation.(2)

Three-hundred and fifty thousand (350,000) gallons of borated water (a level of 46 feet in the BWST) are required to supply emergency core cooling and reactor building spray in the event of a loss-of-core cooling accident. This amount fulfills requirements for emergency core cooling. The borated water storage tank capacity of 388,000 gallons is based on refueling volume requirements. Heaters maintain the borated water supply at a temperature to prevent freezing. The boron concentration is set at the amount of boron required to maintain the core 1 percent subcritical at $70^{o}F$ without any control rods in the core. This concentration is 1,338 ppm boron while the minimum value specified in the tanks is 1,800 ppm boron.

The spray system utilizes common suction lines with the low pressure injection system. If a single train of equipment is removed from either system, the other train must be assured to be operable in each system.

When the reactor is critical, maintenance is allowed per Specification 3.3.5 and 3.3.6 provided requirements in Specification 3.3.7 are met which assure operability of the duplicate components. Operability of the specified com-

(3) Except as provided in specification 3.[redacted].4.b, the reactor shall be brought to the hot shutdown condition within four hours if the quadrant power tilt is not reduced to less than
3.41% Unit 1 within 24 hours.
3.41% Unit 2
4.92% Unit 3

b. If the quadrant tilt exceeds +3.41% Unit 1 and there is simultaneous
3.41% Unit 2
4.92% Unit 3
indication of a misaligned control rod per Specification 3.5.2.2, reactor operation may continue provided power is reduced to 60% of the thermal power allowable for the reactor coolant pump combination.

c. Except for physics test, if quadrant tilt exceeds 9.44% Unit 1,
9.44% Unit 2
11.07% Unit 3
a controlled shutdown shall be initiated immediately, and the reactor shall be brought to the hot shutdown condition within four hours.

d. Whenever the reactor is brought to hot shutdown pursuant to 3.5.2.4.a(3) or 3.5.2.4.c above, subsequent reactor operation is permitted for the purpose of measurement, testing, and corrective action provided the thermal power and the power range high flux setpoint allowable for the reactor coolant pump combination are restricted by a reduction of 2 percent of full power for each 1 percent tilt for the maximum tilt observed prior to shutdown.

e. Quadrant power tilt shall be monitored on a minimum frequency of once every two hours during power operation above 15 percent of rated power.

3.5.2.5 Control Rod Positions

a. Technical Specification 3.1.3.5 does not prohibit the exercising of individual safety rods as required by Table 4.1-2 or apply to inoperable safety rod limits in Technical Specification 3.5.2.2.

b. Except for physics tests, operating rod group overlap shall be 25% $\pm$ 5% between two sequential groups. If this limit is exceeded, corrective measures shall be taken immediately to achieve an acceptable overlap. Acceptable overlap shall be attained within two hours.

c. Except for physics tests or exercising control rods, the control rod withdrawal limits are specified on Figures 3.5.2-1A1 and 3.5.2-1A2, (Unit 1), 3.5.2-1B1, 3.5.2-1B2 and 3.5.2-1B3 (Unit 2), and 3.5.2-1C1, 3.5.2-1C2, and 3.5.2-1C3 (Unit 3) for four pump operation and on Figures 3.5.2-2A1, 3.5.2-2A2 (Unit 1), 3.5.2-2B1, 3.5.2-2B2, 3.5.2-2B3 (Unit 2), and 3.5.2-2C (Unit 3) for three or

two pump operation. If the control rod position limits are exceeded, corrective measures shall be taken immediately to achieve an acceptable control rod position. Acceptable control rod position shall then be attained within two hours. The minimum shutdown margin required by Specification 3.5.2.1 shall be maintained at all times.

d. Except for physics tests, power shall not be increased above the power level cutoff as shown on Figures 3.5.2-1A1, 3.5.2-1A2 (Unit 1), 3.5.2-1B1, 3.5.2-1B2, and 3.5.2-1B3 (Unit 2), and 3.5.2-1C1, 3.5.2-1C2, 3.5.2-1C3 (Unit 3), unless the following requirements are met.

(1) The xenon reactivity shall be within 10 percent of the value for operation at steady-state rated power.

(2) The xenon reactivity worth has passed its final maximum or minimum peak during its approach to its equilibrium value for operation at the power level cutoff.

3.5.2.6 **Reactor power imbalance shall be monitored on a frequency not to exceed two hours during power operation above 40 percent rated power.** Except for physics tests, imbalance shall be maintained within the envelope defined by Figures 3.5.2-3A1, 3.5.2-3A2, 3.5.2-3B1, 3.5.2-3B2, 3.5.2-3B3, and 3.5.2-3C. If the imbalance is not within the envelope defined by Figure 3.5.2-3A1, 3.5.2-3A2, 3.5.2-3B1, 3.5.2-3B2, 3.5.2-3B3, and 3.5.2-3C, corrective measures shall be taken to achieve an acceptable imbalance. If an acceptable imbalance is not achieved within two hours, reactor power shall be reduced until imbalance limits are met.

3.5.2.7 The control rod drive patch panels shall be locked at all times with limited access to be authorized by the manager or his designated alternate.

Control rod groups are withdrawn in sequence beginning with Group 1. Groups 5, 6, and 7 are overlapped 25 percent. The normal position at power is for Groups 6 and 7 to be partially inserted.

The quadrant power tilt limits set forth in Specification 3.5.2.4 have been established with consideration of potential effects of rod bowing (Units 1 and 2 only) and fuel densification to prevent the linear heat rate peaking increase associated with a positive quadrant power tilt during normal power operation from exceeding 5.10% for Unit 1. The limits shown in Specification 3.5.2.4

5.10% for Unit 2
7.36% for Unit 3

are measurement system independent. The actual operating limits, with the appropriate allowance for observability and instrumentation errors, for each measurement system are defined in the station operating procedures.

The quadrant tilt and axial imbalance monitoring in Specification 3.5.2.4 and 3.5.2.6, respectively, normally will be performed in the process computer. The two-hour frequency for monitoring these quantities will provide adequate surveillance when the computer is out of service.

Allowance is provided for withdrawal limits and reactor power imbalance limits to be exceeded for a period of two hours withour specification violation. Acceptable rod positions and imbalance must be achieved within the two-hour time period or appropriate action such as a reduction of power taken.

Operating restrictions are included in Technical Specification 3.5.2.5d to prevent excessive power peaking by transient xenon. The xenon reactivity must be beyond its final maximum or minimum peak and approaching its equilibrium value at the power level cutoff.

REFERENCES

[1] FSAR, Section 3.2.2.1.2

[2] FSAR, Section 14.2.2.2

[3] FSAR, SUPPLEMENT 9

[4] B&W FUEL DENSIFICATION REPORT

BAW-1409 (UNIT 1)

BAW-1396 (UNIT 2)

BAW-1400 (UNIT 3)

3.5 INSTRUMENTATION SYSTEMS

3.5.1 Operational Safety Instrumentation

Applicability

Applies to unit instrumentation and control systems.

Objective

To delineate the conditions of the unit instrumentation and safety circuits necessary to assure reactor safety.

Specifications

3.5.1.1 The reactor shall not be in a startup mode or in a critical state unless the requirements of Table 3.5.1-1, Columns A and B are met.

3.5.1.2 In the event that the number of protective channels operable falls below the limit given under Table 3.5.1-1, Columns A and B; operation shall be limited as specified in Column C.

3.5.1.3 For on-line testing or in the event of a protective instrument or channel failure, a key-operated channel bypass switch associated with each reactor protective channel may be used to lock the channel trip relay in the untripped state. Status of the untripped state shall be indicated by a light. Only one channel bypass key shall be accessible for use in the control room. Only one channel shall be locked in this untripped state or contain a dummy bistable at any one time.

3.5.1.4 For on-line testing or maintenance during reactor power operation, a key-operated shutdown bypass switch associated with each reactor protective channel may be used in conjunction with a key-operated channel bypass switch as limited by 3.5.1.3. Status of the shutdown bypass switch shall be indicated by a light.

3.5.1.5 During startup when the intermediate range instruments come on scale, the overlap between the intermediate range and the source range instrumentation shall not be less than one decade. If the overlap is less than one decade, the flux level shall not be greater than that readable on the source range instruments until the one decade overlap is achieved.

3.5.1.6 In the event that one of the trip devices in either of the sources supplying power to the control rod drive mechanisms fails in the untripped state, the power supplied to the rod drive mechanisms through the failed trip device shall be manually removed within 30 minutes. The condition will be corrected and the remaining trip devices shall be tested within eight hours. If the condition is not corrected and the remaining trip devices tested within the eight hour period, the reactor shall be placed in the hot shutdown condition within an additional four hours.

Bases

Every reasonable effort will be made to maintain all safety instrumentation in operation. A startup is not permitted unless three power range neutron instrument channels and two channels each of the following are operable: four reactor coolant temperature instrument channels, four reactor coolant flow instrument channels, four reactor coolant pressure instrument channels, four pressure-temperature instrument channels, four flux-imbalance flow instrument channels, four power-number of pumps instrument channels, and high reactor building pressure instrument channels. The engineered safety features actuation system must have two analog channels functioning correctly prior to a startup.

Operation at rated power is permitted as long as the systems have at least the redundancy requirements of Column B (Table 3.5.1-1). This is in agreement with redundancy and single failure criteria of IEEE 279 as described in FSAR Section 7.

There are four reactor protective channels. A fifth channel that is isolated from the reactor protective system is provided as a part of the reactor control system. Normal trip logic is two out of four. Required trip logic for the power range instrumentation channels is two out of three. Minimum trip logic on other channels is one out of two.

The four reactor protective channels were provided with key operated bypass switches to allow on-line testing or maintenance on only one channel at a time during power operation. Each channel is provided alarm and lights to indicate when that channel is bypassed. There will be one reactor protective system bypass switch key permitted in the control room. That key will be under the administrative control of the Shift Supervisor. Spare keys will be maintained in a locked storage accessible only to the station Manager.

Each reactor protective channel key operated shutdown bypass switch is provided with alarm and lights to indicate when the shutdown bypass switch is being used. There are four shutdown bypass keys in the control room under the administrative control of the Shift Supervisor. The use of a key operated shutdown bypass switch for on-line testing or maintenance during reactor power operation has no significance when used in conjunction with a key operated channel bypass switch since the channel trip relay is locked in the untripped state. The use of a key operated shutdown bypass switch alone during power operation will cause the channel to trip. When the shutdown bypass switch is operated for on-line testing or maintenance during reactor power operation, reactor power and RCS pressure limits as specified in Table 2.3-1A, B, or C are not applicable.

The source range and intermediate range nuclear instrumentation overlap by one decade of neutron flux. This decade overlap will be achieved at 10^{-10} amps on the intermediate range instrument.

Power is normally supplied to the control rod drive mechanisms from two separate parallel 600 volt sources. Redundant trip devices are employed in each of these sources. If any one of these trip devices fails in the untripped state on-line repairs to the failed device, when practical, will be made, and the remaining trip devices will be tested. Four hours is ample time to test the remaining trip devices and in many cases make on-line repairs.

REFERENCE

FSAR, Section 7.1

b. Thirty-Day Written Reports

The types of events listed below shall be the subject of written reports to the Director, Office of Inspection and Enforcement, Region II, within 30 days of discovery of the event. (Copy to the Director, Office of Management Information and Program Control)

(1) Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the technical specifications but which do not prevent the fulfillment of the functional requirements of affected systems.

(2) Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or shutdown required by a limiting condition for operation.

(3) Observed inadequacies in the implementation of administrative or procedural controls during operation of a unit which could cause reduction of degree of redundancy provided in the Reactor Protective System or Engineered Safety Feature Systems.

6.6.2.2 Environmental Monitoring

a. If individual milk samples show I-131 concentrations of 10 picocuries per liter or greater, a plan shall be submitted within one week advising the NRC of the proposed action to ensure the plant related annual doses will be within the design objective of 15 mrem/yr to the thyroid of any individual.

b. If milk samples collected over a calendar quarter show average concentrations of 4.8 picocuries per liter or greater, a plan shall be submitted within 30 days advising the NRC of the proposed action to ensure the plant related annual doses will be within the design objective of 15 mrem/yr to the thyroid of any individual.

c. If, during any annual report period, a measured level of radioactivity in any environmental medium other than those associated with gaseous radioiodine releases or liquid effluent releases exceeds ten times the the control station value, a written notification will be submitted within one week advising the NRC of this condition. This notification should include an evaluation of any release conditions, environmental factors, or other aspects necessary to explain the anomalous result.

d. If, during any annual report period, a measured level of radioactivity in an environmental medium associated with liquid effluent releases exceeds fifty times the control station value, a written notification will be submitted within one week advising the NRC of this condition. This notification should include an evaluation of any release conditions, environmental factors, or other aspects necessary to explain the anomalous result.

TABLE 4.11-1

OCONEE ENVIRONMENTAL RADIOACTIVITY MONITORING PROGRAM

COLLECTION FREQUENCY

Weekly	W
Monthly	M
Quarterly	Q
Semiannually	S
Triennially	T

		TYPE OF SAMPLE														
		WELL-WATER Residence	FINISHED WATER Water Supply	RAW WATER Water Supply	SURFACE WATER River, Lakes	RAIN, SETTLED DUST Fallout	AIR Particulate, Iodine	VEGETATION Pasture grass, forage	VEGETATION Commercial crops	VEGETATION Aquatic	BOTTOM SEDIMENT Water Supply & Lakes	Radiation Dose & Rate TLD and Instrument	FISH Lakes	MILK Local Dairies	SOIL
000	Site: Visitors Center, Station #1					M	W	Q				Q			T
000.1	Station #2					M						Q			
000.2	Station #3					M						Q			
000.3	Bridge N of Site on Hwy 183 Connecting Canal				M										
000.4	Near Liquid Effluent Release Point									S	S				
000.5	1-Mile Radius of Site (including Lake Keowee)				M					S	S		S		
000.6	Lake Keowee Cooling Water Discharge				M						S	Q			
000.7	At Bridge on Hwy 183 Existing				M						S				
000.8	NW Hwy 183											Q			
000.10	Skimmer Wall											Q			
000.11	E Hwy 183											Q			
000.12	Construction Living Quarters											Q			
000.13	Boat Dock - Visitors Center											Q			
000.14	Keowee Hydro Intake											Q			
000.15	Site Fence, North											Q			
000.16	Site Fence, North											Q			
000.17	Site Fence, West											Q			
000.18	Site Fence, West											Q			
000.19	Site Fence, South											Q			
001	SALEM: Vol. Fire Dept. Lot											Q			
002	WALHALLA: Branch Rd. Sub-Station					M						Q			
002.1	5 Miles W of Site on Hwy 183							Q						W	T
003	KEOWEE: High School Area Hwy 188 1/4 mile South											Q			
004	SENECA: Oconee Memorial Hospital											Q			
004.1	Water Supply, Lake Keowee Intake		M	M											
005	NEWRY: Abandoned High School off S.C. 130											Q			
005.2	Hwy 27 at Bridge				M					S	S				
006	CLEMSON: Meteorology Plot					M	W	Q				Q			T
006.1	Water Supply		M	M											
006.2	Intake Hartwell Reservoir K-3										S				
006.3	Dairy													Q	
007	CENTRAL, S.C.: Transmission Tower Base Hwy 93											Q			
008	LIBERTY, S.C.: Branch Office Yard											Q			
009	SIX MILE, S.C.: Microwave Tower Hwy 137						W					Q			
010	PICKENS, S.C.: Branch Office Yard					M						Q			
011	FLOATING STATION: Warpath Boat Landing											Q			
012	ANDERSON, S.C.: Water Supply		M	M											
013	HARTWELL RESERVOIR: 5.8 Miles S of Keowee Dam				M								S		
014	Old Highway 183 at Lake	Q					W								
015	Farms within a 5-Mile Radius of Site	Q						Q	Q *					W*	

* If sufficient quantities are available for sampling.

6.4 STATION OPERATING PROCEDURES

Specification

6.4.1 The station shall be operated and maintained in accordance with approved procedures. Written procedures with appropriate check-off lists and instructions shall be provided for the following conditions:

a. Normal startup, operation and shutdown of the complete facility and of all systems and components involving nuclear safety of the facility.

b. Refueling operations.

c. Actions taken to correct specific and foreseen potential malfunctions of systems or components involving nuclear safety and radiation levels, including responses to alarms, suspected primary system leaks and abnormal reactivity changes.

d. Emergency procedures involving potential or actual release of radioactivity.

e. Preventive or corrective maintenance which could affect nuclear safety or radiation exposure to personnel.

f. Station survey following an earthquake.

g. Radiation control procedures.

h. Operation of radioactive waste management systems.

i. Control of pH in recirculated coolant after loss-of-coolant accident. Procedure shall state that pH will be measured and the addition of appropriate caustic to coolant will commence within 30 minutes after switchover to recirculation mode of core cooling to adjust the pH to a range of 7.0 to 8.0 within 24 hours.

j. Nuclear safety-related periodic test procedures.

k. Long-term emergency core cooling systems. Procedures shall include provision for remote or local operation of system components necessary to establish low pressure injection within 15 minutes after a line break.

6.4.2 Quarterly selected drills shall be conducted on site emergency procedures including assembly preparatory to evacuation off site and a check of the adequacy of communications with off-site support groups.

6.4.3 A respiratory protective program approved by the Commission shall be in force.

h. By-product material inventory records.

i. Minutes of Nuclear Safety Review Board meetings.

j. Training records.

k. Test results, in units of microcuries, for leak tests performed pursuant to Specification 4.16.

6.5 STATION OPERATING RECORDS

Specification

6.5.1 The following records shall be prepared and permanently retained in a manner convenient for review:

a. Records of modifications to the station as described in the FSAR.

b. Special nuclear material physical inventory records.

c. Special nuclear material isotopic inventory records.

d. Radiation monitoring records, including records of radiation and contamination surveys.

e. Records of off-site environmental surveys.

f. Personnel radiation exposure records as required by 10CFR20.

g. Records of radioactive releases and waste disposal.

h. Records of reactor coolant system in-service inspections.

i. Preoperational testing records.

j. Records of special reactor tests or experiments.

k. Records of changes to safety-related operating procedures.

6.5.2 The following records shall be prepared and retained for a minimum of six (6) years in a manner convenient for review:

a. Switchboard Record.

b. Reactor Operations Logbook.

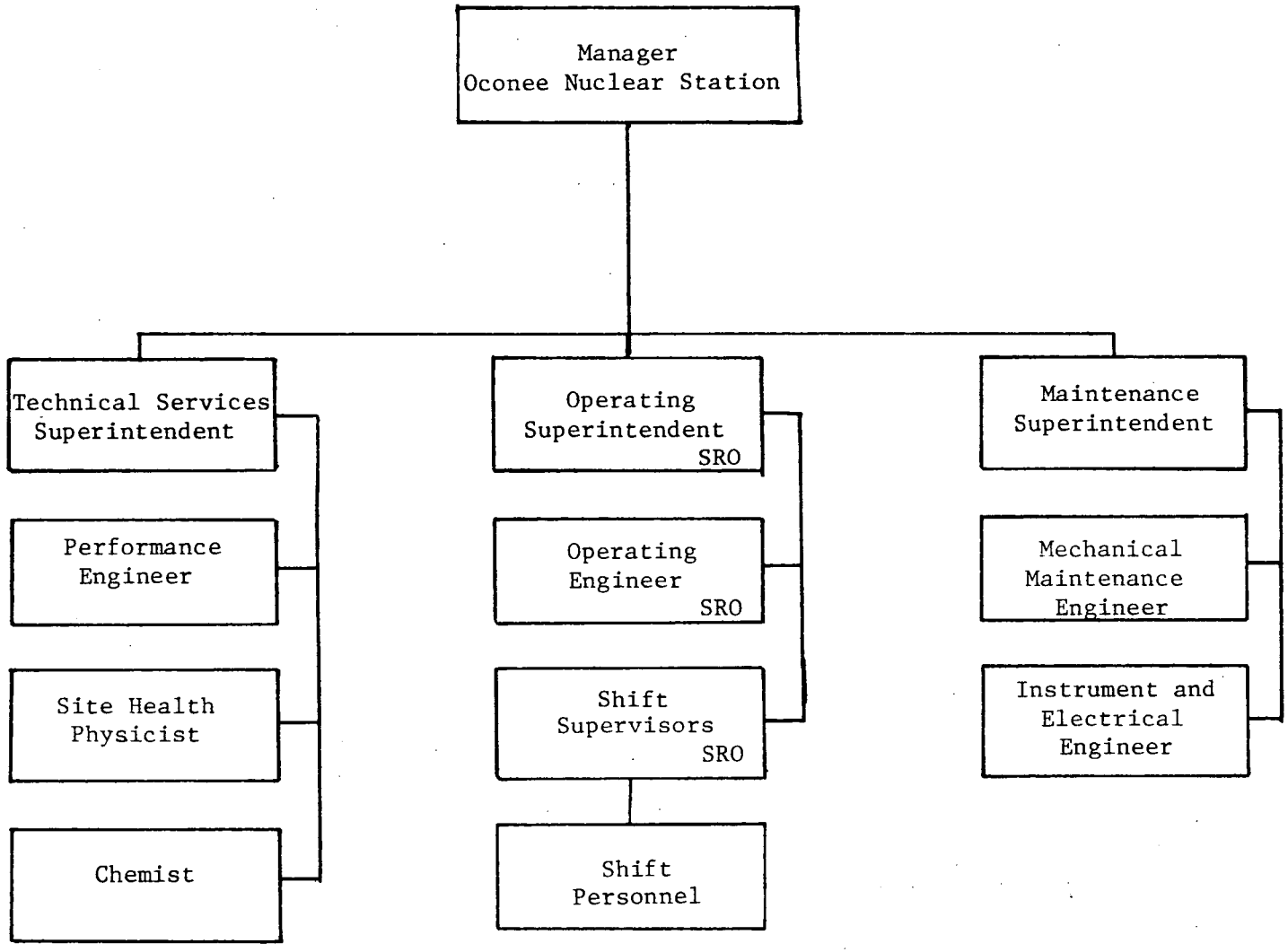
c. Shift Supervisor Logbook.

d. Maintenance histories for station safety-related structures, systems and components.

e. Records of safety-related inspections, other than reactor coolant system in-service inspections.

f. Records of reportable occurrences.

g. Periodic testing records and records of other periodic checks, calibrations, etc. performed in accordance with surveillance requirements for safety-related parameters, structures, systems and components.



OCONEE NUCLEAR STATION

STATION ORGANIZATION CHART

FIGURE 6.1-1