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

June 9, 1978

Mr. E. G. Case, Acting Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. R. Reid, Chief
Operating Reactors Branch #4

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

Dear Sir:

Pursuant to 10CFR50, §50.90 please find attached a proposed revision to Oconee Nuclear Station Technical Specification 3.9, "Release of Liquid Radioactive Waste." Specification 3.9 has been revised to delete several requirements that are no longer applicable to the liquid effluent monitoring system currently installed at Oconee, since an off-line monitor has been permanently installed. This monitor, manufactured by General Atomics Corporation, is capable of the following:

1. Assuring an adequate flow through the monitor with an installed adjustable orifice and rotameter. This decreases the possibility of inadequate flow affecting the monitor reading.

2. Maintaining the photomultiplier tube and scintillation crystal at a constant temperature. This decreases the possibility of rapid temperature changes causing cracking of the scintillation crystal and/or affecting the voltage output of the photomultiplier tube.

3. Flushing the monitor sample chamber and piping from the liquid waste tanks to the monitor between effluent releases. This capability was provided to decrease "spiking" at the beginning of liquid effluent releases. Flushing also decreases the buildup rate of contamination in the sample chamber and piping.

Operation with this system as currently installed and in accordance with this proposed specification, assures compliance with the limits of 10CFR20.

Cook
S
3140

B 06/13/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)
DISTRIBUTION FOR INCOMING MATERIAL 50-269/270/287

REC: CASE E G
NRC

ORG: PARKER W O
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DOCDATE: 06/09/78
DATE RCVD: 06/12/78

DOCTYPE: LETTER NOTARIZED: YES

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LTR 3 ENCL 40

SUBJECT:
FORWARDING LIC NOS DPR-39, 47 & 55 APPL FOR AMEND: TECH SPEC PROPOSED CHANGE CONCERNING REVISION TO TECH SPEC 3.9 "RELEASE OF LIQUID RADIOACTIVE WASTE", TO DELETE SEVERAL REQUIREMENTS NO LONGER APPLICABLE TO THE LIQUID EFFLUENT MONITORING SYSTEM ... NOTAR

PLANT NAME: OCONEE - UNIT 1
OCONEE - UNIT 2
OCONEE - UNIT 3

REVIEWER INITIAL: XJM
DISTRIBUTER INITIAL: DL

***************** DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS *****************

NOTES:
1. M. CUNNINGHAM - ALL AMENDMENTS TO FSAR AND CHANGES TO TECH SPECS

CHANGE REQUESTS FOR ENVIRON TECH SPECS (APPEND B)
(DISTRIBUTION CODE C004)

FOR ACTION: BR CHIEF ORB#4 BC**W/5 ENCL

INTERNAL:
REG FILE**W/ENCL
I & E**W/2 ENCL
GOSSICK & STAFF**W/ENCL
AD FOR OPER TECH**LTR ONLY
J MCGOUGH**W/ENCL
ENVIRO SPEC BR**W/ENCL
EFFLUENT TREAT SYS**W/ENCL
NRC PDR**W/ENCL
OELD**W/ENCL
QAB**W/ENCL
EEB**W/ENCL
DIRECTOR DSE**LTR ONLY
AD FOR SITE ANLYS**LTR ONLY
RAD ASSESSMENT BR**W/ENCL

EXTERNAL:
LPDR'S
WALHALLA, SC**W/ENCL
NATL LAB ORNL**W/3 ENCL
NSIC**W/ENCL
TIC**W/1 ENCL
ACRS CAT B**W/16 ENCL

AA/2

$$
$ CHECK NBR: 196,100 $
$ AMOUNT: $4,800.00 $
$ CHECK AND COPY OF TRANSMITTAL LTR ADVANCED $
$ TO W. MILLER (LFMB) (06/13/78) UPON RECIEPT $
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DISTRIBUTION: LTR 43 ENCL 40
SIZE: 3P+3P

CONTROL NBR: 781630102

*********************************** THE END ***********************************

4.6 EMERGENCY POWER PERIODIC TESTING

Applicability

Applies to the periodic testing and surveillance of the emergency power sources.

Objective

To verify that the emergency power sources and equipment will respond promptly and properly when required.

Specification

4.6.1 Monthly, a test of the Keowee Hydro units shall be performed to verify proper operation of these emergency power sources and associated equipment. This test shall assure that:

a. Each hydro unit can be automatically started from the Unit 1 and 2 control room.

b. Each hydro unit can be synchronized through the 230 kV overhead circuit to the startup transformers.

c. Each hydro unit can energize the 13.8 kV underground feeder.

4.6.2 Annually, the Keowee Hydro units will be started using the emergency start circuits in each control room to verify that each hydro unit and associated equipment is available to carry load within 25 seconds of a simulated requirement for engineered safety features.

4.6.3 During each refueling outage, for the affected unit, a simulated emergency transfer from the 4160 volt main feeder buses to the startup transformer (i.e., CT1, CT2 or CT3) and to the 4160 volt standby buses shall be made to verify proper operation.

4.6.4 Quarterly, the External Grid Trouble Protection System logic shall be tested to demonstrate its ability to provide an isolated power path between Keowee and Oconee.

4.6.5 Annually, it shall be demonstrated that a Lee Station combustion turbine can be started and connected to the 100 kV line. It shall be demonstrated that the 100 kV line can be separated from the rest of the system and supply power to the 4160 volt main feeder buses.

4.6.6 Batteries in the 125 VDC systems shall be tested as follows:

a. The voltage and temperature of a pilot cell in each bank shall be measured and recorded five times per week for the Instrument and Control, Keowee Hydro, and Switching Station batteries.

b. The specific gravity and voltage of each cell shall be measured and recorded monthly for the Instrument and Control, Keowee Hydro, and Switching Station batteries.

4.4.2 Structural Integrity

Applicability

Applies to the structural integrity of the Reactor Building.

Objective

To define the inservice surveillance program for the Reactor Building.

Specification

4.4.2.1 Tendon Surveillance

For the initial surveillance program, covering the first five years of operation, nine tendons shall be selected for periodic inspection for symptoms of material deterioration or force reduction. The surveillance tendons shall consist of three horizontal tendons, one in each of three 120° sectors of the containment; three vertical tendons located at approximately 120° apart; and three dome tendons located approximately 120° apart. The following nine tendons have been selected as the surveillance tendons:

Dome	1D28	
	2D28	(Unit 1 and 3 only)
	3D28	
Horizontal	13H9	
	51H9	
	53H10	
Vertical	23V14	
	45V16	
	61V16	

4.4.2.1.1 Lift-Off

Lift-off readings shall be taken for all nine surveillance tendons.

4.4.2.1.2 Wire Inspection and Testing

One surveillance tendon of each directional group shall be relaxed and one wire from each relaxed tendon shall be removed as a sample and visually inspected for corrosion or pitting. Tensile tests shall also be performed on a minimum of three specimens taken from the ends and middle of each of the three wires. The specimens shall be the maximum length acceptable for the test apparatus to be used and shall include areas representative of significant corrosion or pitting.

After the wire removal, the tendons shall be retensioned to the stress level measured at the lift-off reading and then checked by a final lift-off reading.

Should the inspection of one of the wires reveal any significant corrosion (pitting or loss of area), further inspection of the other two sets in that directional group will be made to determine the extent of the corrosion and

3.8 FUEL LOADING AND REFUELING

Applicability

Applies to fuel loading and refueling operations.

Objective

To assure that fuel loading and refueling operations are performed in a responsible manner.

Specification

3.8.1 Radiation levels in the reactor building refueling area shall be monitored by RIA-2 and RIA-3. Radiation levels in the spent fuel storage area shall be monitored by RIA-6. If any of these instruments becomes inoperable, portable survey instrumentation, having the appropriate ranges and sensitivity to fully protect individuals involved in refueling operation, shall be used until the permanent instrumentation is returned to service.

3.8.2 Core subcritical neutron flux shall be continuously monitored by at least two neutron flux monitors, each with continuous indication available, whenever core geometry is being changed. When core geometry is not being changed, at least one neutron flux monitor shall be in service.

3.8.3 At least one low pressure injection pump and cooler shall be operable.

3.8.4 During reactor vessel head removal and while loading and unloading fuel from the reactor, the boron concentration shall be maintained at not less than that required to shutdown the core to a $k_{eff} \leq 0.99$ if all control rods were removed.

3.8.5 Direct communications between the control room and the refueling personnel in the reactor building shall exist whenever changes in core geometry are taking place.

3.8.6 During the handling of irradiated fuel in the reactor building at least one door on the personnel and emergency hatches shall be closed. The equipment hatch cover shall be in place with a minimum of four bolts securing the cover to the sealing surfaces.

3.8.7 Both isolation valves in lines containing automatic containment isolation valves shall be operable, or at least one shall be closed.

3.8.8 When two irradiated fuel assemblies are being handled simultaneously within the fuel transfer canal, a minimum of 10 feet separation shall be maintained between the assemblies at all times.
Irradiated fuel assemblies may be handled with the Auxiliary Hoist provided no other irradiated fuel assembly is being handled in the fuel transfer canal.

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, DPR-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

Subscribed and sworn to before me this 12th day of June, 1978.

Notary Public

My Commission Expires:

February 15, 1982

determined to be impractical to fulfill.

Specification 4.6.2 requires, in part, that a Keowee hydro unit carry, within 25 seconds of a simulated requirement for engineered safety feature, the equivalent of the maximum safeguards load of one Oconee unit. This requirement cannot be met as specified. Under a postulated requirement for emergency power, each Keowee hydro unit is capable of starting and providing necessary power within 25 seconds. They are automatically aligned, during their startup, to de-energized buses, which eliminates the requirement for phase synchronization and voltage matching during load transfers. There is no load sequencer as is present on diesel powered emergency power systems. It is not practical to simulate this condition for test purposes. The test could not be accomplished with a unit operating without causing a reactor trip to occur. If the test were accomplished with a unit shutdown, all systems associated with the unit would be required to be fully operational in order to provide sufficient electrical load. This would severely impact scheduled maintenance during planned outages, which would adversely affect overall unit availability. It is not possible to provide the required load within 25 seconds for the test from Duke Power grid system, since several minutes are required to safely synchronize the output of Keowee with the grid system. Failure to synchronize could severely damage generation equipment and circuit breakers. The specified time interval of 25 seconds, while acceptable during a postulated emergency, is not practical for a test requirement. Therefore, it is proposed that the specification which is currently in effect be replaced with its precursor. This specification requires that each Keowee hydro unit be verified capable of carrying load within 25 seconds. The reference to the amount of load to be carried has been deleted.

The proposed amendment is considered to involve several changes of the Class III type incorporated into one proposal with duplicate amendments required for two identical units. Accordingly, a check in the amount of $13,100 is attached, consisting of the licensing fees for one Class IV amendment fee and two Class I amendment fees.

Very truly yours,

William O. Parker, Jr.

RLG:scs
Attachment