

Mr. Oliver D. Kingsley, Jr.
 President, TVA Nuclear and
 Chief Nuclear Officer
 Tennessee Valley Authority
 6A Lookout Place
 1101 Market Street
 Chattanooga, TN 37402-2801

July 14, 1997

SUBJECT: ISSUANCE OF TECHNICAL SPECIFICATION AMENDMENTS FOR THE SEQUOYAH
 NUCLEAR PLANT, UNITS 1 AND 2 (TAC NOS. M96600 AND M96601)(TS 96-08)

Dear Mr. Kingsley:

The Commission has issued the enclosed Amendment No. 226 to Facility Operating License No. DPR-77 and Amendment No. 217 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively. These amendments are a partial response to the Tennessee Valley Authority (TVA) application dated August 22, 1996.

The amendments change the Technical Specifications (TS) by eliminating the emergency diesel generator accelerated testing and special reporting requirements of TS 4.8.1.1.2.a in accordance with U. S. Nuclear Regulatory Commission (NRC) Generic Letter 94-01. The staff has reviewed the submittal for these changes and, based on our review, we find the proposed changes acceptable. The subject TVA letter also requested extension of the allowed outage time for emergency diesel generators from 72 hours to 7 days to accommodate maintenance of the generators. The latter request is still under review by the NRC staff.

A copy of the staff's Safety Evaluation regarding this request is also enclosed. Notice of Issuance of the amendments will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by Frederick J. Hebdon for

Ronald W. Hernan, Senior Project Manager
 Project Directorate II-3
 Division of Reactor Projects - I/II
 Office of Nuclear Reactor Regulation

Docket Nos. 50-327 and 50-328

- Enclosures: 1. Amendment No. 226 to License No. DPR-77
 2. Amendment No. 217 to License No. DPR-79
 3. Safety Evaluation

Distribution
 Docket Files
 SQN Rdg.
 GHill (4)
 ACRS
 VBeaston
 MLesser, RII

PUBLIC
 BBoger
 WBeckner
 JJohnson, RII
 THarris
 (TLH3 SE)

070058

cc w/enclosures: See next page

Document Name: G:\SQN\96600.AMD

To receive a copy of this document, indicate in the box:

"C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure
 "N" = No copy

OFFICE	PDII-3/PM	PDII-3/BLA	E	OGC	PDII-3/D	C
NAME	RHernan	BCBenton			FHebdon	
DATE	6/25/97	6/25/97		7/1/97	7/14/97	

DF011

9708070213 970714
 PDR ADOCK 05000327
 PDR



NRC FILE CENTER COPY

Mr. Oliver D. Kingsley, Jr.
Tennessee Valley Authority

cc:

Mr. O. J. Zeringue, Sr. Vice President
Nuclear Operations
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. Jack A. Bailey, Vice President
Engineering & Technical Services
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. R. J. Adney, Site Vice President
Sequoyah Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Soddy Daisy, TN 37379

General Counsel
Tennessee Valley Authority
ET 10H
400 West Summit Hill Drive
Knoxville, TN 37902

Mr. Raul R. Baron, General Manager
Nuclear Assurance and Licensing
Tennessee Valley Authority
4J Blue Ridge
1101 Market Street
Chattanooga, TN 37402-2801

Mr. Pedro Salas, Manager
Licensing and Industry Affairs
Tennessee Valley Authority
4J Blue Ridge
1101 Market Street
Chattanooga, TN 37402-2801

Mr. Ralph H. Shell, Manager
Licensing and Industry Affairs
Sequoyah Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Soddy Daisy, TN 37379

SEQUOYAH NUCLEAR PLANT

Mr. J. T. Herron, Plant Manager
Sequoyah Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Soddy Daisy, TN 37379

Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
61 Forsyth Street, SW., Suite 23T85
Atlanta, GA 30303-3415

Mr. Melvin C. Shannon
Senior Resident Inspector
Sequoyah Nuclear Plant
U.S. Nuclear Regulatory Commission
2600 Igou Ferry Road
Soddy Daisy, TN 37379

Mr. Michael H. Mobley, Director
Division of Radiological Health
3rd Floor, L and C Annex
401 Church Street
Nashville, TN 37243-1532

County Executive
Hamilton County Courthouse
Chattanooga, TN 37402-2801



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-327

SEQUOYAH NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.226
License No. DPR-77

- I. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated August 22, 1996, 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. Paragraph 2.C.(2) of Facility Operating License No. DPR-77 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 226, 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 its date of issuance, to be implemented no later than 45 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Frederick J. Hebdon, Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment: 1. Changes to the Technical
Specifications

Date of Issuance: July 14, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 226

FACILITY OPERATING LICENSE NO. DPR-77

DOCKET NO. 50-327

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

3/4 8-3
3/4 8-7
3/4 8-7b

INSERT

3/4 8-3
3/4 8-7
3/4 8-7b

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.8.1.1.2 Each diesel generator set shall be demonstrated OPERABLE:

- a. At least once per 31 days on a staggered test basis by:
 - 1. Verifying the fuel level in the engine-mounted day tanks.
 - 2. Verifying the fuel level in the 7 day tank.
 - 3. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the engine mounted fuel tanks.
 - 4. *Verifying the diesel starts from ambient condition and achieves in less than or equal to 10 seconds generator voltage and frequency of 6900 ± 690 volts and 60 ± 1.2 Hz. The diesel generator shall be started for this test by using one of the following signals with startup on each signal verified at least once per 124 days:
 - a) Manual.
 - b) Simulated loss of offsite power by itself.
 - c) An ESF actuation test signal by itself.
 - 5. *Verifying the generator is synchronized, loaded between 3960 kw and 4400 kw in less than or equal to 60 seconds, and operates for greater than or equal to 60 minutes, and
 - 6. Verifying the diesel generator is aligned to provide standby power to the associated shutdown boards.
- b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from the engine-mounted fuel tanks.
- c. At least once per 92 days and from new fuel oil prior to addition to the 7-day tanks by verifying that a sample obtained in accordance with ASTM-D270-1975 has a water and sediment content of less than or equal to .05 volume percent and a kinematic viscosity @ 100°F of greater than or equal to 1.8 but less than or equal to 5.8 centi-stokes when tested in accordance with ASTM-D975-77, and an impurity level of less than 2 mg. of insolubles per 100 ml. when tested in accordance with ASTM-D2274-70.

*The diesel generator start (10 sec) and load (60 sec) from standby conditions shall be performed at least once per 184 days in these surveillance tests. All other diesel generator engine starts and loading for the purpose of this surveillance testing may be preceded by an engine idle start, followed by gradual acceleration to synchronous speed (approximately 900 rpm), synchronization, and gradual loading.

TABLE 4.8-1

DIESEL GENERATOR RELIABILITY

THIS PAGE INTENTIONALLY DELETED

ATTACHMENT TO TABLE 4.8-1
DIESEL GENERATOR REQUALIFICATION PROGRAM

THIS PAGE INTENTIONALLY DELETED



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-328

SEQUOYAH NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 217
License No. DPR-79

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated August 22, 1996, 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.

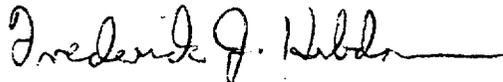
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment. Paragraph 2.C.(2) of Facility Operating License No. DPR-79 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 217, 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 its date of issuance, to be implemented no later than 45 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Frederick J. Hebdon, Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment: 1. Changes to the Technical Specifications

Date of Issuance: July 14, 1997

ATTACHMENT TO LICENSE AMENDMENT NO.217

FACILITY OPERATING LICENSE NO. DPR-79

DOCKET NO. 50-328

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

3/4 8-3
3/4 8-8
3/4 8-8b

INSERT

3/4 8-3
3/4 8-8
3/4 8-8b

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.8.1.1.2 Each diesel generator set shall be demonstrated OPERABLE:

- a. At least once per 31 days on a staggered test basis by:
 - 1. Verifying the fuel level in the engine-mounted day tanks.
 - 2. Verifying the fuel level in the 7 day tank.
 - 3. Verifying the fuel transfer pump starts and transfers fuel from the storage system to the engine mounted fuel tanks.
 - 4. *Verifying the diesel starts from ambient condition and achieves in less than or equal to 10 seconds generator voltage and frequency shall be 6900 ± 690 volts and 60 ± 1.2 Hz. The diesel generator shall be started for this test by using one of the following signals with startup on each signal verified at least once per 124 days:
 - a) Manual.
 - b) Simulated loss of offsite power by itself.
 - c) An ESF actuation test signal by itself.
 - 5. *Verifying the generator is synchronized, loaded between 3960 kw and 4400 kw in less than or equal to 60 seconds, and operates for greater than or equal to 60 minutes, and
 - 6. Verifying the diesel generator is aligned to provide standby power to the associated shutdown boards.
- b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from the engine-mounted fuel tanks.
- c. At least once per 92 days and from new fuel oil prior to addition to the 7-day tanks by verifying that a sample obtained in accordance with ASTM-D270-1975 has a water and sediment content of less than or equal to .05 volume percent and a kinematic viscosity @ 100°F of greater than or equal to 1.8 but less than or equal to 5.8 centi-stokes when tested in accordance with ASTM-D975-77, and an impurity level of less than 2 mg. of insolubles per 100 ml. when tested in accordance with ASTM-D2274-70.

R186

R99

R44

R164

*The diesel generator start (10 sec) and load (60 sec) from standby conditions shall be performed at least once per 184 days in these surveillance tests. All other diesel generator engine starts and loading for the purpose of this surveillance testing may be preceded by an engine idle start, followed by gradual acceleration to synchronous speed (approximately 900 rpm), synchronization, and gradual loading.

R44

R186

TABLE 4.8-1

DIESEL GENERATOR RELIABILITY

THIS PAGE INTENTIONALLY DELETED

ATTACHMENT TO TABLE 4.8-1
DIESEL GENERATOR REQUALIFICATION PROGRAM

THIS PAGE INTENTIONALLY DELETED



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 226 TO FACILITY OPERATING LICENSE NO. DPR-77
AND AMENDMENT NO. 217 TO FACILITY OPERATING LICENSE NO. DPR-79
TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 50-327 AND 50-328

1.0 INTRODUCTION

By letter dated August 22, 1996, Tennessee Valley Authority (TVA, the licensee) proposed changes to the Technical Specifications (TS) for the Sequoyah Nuclear Plant Units 1 and 2. The proposed changes would eliminate the accelerated testing and special reporting requirements for emergency diesel generators in TS 4.8.1.1.2.a in accordance with Generic Letter (GL) 94-01. GL 94-01 was issued on May 31, 1994, in response to the Commission decision on SECY-93-044, "Resolution of Generic Safety Issue B-56, Diesel Generator Reliability." The letter advised licensees that they could request a license amendment to remove accelerated testing and special reporting requirements for diesel generators from plant TS, providing they committed to implement a maintenance program for monitoring and maintaining diesel generator performance in accordance with the requirements of 10 CFR 50.65.

2.0 EVALUATION

2.1 Change 1 (TS 4.8.1.1.2.a): The licensee proposes to delete "In accordance with the frequency specified in Table 4.8-1 on a STAGGERED TEST BASIS by:..." and to replace this phrase with "At least once per 31 days on a staggered test basis by:...".

This proposed change will eliminate the accelerated testing and special reporting requirements for diesel generators as specified in Table 4.8-1 of the TS. This proposed change is in accordance with GL 94-01 and is acceptable. Removal of accelerated testing was recommended in GL 94-01 to eliminate unnecessary testing of diesel generators and to improve the overall reliability of diesel generators. Because the licensee is required to monitor and maintain diesel generator performance in accordance with 10 CFR 50.65, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," there is no need to duplicate this requirement in a separate licensee commitment as stated in GL 94-01.

ENCLOSURE

9708070220 970714
PDR ADOCK 05000327
P PDR

2.2 Change 2 (Table 4.8-1): The licensee has proposed to delete Table 4.8-1 and the attachment to Table 4.8-1 from the TS for Sequoyah Units 1 and 2 (TS Pages 3/4 8-7 & 3/4 8-7b for Unit 1 and 3/4 8-8 & 3/4 8-8b for Unit 2), and insert "THIS PAGE INTENTIONALLY DELETED" where appropriate.

This proposed change is consistent with the elimination of accelerated testing and special reporting requirements for diesel generators, as recommended in GL 94-01, and is acceptable. Since the table and its attachment are no longer needed, it is appropriate to delete them from TS.

3.0 CONCLUSIONS

The U. S. Nuclear Regulatory Commission (NRC) staff has evaluated the licensee-proposed changes documented in Section 2.0. The changes proposed by the licensee and evaluated above are acceptable because (a) they are intended to improve the reliability of the diesel generators; or (b) they are administrative and intended to clarify the TS.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Tennessee State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (61 FR 52969 dated October 9, 1996). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Virgil Beaston

Dated: July 14, 1997