

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

January 18, 1996

SUBJECT: REVISION TO THE TECHNICAL SPECIFICATION BASES
SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

Dear Mr. Kingsley:

By letter dated January 3, 1996, the Tennessee Valley Authority (TVA) informed the NRC of changes (designated by TVA as Revisions BR-7 and BR-8 for Unit 1, BR-9 for Unit 2) that have been made by TVA to the Bases of the Sequoyah Nuclear Plant Units 1 and 2 Technical Specifications (TS). BR-7 revises the Unit 1 Bases Section 3/4.7.1.2 to incorporate the current operational functions of the turbine-driven auxiliary feedwater level control valves. These valves were modified during the Unit 1 Cycle 7 refueling outage to become nonmodulating and automatic opening upon receipt of an accident signal. This change to the Unit 2 TS Bases was previously incorporated. BR-8 (for Unit 1) and BR-9 (for Unit 2) remove information from the same Bases section relative to operator action. This information was misleading with regard to Chapter 15 of the Final Safety Analysis Report.

The purpose of this letter is to distribute the enclosed revised TS pages to the appropriate TS manual holders.

Sincerely,

Original signed by

David E. LaBarge, Sr. 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. Revised Unit 1 TS page
B3/4 7-2a
2. Revised Unit 2 TS page
B3/4 7-2a

cc: See next page

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ENCLOSURE 1

SEQUOYAH NUCLEAR PLANT UNIT 1

TECHNICAL SPECIFICATIONS PAGE B3/4 7-2a

PLANT SYSTEMS

BASES

The limiting Design Basis Accidents (DBAs) and transients for the AFW System are as follows:

- a. Feedwater Line Break (FWLB); and
- b. Loss of main feedwater (MFW).

In addition, the minimum available AFW flow and system characteristics are credited for removing decay heat in the analysis of a small break loss of coolant accident (LOCA).

The AFW System design is such that it can perform its function following a FWLB between the MFW isolation valves and containment, combined with a loss of offsite power following turbine trip, and a single active failure of the steam turbine-driven AFW pump (above 50% power) or one motor-driven AFW pump (below 50% power with steam generator low level reactor trip time delay). For 50% power operation and higher, one motor-driven AFW pump is assumed to deliver to the broken MFW header at the pump run-out flow. Sufficient flow would be delivered to the intact steam generator by the redundant motor-driven AFW pump.

For partial power operation (below 50% power with trip time delay active), one motor-driven AFW pump is assumed to fail. All flow from the turbine-driven AFW pump and the redundant motor-driven AFW pump is assumed to deliver to the broken MFW header until the faulted steam generator is isolated. After isolation of the faulted steam generator, sufficient flow is delivered to the intact steam generator by the turbine-driven and redundant motor-driven AFW pump.

The Engineered Safety Feature Actuation System (ESFAS) automatically actuates the AFW turbine-driven pump and associated valves and controls when required to ensure an adequate feedwater supply to the steam generators during loss of power.

The surveillance requirements (SRs) provide a means of ensuring the AFW system components are capable of supplying required flow to the steam generators, the flow path is aligned correctly, and the automatic functions actuate as designed. The automatic functions are verified through either an actual or simulated actuation signal. The actuation signal associated with SR 4.7.1.2.3 (automatic valve actuation) include the AFW actuation test signal and the low AFW pump suction pressure test signal. The actuation signal associated with SR 4.7.1.2.4 (automatic pump start) includes only the AFW actuation test signal.

Each motor-driven auxiliary feedwater pump (one Train A and one Train B) supplies flow paths to two steam generators. Each flow path contains an automatic air-operated level control valve (LCV). The LCVs have the same train designation as the associated pump and are provided trained air. The turbine-driven auxiliary feedwater pump supplies flow paths to all four steam generators. Each of these flow paths contains an automatic opening (non-modulating) air-operated LCV, two of

R210

BR-8

R210

BR-1

BR-7

ENCLOSURE 2

SEQUOYAH NUCLEAR PLANT UNIT 2

TECHNICAL SPECIFICATIONS PAGE B3/4 7-2a

PLANT SYSTEMS

BASES

The limiting Design Basis Accidents (DBAs) and transients for the AFW System are as follows:

- a. Feedwater Line Break (FWLB); and
- b. Loss of main feedwater (MFW).

In addition, the minimum available AFW flow and system characteristics are credited for removing decay heat in the analysis of a small break loss of coolant accident (LOCA).

The AFW System design is such that it can perform its function following a FWLB between the MFW isolation valves and containment, combined with a loss of offsite power following turbine trip, and a single active failure of the steam turbine-driven AFW pump (above 50% power) or one motor-driven AFW pump (below 50% power with steam generator low level reactor trip time delay). For 50% power operation and higher, one motor-driven AFW pump is assumed to deliver to the broken MFW header at the pump run-out flow. Sufficient flow would be delivered to the intact steam generator by the redundant motor-driven AFW pump.

For partial power operation (below 50% power with trip time delay active), one motor-driven AFW pump is assumed to fail. All flow from the turbine-driven AFW pump and the redundant motor-driven AFW pump is assumed to deliver to the broken MFW header until the faulted steam generator is isolated. After isolation of the faulted steam generator, sufficient flow is delivered to the intact steam generator by the turbine-driven and redundant motor-driven AFW pump.

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The surveillance requirements (SRs) provide a means of ensuring the AFW system components are capable of supplying required flow to the steam generators, the flow path is aligned correctly, and the automatic functions actuate as designed. The automatic functions are verified through either an actual or simulated actuation signal. The actuation signal associated with SR 4.7.1.2.3 (automatic valve actuation) include the AFW actuation test signal and the low AFW pump suction pressure test signal. The actuation signal associated with SR 4.7.1.2.4 (automatic pump start) includes only the AFW actuation test signal.

Each motor-driven auxiliary feedwater pump (one Train A and one Train B) supplies flow paths to two steam generators. Each flow path contains an automatic air-operated level control valve (LCV). The LCVs have the same train designation as the associated pump and are provided trained air. The turbine-driven auxiliary feedwater pump supplies flow paths to all four steam generators. Each of these flow paths contains an automatic opening (non-modulating) air-operated LCV, two of which are designated as Train A, receive A-train air, and provide flow to the same steam generators that are supplied by the B-train motor-driven auxiliary feedwater pump. The remaining two LCVs are designated as Train B, receive B-

R196

BR-9

R196

BR-1

BR-7

BR-1

SEQUOYAH NUCLEAR PLANT

cc:

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

Mr. O. J. Zeringue, Sr. Vice President
Nuclear Operations
Tennessee Valley Authority
3B Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Dr. Mark O. Medford, Vice President
Engineering & Technical Services
Tennessee Valley Authority
3B Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. D. E. Nunn, Vice President
New Plant Completion
Tennessee Valley Authority
3B Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

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

General Counsel
Tennessee Valley Authority
ET 11H
400 West Summit Hill Drive
Knoxville, TN 37902

Mr. P. P. Carier, Manager
Corporate Licensing
Tennessee Valley Authority
4G Blue Ridge
1101 Market Street
Chattanooga, TN 37402-2801

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

TVA Representative
Tennessee Valley Authority
11921 Rockville Pike
Suite 402
Rockville, MD 20852

Regional Administrator .
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW., Suite 2900
Atlanta, GA 30323

Mr. William E. Holland
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 Judge
Hamilton County Courthouse
Chattanooga, TN 37402-2801