Template NRR-058

March 29, 2000

Mr. J. A. Scalice
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS REGARDING CONTAINMENT ISOLATION VALVES (TAC NOS. MA6500 AND MA6501)

Dear Mr. Scalice:

The Commission has issued the enclosed Amendment No. 254 to Facility Operating License No. DPR-77 and Amendment No. 245 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively. These amendments are in response to your "TS 99-10" application dated August 30, 1999.

These amendments revise the Technical Specifications to provide clarification of requirements applicable to containment isolation valves. A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/RA/

Ronald W. Hernan, Senior Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-327 and 50-328

Enclosures: 1. Amendment No. 254 to License No. DPR-77
2. Amendment No. 245 to License No. DPR-79
3. Safety Evaluation

cc w/enclosures: See next page

| | | | | |
|---|---|---|---|---|
| DISTRIBUTION: | File Center | OGC | PUBLIC | GHill (4) |
| PDII Reading | WBeckner | HBerkow | RCorreia | PFredrickson, RII |
| BClayton | ACRS | RHernan | WLong | RGiardina |

DOCUMENT NAME: G:\PDII-2\SQN\A6500AMD.wpd
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-2/PM | | PDII-2/LA | | OTSB/SC | | OGC | | PDII-2/SC | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NAME | RHernan | | BClayton | | WBeckner | | | | RCorreia | | | |
| DATE | 03/29/00 | | 03/29/00 | | 03/29/00 | | 03/29/00 | | 03/29/00 | | | |

OFFICIAL RECORD COPY

DF01

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

March 29, 2000

Mr. J. A. Scalice
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS REGARDING CONTAINMENT ISOLATION VALVES (TAC NOS. MA6500 AND MA6501)

Dear Mr. Scalice:

The Commission has issued the enclosed Amendment No. 254 to Facility Operating License No. DPR-77 and Amendment No. 245 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively. These amendments are in response to your "TS 99-10" application dated August 30, 1999.

These amendments revise the Technical Specifications to provide clarification of requirements applicable to containment isolation valves. A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Ronald W. Hernan

Ronald W. Hernan, Senior Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-327 and 50-328

Enclosures: 1. Amendment No. 254 to License No. DPR-77
2. Amendment No. 245 to License No. DPR-79
3. Safety Evaluation

cc w/enclosures: See next page

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. 254
License No. DPR-77

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

   A. The application for amendment by Tennessee Valley Authority (the licensee) dated August 30, 1999, 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 and 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. 254, 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 and shall be implemented within 45 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard P. Correia, Chief, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: March 29, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 254

FACILITY OPERATING LICENSE NO. DPR-77

DOCKET NO. 50-327

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

| REMOVE | INSERT |
|---|---|
| 3/4 6-1 | 3/4 6-1 |
| 3/4 6-17 | 3/4 6-17 |
| 3/4 6-18 | 3/4 6-18 |
| B 3/4 6-3a | B 3/4 6-3a |

## 3/4.6 CONTAINMENT SYSTEMS

### 3/4.6.1 PRIMARY CONTAINMENT

### CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. Deleted.

b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3. R134

c. Perform required visual examinations and leakage rate testing in accordance with the Containment Leakage Rate Testing Program. R221

## 3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3 Each containment isolation valve shall be OPERABLE.* R207

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With one or more penetration flow paths with one containment isolation valve inoperable; except for containment vacuum relief isolation valves(s), isolate each affected penetration within 4 hours by use of at least one closed deactivated automatic valve, closed manual valve, blind flange, or check valve## with flow through the valve secured; and, verify# the affected penetration flow path is isolated once per 31 days for isolation devices outside containment, and prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days for isolation devices inside containment.

b. With one or more penetration flow paths with two containment isolation valves inoperable; except for containment vacuum relief isolation valves(s), isolate each affected penetration within 1 hour by use of at least one closed deactivated automatic valve, closed manual valve, or blind flange and verify# the affected penetration flow path is isolated once per 31 days.

c. With one or more containment vacuum relief isolation valve(s) inoperable, the valve(s) must be returned to OPERABLE status within 72 hours.

d. With any of the above ACTIONS not met, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

e. The provisions of Specification 3.0.4 do not apply.

SURVEILLANCE REQUIREMENTS

4.6.3.1 Deleted R207

*1. Penetration flow path(s) may be unisolated intermittently under administrative controls.

2. Enter the ACTION of LCO 3.6.1.1, "Primary Containment" when containment isolation valve leakage results in exceeding the overall containment leakage rate acceptance criteria.

#3. Isolation devices in high radiation areas may be verified by use of administrative means.

#4. Isolation devices that are locked, sealed, or otherwise secured may be verified by use of administrative means.

##5. A check valve with flow through the valve secured is only applicable to penetration flow paths with two containment isolation valves.

SURVEILLANCE REQUIREMENTS (Continued)

4.6.3.2 Each automatic containment isolation valve shall be demonstrated OPERABLE at least once per 18 months by:

a. Verifying that on a Phase A containment isolation test signal, each Phase A isolation valve actuates to its isolation position.

b. Verifying that on a Phase B containment isolation test signal, each Phase B isolation valve actuates to its isolation position.

c. Verifying that on a Containment Ventilation isolation test signal, each Containment Ventilation Isolation valve actuates to its isolation position.

d. Verifying that on a high containment pressure isolation test signal, each Containment Vacuum Relief Valve actuates to its isolation position. R85

e. Verifying that on a Safety Injection test signal that the Normal Charging Isolation valve actuates to its isolation position. R105

4.6.3.3 The isolation time of each power operated or automatic containment isolation valve shall be determined to be within its limit when tested pursuant to Specification 4.0.5. R207

4.6.3.4 At least once per 31 days, verify that all penetrations* not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except for valves that are open under administrative control.

*Except valves, blind flanges and deactivated automatic valves which are located inside the annulus or containment or the main steam valve vaults and are locked, sealed or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often than once per 92 days.

BASES

The opening of penetration flow path(s) on an intermittent basis under administrative control includes the following considerations: (1) stationing an operator, who is in constant communication with the control room, at the valve controls, (2) instructing the operator to close these valves in an accident situation, and (3) assuring that the environmental conditions will not preclude access to close the valves and that this action will prevent the release of radioactivity outside the containment. For valves with controls located in the control room, these conditions can be satisfied by including a specific reference to closing the particular valves in the emergency procedures, since communication and environmental factors are not affected because of the location of the valve controls. R207

Note that due to competing requirements and dual functions associated with the containment vacuum relief isolation valves (FCV-30-46, -47, and -48), the air supply and solenoid arrangement is designed such that upon the unavailability of Train A essential control air, the containment vacuum relief isolation valves are incapable of automatic closure and are therefore considered inoperable for the containment isolation function without operator action. R201

The containment vacuum relief valves (30-571, -572, and -573) are qualified to perform a containment isolation function. These valves are not powered from any electrical source and no spurious signal or operator action could initiate opening. The valves are spring loaded, swing disk (check) valves with an elastomer seat. The valves are normally closed and are equipped with limit switches that provide fully open and fully closed indication in the main control room (MCR). Based upon the above information, a 72 hour allowed action time is appropriate while actions are taken to return the containment vacuum relief isolation valves to service.

Isolation of a containment penetration flow path may include the use of a check valve with flow through the valve secured. This method of isolation would involve stopping flow through the penetration flow path such that the check valve acts as a containment isolation barrier.

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. 245
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 30, 1999, 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 and 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. 245, 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 and shall be implemented within 45 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard P. Correia, Chief, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: March 29, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 245

FACILITY OPERATING LICENSE NO. DPR-79

DOCKET NO. 50-328

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

| REMOVE | INSERT |
|---|---|
| 3/4 6-1 | 3/4 6-1 |
| 3/4 6-17 | 3/4 6-17 |
| 3/4 6-18 | 3/4 6-18 |
| B 3/4 6-3a | B 3/4 6-3a |

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. Deleted.

b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3. R117

c. Perform required visual examinations and leakage rate testing in accordance with the Containment Leakage Rate Testing Program. R207

## 3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3 Each containment isolation valve shall be OPERABLE.* | R193

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With one or more penetration flow paths with one containment isolation valve inoperable; except for containment vacuum relief isolation valves(s), isolate each affected penetration within 4 hours by use of at least one closed deactivated automatic valve, closed manual valve, blind flange, or check valve## with flow through the valve secured; and, verify# the affected penetration flow path is isolated once per 31 days for isolation devices outside containment, and prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days for isolation devices inside containment.

b. With one or more penetration flow paths with two containment isolation valves inoperable; except for containment vacuum relief isolation valves(s), isolate each affected penetration within 1 hour by use of at least one closed deactivated automatic valve, closed manual valve, or blind flange and verify# the affected penetration flow path is isolated once per 31 days.

c. With one or more containment vacuum relief isolation valve(s) inoperable, the valve(s) must be returned to OPERABLE status within 72 hours.

d. With any of the above ACTIONS not met, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

e. The provisions of Specification 3.0.4 do not apply.

SURVEILLANCE REQUIREMENTS

4.6.3.1 Deleted | R193

*1. Penetration flow path(s) may be unisolated intermittently under administrative controls.

2. Enter the ACTION of LCO 3.6.1.1, "Primary Containment" when containment isolation valve leakage results in exceeding the overall containment leakage rate acceptance criteria. | R207

#3. Isolation devices in high radiation areas may be verified by use of administrative means.

#4. Isolation devices that are locked, sealed, or otherwise secured may be verified by use of administrative means.

##5. A check valve with flow through the valve secured is only applicable to penetration flow paths with two containment isolation valves.

SURVEILLANCE REQUIREMENTS (Continued)

4.6.3.2 Each automatic containment isolation valve shall be demonstrated OPERABLE at least once per 18 months by:

a. Verifying that on a Phase A containment isolation test signal, each Phase A isolation valve actuates to its isolation position.

b. Verifying that on a Phase B containment isolation test signal, each Phase B isolation valve actuates to its isolation position.

c. Verifying that on a Containment Ventilation isolation test signal, each Containment Ventilation Isolation valve actuates to its isolation position.

d. Verifying that on a high containment pressure isolation test signal, each Containment Vacuum Relief Valve actuates to its isolation position. R72

e. Verifying that on a Safety Injection test signal that the Normal Charging Isolation valve actuates to its isolation position. R90

4.6.3.3 The isolation time of each power operated or automatic containment isolation valve shall be determined to be within its limit when tested pursuant to Specification 4.0.5. R193

4.6.3.4 At least once per 31 days, verify that all penetrations* not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except for valves that are open under administrative control.

*Except valves, blind flanges and deactivated automatic valves which are located inside the annulus or containment or the main steam valve vaults and are locked, sealed or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often than once per 92 days.

3/4.6.3 CONTAINMENT ISOLATION VALVES (Continued

The opening of penetration flow path(s) on an intermittent basis under administrative control includes the following considerations: (1) stationing an operator, who is in constant communication with the control room, at the valve controls, (2) instructing the operator to close these valves in an accident situation, and (3) assuring that the environmental conditions will not preclude access to close the valves and that this action will prevent the release of radioactivity outside the containment. For valves with controls located in the control room, these conditions can be satisfied by including a specific reference to closing the particular valves in the emergency procedures, since communication and environmental factors are not affected because of the location of the valve controls. R193

Note that due to competing requirements and dual functions associated with the containment vacuum relief isolation valves (FCV-30-46, -47, and -48), the air supply and solenoid arrangement is designed such that upon the unavailability of Train A essential control air, the containment vacuum relief isolation valves are incapable of automatic closure and are therefore considered inoperable for the containment isolation function without operator action. R188

The containment vacuum relief valves (30-571, -572, and -573) are qualified to perform a containment isolation function. These valves are not powered from any electrical source and no spurious signal or operator action could initiate opening. The valves are spring loaded, swing disk (check) valves with an elastomer seat. The valves are normally closed and are equipped with limit switches that provide fully open and fully closed indication in the main control room (MCR). Based upon the above information, a 72 hour allowed action time is appropriate while actions are taken to return the containment vacuum relief isolation valves to service.

Isolation of a containment penetration flow path may include the use of a check valve with flow through the valve secured. This method of isolation would involve stopping flow through the penetration flow path such that the check valve acts as a containment isolation barrier.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 254 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO. 245 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 application dated August 30, 1999, the Tennessee Valley Authority (the licensee) proposed an amendment to the Technical Specifications (TS) for Sequoyah Nuclear Plant (SQN) Units 1 and 2. The requested changes would provide clarification of requirements applicable to containment isolation valves.

The Sequoyah Nuclear Plants Units 1 and 2 are Westinghouse 4-loop pressurized water reactors located near Chattanooga, Tennessee. Each unit has a licensed power level of 3411MWt and is provided with an ice condenser type containment.

## 2.0 DISCUSSION AND EVALUATION

The application requests revisions to the TS related to containment integrity and containment isolation valves. The containment isolation valves form part of the containment pressure boundary and provide a means for fluid penetrations not serving accident consequence limiting systems to be provided with two isolation barriers that are closed on a containment isolation signal. These isolation devices are either passive or active (automatic). Manual valves, deactivated automatic valves secured in their closed position (including check valves with flow through the valve secured), blind flanges, and closed systems are considered passive devices. Check valves, or other automatic valves designed to close without operator action following an accident, are considered active devices. Two barriers in series are provided for each penetration so that no single credible failure or malfunction of an active component can result in a loss of isolation or leakage that exceeds limits assumed in the safety analyses. One of these barriers may be a closed system.

A description of each proposed change and the associated staff evaluation is provided below.

Relocation of Periodic 31-day Surveillance Requirement for Verification of Position of Isolation Devices

The Sequoyah TS surveillance requirements for containment isolation valves are currently split between two different TS sections, 3/4.6.1 and 3/4.6.3. TS 3/4.6.1, which is entitled "Containment Integrity," contains a subsection "4.6.1.1.a" which applies to containment piping penetrations and requires that each penetration not capable of being closed by operable automatic containment isolation valves shall be maintained closed by either valves, blind flanges, or deactivated automatic valves secured in their closed position, and the closed position verified every 31 days. Two exceptions are provided: (1) valves that are open under administrative controls as permitted by TS 3.6.3 are not subject to this requirement, and (2) for those valves, blind flanges, and deactivated automatic valves which are located inside the annulus or containment or the main steam valve vaults and are locked, sealed or otherwise secured in the closed position, the frequency is each COLD SHUTDOWN period and the verification need not be performed more often than once per 92 days. The licensee proposes to relocate this requirement to TS section 3/4.6.3 "Containment Isolation Valves" where the other containment isolation valve requirements are located. The licensee states that the purpose of this change is to group the containment isolation valve surveillance requirements in a common location.

The licensee's proposed change is a simple editorial rearrangement. The relocation would not modify (a) the applicability modes for any operability requirements, (b) the scope or frequency of any surveillance requirements or (c) the action requirements that must be met in the event any containment penetration closure device is found to be inoperable. The change is therefore acceptable.

Use of a Check Valve to Isolate a Containment Penetration Having an Inoperable Isolation Valve

In the event of inoperability of a containment isolation valve, the licensee is allowed 4 hours to repair the inoperable valve or isolate the penetration using a deactivated automatic valve, closed manual valve or blind flange. The proposed amendment would permit a check valve with the flow through the valve secured to be used as an additional means to isolate the penetration. It is the staff position that a check valve with the flow through the valve secured is an acceptable means of isolating a penetration. When there is no flow through the check valve, it is considered a passive isolation device, i.e., without need for obturator movement, in order to prevent flow out of the containment. The proposed change is therefore acceptable. Because of General Design Criteria limitations on use of check valves for containment isolation, the check valve alternative is limited to use in containment penetrations having at least two isolation valves. The proposed TS includes a footnote statement to this effect.

Requirement for 31-day Periodic Verification of Position of Isolation Devices used to Isolate a Penetration Having an Inoperable Isolation Valve

The licensee proposes to add a required action that would apply when an isolation valve is inoperable and the penetration is closed by another closure device. The position of the closure device would have to be verified every 31 days if outside containment, and, if inside containment, prior to entering Mode 4 from Mode 5 if not performed in the previous 92 days.

The 31-day periodic verification is an appropriate measure and frequency for assuring that the closure devices have not been inadvertently repositioned. For containment isolation valves inside containment, the reduced frequency of "prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days" is appropriate since these containment isolation valves are operated under administrative controls and the probability of their misalignment is low. The proposed change is consistent with these criteria and is acceptable.

Periodic Verification of Isolation Devices in High Radiation Areas

The licensee proposes to add a statement that the periodic verification of the position of an isolation device in a high radiation area may (as an alternative to visual examination) be performed by use of administrative means.

Allowing verification by administrative means is considered acceptable since access to these areas is typically restricted. Therefore, the probability of misalignment of these valves, once they have been verified to be in the proper position, is small. The proposed change is therefore acceptable.

Periodic Verification of Isolation Devices That Are Locked, Sealed or Otherwise Secured

The licensee proposes to add a statement that the periodic verification of the position of isolation devices that are locked, sealed or otherwise secured may (as an alternative to visual examination) be performed by administrative means.

The proposed change is consistent with TSTF-269, which was approved by the staff on July 16, 1998, to allow the position of locked, sealed or secured components to be verified by administrative means. The justification states:

> It is sufficient to assume that the initial establishment of component status (e.g., isolation valves closed) was performed correctly. Subsequent verification is intended to ensure that component has not been inadvertently repositioned. Given that the function of locking, sealing or securing a component is to ensure that same avoidance of inadvertent prepositioning, the periodic re-verification should only be a verification of the administrative control that ensures that the component remains in the required state. It would be inappropriate to remove the lock, seal, or other means of securing the component solely to perform an active verification of the required state.

Based on consistency with the current staff position, the proposed change is acceptable.

Two Inoperable Isolation Valves in a Flow Path

The licensee proposes to add a requirement specifically applicable to a case where both isolation valves in a piping penetration are inoperable. This would eliminate an ambiguity as to the required action in the event of two inoperable isolation valves in the same flow path versus two inoperable isolation valves in different flow paths. With two inoperable isolation valves in the same flow path, the penetration would have to be isolated by use of a deactivated automatic valve, or closed manual valve or blind flange (check valve not acceptable in this case) within 1 hour, and the flow path verified closed at least once every 31 days.

If both isolation valves are inoperable, the condition is equivalent to a loss of containment integrity. The 1-hour completion time proposed by the licensee is consistent with the currently specified completion time for an inoperable containment and is acceptable.

Required Actions Cannot be Met

The licensee proposes to add a statement applicable to the case where none of the previously stated action requirements can be met. This requirement states "With any of the above ACTIONS not met, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours."

This is a simple editorial statement reflecting an existing requirement and is therefore acceptable.

Refueling Outage Test Requirement

A surveillance requirement which currently reads "Each automatic containment isolation valve shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per 18 months by . . . ." would be replaced by one reading "Each automatic containment isolation valve shall be demonstrated OPERABLE at least once per 18 months by . . . .," thus allowing the tests to be performed with the plant operating. The licensee states that the current mode limitations are overly restrictive and would even preclude testing while the unit is defueled.

The proposed change will permit testing of automatic isolation valves during modes other than refueling, such as during power operation and defueled conditions. Testing during these conditions introduces no new or additional safety concerns because the TS specify appropriate required actions in the event any isolation valve must be made inoperable for testing. This change will facilitate scheduling of required tests and is acceptable.

## 3.0 STATE CONSULTATION

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

## 4.0 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. 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 (64 FR 54382). Accordingly, the amendment meets 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 amendment.

## 5.0 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: William O. Long, NRR/DLPM
Robert J. Giardina, NRR/DRIP

Dated: March 29, 2000

Mr. J. A. Scalice
Tennessee Valley Authority

cc:
Mr. Karl W. Singer, Senior 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. Masoud Bajestani
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. N. C. Kazanas, General Manager
Nuclear Assurance
Tennessee Valley Authority
5M Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. Mark J. Burzynski, Manager
Nuclear Licensing
Tennessee Valley Authority
4X Blue Ridge
1101 Market Street
Chattanooga, TN 37402-2801

**SEQUOYAH NUCLEAR PLANT**

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

Mr. D. L. Koehl, Plant Manager
Sequoyah Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Soddy Daisy, TN 37379

Mr. Russell A. Gibbs
Senior Resident Inspector
Sequoyah Nuclear Plant
U.S. Nuclear Regulatory Commission
2600 Igou Ferry Road
Soddy Daisy, TN 37379

Mr. Michael H. Mobley, Director
TN Dept. of Environment & Conservation
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