



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

*Roche*

August 3, 1989

Docket Nos. 50-327  
and 50-328

Mr. Oliver D. Kingsley, Jr.  
Senior Vice President, Nuclear Power  
Tennessee Valley Authority  
6N 38A Lookout Place  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

Dear Mr. Kingsley:

SUBJECT: AUXILIARY BUILDING GAS TREATMENT SYSTEM (TAC 71616/71617)  
(TS 88-34) - SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

The Commission has issued the enclosed Amendment No. 122 to Facility Operating License No. DPR-77 and Amendment No. 111 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively. These amendments are in response to your application dated December 22, 1988.

The amendments modify the Sequoyah Nuclear Plant, Units 1 and 2, Technical Specifications (TS). The changes remove inappropriate testing requirements associated with the auxiliary building gas treatment system (ABGTS) and add a new requirement on the automatic isolation of the auxiliary building ventilation exhaust. Surveillance requirements for ABGTS activation exist in Section 7, "Plant Systems," and Section 9, "Refueling Operations," of the TS.

The ABGTS test requirement associated with the auxiliary building ventilation monitoring systems (ABVMS) was deleted from Sections 7 and 9. The ABGTS test requirement associated with a phase A containment isolation signal was deleted from Section 9 but remains in Section 7. The ABGTS test requirement associated with the high radiation signal from the spent fuel pool monitors was deleted from Section 7 but remains in Section 9. A new requirement was added to Table 4.3.9 of Specification 3.3.3.10, "Radioactive Gaseous Effluent Monitoring," to demonstrate automatic isolation of the auxiliary building ventilation exhaust any time the ABVMS (radiation monitor) indicates measured levels above the alarm/trip setpoint. This requirement was in Sections 7 and 9 as part of the ABGTS actuation test for a high radiation signal from the ABVMS but was deleted. Also, two typographical errors in the Unit 1 Specification 3.3.3.10 have been corrected.

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A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Original signed by  
B. D. Liaw for

Suzanne Black, Assistant Director  
for Projects  
TVA Projects Division  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 122 to License No. DPR-77
2. Amendment No. 111 to License No. DPR-79
3. Safety Evaluation

cc w/enclosures:  
See next page

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Mr. Oliver D. Kingsley, Jr.

-3-

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

TENNESSEE VALLEY AUTHORITY  
DOCKET NO. 50-327  
SEQUOYAH NUCLEAR PLANT, UNIT 1  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 122  
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 December 22, 1988, 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.

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(2)

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. 122, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



Suzanne Black, Assistant Director  
for Projects  
TVA Projects Division  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 3, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 122

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. Overleaf pages\* are provided to maintain document completeness.

REMOVE

3/4 3-80

3/4 7-20

3/4 9-13

INSERT

3/4 3-80

3/4 7-20

3/4 9-13

TABLE 4.3-9 (Continued)

TABLE NOTATION

- \* At all times.
  - \*\* During waste gas disposal system operation.
  - \*\*\* During shield building exhaust system operation.
  - \*\*\*\* During waste gas releases.
- (1) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm/trip setpoint.
  2. Circuit failure.
  3. Downscale failure.

- (2) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm setpoint.
  2. Circuit failure.
  - 3.- Downscale failure.

For the auxiliary building ventilation system, at least once every 18 months, the CHANNEL FUNCTIONAL TEST shall also demonstrate automatic isolation of this pathway if the following condition exists:

- Instrument indicates measured levels above the alarm/trip setpoint.

- (3) The initial CHANNEL CALIBRATION shall be performed using one or more of the reference standards certified by the National Bureau of Standards or using standards that have been obtained from suppliers that participate in measurement assurance activities with NBS. These standards shall permit calibrating the system over its intended range of energy and measurement range. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration shall be used.
- (4) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:
1. One volume percent hydrogen, balance nitrogen, and
  2. Four volume percent hydrogen, balance nitrogen.
- (5) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:
1. One volume percent oxygen, balance nitrogen, and
  2. Four volume percent oxygen, balance nitrogen.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
- d. At least once per 18 months by:
  - 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 3 inches Water Gauge while operating the filter train at a flow rate of 9000 cfm  $\pm$  10%.
  - 2. Verifying that the filter trains start on a Containment Phase A Isolation test signal.
  - 3. Verifying that the system maintains the spent fuel storage area and the ESF pump rooms at a pressure equal to or more negative than minus 1/4 inch water gage relative the outside atmosphere while maintaining a vacuum relief flow greater than 2000 cfm and a total system flow of 9000 cfm  $\pm$  10%.
  - 4. Verifying that the heaters dissipate  $32 \pm 3.2$  kw when tested in accordance with ANSI N510-1975.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 9000 cfm  $\pm$  10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 9000 cfm  $\pm$  10%.

## REFUELING OPERATIONS

### SURVEILLANCE REQUIREMENTS (Continued)

- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978 meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
- d. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the filter train at a flow rate of 9000 cfm  $\pm 10\%$ .
  2. Verifying that the filter train starts on a high radiation signal from the fuel pool radiation monitoring system.
  3. Verifying that the heaters dissipate  $32 \pm 3.2$  kw when tested in accordance with ANSI N510-1975.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 9000 cfm  $\pm 10\%$ .
- f. After each complete or partial replacement of a charcoal adsorbed bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 9000 cfm  $\pm 10\%$ .



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

TENNESSEE VALLEY AUTHORITY  
DOCKET NO. 50-328  
SEQUOYAH NUCLEAR PLANT, UNIT 2  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 111  
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 December 22, 1988, 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. 111, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Suzanne Black, Assistant Director  
for Projects  
TVA Projects Division  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 3, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 111

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. Overleaf pages\* are provided to maintain document completeness.

REMOVE

3/4 3-82

3/4 7-20

3/4 9-15

INSERT

3/4 3-82

3/4 7-20

3/4 9-15

TABLE 4.3-9 (Continued)

TABLE NOTATION

- \* At all times.
  - \*\* During waste gas disposal system operation.
  - \*\*\* During shield building exhaust system operation.
  - \*\*\*\* During waste gas releases.
- (1) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm/trip setpoint.
  2. Circuit failure.
  3. Downscale failure.
- (2) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm setpoint.
  2. Circuit failure.
  3. Downscale failure.
- For the auxiliary building ventilation system, at least once every 18 months, the CHANNEL FUNCTIONAL TEST shall also demonstrate automatic isolation of this pathway if the following condition exists:
- Instrument indicates measured levels above the alarm/trip setpoint.
- (3) The initial CHANNEL CALIBRATION shall be performed using one or more of the reference standards certified by the National Bureau of Standards or using standards that have been obtained from suppliers that participate in measurement assurance activities with NBS. These standards shall permit calibrating the system over its intended range of energy and measurement range. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration shall be used.
- (4) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:
1. One volume percent hydrogen, balance nitrogen, and
  2. Four volume percent hydrogen, balance nitrogen.
- (5) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:
1. One volume percent oxygen, balance nitrogen, and
  2. Four volume percent oxygen, balance nitrogen.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
- d. At least once per 18 months by:
  - 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 3 inches Water Gauge while operating the filter train at a flow rate of 9000 cfm  $\pm$  10%.
  - 2. Verifying that the filter trains start on a Containment Phase A Isolation test signal.
  - 3. Verifying that the system maintains the spent fuel storage area and the ESF pump rooms at a pressure equal to or more negative than minus 1/4 inch water gauge relative the outside atmosphere while maintaining a vacuum relief flow greater than 2000 cfm and a total system flow of 9000 cfm  $\pm$  10%.
  - 4. Verifying that the heaters dissipate  $32 \pm 3.2$  kw when tested in accordance with ANSI N510-1975.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 9000 cfm  $\pm$  10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 9000 cfm  $\pm$  10%.

## REFUELING OPERATIONS

### SURVEILLANCE REQUIREMENTS (Continued)

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- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
- d. At least once per 18 months by:
  - 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 3 inches Water Gauge while operating the filter train at a flow rate of 9000 cfm  $\pm$  10%.
  - 2. Verifying that the filter train starts on a high radiation signal from the fuel pool radiation monitoring system.
  - 3. Verifying that the heaters dissipate  $32 \pm 3.2$  kw when tested in accordance with ANSI N510-1975.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 9000 cfm  $\pm$  10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 9000 cfm  $\pm$  10%.



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

ENCLOSURE 3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 122 TO FACILITY OPERATING LICENSE NO. DPR-77  
AND AMENDMENT NO. 111 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 December 22, 1988, the Tennessee Valley Authority (the licensee) proposed to modify the Sequoyah Nuclear Plant (SQN), Units 1 and 2, Technical Specifications (TS). The proposed changes are to delete inappropriate surveillance testing requirements associated with the auxiliary building gas treatment system (ABGTS). Surveillance requirements (SR's) for ABGTS actuation exist in Section 7, "Plant Systems," and Section 9, "Refueling Operations." These are SR 4.7.8.d.2 and 4.9.12.d.2, respectively. The ABGTS SR's from Section 7 are applicable during Modes 1, 2, 3, and 4; and the ABGTS SR's from Section 9 are applicable whenever irradiated fuel is in the storage pool.

The ABGTS test requirement associated with the auxiliary building ventilation monitoring system (ABVMS) would be deleted from Sections 7 and 9. The ABGTS test requirements associated with a phase A containment isolation signal would be deleted from Section 9 but would remain in Section 7. The high radiation signal from the spent fuel pool monitors would be deleted from Section 7 but remain in Section 9. A new requirement would be added to Table 4.3.-9 of Specification 3.3.3.10, "Radioactive Gaseous Effluent Monitoring," to demonstrate automatic isolation of the auxiliary building ventilation exhaust any time the ABVMS (radiation monitor) indicates measured radiation levels above the alarm/trip setpoint. Also, two typographical errors in the Unit 1 Specification 3.3.3.10 would be corrected.

2.0 EVALUATION

2.1 System Description

The ABGTS is a fully redundant air cleanup system provided to reduce gaseous radioactive nuclide releases from the auxiliary building secondary containment enclosure (ABSCE) during accidents. It does this by drawing air from the fuel handling areas, waste packaging areas, and emergency core cooling system (ECCS) pump areas, through ducting normally used for ventilation purposes to air cleanup equipment, and then directing this air to the shield building exhaust vent. In doing so, this system draws air from all parts of the auxiliary building to establish a negative pressure region in which virtually no unprocessed air passes from this secondary containment enclosure to the atmosphere.

The auxiliary building ventilation system (ABVS) is described in Sections 9.4.2 and 6.2.3 of the Sequoyah Final Safety Analysis Report (FSAR). This system serves all areas of the auxiliary building including the radwaste areas and the fuel handling areas. It is designed to maintain acceptable environmental conditions for personnel access, for protection of mechanical and electrical equipment and controls, and to limit the release of radioactivity to the environment.

The ABVS supply air is ducted to various clean or accessible areas of the auxiliary building and fuel handling areas where it flows to areas of progressively greater contamination potential before being exhausted through a duct system by the building exhaust fans. The general exhaust from the auxiliary building is provided by four exhaust fans, each rated at 50 percent of the system capacity. These fans discharge into the auxiliary building exhaust vent.

Air utilized to ventilate the fuel handling, waste packaging, and cask shipping areas is exhausted by the fuel handling area exhaust fans. The discharge from these fans is also directed into the auxiliary building exhaust vent.

During periods of high radiation in the auxiliary building exhaust or upon a containment isolation signal, the auxiliary building supply and exhaust fans are automatically stopped. The radiation in the auxiliary building ventilation exhaust is monitored by the ABVMS. Low-leakage dampers located in the ducts, which penetrate the auxiliary building, are closed. An isolation barrier is thus formed between the building and the outdoor environment, and the ABGTS is automatically placed in service.

## 2.2 Plant System

During Modes 1, 2, 3 and 4, surveillance of the ABGTS filter trains is required in SR 4.7.8.d.2 as follows: "ABGTS filter trains shall be demonstrated OPERABLE by verifying, at least once per 18 months, that the filter trains start on a Containment Phase A Isolation test signal; or a high radiation signal from the fuel pool radiation monitoring system or the auxiliary building ventilation monitoring system." The licensee proposes to retain the SR on Containment Phase A Isolation test signal only and delete the SR's on a high radiation signal from the fuel pool radiation monitoring system and the auxiliary building ventilation monitoring system.

In the current TS, both Section 3.7.8 (SR 4.7.8.d.2) and Section 3.9.12 (SR 4.9.12.d.2) address SR's from the spent fuel pool radiation signal (SFPRS). The basis for Section 3.7.8 states that the operability of ABGTS is to ensure that radioactive materials leaking from the emergency core cooling system equipment following a loss-of-coolant accident are filtered prior to reaching the environment. Deletion of SR's on the SFPRS from Section 3.7.8 continues to satisfy this basis because the SR on the SFPRS in Section 3.9.12 remains and would maintain a high degree of reliability of ABGTS actuation. The 18 month test frequency in Section 3.7.8 would be maintained in Section 3.9.12. Under the current TS, an inoperable fuel pool radiation monitor, while in Modes 1, 2, 3 and 4, would require that ABGTS be declared inoperable and could possibly

result in a plant shutdown which is considered by the staff to be inappropriate. The NRC standard technical specifications (STS) for Westinghouse PWR's do not require a plant shutdown for an inoperable ABGTS. Sequoyah is a Westinghouse PWR. Therefore, the staff finds the licensee's proposed change acceptable.

The proposed deletion of the auxiliary building ventilation monitoring system from SR 4.7.8.d.2 and 4.9.12.d.2 was justified for the following reasons. The ABGTS is automatically initiated by four signals: (1) Phase A containment isolation, (2) high radiation in the fuel handling area, (3) high radiation in the auxiliary building exhaust vent and (4) high temperature in the auxiliary building air intakes. Even though the high radiation signal in the auxiliary building vent is one of the signals, it is not assumed in any accident analysis. Its purpose is to ensure that the gaseous effluent release path to the environment is isolated once the vent exhaust radiation monitor reaches the trip setpoint. This isolation ensures that radiation limits for the public in unrestricted areas are maintained in accordance with 10 CFR 20. Upon receipt of their respective signals, the supply and exhaust fans and fuel handling area exhaust fans stop; and dampers in the normal ABVS path isolate the auxiliary building vent. Airflow is then directed by ABGTS to the shield building exhaust vent. Thus, the auxiliary building vent is not a post-accident release path, and the radiation monitor provides no further function following an isolation.

The current ABGTS SR's 4.7.8.d.2 and 4.9.12.d.2 impose inappropriate actions for an inoperable ABVMS. Should the single auxiliary building vent radiation monitor become inoperable, the ABGTS must be declared inoperable and consequently a plant shutdown is required by Specifications 3.0.3. Since similar effluent monitoring technical specifications allow continued reactor operation with vent path sampling, shutdown of the plant due to an inoperable auxiliary building vent radiation monitor is inappropriate.

The staff agrees with the licensee that ABGTS activation upon a high radiation signal from the auxiliary building ventilation monitoring system is not assumed in any accident analysis. The staff also agrees that shutdown of the plant due to an inoperable auxiliary building vent radiation monitor would be inappropriate. The licensee has proposed to add a new requirement to the TS to test this release pathway isolation every 18 months (See Section 2.4) which is consistent with the 18 months in SR's 4.7.8.d.2 and 4.9.12.d.2. Thus, assurance of the capability to prevent radioactive release in excess of 10 CFR Part 20 limits to the environment is maintained. This is consistent with the bases for TS 3.3.3.10. The staff finds the licensee's proposed change acceptable.

### 2.3 Refueling

In TS Section 4.9.12.d.2, the following SR's are required: "ABGTS filter train shall be demonstrated OPERABLE by verifying that the filter trains start on a Containment Phase A Isolation test signal; or a high radiation signal from the fuel pool radiation monitoring system or the auxiliary building ventilation monitoring system." The licensee proposes to delete SR's on the Containment Phase A Isolation test signal and the signal from the auxiliary building ventilation monitoring system.

The reasons for not requiring ABGTS for the radiation signal from the auxiliary building vent were provided above (see Section 2.2). Principally, the high radiation signal in the auxiliary building vent is not a post accident release path.

The reason for deleting the signal response from the Containment Phase A Isolation test signal is as follows: The TS bases 3/4.9.12 states that the limitations on the ABGTS ensure that all the radioactive material released from an irradiated fuel assembly will be filtered through filters and charcoal adsorbers prior to discharge to the atmosphere. Deletion of the Containment Phase A Isolation test signal from SR 4.9.12.d.2 continues to satisfy the bases because TS Section 4.9.12.d.2 retains the SR for a high radiation signal from the fuel pool radiation monitoring system. The SR associated with the Containment Phase A Isolation test signal is retained in SR 4.7.8.d.2 for Modes 1, 2, 3 and 4 primarily to mitigate LOCA's (see Section 2.2). Since the TS Bases are met with the proposed changes, the staff finds the proposed changes acceptable.

#### 2.4 Instrumentation; Radioactive Gaseous Effluent Monitoring

The licensee proposed to add a new requirement to Specification 3.3.3.10, "Radioactive Gaseous Effluent Monitoring," to demonstrate automatic isolation of the auxiliary building ventilation exhaust any time the exhaust radiation monitor indicates measured levels above the alarm/trip setpoint. This requirement is currently performed as part of the ABGTS actuation test from a high radiation signal from the ABVS in SR's 4.7.8.d.2 and 4.9.12.d.2 but would be deleted by the proposed changes to the TS. This is discussed in Section 2.2.

The proposed addition to Table 4.3.-9, is as follows: "For the auxiliary building ventilation system, at least once every 18 months, the CHANNEL FUNCTIONAL TEST shall also demonstrate automatic isolation of this pathway if the following condition exists: Instrument indicates measured levels above the alarm/trip setpoint." The proposed TS change is equivalent to the current requirements in SR's 4.7.8.d.2 and 4.9.12.d.2 for requiring a test of the ABGTS using the ABVMS. The radioactive gaseous effluent monitoring instrumentation for the ABVMS are listed as item "5" of Table 4.3-9. Not meeting the proposed TS (inoperable channels) would lead to grab sample analyses of the effluent whereas not meeting the current TS would result in cold shutdown. The justification for not requiring plant shutdown was presented in Section 2.2. Therefore, the addition of the new requirement is acceptable to the staff.

#### 2.5 Other Proposed Changes

Two typographical errors in the Unit 1 TS 3.3.3.10 would be corrected. The typographical corrections in the TS (Page 3/4 3-80) are strictly administrative and do not alter any intent of the specification. The first correction is made to a misspelled word. The second correction adds partial sentences inadvertently omitted from a table notation. The added words are consistent with the Unit 2 TS 3.3.3.10 and the wording used by the STS. The staff finds the proposed changes acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements.

The staff has determined that the amendments involve 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 these amendments involve no significant hazards consideration and there has been no public comment on such finding. 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 nor environmental assessment need be prepared in connection with the issuance of these amendments.

### 4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (54 FR 6212) on February 8, 1989, and consulted with the State of Tennessee. No public comments were received and the State of Tennessee did not have any comments.

The staff 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendments will not be inimical to the common defense and security nor to the health and safety of the public.

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