Duke Power®
A Duke Energy Company

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February 18, 2004

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Document Control Desk

Subject: Oconee Nuclear Station
Docket Numbers 50-269, 270, and 287
Supplement to License Amendment Request for Full-Scope Implementation of the Alternate Source Term Technical Specification Change (TSC) Number 2001-07

On October 16, 2001, Duke Energy (Duke) submitted the license amendment request (LAR) for full-scope implementation of the Alternate Source Term (AST). This LAR requested approval of the AST analysis methodology for Oconee Nuclear Station (ONS) that will support simplification of Ventilation System testing requirements during core alterations or movement of irradiated fuel. Duke received additional questions from the Nuclear Regulatory Commission (NRC) related to the AST LAR. Supplements to the LAR were submitted on May 20, 2002, September 12, 2002, November 21, 2002, September 22, 2003, and November 20, 2003.

In the submittal dated November 20, 2003, Duke removed Penetration Room Ventilation System (PRVS) from the technical specifications (TS) and adopted TSTF-51 for Spent Fuel Pool Ventilation System (SFPVS) with the exception of the surveillance requirement to run the SFPVS trains. In a conference call with the NRC on February 3, 2004, additional justification to support the SFPVS changes was requested.

A001

Attachment 1 contains a re-typed copy of the TS.
Attachment 2 contains the marked-up copies of the TS.
Attachment 3 contains justification for the changes requested.

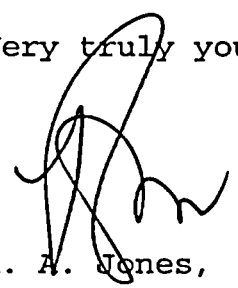
Duke has committed to the following three modifications as a part of the AST LAR: a dual air intake system to the Control Room; a modification to limit Emergency Core Cooling System leakage during post Loss-of-Coolant-Accident Recirculation; and a passive caustic addition system. These modifications will be completed on all three units by the end of 2005.

TS 3.7.9 will be implemented upon approval of the LAR to facilitate completion of the control room dual air intake modification. TS 3.3.16, TS 3.7.16, TS 3.7.17, TS 3.8.2, TS 3.8.4, TS 3.8.7, TS 3.8.9, TS 3.9.3, TS 3.9.6 and the sections in TS 5.5.12 pertaining to Control Room Ventilation System (CRVS) and SFPVS, will be implemented after the dual air intake system to the control room modification is completed. TS 3.3.5, TS 3.3.6, TS 3.3.7, TS 3.7.10, TS 5.5.2 and the sections in TS 5.5.12 pertaining to Penetration Room Ventilation System (PRVS) will be implemented after completion of all three modifications described above.

Pursuant to 10 CFR 50.91, a copy of this proposed license amendment is being sent to the State of South Carolina.

If there are any questions regarding this submittal, please contact Reene' Gambrell at (864) 885-3364.

Very truly yours,



R. A. Jones, Vice President
Oconee Nuclear Site

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Senior Resident Inspector
Oconee Nuclear Station

Mr. Henry Porter, Director
Division of Radioactive Waste Management
Bureau of Land and Waste Management
Department of Health & Environmental Control
2600 Bull Street
Columbia, SC 29201

R. A. Jones, being duly sworn, states that he is Vice President, Oconee Nuclear Site, Duke Energy Corporation, that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this revision to the Renewed Facility Operating License Nos. DPR-38, DPR-47, DPR-55; and that all the statements and matters set forth herein are true and correct to the best of his knowledge.

R. A. Jones, Vice President
Oconee Nuclear Site

Subscribed and sworn to before me this 18 day of February, 2004

Connie M. Greagale
Notary Public

My Commission Expires:

12/19/2012

ATTACHMENT 1
Duke Energy Corporation
Retype of Technical Specifications

REMOVE PAGE	INSERT PAGE
3.7.17-1	3.7.17-1
3.7.17-2	3.7.17-2
5.0-20	5.0-20
5.0-21	5.0-21
B 3.7.17-3	B 3.7.17-3

3.7 PLANT SYSTEMS

3.7.17 Spent Fuel Pool Ventilation System (SFPVS)

LCO 3.7.17 Two SFPVS trains shall be OPERABLE.

APPLICABILITY: During movement of recently irradiated fuel assemblies in the spent fuel pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One SFPVS train inoperable.	A.1 Place OPERABLE SFPVS train in operation. OR A.2 Suspend movement of recently irradiated fuel assemblies in the spent fuel pool.	Immediately Immediately
B. Two SFPVS trains inoperable.	B.1 Suspend movement of recently irradiated fuel assemblies in the spent fuel pool.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.17.1	Operate each SFPVS train for ≥ 15 minutes.	Within 31 days prior to movement of recently irradiated fuel assemblies
SR 3.7.17.2	Perform required SFPVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP

5.5 Programs and Manuals (continued)

5.5.11 Secondary Water Chemistry

This program provides controls for monitoring secondary water chemistry to inhibit SG tube degradation. The program shall include:

a. Identification of a sampling schedule for the critical variables and control points for these variables;

b. Identification of the procedures used to measure the values of the critical variables;

c. Identification of process sampling points;

d. Procedures for the recording and management of data;

e. Procedures defining corrective actions for all off control point chemistry conditions; and

f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.

5.5.12 Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of filter ventilation systems at the frequencies specified in Regulatory Guide 1.52, Revision 2.

The VFTP is applicable to the Control Room Ventilation System (CRVS) Booster Fan Trains and the Spent Fuel Pool Ventilation System (SFPVS).

a. Demonstrate, for the CRVS Booster Fan Trains, that a DOP test of the HEPA filters shows ≥ 99.5% removal when tested in accordance with ANSI N510-1975 at the system design flow rate ± 10%.

b. Demonstrate, for the CRVS Booster Fan Trains, that a halogenated hydrocarbon test of the carbon adsorber shows ≥ 99% removal when tested in accordance with ANSI N510-1975 at the system design flow rate ± 10%.

5.5 Programs and Manuals

5.5.12 Ventilation Filter Testing Program (VFTP) (continued)

c. Demonstrate, for the CRVS Booster Fan Trains and SFPVS, that a laboratory test of a sample of the carbon adsorber shows ≥ 97.5% and 90% radioactive methyl iodide removal when tested in accordance with ASTM D3803-1989 (30°C, 95% RH), respectively.

d. Demonstrate, for the CRVS Booster Fan Trains, that the pressure drop across the pre-filter is ≤ 1 in. of water and the pressure drop across the HEPA filters is ≤ 2 in. of water at the system design flow rate ± 10%.

e. Demonstrate, for the SFPVS, that a dioctyl phthalate (DOP) test of the high efficiency particulate air (HEPA) filters shows ≥ 99% removal when tested in accordance with ANSI N510-1975 at the system design flow rate ± 10%.

f. Demonstrate, for the SFPVS, that a halogenated hydrocarbon test of the carbon adsorber shows ≥ 99% removal when tested in accordance with ANSI N510-1975 at the system design flow rate ± 10%.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

5.5.13 Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the waste gas holdup tanks and the quantity of radioactivity contained in waste gas holdup tanks, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks. The gaseous radioactivity quantities shall be determined. The liquid radwaste quantities shall be determined by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

BASES

ACTIONS (continued)

B.1

When two trains of the SFPVS are inoperable during movement of recently irradiated fuel in the spent fuel pool, the unit must be placed in a condition in which the LCO does not apply. This Action involves immediately suspending movement of recently irradiated fuel assemblies in the spent fuel pool. This does not preclude the movement of recently irradiated fuel to a safe position.

SURVEILLANCE REQUIREMENTS

SR 3.7.17.1

Standby systems should be checked periodically to ensure that they function properly. As the environment and normal operating conditions on this system are not severe, testing each train within 31 days prior to moving recently irradiated fuel assemblies provides an adequate check on this system. The system is no longer credited in dose analysis calculations and is not required to maintain 10 CFR 50.67 dose limits, but is required for ALARA purposes.

SR 3.7.17.2

This SR verifies that the required SFPVS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

REFERENCES

1. UFSAR, Section 9.4.2.
2. UFSAR, Section 15.11.
3. Regulatory Guide 1.183.
4. 10 CFR 50.67.
5. Dose Calculations.

ATTACHMENT 2

Duke Energy Corporation
Mark-up of Technical Specifications

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Two SFPVS trains inoperable.	B.1.1 Suspend movement of ~~irradiated~~ recently irradiated fuel assemblies in the spent fuel pool. ~~AND~~ ~~B.1.2 Suspend crane operations with loads over the spent fuel pool.~~	Immediately ~~Immediately~~

SURVEILLANCE REQUIREMENTS

Within 31 days prior to movement of recently irradiated fuel assemblies

SURVEILLANCE		FREQUENCY
SR 3.7.17.1	Operate each SFPVS train for ≥ 15 minutes.	~~6 months~~ ~~31 days~~
SR 3.7.17.2	Perform required SFPVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP

5.5 Programs and Manuals (continued)

5.5.11 Secondary Water Chemistry

This program provides controls for monitoring secondary water chemistry to inhibit SG tube degradation. The program shall include:

a. Identification of a sampling schedule for the critical variables and control points for these variables;

b. Identification of the procedures used to measure the values of the critical variables;

c. Identification of process sampling points;

d. Procedures for the recording and management of data;

e. Procedures defining corrective actions for all off control point chemistry conditions; and

f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.

5.5.12 ~~Ventilation Filter Testing Program (VFTP)~~

A program shall be established to implement the following required testing of filter ventilation systems at the frequencies specified in Regulatory Guide 1.52, Revision 2. ~~Filter testing will be conducted~~

The VFTP is applicable to the ~~Penetration Room Ventilation System (PRVS), the~~ Control Room Ventilation System (CRVS) Booster Fan Trains, and the Spent Fuel Pool Ventilation System (SFPVS).

~~a. Demonstrate, for the PRVS, that a dioctyl phthalate (DOP) test of the high efficiency particulate air (HEPA) filters shows ≥ 99% removal when tested in accordance with ANSI N510-1975 at the system design flow rate ± 10%.~~

a. Demonstrate, for the CRVS Booster Fan Trains, that a DOP test of the HEPA filters shows ≥ 99.5% removal when tested in accordance with ANSI N510-1975 at the system design flow rate ± 10%.

~~b. Demonstrate, for the PRVS, that a halogenated hydrocarbon test of the carbon adsorber shows ≥ 99% removal when tested in accordance with ANSI N510-1975 at the system design flow rate ± 10%.~~

5.5 Programs and Manuals

5.5.12 Ventilation Filter Testing Program (VFTP) (continued)

b ~~d~~. Demonstrate, for the CRVS Booster Fan Trains, that a halogenated hydrocarbon test of the carbon adsorber shows ≥ 99% removal when tested at in accordance with ANSI N510-1975 at the system design flow rate ± 10%.

c ~~d~~. Demonstrate, for the CRVS ~~Booster Fan Trains, PRVS~~ and SFPVS, that a laboratory test of a sample of the carbon adsorber shows ≥ ~~90%~~ 95% and ~~90%~~ 90% radioactive methyl iodide removal when tested in accordance with ASTM D3803-1989 (30°C, 95% RH), respectively

Delete → ~~f. Demonstrate, for the PRVS, that the pressure drop across the combined HEPA filters and carbon adsorber banks is < 6 in. of water at the system design flow rate ± 10%.~~ Removed

d ~~d~~. Demonstrate, for the CRVS Booster Fan Trains, that the pressure drop across the pre-filter is ≤ 1 in. of water and the pressure drop across the HEPA filters is ≤ 2 in. of water at the system design flow rate ± 10%.

e ~~f~~. Demonstrate, for the SFPVS, that a dioctyl phthalate (DOP) test of the high efficiency particulate air (HEPA) filters shows ≥ ~~99%~~ 99% removal when tested in accordance with ANSI N510-1975 at the system design flow rate ± ~~10~~ 10%.

f ~~f~~. Demonstrate, for the SFPVS, that a halogenated hydrocarbon test of the carbon adsorber shows ≥ ~~99%~~ 99% removal when tested in accordance with ANSI N510-1975 at the system design flow rate ± ~~10~~ 10%.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

5.5.13 Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the waste gas holdup tanks and the quantity of radioactivity contained in waste gas holdup tanks, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks. The gaseous radioactivity quantities shall be determined. The liquid radwaste quantities shall be determined by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

BASES

ACTIONS (continued)

B.1

When two trains of the SFPVS are inoperable during movement of fuel in the spent ~~fuel pool, the unit must~~ be placed ~~in a condition in which the~~ LCO ~~does~~ not apply. This Action involves immediately suspending movement of fuel assemblies in the spent fuel pool ~~and suspension of crane operations with loads over the spent fuel pool~~. This does not preclude the movement of fuel ~~or crane loads~~ to a ~~safe~~ position.

SURVEILLANCE REQUIREMENTS

SR 3.7.17.1

Standby systems should be checked periodically to ensure that they function properly. As the environment and normal operating conditions on this system are not severe, testing each train ~~once every 31 months~~ provides an adequate check on this system. ~~Systems without heaters need only be operated through the associated reactor building purge filters at a design flow ± 10% for ≥ 15 minutes to demonstrate the function of the system. The 31 day Frequency is based on the known reliability of the equipment and the two train redundancy.~~

Within 31 days prior to moving recently irradiated fuel assemblies and

The system is no longer credited in dose analysis calculations and is not required to maintain 10 CFR 50.67 dose limits, but is required for ALARA purposes.

SR 3.7.17.2

This SR verifies that the required SFPVS testing is performed in accordance with ~~the~~ Ventilation Filter Testing ~~Program~~ (VFTP). The VFTP ~~includes~~ testing HEPA ~~filter performance~~, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

REFERENCES

1. UFSAR, Section 9.4.2.
2. UFSAR, Section 15.11.
3. Regulatory Guide 1.~~25~~ 183.
4. 10 CFR 50.67.
5. Dose Calculations.

ATTACHMENT 3
TECHNICAL JUSTIFICATION

ATTACHMENT 3
TECHNICAL JUSTIFICATION

BACKGROUND:

On October 16, 2001, the license amendment request (LAR) for approval of the Alternate Source Term (AST) analysis methodology for Oconee Nuclear Station (ONS) was submitted. This license amendment will support simplification of Ventilation System testing requirements during core alterations or movement of irradiated fuel. Duke Energy Corporation (Duke) received additional questions from the NRC related to the AST submittal. Responses to these questions were submitted on May 20, 2002, September 12, 2002, November 21, 2002, September 22, 2003, and November 20, 2003.

In the submittal dated November 20, 2003, Duke removed Penetration Room Ventilation System (PRVS) from the technical specifications (TS) and adopted TSTF-51 for Spent Fuel Pool Ventilation System (SFPVS) with the exception of the surveillance requirement to run the SFPVS trains. In a conference call with the NRC on February 3, 2004, additional justification to support the SFPVS changes was requested.

JUSTIFICATION FOR REQUEST:

The submitted dose analysis does not credit removal of radiological contaminants by the PRVS subsequent to a Loss Of Coolant Accident (LOCA) or Fuel Handling Accident (FHA) inside containment, or by the SFPVS in the spent fuel pool building. Because the analysis no longer credits the SFPVS, it no longer meets the criterion for inclusion in TS as defined in 10 CFR 50.36. As a result of conversations with the NRC, Duke will retain and relax certain surveillance requirements for SFPVS TS. Retaining the TS for SFPVS is for ALARA purposes.

Description of Changes and Justification:

TS 3.7.17, Spent Fuel Pool Ventilation System (SFPVS)

Deleting note 1 - The TS is only applicable during movement of recently irradiated fuel which is a 72 hour period following reactor shutdown. During this time period, fuel cannot be physically moved. These actions are controlled by

a selected licensee commitment (SLC). The note is being deleted because in the short time it is applicable, it doesn't serve a function since there are no required actions as a result of entry into 3.0.3.

Deleting note 2 - The TS is only applicable during movement of recently irradiated fuel which is a 72 hour period following reactor shutdown. During this time period, fuel cannot be physically moved. These actions are controlled by a SLC. The note is being deleted because in the short time it is applicable, it doesn't serve a function.

The APPLICABILILITY of 'During crane operations with loads over the spent fuel pool' is being deleted. This is acceptable because the revised fuel handling analysis does not take credit for SFPVS in the event of a Spent Fuel Pool building accident. The analysis can be referenced in the submittal dated October 16, 2001, Attachment 3. For the 72 hour time period following reactor shutdown in which the TS is applicable, fuel cannot be physically moved and is controlled by SLC.

The logical connectors AND for REQUIRED ACTIONS A.2.2 and B.1.2, REQUIRED ACTION (RA) A.2.2, RA B.1.2 and their associated COMPLETION TIMES are being deleted. This is acceptable because the revised fuel handling analysis does not take credit for SFPVS in the event of an Spent Fuel Pool building accident. The analysis can be referenced in the submittal dated October 16, 2001, Attachment 3. For the 72 hour time period following reactor shutdown in which the TS is applicable, fuel cannot be physically moved and is controlled by SLC.

The Completion Time for SR 3.7.17.1 is being revised from 31 days to within 31 days prior to movement of recently irradiated fuel assemblies. Because the analysis no longer credit SFPVS, the SR can be relaxed as long as the fans are proven OPERABLE prior to moving recently irradiated fuel.

TS 5.5.12 Ventilation Filter Testing Program (VFTP)

The testing requirements for the SFPVS are being returned to the original approved values.

TSB 3.7.17, SFPVS

The 'LCO' is being revised to delete the NOTES in their entirety. The justification is provided above in description of changes for TS.

The 'APPLICABILITY' is being revised to delete information related to crane operations with loads over the spent fuel pool. The justification is provided above in description of changes for TS.

Action A.1 and A.2 will be revised to delete reference to crane operations with loads over the spent fuel pool. The justification is provided above in description of changes for TS.

Action B.1 will be revised to reflect to delete reference to crane operations with loads over the spent fuel pool. The justification is provided in description of changes for TS.

The Completion Time for SR 3.7.17.1 was revised from 31 days to within 31 days prior to movement of recently irradiated fuel. This will ensure the system is OPERABLE prior to movement of recently irradiated fuel. Since, the system is no longer credited in dose analysis calculations and is not required to maintain 10 CFR 50.67 dose limits for fuel that has not been recently irradiated, a relaxed testing frequency is acceptable.