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50-425

NL-05-1487

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555-0001

**Vogtle Electric Generating Plant  
Request to Revise Technical Specifications  
Increased Flexibility in Mode Restraints  
Auxiliary Feedwater (AFW) System**

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.90, Southern Nuclear Operating Company (SNC) proposes to revise the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications (TS). The proposed change would revise the ACTIONS NOTE for TS 3.7.5, "Auxiliary Feedwater (AFW) System." The ACTIONS NOTE was inadvertently applied incorrectly during the original submittal for TSTF-359, Revision 9, "Increased Flexibility in Mode Restraints," (NL-04-0548) on October 26, 2004. The availability of this TS improvement was announced in the Federal Register on April 4, 2003 (68 FR 16579) as part of the Consolidated Line Item Improvement Process (CLIP).

The proposed change and the basis are described in Enclosure 1. The significant hazards evaluation and environmental assessment are in Enclosure 2. Marked-up TS and Bases pages are provided in Enclosure 3 and clean-typed pages are provided in Enclosure 4.

SNC requests approval of the proposed change by December 2006, with the amendment being implemented within 90 days.

(Affirmation and signature provided on following page.)

Mr. D. E. Grissette states he is a Vice President of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and to the best of his knowledge and belief, the facts set forth in this letter are true.

This letter contains no NRC commitments. If you have any questions, please advise.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



Don E. Grissette

Sworn to and subscribed before me this 16<sup>th</sup> day of December, 2005.

  
Notary Public

My commission expires: 11/10/06

DEG/DRG/daj

Enclosure 1: Basis for Proposed Change

Enclosure 2: 10 CFR 50.92 Significant Hazards Evaluation and Environmental Assessment

Enclosure 3: Marked-up TS and Bases Pages

Enclosure 4: Clean-typed TS and Bases Pages

cc: Southern Nuclear Operating Company  
Mr. J. T. Gasser, Executive Vice President  
Mr. T. E. Tynan, General Manager – Plant Vogtle  
RType: CVC7000

U. S. Nuclear Regulatory Commission  
Dr. W. D. Travers, Regional Administrator  
Mr. C. Gratton, NRR Project Manager – Vogtle  
Mr. G. J. McCoy, Senior Resident Inspector – Vogtle

State of Georgia  
Mr. L. C. Barrett, Commissioner – Department of Natural Resources



**Enclosure 1**

**Vogtle Electric Generating Plant  
Request to Revise Technical Specifications  
Increased Flexibility in Mode Restraints  
Auxiliary Feedwater (AFW) System**

**Basis for Proposed Change**

## Enclosure 1

### Vogtle Electric Generating Plant Request to Revise Technical Specifications Increased Flexibility in Mode Restraints Auxiliary Feedwater (AFW) System

#### Basis for Proposed Change

#### **DESCRIPTION**

The proposed amendment would modify the ACTIONS NOTE for Technical Specifications (TS) 3.7.5, "Auxiliary Feedwater (AFW) System." The ACTIONS NOTE in LCO 3.7.5 states that LCO 3.0.4b is not applicable when entering MODE 1. However, this is only applicable to plants that do not use AFW for startup. During the preparation of the original submittal for TSTF-359, this note was inadvertently applied incorrectly. Since Vogtle uses AFW for startup, the note should be revised to state that LCO 3.0.4b is not applicable.

#### **PROPOSED CHANGE**

Southern Nuclear Operating Company (SNC) proposes to revise the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications (TS). The proposed change would revise the ACTIONS NOTE for TS 3.7.5, "Auxiliary Feedwater (AFW) System." The proposed change is based on Industry/TSTF Standard Technical Specification Change Traveler TSTF-359, Revision 9, "Increased Flexibility in Mode Restraints." The following is a description of the proposed change.

TS 3.7.5, "Auxiliary Feedwater System," the ACTIONS NOTE is revised to state "LCO 3.0.4b is not applicable."

#### **BACKGROUND**

TSTF-359, Revision 9 approved a revision to LCO 3.0.4 to allow entry into a MODE or other specified condition in the Applicability (MOSCA) while relying on the associated ACTIONS, provided that (a) the ACTIONS to be entered permit continued operation in the MOSCA for an unlimited period of time, or (b) there is a risk assessment performed which justifies the use of LCO 3.0.4 for a MOSCA change, or (c) an NRC-approved allowance is provided in the Specification to be entered. By letter dated October 26, 2004, Southern Nuclear Operating Company proposed license amendments to change the Technical Specifications (TS) for the Vogtle Electric Generating Plant (VEGP), Units 1 and 2. Amendments 137 and 116 approved the modification of the TS requirements to adopt the provisions of TSTF-359.

One of the risk significant systems that were excluded from the provision of LCO 3.0.4b is the AFW system. During the preparation of the original submittal, a NOTE was added to LCO 3.7.5 which states LCO 3.0.4b is not applicable when entering MODE 1. However, this note is only applicable to plants that do not use AFW for startup. Since VEGP uses AFW for startup, the NOTE should have stated LCO 3.0.4b is not applicable. Rather than allow use of LCO 3.0.4b for entry into MODE 3 from MODE 4 or MODE 2 from MODE 3, the correct NOTE should preclude use of LCO 3.0.4b. Therefore, TSTF-359 was incorrectly applied to the NOTE for LCO 3.7.5. Prior to the implementation of

## Enclosure 1

### Vogle Electric Generating Plant Request to Revise Technical Specifications Increased Flexibility in Mode Restraints Auxiliary Feedwater (AFW) System

#### Basis for Proposed Change

this license amendment, this error was discovered. Currently, there are administrative controls which will prohibit inappropriate MODE changes for LCO 3.7.5, Auxiliary Feedwater System. The implementation procedures for the AFW system are correct and prohibit the use of LCO 3.0.4b for LCO 3.7.5.

#### **TECHNICAL ANALYSES**

Amendment 137/116 approved changes for TS requirements for mode change limitations in LCO 3.0.4 and Surveillance Requirement (SR) 3.0.4 to adopt provisions of Industry/TS Task Force (TSTF) change TSTF-359, "Increased Flexibility in Mode Restraints." The availability of TSTF-359 for adoption by licensees was announced in the Federal Register on April 4, 2003 (68 FR 16579) as part of the Consolidated Line Item Improvement Process (CLIP).

The LCO 3.0.4b allowances apply to systems and components, and require a risk assessment prior to use to ensure an acceptable level of safety is maintained. The Auxiliary Feedwater system is one of the risk significant systems that is excluded from the new LCO 3.0.4b. Therefore, a NOTE was added to LCO 3.7.5 which states LCO 3.0.4b is not applicable for entry into MODE 1. However, this NOTE is only applicable to plants that do not use AFW for startup. Therefore, during the initial preparation of the TSTF-359 submittal, the reviewer's note of TSTF-359 for LCO 3.7.5 was not appropriately implemented. This led to an incorrect application of TSTF-359 for LCO 3.7.5. Since VEGP uses AFW for startup, the NOTE should have stated LCO 3.0.4b is not applicable. This correct NOTE would preclude use of LCO 3.0.4b for the Auxiliary Feedwater System, LCO 3.7.5. This is consistent with Attachment 4, WOG Qualitative Risk Assessment Supporting Increased Flexibility in MODE Restraints, of TSTF-359 Revision 9.

This error was discovered prior to the implementation of Amendments 137/116. Therefore, VEGP has implemented guidelines which correctly implement the reviewer's note in TSTF-359 for LCO 3.7.5. These administrative controls prohibit inappropriate MODE changes while in LCO 3.7.5 and ensure the correct application of LCO 3.0.4b for the Auxiliary Feedwater System.

**Enclosure 2**

**Vogtle Electric Generating Plant  
Request to Revise Technical Specifications  
Increased Flexibility in Mode Restraints  
Auxiliary Feedwater (AFW) System**

**10 CFR 50.92 Significant Hazards Evaluation  
and Environmental Assessment**

## Enclosure 2

Vogtle Electric Generating Plant  
Request to Revise Technical Specifications  
Increased Flexibility in Mode Restraints  
Auxiliary Feedwater (AFW) System

10 CFR 50.92 SIGNIFICANT HAZARDS EVALUATION  
AND ENVIRONMENTAL ASSESSMENT

Southern Nuclear Operating Company (SNC) proposes to revise the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications (TS). The proposed amendment would modify Technical Specification (TS) Limiting Condition for Operation (LCO) 3.7.5. The proposed amendment will correct the ACTIONS NOTE in LCO 3.7.5. The following is a description of the proposed change.

- LCO 3.7.5, "Auxiliary Feedwater (AFW) System," the ACTIONS NOTE is revised to state LCO 3.0.4b is not applicable.

### Evaluation

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

No. The proposed change does not adversely affect accident initiators or precursors nor alter the design assumptions, conditions, or configuration of the facility or the manner in which the plant is operated and maintained. The proposed change does not alter or prevent the ability of structures, systems, and components (SSCs) from performing their intended function to mitigate the consequences of an initiating event within the assumed acceptance limits. The proposed change does not affect the source term, containment isolation, or radiological release assumptions used in evaluating the radiological consequences of an accident previously evaluated. Further, the proposed change does not increase the types or amounts of radioactive effluent that may be released offsite, nor significantly increase individual or cumulative occupational/public radiation exposures. The proposed change is consistent with safety analysis assumptions and resultant consequences.

Therefore, the proposed change does not increase the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any previously evaluated?

No. The proposed change does not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. In addition, the change does not impose any new or different requirements or eliminate any existing requirements. The change does not alter assumptions made in the safety analysis. The proposed change is consistent with the safety analysis assumptions and current plant operating practice.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

Enclosure 2

Vogle Electric Generating Plant  
Request to Revise Technical Specifications  
Increased Flexibility in Mode Restraints  
Auxiliary Feedwater (AFW) System

10 CFR 50.92 SIGNIFICANT HAZARDS EVALUATION  
AND ENVIRONMENTAL ASSESSMENT

3. Does the proposed change involve a significant reduction in a margin of safety?

No. The proposed change does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis acceptance criteria are not impacted by this change. The proposed change will not result in plant operation in a configuration outside the design basis.

Therefore, the proposed change does not involve a significant reduction in the margin of safety.

Conclusion

Based on the preceding evaluation, Southern Nuclear has determined that the proposed change meets the requirements of 10 CFR 50.92(c) and does not involve a significant hazards consideration.

Environmental Assessment

Southern Nuclear has evaluated the proposed change and determined the change does not involve (1) a significant hazards consideration, (2) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (3) a significant increase in the individual or cumulative occupational exposure. Accordingly, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9), and an environmental assessment of the proposed change is not required.



**Enclosure 3**

**Vogtle Electric Generating Plant  
Request to Revise Technical Specifications  
Increased Flexibility in Mode Restraints  
Auxiliary Feedwater (AFW) System**

**Marked-up TS and Bases Pages**

3.7 PLANT SYSTEMS

3.7.5 Auxiliary Feedwater (AFW) System

LCO 3.7.5 Three AFW trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

NOTE

LCO 3.0.4b is not applicable when entering MODE 1.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One steam supply to turbine driven AFW pump inoperable.	A.1 Restore steam supply to OPERABLE status.	7 days <u>AND</u> 10 days from discovery of failure to meet the LCO
B. One AFW train inoperable for reasons other than Condition A.	B.1 Restore AFW train to OPERABLE status.	72 hours <u>AND</u> 10 days from discovery of failure to meet the LCO

(continued)

**BASES**

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**APPLICABILITY**  
(continued)                      In MODE 5 or 6, the steam generators are not normally used for heat removal, and the AFW System is not required.

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**ACTIONS**                      A Note prohibits the application of LCO 3.0.4b to an inoperable AFW train when entering ~~MODE 1~~. There is an increased risk associated with entering ~~MODE 1~~ with an AFW train inoperable and the provisions of LCO 3.0.4b, which allow entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, should not be applied in this circumstance.

**A.1**

If one of the two steam supplies to the turbine driven AFW train is inoperable, action must be taken to restore OPERABLE status within 7 days. The 7 day Completion Time is reasonable, based on the following reasons:

- a. The redundant OPERABLE steam supply to the turbine driven AFW pump;
- b. The availability of redundant OPERABLE motor driven AFW pumps; and
- c. The low probability of an event occurring that requires the inoperable steam supply to the turbine driven AFW pump.

The second Completion Time for Required Action A.1 establishes a limit on the maximum time allowed for any combination of Conditions to be inoperable during any continuous failure to meet this LCO.

The 10 day Completion Time provides a limitation time allowed in this specified Condition after discovery of failure to meet the LCO. This limit is considered reasonable for situations in which Conditions A and B are entered concurrently. The AND connector between 7 days and 10 days dictates that both Completion Times apply simultaneously, and the more restrictive must be met.

**B.1**

With one of the required AFW trains (pump or flow path) inoperable for reasons other than Condition A, action must be taken to restore OPERABLE status within 72 hours. This

(continued)

**Enclosure 4**

**Vogtle Electric Generating Plant  
Request to Revise Technical Specifications  
Increased Flexibility in Mode Restraints  
Auxiliary Feedwater (AFW) System**

**Clean-typed TS and Bases Pages**

**3.7 PLANT SYSTEMS**

**3.7.5 Auxiliary Feedwater (AFW) System**

**LCO 3.7.5** Three AFW trains shall be OPERABLE.

**APPLICABILITY:** MODES 1, 2, and 3.

**ACTIONS**

~~NOTE~~

LCO 3.0.4b is not applicable.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One steam supply to turbine driven AFW pump inoperable.	A.1 Restore steam supply to OPERABLE status.	7 days <u>AND</u> 10 days from discovery of failure to meet the LCO
B. One AFW train inoperable for reasons other than Condition A.	B.1 Restore AFW train to OPERABLE status.	72 hours <u>AND</u> 10 days from discovery of failure to meet the LCO

(continued)

**BASES**

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**APPLICABILITY  
(continued)**

In MODE 5 or 6, the steam generators are not normally used for heat removal, and the AFW System is not required.

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**ACTIONS**

A Note prohibits the application of LCO 3.0.4b to an inoperable AFW train. There is an increased risk associated with an AFW train inoperable and the provisions of LCO 3.0.4b, which allow entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, should not be applied in this circumstance.

**A.1**

If one of the two steam supplies to the turbine driven AFW train is inoperable, action must be taken to restore OPERABLE status within 7 days. The 7 day Completion Time is reasonable, based on the following reasons:

- a. The redundant OPERABLE steam supply to the turbine driven AFW pump;
- b. The availability of redundant OPERABLE motor driven AFW pumps; and
- c. The low probability of an event occurring that requires the inoperable steam supply to the turbine driven AFW pump.

The second Completion Time for Required Action A.1 establishes a limit on the maximum time allowed for any combination of Conditions to be Inoperable during any continuous failure to meet this LCO.

The 10 day Completion Time provides a limitation time allowed in this specified Condition after discovery of failure to meet the LCO. This limit is considered reasonable for situations in which Conditions A and B are entered concurrently. The AND connector between 7 days and 10 days dictates that both Completion Times apply simultaneously, and the more restrictive must be met.

**B.1**

With one of the required AFW trains (pump or flow path) inoperable for reasons other than Condition A, action must be taken to restore OPERABLE status within 72 hours. This

(continued)