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SVP, Nuclear Operations  
Nuclear Generation

February 27, 2009

U. S. Nuclear Regulatory Commission  
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Washington, DC 20555-0001

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Subject: Duke Energy Carolinas, LLC (Duke)  
Oconee Nuclear Station, Units 1, 2, and 3  
Docket Nos. 50-269, 50-270, 50-287  
McGuire Nuclear Station, Units 1 and 2  
Docket Nos. 50-369, 50-370  
Catawba Nuclear Station, Units 1 and 2  
Docket Nos. 50-413, 50-414

License Amendment Request for Adoption of TSTF-511, Rev.0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR PART 26"

In accordance with the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (10CFR), Duke is submitting a request for an amendment to the Technical Specifications (TS) for Oconee Nuclear Station, Units 1, 2, and 3; McGuire Nuclear Station, Units 1 and 2; and Catawba Nuclear Station, Units 1 and 2.

The proposed amendment would delete those portions of TS superseded by 10 CFR Part 26, Subpart I. This change is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-511, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26." The availability of this TS improvement was announced in the Federal Register on December 30, 2008 (73 FR 79923) as part of the consolidated line item improvement process (CLIIP).

Duke is requesting NRC approval of the following for all three sites:

1. An interim TS 5.2.2.e that will be in effect until midnight on September 30, 2009.
2. A TS that deletes the requirement of TS 5.2.2.e and becomes effective on October 1, 2009

This is a minor difference from TSTF-511 and does not adversely affect the NRC staff's model.

Attachment 1 provides an evaluation of the proposed change. Attachment 2 provides the existing TS pages marked up to show the proposed change. Attachment 3 provides the proposed TS changes in final typed format. Attachment 4 provides the regulatory commitments.

Duke requests approval of the proposed license amendment by September 1, 2009, to support implementation of TS changes concurrent with implementation of the new 10 CFR 26, Subpart I requirements by October 1, 2009.

This letter contains regulatory commitments as described in Attachment 4.

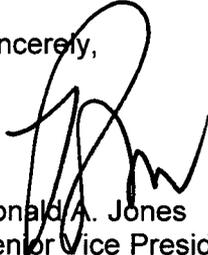
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In accordance with 10 CFR 50.91, a copy of this proposed amendment is being provided to the appropriate officials of the States of North Carolina and South Carolina.

If there are any questions please contact R. L. Gill at 704-382-3339.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ronald A. Jones', is written over the word 'Sincerely,'.

Ronald A. Jones  
Senior Vice President, Nuclear Operations

Attachments:

1. Evaluation of Proposed Change
2. Proposed Technical Specification Change (Mark-Up)
3. Proposed Technical Specification Change (Re-Typed)
4. List of Regulatory Commitments

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xc:

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G. A. Hutto, NRC Senior Resident Inspector  
Oconee Nuclear Station

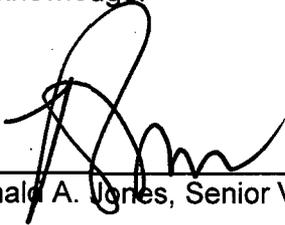
J. B. Brady, NRC Senior Resident Inspector  
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A. T. Sabisch, NRC Senior Resident Inspector  
Catawba Nuclear Station

S. E. Jenkins, Section Manager  
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B. O. Hall, Section Chief  
Division of Environmental Health, Radiation Protection Section  
North Carolina Department of Environment and Natural Resources  
1645 Mail Service Center  
Raleigh, NC 27699

Ronald A. Jones affirms that he is the person who subscribed his name to the foregoing statement, and that all the matters and facts set forth herein are true and correct to the best of his knowledge.

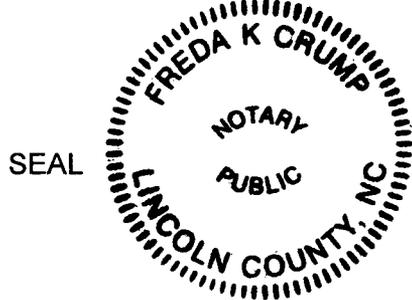


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Ronald A. Jones, Senior Vice President, Nuclear Operations

Subscribed and sworn to me: February 27, 2009  
Date

Freda K. Crump  
Notary Public

My Commission Expires: August 17, 2011  
Date



# **Attachment 1**

## **Evaluation of Proposed Change**

**License Amendment Request for Adoption of TSTF-511, Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26"**

- 1.0 Description
- 2.0 Proposed Change
- 3.0 Background
- 4.0 Technical Analysis
- 5.0 Regulatory Safety Analysis
  - 5.1 No Significant Hazards Determination
  - 5.2 Applicable Regulatory Requirements / Criteria
- 6.0 Environmental Consideration
- 7.0 References

## **1.0 DESCRIPTION**

The proposed amendment would delete those portions of TS superseded by 10 CFR Part 26, Subpart I. This change is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-511, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26." Minor differences between the proposed plant specific TS changes, and the changes proposed by TSTF-511 are listed in section 2.0. The availability of this TS improvement was announced in the Federal Register on December 30, 2008 (73 FR 79923) as part of the consolidated line item improvement process (CLIP).

## **2.0 PROPOSED CHANGE**

Consistent with the NRC approved Revision 0 of TSTF-511, the proposed TS changes delete those portions of TS superseded by 10 CFR Part 26, Subpart I.

This application is being made in accordance with the CLIP. Duke is proposing a minor difference from the TS changes described in TSTF-511, Revision 0, published on December 30, 2008 (73 FR 79923) as part of the CLIP Notice of Availability.

Duke is requesting NRC approval of the following for all three sites:

1. An interim TS 5.2.2.e that will be in effect until midnight on September 30, 2009.
2. A TS that deletes the requirement of TS 5.2.2.e and becomes effective on October 1, 2009.

This is a minor difference from TSTF-511 and does not adversely affect the NRC staff's model.

## **3.0 BACKGROUND**

The NRC issued a Federal Register notice (73 FR 16966, March 31, 2008) of the issuance of a final rule that amended 10 CFR Part 26. The revised regulations in 10 CFR Part 26, Subpart I supersede working hour restrictions contained in paragraph e of TS 5.2.2. The background for this application is adequately addressed by the NRC Notice of Availability published on December 30, 2008 (73 FR 79923).

## **4.0 TECHNICAL ANALYSIS**

Duke has reviewed the Safety Evaluation (SE) published on December 30, 2008 (73 FR 79923) as part of the CLIP Notice of Availability. Duke has concluded that the technical justifications presented in the SE prepared by the NRC staff are applicable to Oconee Nuclear Station, Units 1, 2, and 3; McGuire Nuclear Station, Units 1 and 2; and Catawba Nuclear Station, Units 1 and 2.

10 CFR Part 26, Subpart I, supersedes existing worker fatigue guidance.

10 CFR Part 26, Subpart I, distinguishes between work hour controls and fatigue management and strengthens the requirements for both. Under the new rule, work hour restrictions include not only work hour limitations for rolling 24-hour, 48-hour, and 7-day periods, but also include a required minimum break between work periods and varying required minimum days off. Additionally, Subpart I confines the use of waivers (deviations from restrictions) to situations where overtime is necessary to mitigate or prevent a condition adverse to safety or necessary to maintain the security of the facility. Subpart I also strengthens reporting requirements. Finally, the new rule's work hour control scope includes certain operating and maintenance personnel, as well as individuals directing those operating and maintenance personnel, health physics and chemistry personnel who are a part of the on-site emergency response organization minimum shift complement, the fire brigade member who is responsible for understanding the effects of fire and fire suppressants on safe shutdown capability, and certain security personnel.

The proposed change removes working hour limits imposed in the Technical Specifications in order to support compliance with 10 CFR Part 26, Subpart I. Work hour controls and fatigue management requirements have been incorporated into the NRC's regulations; therefore, it is unnecessary to have work hour control requirements in the Technical Specifications.

Removal of the Technical Specification requirements will be performed concurrently with the implementation of the 10 CFR Part 26, Subpart I, requirements, on October 1, 2009. Along with this License Amendment Request (LAR), Duke has submitted a commitment to comply with 10 CFR Part 26 concurrently with the implementation of the Technical Specification change.

## **5.0 REGULATORY SAFETY ANALYSIS**

### **5.1 NO SIGNIFICANT HAZARDS DETERMINATION**

Duke has reviewed the no significant hazards determination published on December 30, 2008 (73 FR 79923) as part of the CLIP Notice of Availability. Duke has concluded that the determination presented in the notice is applicable to Oconee Nuclear Station, Units 1, 2, and 3; McGuire Nuclear Station, Units 1 and 2; and Catawba Nuclear Station, Units 1 and 2. Duke has evaluated the proposed changes to the TS using the criteria in 10 CFR 50.92 and has determined that the proposed changes do not involve a significant hazards consideration. An analysis of the issue of no significant hazards consideration is presented below:

**Criterion 1:** The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change removes Technical Specification restrictions on working hours for personnel who perform safety related functions. The Technical Specification restrictions are superseded by the worker fatigue requirements in 10 CFR Part 26. Removal of the Technical Specification requirements will be performed concurrently with the implementation of the 10 CFR Part 26, Subpart I, requirements. The proposed change does not impact the physical configuration or function of plant structures, systems, or components (SSCs) or the manner in which SSCs are operated, maintained, modified, tested, or inspected. Worker fatigue is not an initiator of any accident previously evaluated. Worker fatigue is not an assumption in the

consequence mitigation of any accident previously evaluated.

Therefore, it is concluded that this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

**Criterion 2:** The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change removes Technical Specification restrictions on working hours for personnel who perform safety related functions. The Technical Specification restrictions are superseded by the worker fatigue requirements in 10 CFR Part 26. Working hours will continue to be controlled in accordance with NRC requirements. The new rule allows for deviations from controls to mitigate or prevent a condition adverse to safety or as necessary to maintain the security of the facility. This ensures that the new rule will not unnecessarily restrict working hours and thereby create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change does not alter the plant configuration, require new plant equipment to be installed, alter accident analysis assumptions, add any initiators, or affect the function of plant systems or the manner in which systems are operated, maintained, modified, tested, or inspected.

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

**Criterion 3:** The proposed change does not involve a significant reduction in a margin of safety.

The proposed change removes Technical Specification restrictions on working hours for personnel who perform safety related functions. The Technical Specification restrictions are superseded by the worker fatigue requirements in 10 CFR Part 26. The proposed change does not involve any physical changes to plant or alter the manner in which plant systems are operated, maintained, modified, tested, or inspected. 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 affected by this change. The proposed change will not result in plant operation in a configuration outside the design basis. The proposed change does not adversely affect systems that respond to safely shutdown the plant and to maintain the plant in a safe shutdown condition.

Removal of plant-specific Technical Specification administrative requirements will not reduce a margin of safety because the requirements in 10 CFR Part 26 are adequate to ensure that worker fatigue is managed.

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

Based on the above, Duke concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

## **5.2 APPLICABLE REGULATORY REQUIREMENTS / CRITERIA**

A description of the proposed TS change and its relationship to applicable regulatory requirements was provided in the NRC Notice of Availability published on December 30, 2008 (73 FR 79923). Duke has reviewed the NRC staff's model SE published on December 30, 2008 (73 FR 79923) as part of the CLIP Notice of Availability and concluded that the regulatory evaluation section is applicable to Oconee Nuclear Station, Units 1, 2, and 3; McGuire Nuclear Station, Units 1 and 2; and Catawba Nuclear Station, Units 1 and 2.

The proposed change eliminates the plant-specific Technical Specification administrative controls on working hours. The Technical Specification guidance has been superseded by 10 CFR Part 26.

10 CFR Part 26, Subpart I, "Managing Fatigue," contains requirements for managing worker fatigue at operating nuclear power plants.

10 CFR 50.36 provides, among other things, the regulatory requirements for the content in the Administrative Controls section of the Technical Specifications. The inclusion of requirements to control working hours and manage fatigue is not required to be in the Administrative Controls by 10 CFR Part 50.36. Because the requirement to control working hours and manage fatigue is provided in 10 CFR Part 26, Subpart I, it is unnecessary for the Technical Specifications to contain similar controls.

## **6.0 ENVIRONMENTAL CONSIDERATION**

Duke has reviewed the environmental evaluation included in the safety evaluation (SE) published on December 30, 2008 as part of the CLIP Notice of Availability. Duke has concluded that the staff's findings presented in that evaluation are applicable to Oconee Nuclear Station, Units 1, 2, and 3, McGuire Nuclear Station, Units 1 and 2, and Catawba Nuclear Station, Units 1 and 2. The proposed amendment changes recordkeeping, reporting, or administrative procedures. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). 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.

## **7.0 REFERENCES**

1. Federal Register Notice, Final Rule 10 CFR Part 26 published on March 31, 2008.
2. TSTF-511, Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26."
3. Federal Register Notice, Notice of Availability published on December 30, 2008 (73 FR 79923).

Attachment 2  
Proposed Technical Specification Change (Mark-Up)

Attachment 3  
Proposed Technical Specification Change (Re-Typed)

Attachment 4  
List of Regulatory Commitments

Commitment

Removal of the plant-specific TS requirements will be performed concurrently with the implementation of the 10 CFR Part 26, Subpart I requirements. This commitment will be completed no later than October 1, 2009.

## **ATTACHMENT 2**

**Proposed Technical Specification Pages (Mark-Up)**

**Oconee Nuclear Station, Units 1, 2, and 3**

**McGuire Nuclear Station, Units 1 and 2**

**Catawba Nuclear Station, Units 1 and 2**

5.2 Organization

5.2.2 Station Staff (continued)

- b. At least one licensed Reactor Operator (RO) per unit shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

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- e. ~~Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety related functions (e.g., licensed SROs, licensed ROs, health physicists, Non-Licensed operators, and key maintenance personnel).~~

~~Any deviation from the above guidelines shall be authorized in advance by the Station Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.~~

~~Controls shall be included in the procedures such that individual overtime shall be periodically reviewed to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.~~

- f. The Operations Superintendent or Shift Operations Manager shall hold an SRO license.
- g. The Shift Work Manager, whose functions include those of a Shift Technical Advisor (STA), shall provide advisory technical support to the Shift Supervisor (SS) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the Shift Work Manager shall meet the qualifications for STA specified by the Commission Policy Statement on Engineering Expertise on Shift.

This Page is Effective October 1, 2009

5.2 Organization

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5.2.2 Station Staff (continued)

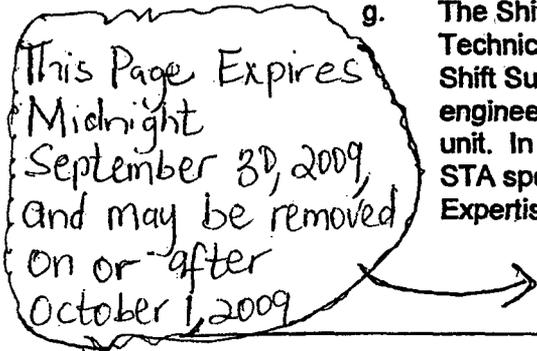
- b. At least one licensed Reactor Operator (RO) per unit shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety related functions (e.g., licensed SROs, licensed ROs, health physicists, Non-Licensed operators, and key maintenance personnel).

Any deviation from the above guidelines shall be authorized in advance by the Station Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

Controls shall be included in the procedures such that individual overtime shall be periodically reviewed to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

- f. The Operations Superintendent or Shift Operations Manager shall hold an SRO license.
- g. The Shift Work Manager, whose functions include those of a Shift Technical Advisor (STA), shall provide advisory technical support to the Shift Supervisor (SS) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the Shift Work Manager shall meet the qualifications for STA specified by the Commission Policy Statement on Engineering Expertise on Shift.

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on or after  
October 1, 2009



5.2 Organization (continued)

5.2.2 Unit Staff

The unit staff organization shall include the following:

- a. A non-licensed operator shall be assigned to each reactor containing fuel and an additional non-licensed operator shall be assigned for each control room from which a reactor is operating in MODES 1, 2, 3, or 4.

A total of three non-licensed operators are required for the two units.

- b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.

- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

- d. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

- e. Administrative procedures shall be developed and implemented to limit the working hours of station staff who perform safety related functions (e.g., licensed SROs, licensed ROs, radiation protection technicians, auxiliary operators, and key maintenance personnel).

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Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a 12 hour day with alternating 48 hour and 36 hour weeks while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or plant modification, on a temporary basis the following guidelines shall be followed:

1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;

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5.2 Organization (continued)

5.2.2 Unit Staff

The unit staff organization shall include the following:

- a. A non-licensed operator shall be assigned to each reactor containing fuel and an additional non-licensed operator shall be assigned for each control room from which a reactor is operating in MODES 1, 2, 3, or 4.

A total of three non-licensed operators are required for the two units.

- b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Administrative procedures shall be developed and implemented to limit the working hours of station staff who perform safety related functions (e.g., licensed SROs, licensed ROs, radiation protection technicians, auxiliary operators, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a 12 hour day with alternating 48 hour and 36 hour weeks while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or plant modification, on a temporary basis the following guidelines shall be followed:

- 1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;

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October 1, 2009

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5.2 Organization

5.2.2 Unit Staff (continued)

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~~2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 28 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;~~

~~3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;~~

~~4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.~~

~~Any deviation from the above guidelines shall be authorized in advance by the Station Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.~~

~~Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Station Manager or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.~~

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f. The Operations Manager shall hold or have held an SRO license.

g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Control Room Senior Reactor Operator (CRSRO) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit.

(continued)

5.2 Organization

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5.2.2 Unit Staff (continued)

2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 28 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;
3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;
4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized in advance by the Station Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Station Manager or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

- f. The Operations Manager shall hold or have held an SRO license.
- g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Control Room Senior Reactor Operator (CRSRO) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit.

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September 30, 2009, and  
may be removed on or  
after October 1, 2009

(continued)

5.2 Organization

5.2.2 Unit Staff (continued)

- b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

e. ~~Administrative procedures shall be developed and implemented to limit the working hours of station staff who perform safety related functions (e.g., licensed SROs, licensed ROs, radiation protection technicians, auxiliary operators, and key maintenance personnel).~~

~~Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a 12 hour day with alternating 48 hour and 36 hour weeks while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modification, on a temporary basis the following guidelines shall be followed:~~

1. ~~An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;~~
2. ~~An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;~~
3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;
4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

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5.2 Organization

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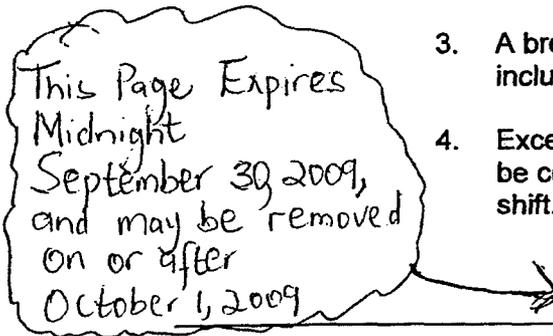
5.2.2 Unit Staff (continued)

- b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
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- e. Administrative procedures shall be developed and implemented to limit the working hours of station staff who perform safety related functions (e.g., licensed SROs, licensed ROs, radiation protection technicians, auxiliary operators, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a 12 hour day with alternating 48 hour and 36 hour weeks while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modification, on a temporary basis the following guidelines shall be followed:

- 1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;
- 2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;
- 3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;
- 4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

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on or after  
October 1, 2009



(continued)

5.2 Organization

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5.2.2 Unit Staff (continued)

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Any deviation from the above guidelines shall be authorized in advance by the Station Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Station Manager or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

Move Over  
to Page 5.2-2 →

- f. The Operations Superintendent shall hold or have held a SRO license. The Shift Operations Manager, Shift Supervisor, and Assistant Shift Supervisor shall hold an SRO license. The Reactor Operator shall hold a Reactor Operator License.
- g. The Shift Work Manager, whose functions include those of a Shift Technical Advisor (STA), shall provide advisory technical support to the Shift Supervisor in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the Shift Work Manager shall meet the qualifications for STA specified by the Commission Policy Statement on Engineering Expertise on Shift.

5.2 Organization

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5.2.2 Unit Staff (continued)

Any deviation from the above guidelines shall be authorized in advance by the Station Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Station Manager or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

- f. The Operations Superintendent shall hold or have held a SRO license. The Shift Operations Manager, Shift Supervisor, and Assistant Shift Supervisor shall hold an SRO license. The Reactor Operator shall hold a Reactor Operator License.
- g. The Shift Work Manager, whose functions include those of a Shift Technical Advisor (STA), shall provide advisory technical support to the Shift Supervisor in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the Shift Work Manager shall meet the qualifications for STA specified by the Commission Policy Statement on Engineering Expertise on Shift.

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### ATTACHMENT 3

#### Proposed Technical Specification Change (Re-Typed)

Station	Remove	Replace
Oconee Nuclear Station, Units 1, 2, and 3	5.0-3 -----	5.0-3 5.0-3a
McGuire Nuclear Station, Units 1 and 2	5.2-2 ----- 5.2-3	5.2-2 5.2-2a 5.2-3a
Catawba Nuclear Station, Units 1 and 2	TS Pages (Re-Typed) To be Submitted at a Later Date	

5.2 Organization

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5.2.2 Station Staff (continued)

- b. At least one licensed Reactor Operator (RO) per unit shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Deleted
- f. The Operations Superintendent or Shift Operations Manager shall hold an SRO license.
- g. The Shift Work Manager, whose functions include those of a Shift Technical Advisor (STA), shall provide advisory technical support to the Shift Supervisor (SS) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the Shift Work Manager shall meet the qualifications for STA specified by the Commission Policy Statement on Engineering Expertise on Shift.

**This Page is Effective October 1, 2009**

5.2 Organization

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5.2.2 Station Staff (continued)

- b. At least one licensed Reactor Operator (RO) per unit shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety related functions (e.g., licensed SROs, licensed ROs, health physicists, Non-Licensed operators, and key maintenance personnel).

Any deviation from the above guidelines shall be authorized in advance by the Station Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

Controls shall be included in the procedures such that individual overtime shall be periodically reviewed to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

- f. The Operations Superintendent or Shift Operations Manager shall hold an SRO license.
- g. The Shift Work Manager, whose functions include those of a Shift Technical Advisor (STA), shall provide advisory technical support to the Shift Supervisor (SS) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the Shift Work Manager shall meet the qualifications for STA specified by the Commission Policy Statement on Engineering Expertise on Shift.

**This Page Expires Midnight September 30, 2009, and may be removed on or after October 1, 2009**

5.2 Organization (continued)

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5.2.2 Unit Staff

The unit staff organization shall include the following:

- a. A non-licensed operator shall be assigned to each reactor containing fuel and an additional non-licensed operator shall be assigned for each control room from which a reactor is operating in MODES 1, 2, 3, or 4.

A total of three non-licensed operators are required for the two units.

- b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Deleted
- f. The Operations Manager shall hold or have held an SRO license.
- g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Control Room Senior Reactor Operator (CRSRO) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit.

**This Page is Effective October 1, 2009**

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5.2 Organization (continued)

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5.2.2 Unit Staff

The unit staff organization shall include the following:

- a. A non-licensed operator shall be assigned to each reactor containing fuel and an additional non-licensed operator shall be assigned for each control room from which a reactor is operating in MODES 1, 2, 3, or 4.

A total of three non-licensed operators are required for the two units.

- b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Administrative procedures shall be developed and implemented to limit the working hours of station staff who perform safety related functions (e.g., licensed SROs, licensed ROs, radiation protection technicians, auxiliary operators, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a 12 hour day with alternating 48 hour and 36 hour weeks while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or plant modification, on a temporary basis the following guidelines shall be followed:

1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;

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(continued)

## 5.2 Organization

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### 5.2.2 Unit Staff (continued)

2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 28 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;
3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;
4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized in advance by the Station Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Station Manager or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

- f. The Operations Manager shall hold or have held an SRO license.
- g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Control Room Senior Reactor Operator (CRSRO) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit.

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**Catawba Nuclear Station Technical Specification Pages (Re-Typed)**

**To be Submitted at a Later Date**

## ATTACHMENT 4

### List of Regulatory Commitments

The following table identifies the TS pages committed by Duke that will be removed on or after October 1, 2009, concurrently with the implementation of the 10 CFR Part 26, Subpart I requirements in this document:

Station	TS Section	TS Pages to be Removed by Duke on or after October 1, 2009
Oconee Nuclear Station, Units 1, 2, and 3	5.2.2.e	5.0-3a
McGuire Nuclear Station, Units 1 and 2	5.2.2.e	5.2-2a, 5.2-3a
Catawba Nuclear Station, Units 1 and 2	5.2.2.e	5.2-2a, 5.2-3a