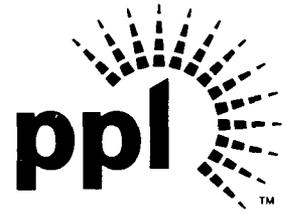


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MAR 24 2009

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Stop OP1-17  
Washington, DC 20555

**SUSQUEHANNA STEAM ELECTRIC STATION  
AMENDMENT REQUEST NO. 304 TO LICENSE NPF-14  
AND AMENDMENT REQUEST NO. 275 TO LICENSE NPF-22:  
ADOPTION OF TSTF-511, REV. 0, "ELIMINATE WORKING  
HOUR RESTRICTIONS FROM TS 5.2.2 TO SUPPORT  
COMPLIANCE WITH 10 CFR PART 26"  
PLA-6474**

**Docket Nos. 50-387  
and 50-388**

In accordance with the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), PPL Susquehanna, LLC (PPL) is submitting a request for an amendment to the Technical Specifications (TS) for Susquehanna Steam Electric Station Units 1 & 2. The proposed amendment would delete TS Section 5.2.2.e, which is superseded by 10 CFR Part 26, Subpart I. This change is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical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" with no variations. 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).

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 listing of regulatory commitments.

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

This letter contains one regulatory commitment as identified in Attachment 3.

A001  
A021  
NRA

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated Commonwealth of Pennsylvania Official.

If you should have any questions regarding this submittal, please contact Ms. Mari J. Jaworsky at (570) 542-3270.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 3/24/09

  
William H. Spence

**Attachments:**

- Attachment 1 – Evaluation of the Proposed Change
- Attachment 2 - Proposed Technical Specification Changes, Units 1 & 2,  
(Mark-ups)
- Attachment 3 – List of Regulatory Commitments

cc: NRC Region I  
Mr. R. R Janati, DEP/BRP  
Mr. F. W. Jaxheimer, NRC Sr. Resident Inspector  
Mr. B. K. Vaidya, NRC Project Manager

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# **Attachment 1 to PLA-6474**

## **Evaluation of the 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"

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- 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

## EVALUATION OF PROPOSED CHANGE

### 1.0 DESCRIPTION

The proposed amendment would delete Section 5.2.2.e 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).

### 2.0 PROPOSED CHANGE

Consistent with the NRC approved Revision 0 of TSTF-511, the proposed TS change deletes Section 5.2.2.e of TS superseded by 10 CFR Part 26, Subpart I for Susquehanna Steam Electric Station, Units 1 & 2.

This application is being made in accordance with the CLIIP. PPL Susquehanna, LLC (PPL) is not proposing variations or deviations from the TS changes described in TSTF-511, Revision 0, or the NRC staff's model safety evaluation (SE) published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability.

### 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 December 30, 2008 (73 FR 79923).

### 4.0 TECHNICAL ANALYSIS

PPL has reviewed the SE published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability. PPL has concluded that the technical justifications presented in the SE prepared by the NRC staff are applicable to Susquehanna Steam Electric Station, Units 1 & 2 (SSES).

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 even if the Technical Specification change is implemented prior to the October 1, 2009 deadline. Along with this LAR, PPL 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**

PPL has reviewed the no significant hazards determination published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability. PPL has concluded that the determination presented in the notice is applicable to Susquehanna Steam Electric Station, Units 1 & 2 (SSES). PPL 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 effect 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, PPL 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). PPL has reviewed the NRC staff's model SE published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability and concluded that the regulatory evaluation section is applicable to Susquehanna Steam Electric Station, Units 1 & 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**

PPL has reviewed the environmental evaluation included in the safety evaluation (SE) published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability. PPL has concluded that the staff's findings presented in that evaluation are applicable to Susquehanna Steam Electric Station, Units 1 & 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).

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**Attachment 2 to PLA-6474**

**Proposed Units 1 & 2 Technical Specification  
Changes**

**(Mark-ups)**

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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 of each unit which has fuel in the reactor. In addition, while the unit is in MODE 1, 2, or 3, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room. This individual may be qualified on both Units and serving in this capacity for both Units.
- 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, 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 nominal 40 hour week 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;~~

(continued)

## 5.2 Organization

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### 5.2.2 Unit Staff (continued)

- ~~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 plant 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 plant 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 or assistant operations manager shall hold an SRO license.
  - g. The 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 STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on 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 of each unit which has fuel in the reactor. In addition, while the unit is in MODE 1, 2, or 3, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room. This individual may be qualified on both Units and serving in this capacity for both Units.
- 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, 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 nominal 40-hour week 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;~~

(continued)

## 5.2 Organization

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### 5.2.2 Unit Staff (continued)

- ~~— 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 plant 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 plant 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 or assistant operations manager shall hold an SRO license.
  - g. The 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 STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.
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**Attachment 3 to PLA-6474**  
**List of Regulatory Commitments**

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## List of Regulatory Commitments

The following table identifies the regulatory commitments in this document. Any other statements in this submittal represent intended or planned actions, are provided for informational purposes, and are not considered to be regulatory commitments.

<b>Regulatory Commitments</b>	<b>Due Date/Event</b>
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.