

BEFORE THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

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In the Matter of :  
PP&L, INC. : Docket No. 50-387

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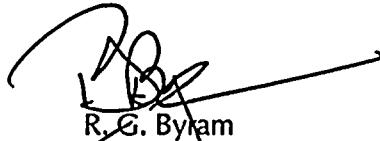
PROPOSED AMENDMENT NO. 220  
FACILITY OPERATING LICENSE NO. NPF-14  
SUSQUEHANNA STEAM ELECTRIC STATION  
UNIT NO. 1

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Licensee, PP&L, Inc., hereby files proposed Amendment No. 220 to its Facility Operating License No. NPF-14 dated July 17, 1982.

This amendment contains a revision to the Susquehanna SES Unit 1 Technical Specifications.

PP&L, INC.  
BY:



R. G. Byram  
Sr. Vice President - Generation and Chief Nuclear Officer

Sworn to and subscribed before me  
this *1st* day of *June*, 1998.

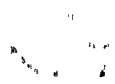


Notary Public

NOTARIAL SEAL  
JANICE M. REESE, Notary Public  
City of Allentown, Lehigh County, PA  
My Commission Expires June 11, 2001



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BEFORE THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

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In the Matter of :  
PP&L, INC. : Docket No. 50-388

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PROPOSED AMENDMENT NO. 182  
FACILITY OPERATING LICENSE NO. NPF-22  
SUSQUEHANNA STEAM ELECTRIC STATION  
UNIT NO. 2

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Licensee, PP&L, Inc., hereby files proposed Amendment No. 182 to its Facility Operating License No. NPF-22 dated March 23, 1984.

This amendment contains a revision to the Susquehanna SES Unit 2 Technical Specifications.

PP&L, INC.  
BY:



R. G. Byram  
Sr. Vice President - Generation and Chief Nuclear Officer

Sworn to and subscribed before me  
this *1st* day of *June*, 1998.

*Janice M. Reese*  
Notary Public

NOTARIAL SEAL  
JANICE M. REESE, Notary Public  
City of Allentown, Lehigh County, PA  
My Commission Expires June 11, 2001





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**ATTACHMENT 1 TO PLA-4903**

**SAFETY ASSESSMENT**



## SAFETY ASSESSMENT

### ULTIMATE HEAT SINK AVERAGE TEMPERATURE

#### BACKGROUND:

Resolution of a discrepancy regarding the reactor decay heat values used in UHS analyses has resulted in the need to lower the maximum acceptable spray pond temperature. The affected analyses have been revised incorporating the corrected decay heat values. The UHS analyses methods are in accordance with Regulatory Guide 1.27 and the reactor decay heat analysis method is in accordance with Branch Technical Position ASB 9-2. The revised analyses show that by reducing the initial UHS temperature to the values proposed, the peak calculated bulk UHS temperature following a design basis accident (DBA) LOCA/LOOP will be maintained less than the results reported previously. In accordance with Regulatory Guide 1.27 requirements, analysis also concludes that adequate water supply is available without make-up for an assumed 30 day transient period.

#### DESCRIPTION OF PROPOSED CHANGE:

The proposed change to the Unit 1 and Unit 2 Technical Specification Surveillance Requirement SR 3.7.1.2 involves lowering the UHS surveillance requirement maximum acceptable spray pond average temperature. The new temperature limits are specified to assure that the post DBA LOCA/LOOP maximum UHS temperature will be maintained less than the UHS design temperature. Attachment 3 contains the markup pages of the current Technical Specification pages which reflect the change.

#### SAFETY ANALYSIS:

The revised calculations conclude that a decrease in the maximum acceptable normal operating UHS temperatures as proposed is required to assure that the post accident UHS temperature will be unaffected. The revised analyses show that by reducing the initial UHS temperature as proposed, the peak calculated bulk UHS temperature following a design basis accident (DBA) LOCA/LOOP will be maintained less than the results reported previously. The safety related coolers which are supplied by the UHS are evaluated to assure that they are capable of transferring the minimum required heat load to the UHS. Since the peak calculated bulk UHS temperature is less than the results reported previously, performance of the coolers is unaffected by the change. The safety margin is unaffected since the peak design UHS temperature is unaffected.

The UHS has a safety related function to provide cooling water for use in the ESW and RHRSW systems during testing, normal shutdown and accident conditions. The UHS is capable of providing sufficient cooling water without makeup for at least 30 days.

The postulated conditions used for the UHS Minimum Heat Transfer (MHT) analysis also maximize the UHS evaporative losses and results in the most limiting conditions for concentrating the pond's dissolved solids. The scaling potential associated with the revised analysis is slightly higher than that in the previous analysis due to the increased decay heat assumed in the analysis. Current UHS chemical procedures, however, bound the changes resulting from the revised analysis.

Necessary procedure changes have been implemented to assure the new limits are maintained.

CONCLUSIONS:

The proposed change to SSES Unit 1 and Unit 2 Technical Specification Surveillance Requirements provides assurance that the peak calculated bulk UHS temperature is maintained post DBA LOCA/LOOP. With the proposed temperature limits maintained, it is assured that the UHS is capable of providing sufficient cooling water without makeup for at least 30 days as required.



**ATTACHMENT 2 TO PLA-4903**

**NO SIGNIFICANT HAZARDS CONSIDERATIONS**

**NO SIGNIFICANT HAZARDS CONSIDERATIONS AND ENVIRONMENTAL ANALYSIS  
ULTIMATE HEAT SINK AVERAGE TEMPERATURE**

**NO SIGNIFICANT HAZARDS CONSIDERATIONS**

Pennsylvania Power and Light Company has evaluated the proposed Technical Specification change in accordance with the criteria specified by 10 CFR 50.92 and has determined that the proposed change does not involve a significant hazards consideration. The criteria and conclusions of our evaluation are presented below.

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

This proposal does not involve an increase in the probability or consequences of an accident previously evaluated. The proposed change lowers the UHS temperature surveillance requirement so that the maximum post DBA UHS temperature is maintained less than that reported previously.

The UHS provides cooling to equipment and systems required for the safe shutdown of the plant following an accident with radiological consequence potential, such as a LOCA. The change in UHS initial temperature limit assures that the peak temperature will remain less than that reported previously. Therefore, the components cooled by the UHS will not be impacted and will be capable of performing their function as designed.

Based upon the analysis presented above, PP&L concludes that the proposed action does not involve an increase in the probability or consequences of an accident previously evaluated.

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

This proposal does not create the probability of a new or different type of accident from any accident previously evaluated. The proposed change lowers the UHS surveillance requirement temperature so that the maximum post DBA UHS temperature is maintained less than that reported previously. Therefore the operation of the components cooled by the UHS will not be impacted and will be capable of performing their design function.

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

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

The change does not involve a reduction in the margin of safety. The proposed change lowers the UHS surveillance temperature so that the maximum post DBA UHS temperature is maintained less than that reported previously. The margin of safety is unaffected since the maximum post DBA UHS temperature is not affected. Performance of equipment cooled by the UHS is unaffected.

**ENVIRONMENTAL ANALYSIS**

An environmental assessment is not required for the proposed change because the requested change conforms to the criteria for actions eligible for categorical exclusion as specified in 10 CFR 51.22(c)(9). The requested change will have no impact on the environment. As discussed above, the proposed change does not involve a significant hazards consideration. The proposed change does not involve a significant change in the types or significant increase in the amounts of effluents that may be released off-site. In addition, the proposed change does not involve a significant increase in the individual or cumulative occupational radiation exposure.