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SEP 09 2003

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

**SUSQUEHANNA STEAM ELECTRIC STATION  
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION  
PROPOSED AMENDMENT NO. 255 TO LICENSE NPF-14 AND  
PROPOSED AMENDMENT NO. 220 TO LICENSE NPF-22  
ONE-TIME CHANGE TO TECHNICAL SPECIFICATIONS 3.8.1  
ALLOWABLE COMPLETION TIME FOR  
OFFSITE AC CIRCUITS  
PLA-5671**

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

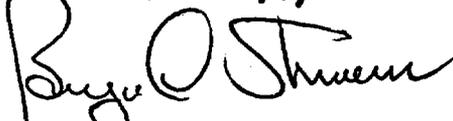
*Reference: 1) PLA-5637, B. L. Shriver (PPL) to USNRC, "Proposed Amendment No. 255 to License NPF-14 and Proposed Amendment No. 220 to License NPF-22 One-Time Change to Technical Specifications 3.8.1 Allowable Completion Time For Offsite AC Circuits," dated July 3, 2003.*

In teleconferences held on August 21, 2003 and September 2, 2003, NRC requested additional information regarding the PPL Susquehanna, LLC (PPL) risk assessment generated to support the proposed license amendment for a one-time change to Technical Specifications 3.8.1 Allowable Completion Time for Offsite AC Circuits (Reference 1). The responses provided in the teleconferences are documented in Attachment 1.

If you have any questions, please contact Mr. John M. Oddo at (610) 774-7596.

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

Executed on: 9/9/2003

  
B. L. Shriver

A001

**Attachment 1 – Response to Request for Additional Information**

**copy: NRC Region I**

**Mr. T. Colburn, NRC Project Manager**

**Mr. R. V. Guzman, NRC Project Manager**

**Mr. S. L. Hansell, NRC Sr. Resident Inspector**

**Mr. R. Janati, DEP/BRP**

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**Attachment 1 to PLA-5671**

**Response to Request for Additional Information**

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**August 21, 2003 NRC, PPL Telecon**

During a telecon with the NRC on August 21, 2003 regarding PPL's proposed license amendment for a one-time change to the allowable Completion Time for offsite AC circuits, PPL was asked to explain the larger value of  $\Delta$ LERF in contrast to the smaller value of  $\Delta$ CDF.

**PPL Response:**

The reason for this difference is that a number of valve recoveries that affect LERF were not included in the original model on which the submittal was based. This exclusion of the recovery probabilities yielded an overly conservative estimate of  $\Delta$ LERF.

To demonstrate the impact of including these recoveries, the  $\Delta$ LERF was re-calculated including two recoveries for operator action failures to operate specific valves (which, if operated, would prevent a large early release). The specific recoveries included are for the A and B Loop LPCI injection valves. The table below presents these results:

***LERF Results for a 10 Day AOT on AC Transformer (T-10) OOS  
(with additional valve recoveries)***

Case *	Description	LERF Unit 1 (Unit 2)	$\Delta$ LERF Unit 1 (Unit 2)	ICLERP Unit 1 (Unit 2)
A	Base Case – ST. No. 10 OPERABLE / E- Emergency Diesel Generator available	4.72E-7  (4.38E-7)	---	---
B	ST. No. 10 INOPERABLE / E- Emergency Diesel Generator available <u>with</u> Compensatory Actions	7.63E-7  (6.37E-7)	2.91E-7  (1.99E-7)	7.97E-9  (5.45E-9)

\* Cases A and B above correspond to Cases 2 and 3 in Table 4-1 in PLA-5637. Case 3 established  $\Delta$ LERF values of 1.06E-6 and 9.86E-7 for Unit 1 and Unit 2, respectively.

The above results are a more realistic assessment of the  $\Delta$ LERF and ICLERP (based on including the recoveries). Note that the  $\Delta$ LERF values are in Region II of Regulatory Guide 1.174, Figure 4. The  $\Delta$ CDF values of 6.00E-8 and 9.00 E-8 for Unit 1 and Unit 2, respectively (Table 4-1 of PLA-5637), are in Region III of Regulatory Guide 1.174, Figure 4. Therefore, both values meet the established acceptance criteria.

Using the revised model discussed above, a sensitivity calculation was done assuming diesel generator failure rates were twice the base values. The results are presented in the table below:

***LERF Results for a 10 Day AOT on AC Transformer (T-10) OOS  
(with additional valve recoveries and  
Diesel Generator Failure Rates increased by a factor of 2.0)***

Case *	Description	LERF Unit 1 (Unit 2)	$\Delta$ LERF Unit 1 (Unit 2)	ICLERP Unit 1 (Unit 2)
C	Base Case – ST. No. 10 OPERABLE / E- Emergency Diesel Generator available	6.66E-7  (5.90E-7)	---	---
D	ST. No. 10 INOPERABLE / E- Emergency Diesel Generator available <u>with</u> Compensatory Actions	1.37E-6  (1.11E-6)	7.04E-7  (5.20E-7)	1.93E-8  (1.42E-8)

\* Cases C and D above correspond to Cases 2 and 3 in Table 4-1 in PLA-5637. Case 3 established  $\Delta$ LERF values of 1.06E-6 and 9.86E-7 for Unit 1 and Unit 2, respectively.

Note that the  $\Delta$ LERF values, assuming the diesel generator failure rate is twice the base value, are still in Region II of Regulatory Guide 1.174, Figure 4. Therefore, both values meet the established acceptance criteria.

**September 2, 2003 NRC, PPL Telecon**

In a telecon on September 2, 2003 NRC requested that PPL ensure that any cumulative risk associated with the proposed amendment has been reviewed. NRC stated that PPL may need to consider any impact from amendments or licensing actions - recently approved or pending before the staff. NRC wants PPL to ensure that any associated risk impact, not included in the submittal, is considered.

PPL Response:

**There are no other submittals approved or pending which would have an impact on the cumulative risk associated with the transformer replacement. [The HPCI Suction Swap submittal of June 8, 2001 – PLA 5322 – has already been included in the model.]**