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

SUSQUEHANNA STEAM ELECTRIC STATION
SUPPLEMENT TO PROPOSED AMENDMENT NO. 281
TO LICENSE NPF-14 AND PROPOSED AMENDMENT NO. 251
TO LICENSE NPF-22: "APPLICATION FOR LICENSE AMENDMENT
AND RELATED TECHNICAL SPECIFICATION CHANGES TO
IMPLEMENT FULL-SCOPE ALTERNATIVE SOURCE TERM
IN ACCORDANCE WITH 10 CFR 50.67" **Docket Nos. 50-387**
PLA-6055 **and 50-388**

References: 1) *PLA-5963, Mr. B. T. McKinney (PPL) to Document Control Desk (USNRC) Proposed Amendment No. 281 to License NPF-14 and Proposed Amendment No. 251 to License NPF-22: "Application for License Amendment and Related Technical Specification Changes To Implement Full-Scope Alternative Source Term In Accordance with 10 CFR 50.67," dated October 13, 2005.*

The purpose of this letter is to supplement the Reference 1 request for an amendment to the licensing basis for the Susquehanna Steam Electric Station (SSES) Units 1 and 2 that supports a full implementation application of an Alternative Source Term (AST) methodology.

In Reference 1, PPL indicated that the Recirculation Pump Seizure Event AST Analysis would be provided as a separate document at a later date. PPL revised the Recirculation Pump Seizure Analysis and has concluded, in accordance with 10 CFR 50.59, that NRC approval is not required. Thus, a separate submittal will not be provided to NRC for the AST impacts on the Recirculation Pump Seizure Analysis.

As discussed with the SSES Project Manager on January 10, 2006, PPL identified an error subsequent to the submittal of Reference 1. The error involved incorrect transposition of calculation results in a calculation result summary table which was then also carried into results tables presented in Sections 4.6.5 and 4.6.6 of the detailed AST Safety Assessment Report (Attachment 2 of Reference 1). Attachment 1 to this letter contains the markup of the Reference 1, Attachment 2 affected page showing the correct values.

A001

Attachment 2 to this letter contains the revised calculation EC-RADN-1126, Revision 1, provided to replace the Revision 0 version of the calculation originally provided in Attachment 12 of Reference 1.

If you have any questions regarding this submittal, please contact Mr. Michael H. Crowthers at (610) 774-7766.

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

Executed on: 5/18/2006

Respectfully,

Robert Saccone
Vice President – Nuclear Operations

Attachments:

Attachment 1 – Markup of the Reference 1, Attachment 2 Affected Page Showing the Correct Values
Attachment 2 – Revised Calculation EC-RADN-1126, Revision 1

cc: NRC Region I
Mr. A. Blamey, NRC Sr. Resident Inspector
Mr. R. V. Guzman, NRC Project Manager
Mr. R. Janati, DEP/BRP

Attachment 1 to PLA-6055

Markup of the Reference 1, Attachment 2 Affected Page Showing the Correct Values

An unidentified unfiltered inleakage rate of 500 cfm is conservatively assumed in the RADTRAD model. This inleakage bounds the tracer gas test results (including error band) from the December 2004 SSES CRHE inleakage test.

In addition, 10 cfm of unfiltered inleakage is added to the CRHE to account for ingress/egress of personnel.

4.6.4 Radiological Transport Modeling (see Figures 4 & 11)

The radiological release modeled in this analysis is consistent with RG 1.183.

The activity was released from the Reactor Building via the SGTS via the environment over a 2 hour period.

The 0 – 2 hour CRHE χ/Q from the SGTS exhaust vent to the Control Room outside air intake of 1.45E-03 sec/m^3 was used in the analysis.

4.6.5 Results – Control Room Operator Dose

The RADTRAD computer code was used to determine the Control Room operator dose for the FHA/EHA events. Table 4.6-2 shows the proposed licensing basis dose limit for the FHA/EHA compared to the regulatory limit.

Table 4.6-2
FHA/EHA Control Room Operator Dose (rem)

	Calculation TEDE	RG 1.183 TEDE
CR Operator Dose (FHA)	~~0.10~~ 0.07	5.0
CR Operator Dose (EHA)	0.13	5.0

4.6.6 Results – Offsite Doses

The RADTRAD computer code was used to determine the offsite doses. Table 4.6-3 shows the proposed licensing basis dose limit for the FHA/EHA compared to the regulatory limit.

Table 4.6-3
FHA/EHA Offsite Doses (rem)

	Calculation TEDE	RG 1.183 TEDE
FHA		
EAB Dose	~~1.38~~ 0.96	6.3
LPZ Dose	~~0.08~~ 0.06	6.3
EHA		
EAB Dose	1.74	6.3
LPZ Dose	0.10	6.3