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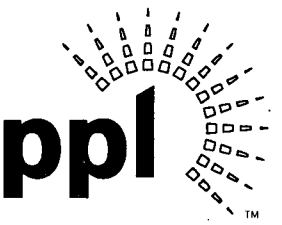

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SUSQUEHANNA STEAM ELECTRIC STATION
10 CFR 50.46 - ANNUAL REPORT **Docket Nos. 50-387**
PLA-6385 **and 50-388**

References: 1) NRC Letter from R. Guzman (NRC) to B. T. McKinney (PPL), "Susquehanna Steam Electric Station Units 1 and 2 - Issuance of Amendment Regarding the 13-Percent Extended Power Uprate (TAC Nos. MD3309 and MD3310)," dated January 30, 2008.

2) PPL Letter PLA-6247, from B. T. McKinney (PPL) to Document Control Desk (NRC), "10 CFR 50.46 - Annual Report," dated July 24, 2007.

This report is being sent in accordance with 10 CFR 50.46(a)(3)(ii).

10 CFR 50.46(a)(3)(ii) requires (in part) annual reporting of changes to or errors in evaluation models used for calculating Emergency Core Cooling System (ECCS) performance, and an estimate of their effect on the limiting ECCS analysis. Additionally, a proposed schedule is required for re-analysis or identification of other actions necessary to show compliance with 10 CFR 50.46 requirements.

The ECCS performance evaluation method applicable to both Susquehanna SES Unit 1 and Unit 2 is the AREVA EXEM BWR – 2000 LOCA Methodology. Susquehanna SES Unit 1 is currently operating at Extended Power Uprate Conditions (EPU) (Reference 1) with a licensed thermal power of 3952 MWth. Since the NRC approval of EPU (Reference 1) until June 11, 2008, there have been no non-zero Peak Cladding Temperature (PCT) changes reported to PPL Susquehanna, LLC for Unit 1. Susquehanna SES Unit 2 is currently operating at a licensed thermal power of 3489 MWth (pre-EPU). From the submittal of the last annual 10 CFR 50.46 report (Reference 2) until June 11, 2008, there have been no non-zero PCT changes reported to PPL Susquehanna, LLC for Unit 2. Thus, the current licensing basis PCT remains valid and no further actions are required. This letter meets the annual reporting requirements.

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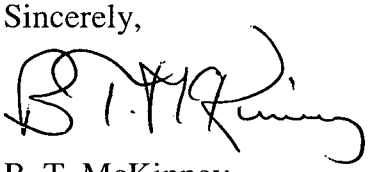
PPL Susquehanna, LLC will continue to track future changes to the evaluation models used in the applicable LOCA analysis methods to ensure that the PCT values remain below the 10 CFR 50.46 limit, and to ensure that the 10 CFR 50.46 reporting requirements are met.

If you have any questions, please contact Mr. Michael H. Crowthers, Manager Nuclear Regulatory Affairs at (610) 774-7766.

Sincerely,



B. T. McKinney

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