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U. S. Nuclear Regulatory Commission
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SUSQUEHANNA STEAM ELECTRIC STATION
10 CFR 50.46 – 30-DAY AND ANNUAL REPORTS
PLA-5929

Docket Nos. 50-387
and 50-388

References: 1) Proprietary letter from A. W. Will (Framatome ANP) to R. M. Rose (PPL), "10 CFR 50.46 PCT Reporting for the Susquehanna Units (CR2005-1582) and Transmittal of Revised LOCA Reports," dated July 20, 2005.
2) PLA-5827 from B. T. McKinney (PPL Susquehanna, LLC) to the Nuclear Regulatory Commission "10 CFR 50.46 – Annual Report," dated October 11, 2004.

In accordance with 10 CFR 50.46 (a)(3)(ii), this letter provides, for PPL Susquehanna Unit 2, the required 30-day report for a significant change or error, which results in a calculated peak fuel cladding temperature (PCT) difference of more than 50°F.

This letter also meets the intent of providing the annual reports required by 10 CFR 50.46 (a)(3)(ii) for both Susquehanna Units 1 and 2. It does so by detailing the evaluation model changes applicable to each unit.

Framatome-ANP (FANP) EXEM BWR-2000 LOCA Analysis – Unit 2 30-Day and Annual Report

Per Reference 1, Framatome ANP (FANP) notified PPL Susquehanna LLC (PPL), of an error within its NRC approved EXEM BWR-2000 LOCA methodology as it pertains to Unit 2. This approved methodology evaluates the ATRIUM™-10 fuel, which currently occupies the entire Unit 2 core. (Note that the approved methodology applicable to Unit 1 is different than the methodology used for Unit 2).

The error was created by an incorrect irreversible loss between the fuel bypass and the vessel lower plenum regions. When this error was corrected, the calculated PCT increased by 71°F. This PCT increase meets the 10 CFR 50.46 (a)(3)(i) significant change threshold for which this 30-day report is required.

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The corrected EXEM BWR-2000 LOCA methodology PCT remains below the 10 CFR 50.46 (b)(1) 2,200°F requirement as determined through reanalysis.

This is the only PCT change associated with the Unit 2 EXEM BWR-2000 LOCA methodology since PPL's last annual report (Reference 2). Additionally, this 30-day report also fulfills the annual reporting requirements of 10 CFR 50.46 (a)(3)(ii).

Framatome-ANP (FANP) 1993 EXEM LOCA Analysis – Unit 1 Annual Report

An incorrect irreversible loss between the fuel bypass and the vessel lower plenum regions was also found within the NRC approved 1993 EXEM LOCA methodology applicable to Unit 1. This approved methodology evaluates the ATRIUM™-10 fuel, which currently occupies the entire Unit 1 core.

When this error was corrected, the calculated PCT increased by 33°F. Since this increase is below the 10 CFR 50.46 (a)(3)(i) significant error threshold, it does not constitute a significant change in the calculated PCT.

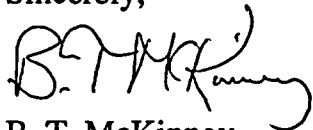
The corrected 1993 EXEM LOCA methodology PCT remains below the 10 CFR 50.46 (b)(1) 2,200°F requirement.

This is the only PCT change associated with the Unit 1 1993 EXEM LOCA methodology since PPL's last annual report (Reference 2). The annual reporting requirements of 10 CFR 50.46 (a)(3)(ii) are hereby satisfied by this report.

PPL Susquehanna continues to track changes to these LOCA evaluation models to ensure that the PCT values remain below the 10 CFR 50.46(b)(1) limit.

Please address any questions regarding this letter to Mr. Duane L. Filchner at (610) 774-7819.

Sincerely,



B. T. McKinney

cc: NRC Region 1
Mr. R. V. Guzman, NRC Project Manager
Mr. R. Janati, DEP/BRP
Mr. F. W. Jaxheimer, NRC Sr. Resident Inspector