Mr. Bryce L. Shriver Senior Vice President and Chief Nuclear Officer PPL Susquehanna, LLC 769 Salem Boulevard, NUCSB3 Berwick, PA 18603-0467

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) - SUSQUEHANNA STEAM

ELECTRIC STATION, UNITS 1 AND 2 (SSES 1 AND 2) - REVISED RESPONSE TO GENERIC LETTER 94-02: LONG-TERM STABILITY

SOLUTION (TAC NOS. MC1659 AND MC1660)

Dear Mr. Shriver:

In reviewing your submittal of December 22, 2003, concerning a request to add SSES 1 and 2 Technical Specification (TS) 3.3.1.3, "Oscillation Power Range Monitor Instrumentation," and revise TS 3.4.1, "Recirculation Loops Operating," and TS 5.6.5, "Core Operating Limits Report," the Nuclear Regulatory Commission staff has determined that additional information contained in the enclosure to this letter is needed to complete its review. These questions were discussed with your staff during a teleconference on May 5, 2004. As agreed to by your staff, we request you respond within 30 days of the date of this letter.

If you have any questions, please contact me at 301-415-1030.

Sincerely,

#### /RA/

Richard V. Guzman, Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-387 and 50-388

Enclosure: RAI

cc w/encl: See next page

Mr. Bryce L. Shriver
Senior Vice President
and Chief Nuclear Officer
PPL Susquehanna, LLC
769 Salem Boulevard, NUCSB3
Berwick, PA 18603-0467

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DATE	5/12/04	5/12/04	5/17/04	5/17/04

## REQUEST FOR ADDITIONAL INFORMATION

# RELATING TO REVISED RESPONSE TO GENERIC LETTER 94-02

## LONG-TERM STABILITY SOLUTION FOR

## SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 (SSES 1 AND 2)

# PPL SUSQUEHANNA, LLC (PPL)

## DOCKET NOS. 50-387 AND 50-388

The Nuclear Regulatory Commission (NRC) staff is reviewing the proposed license amendment to Facility Operating License Nos. NPF-14 and NPF-22 requesting to add SSES 1 and 2 Technical Specification (TS) 3.3.1.3, "Oscillation Power Range Monitor [OPRM] Instrumentation," and revise TS 3.4.1, "Recirculation Loops Operating" and TS 5.6.5, "Core Operating Limits Report [COLR]," dated December 22, 2003. The NRC staff has determined that the information requested below will be needed to complete its review.

- 1. Confirm the current validity of the plant-specific actions stated in CENPD-400-P-A, Rev. 1, "Generic Topical Report for the ABB Option III Oscillation Power Range Monitor."
- Describe the current implementation and monitoring status (i.e., system tests and operability basis) of the OPRM system, and the analytical approach stated in NEDO-32465-A, "Reactor Stability Detect and Suppress Solutions Licensing Basis Methodology for Reload Applications."
- 3. Provide a description of the actions taken by PPL according to the Boiling Water Reactor Owner's Group (BWROG) letter, BWROG-03049 dated September 30, 2003, "Utility Commitment to NRC for OPRM Operability at Option III Plants." Please identify any plant-specific differences from the generic values specified in NEDO-32465-A such as Period Based Detection Algorithm (PBDA) period confirmation setpoints in Table 3-1, PBDA trip setpoints in Table 3-2, and generic DIVOM (Delta critical power ratio (CPR) to Initial CPR vs. Oscillation Magnitude) curve slope.
- 4. Provide the rationale for locating the OPRM Period Based Algorithm Allowable Value and Confirmation Counts in the COLR.
- 5. Identify the methodologies and key inputs used to determine the OPRM setpoints for TS 3.3.1.3 and indicate whether they are NRC-approved methods.
- 6. Describe how the alternate method will be employed to detect and suppress thermal hydraulic instability oscillations stated in TS 3.3.1.3 Actions A.3 and B.1.

## Susquehanna Steam Electric Station, Unit Nos. 1 and 2

CC:

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# Susquehanna Steam Electric Station, Unit Nos. 1 and 2

cc:

Board of Supervisors Salem Township P.O. Box 405 Berwick, PA 18603-0035

Dr. Judith Johnsrud National Energy Committee Sierra Club 443 Orlando Avenue State College, PA 16803