



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 30, 1999

Mr. Robert G. Byram  
Senior Vice President-Generation  
and Chief Nuclear Officer  
PP&L, Inc  
2 North Ninth Street  
Allentown, PA 18101

SUBJECT: COMPLETION OF LICENSING ACTION FOR BULLETIN 96-03, "POTENTIAL PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS BY DEBRIS IN BOILING-WATER REACTORS," SUSQUEHANNA STEAM ELECTRIC STATION (SSES), UNITS 1 AND 2 (TAC NOS. M96172 AND M96173)

Dear Mr. Byram:

On May 6, 1996, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin (BL) 96-03, "Potential Plugging of Emergency Core Cooling Suction Strainers by Debris in Boiling-Water Reactors [BWRs]" to all holders of operating licenses or construction permits for boiling-water reactors. The NRC issued BL 96-03 to ensure that the emergency core cooling systems (ECCS) in BWRs can perform their intended safety function to mitigate the effects of a postulated loss-of-coolant accident. The BL provided three options for resolving this issue including (1) installation of large capacity passive strainers, (2) installation of self-cleaning strainers, or (3) installation of a back flush system.

In BL 96-03, the NRC staff specifically requested that licensees submit the following reports for each of their facilities:

1. A description of planned actions and mitigative strategies used, the schedule for implementation, and proposed technical specification, if appropriate.
2. A report confirming completion and summarizing actions taken.

In response to BL 96-03, you provided a letter dated October 4, 1996, as supplemented by letters dated November 5, 1996, April 24, 1998, June 22, 1998, and March 12, 1999, for SSES, Units 1 and 2. You stated that you planned to install large capacity passive strainers that PP&L, Inc., would design using the guidance in the Boiling Water Reactors Owners Group Utility Resolution Guidance (URG). The staff reviewed the URG and issued a safety evaluation on August 20, 1998. By letter dated May 27, 1999, you informed the staff that you had completed all actions requested by the bulletin. These actions included adequately sizing the strainers to address the NRC Bulletin 96-03 concerns, installing the strainers in Units 1 and 2, carrying out the revised design basis for the ECCS strainers and updating the Final Safety Analysis Report in accordance with 10 CFR 50.71 requirements.

The staff has reviewed your response and has determined that the actions taken should reduce the potential for clogging of ECCS suction strainers and ensure the capability of the ECCS to provide long-term cooling following a loss-of-coolant-accident as required by 10 CFR 50.46. The staff notes that General Electric's Licensing Topical Report NEDC-32721P, "Application Methodology for GE Stacked Disk Suction Strainer" is still undergoing staff review. Part I of the

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staff's safety evaluation of the topical report was issued on February 3, 1999, approving GE's methodology for determining strainer head loss. However, the GE methodology for calculating strainer and associated penetration structural loadings due to hydrodynamic forces is still under staff review. Part II of the staff's safety evaluation will be issued upon completion of this review. Because the staff considers your actions responsive to the concerns raised in Bulletin 96-03 and no plant-specific concerns have been identified, BL 96-03 is closed for your facilities. We may do detailed reviews of your strainer design and do a 10 CFR 50.59 evaluation on a plant-specific basis in the future.

If you have any questions regarding this matter, please contact me at (301) 415-1484.

Sincerely,



Victor Nerses, Sr. Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-387 and 50-388

cc: See next page



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