June 2, 1998

Mr. Robert G. Byram
Senior Vice President-Generation
and Chief Nuclear Officer
Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, PA 18101

SUBJECT: CORRECTION TO SAFETY EVALUATION FOR AMENDMENT NO. 174 TO FACILITY OPERATING LICENSE NO. NPF-14, SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

Dear Mr. Byram:

The Commission issued Amendment No. 174 on April 6, 1998, to Facility Operating License No. NPF-14 for Susquehanna Steam Electric Station, Unit 1. Mr. Roscioli of your staff notified me of some typographical errors on pages 2 and 3 of the safety evaluation accompanying Amendment No. 174. The affected pages were corrected and are enclosed for your inclusion in the safety evaluation dated April 6, 1998.

Sincerely,
/S/

Victor Nerses, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-387/50-388

Enclosure: Pages 2 and 3 of Safety Evaluation

cc: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Mr. Robert G. Byram
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Susquehanna Steam Electric Station,
Units 1 & 2

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EMF- 97-010(P), Revision 1, "Application of ANFB to ATRIUM™-10 for Susquehanna Reloads," March 1997, and PLA-4595 FILE R41-2, Susquehanna Steam Electric Station, "Response to NRC Request for Additional Information on Siemens' Report EMF-97-010, Revision 1, March 27, 1997 (References 4 and 5). The detailed review was given in a letter from Chester Poslusny, NRC, to Robert G. Byram, PP&L, Susquehanna Steam Electric Station, Unit 2 (TAC No. M97499), dated May 7, 1997 (Reference 6). This review and approval is also applicable to Unit 1 because the fuel is the same design as was used in Unit 2.

2.3 Technical Specification Changes

The licensee requested a change to the S1C11 TSs in accordance with 10 CFR 50.90. The proposed revisions of the TSs and the associated Bases are described below.

(1) TS 1.2 Average Exposure and 1.3 Average Planar Linear Heat Generation Rate

On page 1-1 of the TSs, Section 1.0 DEFINITIONS, the definition of AVERAGE EXPOSURE currently reads as follows:

> 1.2 The AVERAGE BUNDLE EXPOSURE shall be equal to the sum of the axially averaged exposure of all the fuel rods in the specified bundle divided by the number of fuel rods in the fuel bundle.
>
> The AVERAGE PLANAR EXPOSURE shall be applicable to a specific planar height and is equal to the sum of the exposure of all fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.

This definition is proposed to be entirely replaced by the following definition:

> 1.2 The AVERAGE BUNDLE EXPOSURE shall be equal to the total energy produced by the bundle divided by the total initial weight of uranium in the fuel bundle.
>
> The AVERAGE PLANAR EXPOSURE at a specified height shall be equal to the total energy produced per unit length at the specified height divided by the total initial weight of uranium per unit length at that height.

The proposed changes of definitions for TS 1.2 average bundle exposure and average planar exposure and for TS 1.3 average planar linear heat generation rate to reflect the use of part length rods in the ATRIUM™-10 fuel assemblies as well as full length rods in SPC 9x9-2 fuel assemblies are acceptable since the new wordings accurately reflect the calculation of average planar exposure for fuel containing part length fuel rods.

(2) TS 2.1.2 and 3.4.1.1.2

The licensee proposed two changes on Page 2-1 of the TSs. Section 2.1, SAFETY LIMITS, describes, in part, limits for thermal power under high pressure and high flow in paragraph 2.1.2. Paragraph 2.1.2 currently reads as follows:

The MINIMUM CRITICAL POWER RATIO (MCPR) shall not be less than 1.09* with the reactor vessel steam dome pressure greater than 785 psig and core flow greater than 10 million lbm/hr.

The licensee proposed to change that paragraph to read:

The MINIMUM CRITICAL POWER RATIO (MCPR) shall not be less than the value shown in Figure 2.1.2-1*# with the reactor vessel steam dome pressure greater than 785 psig and core flow greater than 10 million lbm/hr.

Also the licensee proposed to change the action statement under paragraph 2.1.2. That statement currently states:

With MCPR less than 1.09* and the reactor vessel steam dome pressure greater than 785 psig and core flow greater than 10 million lbm/hr., be in at least HOT SHUTDOWN within 2 hours and comply with the requirements of Specification 6.7.1.

The proposed change reads as follows:

With MCPR less than the value shown in Figure 2.1.2-1*# and the reactor vessel steam dome pressure greater than 785 psig and core flow greater than 10 million lbm/hr., be in at least HOT SHUTDOWN within 2 hours and comply with the requirements of Specification 6.7.1.

A footnote on page 2-1 is added:

Only applicable for Unit 1 Cycle 11 operation.

The original footnote, marked with the asterisk, is unchanged.

Susquehanna TSs page 3/4 4-1c, LIMITING CONDITION FOR OPERATION, for RECIRCULATION LOOPS-SINGLE OPERATION, in Section 3.4.1.1.2.a.1, currently states:

1. Specification 2.1.2: the MCPR Safety Limit shall be increased to 1.10.

This specification is proposed to be changed to read:

1. Specification 2.1.2: the MCPR Safety Limit shall be increased to the value shown in Figure 3.4.1.1.2-1++.

A footnote, denoted by the symbol ++, is proposed for the bottom of the page to explain that this condition is only applicable for Unit 1 Cycle 11 operation.

The safety limit MCPR in TS 2.1 is proposed to change from 1.09 to the value shown in Figure 2.1.2-1 (≥1.1 depending on the core flow) for operation with two recirculation loops with the reactor vessel steam dome pressure greater than 785 psig and core flow greater than 10 million lbm/hr., and from 1.10 to the value shown in Figure 3.4.1.1.2-1 (≥1.22) for single loop operation