

September 18, 2007

LICENSEE: PPL Susquehanna, LLC

FACILITY: Susquehanna Steam Electric Station, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALLS HELD ON AUGUST 28, 2007 AND SEPTEMBER 5, 2007, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PPL SUSQUEHANNA, LLC, CONCERNING DRAFT REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of PPL Susquehanna, LLC held telephone conference calls on August 28, 2007 and September 5, 2007, to discuss and clarify the staff's draft requests for additional information (D-RAIs) concerning the Susquehanna Steam Electric Station, Units 1 and 2, license renewal application. The telephone conference calls were useful in clarifying the intent of the staff's D-RAIs.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the D-RAIs discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

/RA/

Evelyn Gettys, Project Manager
License Renewal Branch A
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-387 and 50-388

Enclosures:

1. List of Participants
2. List of Draft Requests for Additional Information

cc w/encls: See next page

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DATE	09/07/07	09/07/07	09/18/07

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**TELEPHONE CONFERENCE CALL
SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION**

LIST OF PARTICIPANTS
August 28, 2007 and September 5, 2007

PARTICIPANTS

Evelyn Gettys
Allen Hiser
Andrew Johnson
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PPL Susquehanna, LLC (PPL)
PPL
PPL
PPL

**DRAFT REQUESTS FOR ADDITIONAL INFORMATION
SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION**

August 28, 2007 and September 5, 2007

The U.S. Nuclear Regulatory Commission (NRC or the staff) and Representatives of PPL Susquehanna, LLC, held telephone conference calls on August 28, 2007 and September 5, 2007, to discuss and clarify the following draft requests for additional information (D-RAIs) concerning the Susquehanna Steam Electric Station (SSES), Units 1 and 2, license renewal application (LRA).

D-RAI 4.7.1-1

In Section 4.7.1 of the SSES LRA, the licensee references Section 5.4.4.4 of the Final Safety Analysis Report (FSAR), Rev. 60, and then states that the main steam flow restrictors are resistant to erosion by comparing turbine inspection results made at the Dresden Unit 1 facility that revealed no noticeable effects from erosion on the stainless steel nozzle partitions.

- a. Discuss any actual erosion rates that have been measured on main steam line flow restrictors at SSES or other nuclear plants. If there are no actual measured erosion rates available, discuss the basis for concluding that the main steam flow restrictors are resistant to erosion, and include in the discussion a detailed comparison of turbine nozzle partition and main steam flow restrictor materials. The materials comparison should include such salient points as material specifications used, chemistry limits of those specifications, and process controls for material fabricated in the late 1950s (Dresden) vs. the early 1980s (Susquehanna).
- b. Section 5.4.4.3 of the FSAR, Rev. 60, states that surface finish has a minor effect on erosion-corrosion, and that very rough surfaces will erode more rapidly than smooth surfaces. Has the licensee verified that the exposed surfaces of the main steam line flow restrictors are sufficiently smooth to not undergo accelerated erosion?

Discussion: The applicant's discussion of the historical precedence set by the FSAR, helped to clarify an issue for the staff. Therefore, the staff decided to withdraw the question, and it will not be sent as a formal RAI.

D-RAI 4.7.1-2

With an assumed erosion rate of 0.004 in. per year, the applicant stated that 40 years of operation would only increase steam flow rate by 5 percent, and an additional 20 years of operation could be linearly extrapolated for a total increase in steam flow (and therefore dose) of 7.5 percent.

- c. Discuss the basis for assuming an erosion rate of 0.004 in. per year, and include whether this is a conservative, realistic, or non-conservative assumption.

Enclosure 2

- d. Provide a copy of the calculation used to establish the 5 percent increase in steam flow after 40 years of operation, including descriptions of all relevant parameters. Also include relevant dimensions of the main steam line flow restrictors when initially installed and at the most recent inspection.

Discussion: Based on the discussion with the applicant, the staff agreed to revise this question as follows. The revised question will be sent as a formal RAI.

RAI 4.7.1-1 The applicant stated that 40 years of operation would increase steam flow rate by no more than 5 percent, and an additional 20 years of operation could be linearly extrapolated for a total increase in steam flow (and therefore dose) of 7.5 percent.

- a. Discuss the basis for assuming an erosion rate of 0.004 inches per year, and if this will be applicable for the term of extended operation. Include whether this is a conservative, realistic, or non-conservative assumption.
- b. Provide a copy of a calculation that demonstrates the acceptability of the main steam flow restrictors for the license renewal period. Include descriptions of all relevant parameters and provide the basis and justification for all assumptions.

Memo to PPL Susquehanna, LLC from E. Gettys dated September 18, 2007

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