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**SUSQUEHANNA STEAM ELECTRIC STATION
UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (LRA)
AMENDMENTS TO LRA AND RAI 3.2.2.3-1 RESPONSE Docket Nos. 50-387
PLA-6540 and 50-388**

- References:*
- 1) PLA-6110, Mr. B. T. McKinney (PPL) to Document Control Desk (USNRC),
"Application for Renewed Operating License Numbers NPF-14 and NPF-22,"
dated September 13, 2006.
 - 2) PLA-6406, Mr. B. T. McKinney (PPL) to Document Control Desk (USNRC),
"Request for Additional Information for the Review of the Susquehanna Steam
Electric Station Units 1 and 2, License Renewal Application (LRA) Sections B.2.8,
B.2.9, 3.1.2, 3.2.2, 3.3.2, and 3.4.2," dated August 27, 2008.

In accordance with the requirements of 10 CFR 50, 51, and 54, PPL requested the renewal of the operating licenses for the Susquehanna Steam Electric Station (SSES) Units 1 and 2 in Reference 1.

The enclosure to this letter contains amendments to section 3.2.2.1.4 and Table 3.2.2-4 of the SSES License Renewal Application (LRA). Also included are changes to PPL's previously submitted Request for Additional Information (RAI) 3.2.2.3-1. These changes are necessary due to a recent determination that the material of construction for flexible connections in the High Pressure Coolant Injection (HPCI) lubricating and control oil system is stainless steel, rather than synthetic rubber as originally submitted in Reference 1. The revised PPL response to RAI 3.2.2.3-1 replaces the original response, submitted by Reference 2, in its entirety.

There are no new or revised regulatory commitments contained herein as a result of these changes.

If you have any questions, please contact Mr. Duane L Filchner at (610) 774-7819.

A120
NRR

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on: 7-28-09

Richard P. Godin for T.S. Rausch

T. S. Rausch

Enclosure: Amendments to the SSES License Renewal Application and Change to
RAI 3.2.2.3-1 Response

Copy: NRC Region I

Ms. E. H. Gettys, NRC Project Manager, License Renewal, Safety

Mr. R. Janati, DEP/BRP

Mr. F. W. Jaxheimer, NRC Sr. Resident Inspector

Mr. A. L. Stuyvenberg, NRC Project Manager, License Renewal, Environmental

**Enclosure to PLA-6540
Amendments to the SSES License Renewal
Application and Change to RAI 3.2.2.3-1 Response**

LRA Amendment

LRA Section 2.3.2.4 identifies the HPCI system components that are subject to aging management review. Flexible connections used in the HPCI lubricating and control oil system are included on this list. LRA Section 3.2.2.1.4 and Table 3.2.2-4 identify the flexible connection material of construction to be synthetic rubber. It has been determined that the flexible connections are constructed of stainless steel rather than synthetic rubber. The LRA amendments which reflect this change follow. Also, a revision to the original response to RAI 3.2.2.3-1 in Reference 2 follows the LRA amendment. This revision replaces the original response to RAI 3.2.2.3-1 in its entirety.

3.2.2.1.4 High Pressure Coolant Injection System

- The following text under Section 3.2.2.1.4 (on LRA page 3.2-6) is revised by deletion (~~strikethrough~~).

Materials

The materials of construction for the High Pressure Coolant Injection System components are:

- Carbon Steel
- Cast Iron
- Copper Alloy (Admiralty Brass, Brass, Bronze, Red Brass)
- Glass
- Stainless Steel
- ~~Synthetic Rubber~~

Table 3.2.2-4 Aging Management Review Results – High Pressure Coolant Injection System

➤ The following line items in LRA Table 3.2.2-4 (page 3.2-78) are revised by addition (*bold italics*) and by deletion (~~strikethrough~~) as follows:

Component / Commodity	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Volume 2 Item	Table 1 Item	Notes
Flexible Connections (Hoses)	Pressure Boundary	Synthetic Rubber <i>Stainless Steel</i>	Lubricating Oil (Internal)	None Identified Loss of Material	None Required <i>Lubricating Oil Analysis Program</i> <i>Lubricating Oil Inspection</i>	N/A <i>V.D1-24</i>	N/A <i>3.2.1-06</i>	G <i>B</i>
			Indoor Air (External)	None Identified	None Required	V.B-4 <i>V.F-12</i>	3.2.1-11 <i>3.2.1-53</i>	I <i>A</i>

RAI 3.2.2.3-1:

The staff has noted that, in the LRA, the applicant appears to take an inconsistent approach to aging management of elastomeric, rubber, polymeric, and glass components in the application because in some AMRs for these types of materials the applicant has identified that cracking and changes in material properties as applicable AERMs, whereas in other AMRs for these types of materials, the applicant has concluded that AERMs are not applicable to the components. The staff seeks consolidation of PPL's approach to management of aging in the elastomeric, rubber, and polymeric engineered safety features system components with the aging management approach that the applicant had taken for these types of components in the auxiliary systems.

Part A. Provide your basis why PPL has not identified any AERMs for high-pressure coolant injection (HPCI) synthetic rubber component surfaces that are exposed to lubricating oil and to indoor air environments when cracking and changes in materials had been identified as applicable aging effects for: (1) neoprene and rubber components in the primary containment atmosphere circulation system under exposure to indoor air and to ventilation air, (2) neoprene/fiberglass components in the reactor building heating, ventilating, and air conditioning (HVAC) system under exposure to indoor air and to ventilation air, and (3) for Teflon piping in the sampling system (changes in material properties only) under exposure to indoor air.

Part B. Identify those material properties and aging effects that could be impacted by exposure of these synthetic rubber materials to the lubricating oil and indoor air environments.

RAI 3.2.2.3-1 Revised Response: (This response replaces the original response in its entirety)

Part A. The SSES LRA, submitted via Reference 1, identified Flexible Connections in the HPCI lubricating and control oil system as subject to aging management review and identified the material of construction of these flexible connections as synthetic rubber. Subsequently, it has been determined that these flexible connections are constructed of stainless steel and not synthetic rubber. The results of the aging management review for stainless steel exposed to lubricating oil and indoor air are provided in the LRA amendment above.

Part B. As described in the response to Part A of this RAI, the flexible connections are constructed of stainless steel, and the aging effects are identified in the LRA amendment above.