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U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station OP1-17
Washington, DC 20555

**SUSQUEHANNA STEAM ELECTRIC STATION
RESPONSE TO NRC REQUEST FOR ADDITIONAL
INFORMATION ON PROPOSED REVISION 1 TO
RELIEF REQUEST RR-02
PLA-6652**

**Docket No. 50-387
and 50-388**

Reference: PLA-6614, T. S. Rausch (PPL) to Document Control Desk (USNRC), "Susquehanna Steam Electric Station Proposed Revision 1 to Relief Request RR-02 to Provide a Grace Period for the Test Frequency for Main Steam Safety Relief Valves for Third 10-Year Interval In-Service Testing Program Plan for Susquehanna SES Unit 1 and Unit 2," dated June 1, 2010.

Attachment 1 contains the PPL Susquehanna, LLC (PPL) response to the NRC Staff's question related to how PPL meets the requirements of Code Case OMN-17. The question was received via email dated August 30, 2010 and was discussed with the NRC Staff during a telephone conversation on September 9, 2010.

Should you have any questions, please contact Cornelius T. Coddington at (610) 774-4019.

Sincerely,

A handwritten signature in blue ink, appearing to read "Timothy Rausch", is written over a white background. The signature is fluid and cursive, with the first name "Timothy" being more prominent than the last name "Rausch".

T. S. Rausch

Attachment: Response to Question on Revision 1 to Relief Request RR-02 for Susquehanna Units 1 and 2

Copy: NRC Regional I
Mr. P. W. Finney, NRC Sr. Resident Inspector
Mr. R. R. Janati, DEP/BRP
Mr. B. Vaidya, NRC Project Manager

ATTACHMENT TO PLA-6652

RESPONSE TO QUESTION ON REVISION 1
TO
RELIEF REQUEST RR-02 FOR
SUSQUEHANNA UNITS 1 and 2

NRC Question:

Please provide an explanation as to how PPL meets the requirements in Code Case OMN-17 subparagraphs 1(b)(1), 1(b)(2), 1(d), and 1(e).

Code Case OMN-17 subparagraph 1(b)(1)

(b) Replacement With Pretested Valves. The Owner may satisfy testing requirements by installing pretested valves to replace valves that have been in service, provided that

(1) for replacement of a partial complement of valves, the valve removed from service shall be tested prior to resumption of electric power generation and shall be subjected to the maintenance specified in subpara. (d).

PPL Explanation:

PPL has a complement of 40 Crosby Safety/Relief Valves (SRV) that are shared between the two Susquehanna Units. Each unit has 16 SRVs in service at any one time, leaving the balance of eight (8) SRVs as spares. Normally, six (6) SRVs are removed at any one time. The SRV seat tightness is determined and an as found actuation test and set pressure test is performed. The as-found set-pressure testing is performed to determine whether the SRV setpoint is within the technical specification acceptance criteria of +/- 3%. The results of these tests are used to determine if the number of valves tested is sufficient to meet the Inservice Test Program requirements.

The information resulting from the above activities along with the valves operating history is used to determine the type of maintenance to be performed. This determination is a collaborative effort among the valve manufacture's representative, the testing corporation's engineering staff, and the PPL engineer.

The types of maintenance performed includes disassembly, inspection, refurbishment, and/or lapping of the SRV seating surface. For example:

- If an SRV developed a weep within one cycle of being disassembled, the SRV's seat would likely be lapped.
- If the SRV developed a weep after more than one cycle, the SRV would likely be disassembled.
- If four steam set pressure tests do not show improvement in the setpoint, the SRV would likely be disassembled.
- If the setpoint is consistently high/low or erratic, then the SRV would likely be disassembled.

SRV testing has shown that most of the test failures are due to setpoint drift and are not due to a malfunction in the SRV itself. This is consistent with industry experience that indicates Crosby SRVs are prone to setpoint drift. PPL has not experienced any SRV that failed to open. Based on the above, the PPL SRV maintenance practices have proven to provide adequate assurance, prior to resumption of electric power, that each SRV will perform its specified function.

Code Case OMN-17 subparagraph 1(b)(2)

(b) Replacement With Pretested Valves. The Owner may satisfy testing requirements by installing pretested valves to replace valves that have been in service, provided that

(2) for replacement of a full complement of valves, the valves removed from service shall be tested within 24 months of removal from the system.

PPL Explanation:

This requirement is not applicable since PPL does not replace a full complement of SRVs at any one time. The only time we would replace a full complement would be if the results of the first actuation tests required us to test the remaining valves per ASME code requirement specified in I -1330 (c)(2). Presently, our surveillances require that this testing be performed within 12 months of removal from the system.

Code Case OMN-17 subparagraph 1(d)

(d) Maintenance. The Owner shall disassemble and inspect each valve after as-found set-pressure testing to verify that parts are free of defects resulting from time-related degradation or service-induced wear. Based upon this inspection, the owner shall determine the need for additional inspections or testing to address any generic concerns. As-left set-pressure testing shall be performed following maintenance and prior to returning the valve to service.

PPL Explanation:

The seat tightness determination, the as found actuation test, the subsequent steam set pressure tests, and the SRV history (last time disassembled) determines what type of maintenance is performed on the SRV. This determination is a collaborative effort among the valve manufacture's representative, the testing corporation's engineering staff, and the PPL engineer. The type of maintenance performed includes disassembly, inspection, and refurbishment and/or lapping of the SRV seating surface. The SRVs may or may not be disassembled and inspected after as-found set-pressure testing.

The PPL SRV operating history, based on the maintenance practices described above, has proven to provide adequate assurance, that prior to resumption of electric power, each SRV will perform its specified function. No SRV has failed to open for either Susquehanna unit.

After pressure testing and maintenance, the as-left set-pressure setpoint is set to within a tolerance of +/- 1%.

Based on the above, the PPL maintenance practices meet the intent of the subparagraph 1(d) requirements.

Code Case OMN-17 subparagraph 1(e)

(e) Disassembly and Inspection. Each valve shall have been disassembled and inspected in accordance with subpara. (d) above prior to the start of the 72-month test interval. Disassembly and inspection performed prior to the implementation of this Code Case may be used.

PPL Explanation:

As stated in the explanation to subparagraph 1(d) above, the SRVs may or may not be disassembled prior to the start of the 72-month test interval. The intent of subparagraph 1(e) is to assure that the SRV can adequately perform its intended safety function prior to the start of a 72-month period. Our maintenance practices and SRV performance history has proven that the PPL SRVs can adequately perform their intended safety function for a 72-month period.