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FEB 25 1999

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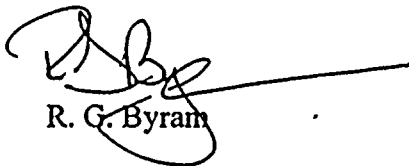
**SUSQUEHANNA STEAM ELECTRIC STATION
REPLY TO A NOTICE OF VIOLATION
(50-387/98-12-02 & 50-388/98-12-02)
PLA-5035**

Docket Nos. 50-387
and 50-388

This letter provides PP&L, Inc.'s response to NRC Notice of Violation 50-387/98-12-02 and 50-388/98-12-02 contained in combined NRC Inspection Report 50-387/98-12 and 50-388/98-12, dated January 26, 1999.

If you have any questions concerning the response, please contact Mr. J. M. Kenny at (610)-774-7535.

Sincerely,


R. G. Byram

Attachment

Copy: NRC Region I
Mr. S. L. Hansell, NRC Acting Sr. Resident Inspector
Mr. V. Nerses, NRC Sr. Project Manager

9903050023 5pp.



REPLY TO A NOTICE OF VIOLATION

Violation 50-387 & 388/98-12-02

10 CFR 50, Appendix B, Criterion III, "Design Control", requires, in part, that measures be established to ensure that applicable regulatory requirements and the design basis are correctly translated into specifications, drawings, procedures and instructions. It further requires that measures be established for the selection and review for suitability of application of materials and parts.

Contrary to the above, on July 1, 1998, PP&L had not ensured that the applicable design basis, from modification PCN 89-9008, was correctly translated into specifications, drawings, procedures or instructions, and had not ensured that measures were established for the selection and review of materials, in that, on two separate occasions, PP&L substituted incorrect gasket material for a neoprene gasket without a review for suitability of materials, on the "A" emergency diesel generator fuel oil storage tank.

I. Reason for the Violation:

Plant Modification (PMR) 89-9008 (note: "PMR" not "PCN") installed a different type of level instrument, and added stilling wells to the diesel fuel oil storage tanks in 1990. The instrument tank flange consists of three flanges sandwiched together by one set of bolts. The lower gasket is between the tank flange and the stilling well flange, and the upper gasket is between the stilling well flange and the instrument flange.

The gasket material was specified in two of the modification package documents. Drawing change notices 90-1841 and 90-1842 were issued to specify Neoprene ("1/8 black neoprene"), for both the upper and lower gasket, during the modification installation process. The original design for the flange connection required installation of flexitalic gaskets which is consistent with engineering specifications. It was recognized, however, during the installation of the modification, that neoprene gaskets would be a better choice of gasket material because neoprene would simplify future maintenance activities affecting the flange connection. This is because each time the compression is released on flexitalic gaskets, flexitalic gaskets require replacement. Neoprene gaskets for this application would not necessarily require replacement when the compression is released. Since the stilling well configuration contains two gaskets, one that requires removal of the stilling well to replace (i.e. the lower gasket), use of neoprene for this application was determined beneficial to simplify maintenance activities affecting the flange. Otherwise, flexitalic gaskets are an acceptable gasket material for this application. Drawing change notice 90-1841 updated drawing JL-136 sheet 6 ("Common Instrument Installation Det. Stilling Well Diesel Fuel Oil Storage Tank") and 90-1842 updated the modification's mechanical installation instructions to specify neoprene gaskets for the stilling wells.



The modification package also updated numerous other drawings to provide reference to the stilling well detail drawing JL-136 sheet 6. The modification updated the instrument detail drawings applicable to each diesel fuel oil tank (JL-136 sheets 1,7,8,9,10) by adding a note that refers to JL-136 Sheet 6 for the stilling well details. The modification package also updated the tank drawing (FF 106100 Sheet 0801) that depicts the diesel fuel oil storage tank details to add a note identifying that JL-136 sheet 6 should be referred to for stilling well details.

Based on the above, it is concluded that the modification package 89-9008 properly updated the design documents that specified a gasket material for the diesel fuel oil tank instrument flange gaskets. Also, the modification package revised all other pertinent design documents to provide reference to the drawing that specifically depicted the gasket material.

Despite the above, a black "rubber" gasket was found on the "A" diesel fuel oil storage tank stilling well upper gasket location and determined to be the cause for water ingress to the "A" tank. A Condition Report which identified loose bolts on the "A" tank instrument flange connection, was issued. Investigation revealed that the bolts were loose due to deterioration of the "rubber" upper flange gasket and that the work plan covering maintenance of the level instruments did not specify a specific gasket material. It is believed that the black rubber was mistakenly substituted for the black neoprene.

Since the deteriorated gasket was determined to be the cause of the loose bolts, the maintenance work group responsible to replace the deteriorated gasket questioned the material. The maintenance planner and maintenance engineers who were consulted did not identify that drawing JL-136 sheet 6 specified neoprene gasket material. As a result, flexitalic was specified and the applicable maintenance work plan was revised. The flexitalic gasket was installed on the "A" diesel fuel oil storage tank upper gasket location in accordance with the revised work plan. As stated earlier, use of flexitalic gaskets for flange connections such as the stilling well flanges is consistent with engineering specifications. For this application, however, modification 89-9008 specified neoprene to simplify maintenance activities.

Based on the above, it is concluded that the reasons for the violation are:

1. The design requirements associated with modification 89-9008 were not translated into maintenance work plans for the instrument stilling well to specify neoprene gasket material. This lack of work plan detail is believed to be the reason rubber was substituted for neoprene.
2. An inadequate review of design documentation was performed when it was determined that a flexitalic gasket should be substituted for the deteriorated "rubber" gasket on the "A" diesel fuel oil storage tank.

II. Corrective Steps Which Have Been Taken and the Results Achieved

- Neoprene gasket material has been confirmed to be the proper material for the diesel generator fuel oil storage tank stilling wells.
- The "A" through "E" diesel generator fuel oil storage tank stilling well gaskets have been inspected and all were found to contain flexitalic gaskets on the upper gasket location and neoprene on the lower location.
- Work plan changes that provide specific reference to neoprene gaskets and the JL-136 sheet 6 drawing have been made.

III. Corrective Steps Which Will Be Taken to Avoid Further Violations

- The flexitalic gaskets installed on the diesel generator "A" through "E" fuel oil storage tank stilling wells will be replaced with neoprene gaskets by 4/15/99. The flexitalic gaskets currently installed have been determined acceptable in the interim as documented in the operability evaluation for Condition Report 88066.
- The cited condition and its causes as delineated herein will be reviewed with all maintenance planners and engineers by 4/15/99. The review will reinforce the SSES expectations regarding the proper identification, specification, and authorization for installation of material different than what is found in the field during repairs.

IV. Safety Significance:

PP&L has performed safety assessments and operability evaluations of the conditions discussed herein. These evaluations are documented in the SSES Condition Reports and establish the following:

- The water quantity found in the bottom of the "A" tank and inaccurate storage tank level indication would not prevent the start, acceleration and loading of the diesel generator. In addition, calculations indicate that the tank was continuously capable of supplying 7 days of fuel oil to the "A" diesel generator at full load operation.
- The "A" diesel tank vault yard surface conditions are the worst case for water ingress into the vault.
- Adequate sealing is achieved during the interim with the flexitalic gaskets installed to prevent water intrusion into the tanks through the instrument stilling well flange connections.



- Two barriers (tank vault and tank access port(s)) must be breached for water to enter the fuel oil storage tanks.
- The tank vaults are periodically monitored for water intrusion.
- The level indicators are checked during operator rounds.

Based on the above, it is concluded that at no time were any of the diesel generators not capable of performing their design basis safety function.

V. Date of Full Compliance

Based on the above, PP&L will be in full compliance by 4/15/99.

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