PP&L

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June 4, 1979

Mr. Robert T. Carlson
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U. S. Nuclear Regulatory Commission
631 Park Avenue
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SUSQUEHANNA STEAM ELECTRIC STATION
NRC INSPECTION OF MARCH 19-23, 1979
REPORT NOS. 50-387/79-14 & 50-388/79-08 (COMBINED)
ERs 100450/100508 FILE 840-4
PLA-368

Dear Mr. Carlson:

Reference is to your letter of April 26, 1979 forwarding IE Inspection Report Nos. 50-387/79-14 & 50-388/79-08 and Enclosure (1) thereto, "Appendix A, Notice of Violation."

Your letter advised that PP&L was to submit within 30 days of receipt, a written explanation addressing (1) corrective steps which have been taken and the results achieved, (2) corrective steps which will be taken to avoid further items of noncompliance, and (3) the date when full compliance will be achieved.

Item A of the Notice of Violation (Infraction) states as follows and the corrective measures are detailed below:

"10CFR50.55a, Paragraph (d)(2), states, in part: "For construction permits issued on or after January 1, 1971, but before July 1, 1974, piping which is part of the reactor coolant pressure boundary shall meet ...the requirements applicable to Class 1 piping of editions of Section III of the ASME Boiler and Pressure Vessel Code..."

The Susquehanna PSAR, Appendix A, states, in part: "Piping...(is) separated into classifications...and the applicable codes...as indicated in Table A.2.1.a..." Table A.2.2 specifies the feedwater system as Group A which corresponds to ASME Boiler and Pressure Vessel Code, Section III (ASME B&PVC).

The ASME B&PVC, Section III, Paragraph NB-4321, states, in part: "Each ...Installer...shall establish the procedure and conduct the tests required by this article and by Section IX of this Code..." Section IX states, in part, in Paragraph QW-201.1: "The welding procedure specification shall list in detail the...variables described for each welding process as either essential or nonessential."

Contrary to the above:

1. Welding procedure specification DWP-SQI-1.4, Revision 1, was approved on January 9, 1979, and used to weld the internal diameter build up on feedwater safe ends N4A through N4F without addressing the essential variable QW-410.16.

2. Welding procedure specification DWP-SQI-1.4.1, Revision 0, was approved for use to weld the new safe ends to the feedwater system without addressing the essential variable QW-410.24.

(1) Corrective steps which have been taken and the results achieved:

(a) Welding procedure specification DWP-SQI-1.4.1, Rev. 0 was revised to incorporate supplementary essential variable QW-410.24. As noted in the inspection report, DWP-SQI-1.4.1, Rev. 0 was used to build up the internal diameter of safe ends N4A through N4F. We have evaluated this situation and consider the deposited weld metal acceptable for the following reasons:

- The welding procedure specification, DWP-SQI-1.4.1, Rev. 0, was based on the procedure qualification record, PQR-1. This approved procedure qualification record, specified the control of travel speed and welding techniques in accordance with ASME Section IX, 1974 edition, paragraph 410.24, summer 1976 Addendum.

- All welds were made by individuals who qualified to WQ-SQI-1.4, Rev. 2 and performed mockup welding per SQI-1.1, Rev. 2. Both procedures incorporate supplementary essential variable QW-410.24.

(b) Welding procedure specification DWP-SQI-1.4, Rev. 1 was revised to incorporate supplementary essential variable QW-410.16. No production welding had been performed using this welding procedure specification until the procedure had been revised to incorporate the supplementary essential variable in question. Therefore, no further corrective steps are deemed necessary.

(2) Corrective steps which have been taken to avoid further items of noncompliance:

Items (a) & (b) - In addition to revising the welding procedure specifications to incorporate the essential variables; G.E. audited all welding procedures used for the safe end modification work. The audit results indicate that the violations cited are an isolated condition which the aforementioned revisions rectify.

(3) The date when full compliance was achieved:

Items (a) & (b) - The supplementary essential variables were incorporated into applicable welding procedure specifications DWP-SQI-1.4, Rev. 4 and DWP-SQI-1.4.1, Rev. 1. The specifications were approved and released for production effective March 22, 1979.

Item B of the Notice of Violation (Infraction) states as follows and the respective corrective measures are detailed below:

"10CFR50, Appendix B, Criterion V states, in part: "Activities affecting quality shall be prescribed by documented instructions...and shall be accomplished in accordance with these instructions..."

The Susquehanna PSAR, Appendix D.3.3.7 states, in part: "...Use of qualified procedures and application thereof as required by established standards will be rigidly enforced..."

The Bechtel Quality Control Instruction, P-1.10, Revision 7, Paragraph 2.4, states, in part: "Inspect the internals of the piping components and any adjacent components accessible at the time of installation to assure compliance with the applicable Engineering Specification. This inspection is to be performed just prior to the connection closure."

Contrary to the above, on February 1, 1979, a cleanliness inspection was performed and documented on pipe spool DCA-108-1-2-FW4. Subsequent to this inspection; machining, fitting, and aligning activities took place on the open ends of the pipe spool during March 19-20, 1979, and the closure weld commenced on March 21, 1979. No additional cleanliness inspection was performed."

(1) Corrective steps which have been taken and the results achieved:

Bechtel NCR-3618 was initiated on March 22, 1979 to document the condition cited by the inspector. A subsequent investigation revealed that the beveled edge had been reground after the cleanliness check was performed to allow proper fit-up and alignment. Bechtel QC was not notified that additional work had been done, as a result, a reinspection for cleanliness had not been performed.

The NCR was dispositioned use-as-is by project engineering on the basis that the line will be flushed and valve DCA-GT-HV-E11-1F009 will be disassembled for QC and Field Engineering inspection to ensure that all foreign materials are removed.

Bechtel QA will monitor the disassembly/reassembly of the valve and witness the cleanliness inspection operation.

(2) Corrective steps which have been taken to avoid further items of noncompliance:

Bechtel QC issued an interoffice memo on March 22, 1979 to all QC welding and piping engineers. This memo states that welding shall <u>not</u> be performed if it is realized through surveillance inspection activities that additional work (such as refit-up, cut-apart or grinding, etc.), has/was performed after the date indicated on the cleanliness record card. The memo further requires that notification must be made to the Piping Quality Control discipline to obtain additional cleanliness inspections prior to fit-up (release for welding) in such cases.

Bechtel Welding Quality Control is presently verifying that the piping connection closure(s) have been accepted by Piping Quality Control for cleanliness prior to sign off of the fit-up on WR-5, Revision 8.

Field Procedure FP-P-10, Revision 1, "Procedure for Valve Installation", is in the process of being approved. This procedure is intended to minimize the likelihood of damage to valves, thereby ensuring trouble free operation.

(3) The date when full compliance will be achieved:

NCR-3618 was completed on April 12, 1979. Disassembly and inspection of valve DCA-GT-HV-E11-1F009 is scheduled for June 15, 1979. Field Procedure P-10, Rev. 1 should be approved by June 15, 1979.

We trust the Commission will concur that the actions taken to date are adequate.

Very truly yours,

A. R. Sabol
Manager-Nuclear Quality Assurance

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cc: Mr. Robert M. Gallo
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