

FINAL REPORT ON
STOP WORK ORDER ISSUED TO
BINGHAM-WILLAMETTE COMPANY
ON
MARCH 29, 1979

1.0 SUMMARY

Quench spray, recirculation spray, and auxiliary feedwater pumps are being manufactured by Bingham-Willamette Company for the Beaver Valley Power Station - Unit No. 2. A stop work order was issued on March 29, 1979, because Bingham-Willamette Company was unable to demonstrate that it had performed welding and nondestructive testing to approved procedures. Bingham-Willamette had, in several cases, provided documentation which failed to meet specification requirements. The pumps tested failed to meet the specification design operational requirements.

A joint Duquesne Light Company/Stone & Webster Quality Assurance audit was performed on May 7, 1979, to May 11, 1979, resulting in 13 findings and one observation. Bingham-Willamette has proposed corrective action for each finding. Stone & Webster has determined that the corrective actions are acceptable and satisfy the requirements of the pump specifications. On this basis, the stop work order was removed on August 8, 1979.

2.0 IMMEDIATE ACTION TAKEN

A "stop work" order was issued to Bingham-Willamette Company on March 29, 1979, for the Beaver Valley Power Station - Unit No. 2 pump orders only. This stop work order was issued because of Bingham-Willamette's inability to demonstrate that work had been done to approved procedures, to provide proper documentation for materials and NDT results, and to effect corrective action specified in the Nonconformance and Disposition Report.

3.0 DESCRIPTION OF DEFICIENCY

Bingham-Willamette failed to demonstrate compliance with specification requirements for post-weld repair heat treating, welder qualification, welding procedure qualification, nondestructive testing procedures, material certifications, and pump operational test requirements.

Bingham-Willamette continued to manufacture the subject pumps for a period of 12 to 15 months before taking exception to corrective action specified in the Nonconformance and Disposition Reports. This lack of conformance could have resulted in components which were technically unacceptable or whose quality could not be conclusively demonstrated.

4.0 ANALYSIS OF SAFETY IMPLICATION

Pumps supplied by Bingham-Willamette include those in the containment quench spray and recirculation spray systems as well as auxiliary

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feedwater systems. Failure of this equipment to perform to the specified requirements could impact the capabilities for containment and primary system heat removal.

5.0 CORRECTIVE ACTION TO REMEDY DEFICIENCY

The Duquesne Light Company and Stone & Webster Engineering Corporation Quality Assurance Departments performed an in-depth audit of the Bingham-Willamette Quality Assurance program with respect to Beaver Valley Power Station - Unit No. 2 purchase orders on May 7 through May 11, 1979.

This audit resulted in 13 findings and one observation. Bingham-Willamette proposed corrective actions for each finding which are acceptable.

The corrective action regarding fabrication ~~problems~~ **is directed** to areas of welder and weld procedure qualification, sensitization of austenitic stainless steel, non-destructive examination procedure approval and material documentation. In each case, Bingham-Willamette will provide or has performed corrective action to satisfy requirements of the specifications, codes, PSAR, and Appendix B to 10CFR50.

Quench pump testing performed to date has resulted in mechanical damage, rubbing, and excessive wear. Bingham-Willamette will correct, with the concurrence of Stone & Webster, the operational defects. Pumps will be retested to assure that the mechanical defects are corrected. Pumps will only be shipped after satisfactory completion of operational and performance tests.

Based upon the above summary of Bingham-Willamette's corrective actions, it can be proved conclusively that the quench spray, recirculation spray, and auxiliary feedwater pumps are technically acceptable and that their quality can be demonstrated to meet the requirements of 10CFR50, Appendix B. Thus, the stop work order issued to Bingham-Willamette on March 29, 1979, was removed on August 8, 1979.

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