

August 2, 2002

Documents Control Desk
United States Nuclear Regulatory Commission
Washington, DC 20555

Subject: Potential Performance Problems with Certain Pump Kits used in ASCO
General Controls NH95 Actuators

Gentlemen:

In our letter of June 19, 2002, we advised that we were investigating field reports of operational difficulties with certain replacement pump kits that were installed in NH95 Model B Hydramotor Actuators. These reports were that following installation of a new pump kit, recycling of the Hydramotor in excess of the allowable was experienced.

We have completed our evaluation of returned product and have confirmed the reports of excessive recycling. We have found this to be the result of excessive internal pump leakage, the root cause of which was leakage through the solenoid valve due to improper adjustment of the solenoid valve stroke in some of the units, and leakage due to a damaged seal edge on a pump cylinder in the others.

Both of these conditions should have been cause for rejection during our acceptance testing prior to shipment

In reviewing our processes and procedures associated with the testing of Hydramotor pumps, we believe that the reason these conditions did not result in rejection of the product during test is the result of error by production line testers. The NH95 Model B pump represents only a small percentage of our pump production. The majority of our production is of pumps identified a Model B1. Both pumps are tested in the same test fixture. Among other things, the two pump types are different in that the allowable leakage for the NH95 Model B pumps is considerably less that for the Model B1 pumps. Therefore it is our belief that the tester was testing both pump models the same regardless of which version they were, and were using the same allowable leakage specification for the Model B pumps as the Model B1 pumps. As such, the leakage exhibited on the returned units and which caused excessive recycling when installed in Hydramotor actuators did not (but should have), caused rejection during our acceptance testing.

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We have taken the following action to prevent this situation in the future:

- A procedure will be issued for setting and testing the solenoid valve stroke prior to its assembly to the pump.
- A procedure will be issued for checking and qualifying the sealing edge of the pump cylinders.
- All pumps will be tested twice-once by the production line testers and a second time by a member of the Product Engineering Group.
- Additional training has been provided for the production line testers to insure that the differences in acceptance test criteria between Model B and Model B1 pumps are clear.

We will notify all purchasers of affected product of our findings and offer to take back any pump kits in their inventory for testing and corrective action, if necessary. A complete list of ASCO's shipments of Model B replacement pump Kits, including names and quantities, is attached.

All of the reported problems occurred immediately at the start of testing of a Hydramotor Actuator following installation of a new pump kit, and prior to returning the Hydramotor to service. As a result, ASCO does not believe that Hydramotors in which new pump kits have been installed, and which are in service operating properly are affected by this potential problem.

Should you wish to discuss this further, or obtain any additional information, please let us know.

Very truly yours,
ASCO VALVE, Inc.



A. Gregory Byrns
Service Manager

Shipments of NH95 Model B Pump kits 324308, 324189, 324193

| | 1998 | 1999 | 2000 | 2001 | 2002 | Totals |
|--|------|------|------|------|------|--------|
| <u>324308</u> | | | | | | |
| Framatome ANP Inc. | | 10 | 49 | | | 59 |
| ITT Barton Industrial | | 8 | | | | 8 |
| Cemtech Delmar | | 5 | | | | 5 |
| Jones & Auerbacher | | 2 | | | | 2 |
| <u>324189</u> | | | | | | |
| Framatome ANP Inc. | | 5 | 8 | 11 | 6 | 30 |
| Bellilove Company Engineers | | 2 | 1 | | | 3 |
| G-Kar Controls | 1 | 1 | | | | 2 |
| Ajax Boiler | 1 | | | | | 1 |
| <u>324193</u> | | | | | | |
| Framatome ANP | | 1 | 6 | 4 | | 11 |
| I & C Sales | 6 | | | | | 6 |
| Totals | 8 | 34 | 64 | 15 | 6 | 127 * |
| * This number differs from that set forth in our June 19 report. We erroneously included 2 pump kits that were previously returned to ASCO in 1998 and thus are not included in the relevant population. | | | | | | |
| The differences among these three pump kits is solely in their operating voltage. | | | | | | |
| NH95Bpumps | | | | | | |
| AGB 7/29/2002 | | | | | | |