

December 17, 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:

The enclosed is a revision of ASCO's July 31, 2002 Important Safety Notice affecting certain pump kits used in NH 95 series actuators. Since July 31, our review of product and processes has continued, and some information has come to light, which we felt we should make you aware of. It remains our conclusion that the problem described in the Notice will occur immediately at the start of testing of a Hydramotor actuator following installation a new pump kit. Therefore, hydramotor actuators in which new pump kits have been installed and which are in service and operating properly will continue to do so.

The changes/additions reflected in the attached revised Important Safety Notice are as follows:

1. Based on our continuing review, we have revised our explanation as to how these pumps passed our acceptance testing. (i.e., NH95 pumps were apparently being tested as NH91 pumps, which are not tested for leakage)
2. We have modified the test fixture for the low-pressure relief valve to insure proper setting of the low-pressure relief valves.
3. Product returns and/or replacements will be handled by Framatome ANP, Inc.
4. Inclusion of "Improper (too low) setting of the low pressure relief valve" as one of the causes of excessive internal pump leakage.

These changes are highlighted in boldface in the body of the Important Safety Notice.

If you wish to discuss this further, or obtain any additional information.

Very truly yours,
ASCO VALVE, Inc.


A. Gregory Byrne
Service Manager

GB:vep
Enclosure

IMPORTANT SAFETY NOTICE

Revised 12/16/2002

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

DATE: July 31, 2002

Product Involved

Model NH95 Model B Pump Kits, Catalog Numbers 324308, 324189, 324191 and 324193, details of your potentially affected purchases are attached

Problem Description

ASCO has received several reports from the field of what appears to be possible operational difficulties with certain pumps supplied in pump kits and installed in NH95 Model B Hydramotor Actuators.

The reports are that, during testing of NH95 Model B series Hydramotor actuators following installation of a new pump kit, recycling of the Hydramotor in excess of the allowable was experienced. (Recycling refers to the actuation and de-actuation of the pump required to maintain adequate pressure to keep the Hydramotor shaft in its "powered" position. A certain amount of recycling is not abnormal.)

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 cause of which was one of the following:

- Leakage through the solenoid valve due to improper adjustment of the solenoid valve stroke.
- Leakage due to a damaged sealing edge on a pump cylinder.
- **Improper (too low) setting of the low-pressure relief valve.**

These conditions should have been cause for rejection during our acceptance testing prior to shipment.

It is our belief that the root cause of the excessive leakage not being detected was an error by production line testers. **We believe that the testers were mistakenly testing the NH95 model B pumps as NH91 pumps.** The test procedures for the NH91 and NH95 pumps are identical, except that the NH91 pumps are not tested for leakage.

The reason for the difference in testing is that the NH95 actuators operate intermittently and require very low leakage, while the NH91 actuators operate continuously and low leakage is not a requirement. Therefore, 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.

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

- A procedure has been issued for setting and testing the solenoid valve stroke prior to its assembly to the pump.
- A procedure has been 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 until such time as we reach a level of confidence in our processes and procedures that we can resume normal testing.
- Additional training has been provided for production line testers to insure that the differences in acceptance test criteria between NH95 Model B pumps and NH91 pumps, are clear.
- **The test fixture for the low-pressure relief valve has been equipped with new, more accurate gauges to insure proper setting of the low-pressure relief valves.**

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. New pump kits that have been installed and which are in service and are operating properly are not affected by this potential problem.

What You Should Do

If the affected product is still in your inventory it should be returned to ASCO via Framatome-ANP for replacement at no cost. The Framatome-ANP contact to arrange for product return and replacement is as follows:

**Jed Williamson
Framatome-ANP
3315A Old Forest Rd.
Lynchburg, VA 24501
phone: 434-832-3107
email: Jed.Williamson@framatome-anp.com**

We appreciate your cooperation and apologize for any inconvenience this may cause. If you have any questions, please contact A.G. Byrne, ASCO Quality Assurance (phone – 973-966-2060, fax – 973-966-2551, or email at GByrne@ASCO.com).