



Date: June 19, 2006

**To: Ken Brown, Utility Service Associates
58 Garnock Avenue
Toronto, ON Canada M4K 1M2**

**Subject: MOV Long Life Approval
Reference: Millstone Power Station**

The referenced utility has a number of Limitorque manual gearbox actuators of various model types. In an effort to consolidate lubricants, they are seeking approval for the use of MOV Long Life as an aftermarket lubricant. Reported model types on site include W, B, VG, & B320 gear boxes.

The W & B units were late 1950s vintage grease filled worm gear and bevel gear driven manual units. VG & VGC units were grease filled quarter-turn worm gear operators from the 1970s. B320 units are bevel gear units originally sold in the mid-1980s and are still available as of the date of this letter.

MOV Long Life (NLGI grade 0) is currently the standard factory filled lubricant for the SMB electric actuator line and the HBC manual gearbox product line for both nuclear and commercial applications. Based upon the similarity of actuator design, MOV Long Life (NLGI grade 0) is approved for use in the manual gear operators discussed above. In maintenance situations, MOV Long Life can be used to top off actuators originally supplied with calcium complex base greases.

Note that the current factory fill lubricant for commercial B320 gearboxes is a lithium based grease. As a general practice, Limitorque does not recommend mixing of lithium based and calcium based greases.

Best Regards,
Kyle Ramsey, Chief Engineer
Flowserve FCD, Lynchburg Operations