



Limitorque

December 2, 2022

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington DC 20555-0001

Subject: Interim Report Potential Part 21 on Peerless 56 frame DC Motors

Dear Sirs,

Pursuant to the requirements of 10 CFR Part 21, Flowserve – Limitorque is submitting this interim report as notification to the NRC of a potential Part 21 condition under evaluation.

Flowserve – Limitorque received information from Entergy Waterford 3 on 10-5-2022 that during routine maintenance involving partial disassembly of a Peerless 125 volt, 25 ft-lb, 56 frame DC motor, the motor was found to have two fasteners securing the brush holder ring assembly to the motor frame while the motor frame machining has provision to accommodate four fasteners. Investigation into Limitorque actuator environmental and seismic qualification records indicate that the DC motor assembly used in the qualification test program was assembled with four fasteners. Therefore, the use of two fasteners in the assembly in lieu of four fasteners constitute a deviation to the qualified design. Flowserve is evaluating this deviation to determine whether the condition could potentially affect the safety related function of DC powered Limitorque SMB/SB/SBD actuators.

This brush holder assembly mounting configuration is unique to Peerless -Winsmith DC electric motors built in a 56 frame size. Peerless – Winsmith DC motors with start torque ratings of 2, 5, 7.5, 10, 15 and 25 ft-lb. are built in a 56 frame size. Flowserve continues to work with the motor OEM to refine the scope of potentially affected motors through research of historic assembly records.

Limitorque actuators equipped with Peerless – Winsmith DC electric motors with start torque ratings of 40 ft-lb and larger are not affected by this issue. Limitorque actuators equipped with AC powered electric motors are not affected by this issue.

The evaluation is expected to be completed by 01/27/2023. If there are questions, or addition information is required, please contact Chris Shaffer (434) 522-4136.

Sincerely,

A handwritten signature in black ink, appearing to be "Chris Shaffer", written over a horizontal line.

Chris Shaffer
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