



November 30, 2022

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

RE: Reply to a Notice of Nonconformance

This is in response to the NRC Audit nonconformances 99900100/2022-201-01, 99900100/2022-201-02, and 99900100/2022-201-03.

99900100/2022-201-01

Reason for the noncompliance:

Flowserve's evaluation of the subject design change was primarily based on a comparison of the mechanical properties of the steel alloys and did not include an evaluation of the material thermal properties.

Corrective steps that will be taken:

Flowserve engineering will update the subject design change analysis to include an evaluation of any potential impact to the component/actuator function resulting from differences in thermal properties of the alloys.

Corrective steps that will be taken to avoid further noncompliance:

Flowserve will revise LYB-EDP-005.001, "Procedure for Engineering Design Documents" to include additional guidance for the evaluation of material changes for nuclear safety related components.

Date when the correction action will be completed:

Corrective actions will be completed on or before 02-03-2023

99900100/2022-201-02

Reason for the noncompliance:

Purchasing Procedure LYB-QAP-0006 did not adequately control the purchasing process utilized to procure commercial grade calibration services.

Corrective steps that have been taken:

Purchasing Procedure, LYB-QAP-0006 has been revised. Calibration Service Purchase Order and Shipping List, Form LYB-L829 was created to incorporate the requirements of NEI-1405A.

Corrective steps that will be taken to avoid further noncompliance:

Training on the revise Purchasing Procedure and Calibration Service Purchase Order and Shipping List was completed.

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Date when the correction action will be completed:

Completed on 11/30/2022

99900100/2022-201-03

Reason for the noncompliance:

The corrective action for ADN No. 2018-99900100/2018-201-E-1 included a new requirement for the motor OEM to verify the motor capability of producing the rated start torque at a nominal voltage condition. The RMT data currently being provided to Flowserve includes a measurement of the motor speed and the motor current while operating at a torque load equal to the rated start torque of the motor. However, the OEM does not document a measured value for motor torque on the RMT corresponding to the current and speed. The non-conformance was issued because the RMT data being reviewed per LYB-QAP-10.40, "Procedure for Certificates of Compliance" does not provide clear evidence that the motor can produce the rated start torque.

Corrective steps that will be taken:

Flowserve will require that the RMT report provided by the OEM include the measured torque output during the performance of the start torque capability verification test.

Corrective steps that will be taken to avoid further noncompliance:

Flowserve will revise LYB-QAP-10.40 "Procedure for Certificates of Compliance" to include a requirement to compare the measured torque value on the RMT to the start torque rating of the motor.

Date when the correction action will be completed:

Corrective actions will be implemented on or before 02-03-2023

A handwritten signature in black ink, appearing to read "C. Shaffer".

Chris Shaffer
Quality Assurance Manager
Flowserve-Limitorque

CC: Kerri Kavanagh, Chief, Quality Assurance and Vendor Inspection Branch, Division of Reactor Oversight, Office of Nuclear Reactor Regulation.