

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 revised 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:*

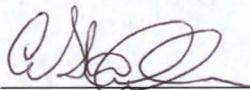
Flowserve will require that the RMT report provided by the OEM include the measured torque output during the performance of the start torque capability verification test.

*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 "Chris 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.