

# QUG 11

## Quality Assurance Corner

August, 17<sup>th</sup> 2017

presented by:

Richard J. Shannon, Quality Assurance Coordinator  
Jason J. Haglund, Nuclear Quality Assurance Manager

Photo: Temelín Nuclear Power Station Czech Republic



**TELEDYNE LECROY TEST SERVICES**  
Everywhereyoulook™

- TLTS *Quality Assurance Manual 4th Edition R0* Rollout.
- Customer Service Bulletins Issued in 2017



**TELEDYNE  
LECROY TEST SERVICES**  
Everywhereyoulook™  
513 Mill Street  
Marion, MA 02738-1549  
(508) 748-0103 Fax: (508) 748-2029

**CUSTOMER SERVICE BULLETIN**

**CSB No.:** 2017-003

**Title:** Spring Pack Measurement Device (SPMD) Sensitivity

**Affected Products:** All TLTS Spring Pack Measurement Devices (SPMD's)

**Specific Models:** QL3 SPMD 0.5inch, P/N: 160208-0.5  
QL3 SPMD 1inch, P/N: 160208  
QL3 SPMD 2inch, P/N: 160208-2



**Description:**  
SPMD's are used to measure spring pack displacement during motor operated valve diagnostic testing. In order for the spring pack plot to mimic torque the sensitivity should have a negative sign (-). A number of SPMD's were programmed with a positive sensitivity. Please note that a positive sensitivity does not affect the integrity of any data taken, it only flips the trace. Past practice for customers using SPMD's on Limitorque actuators has been to use a negative sign convention so that the SPMD trace will look similar to stem thrust and torque traces. **Effective immediately TLTS will revert to the negative sign convention.**

For testing of Rotork actuators, users may wish to use the positive sensitivity convention. This can be accomplished by simply using the "Flip TEDS Sensitivity" function in the Channel Data window.

This notice is simply intended to clarify the standard protocol of sign convention for SPMD's and remind users of their ability to control sign convention as they see fit.

**Customer Action Required:**  
No mandatory customer action is required as a result of this bulletin. Customers who wish to have their SPMD sensitivity changed and do not have TEDSWriter software can simply send them in to TLTS and we will update TEDS chip at no cost.

1 of 1

## WHAT DID WE DO?

Over the past 8 months Teledyne LeCroy Test Services (TLTS) has performed a complete overhaul of our Quality Assurance Program.

We have improved our program to include the requirements specified in ASME NQA-1 2008, Add. 2009.

ASME Nuclear Quality Assurance Program  
ASME NQA-1 2008, Add. 2009

*Quality Assurance Requirements for  
Nuclear Facility Applications*



# WHAT DOES THIS CHANGE REPRESENT?



from this

1994



TLTS Quality Assurance  
Manual 3<sup>rd</sup> Edition, R4

Administrative  
Procedures AP-1 thru  
AP-21

to this

2008, Add. 2009



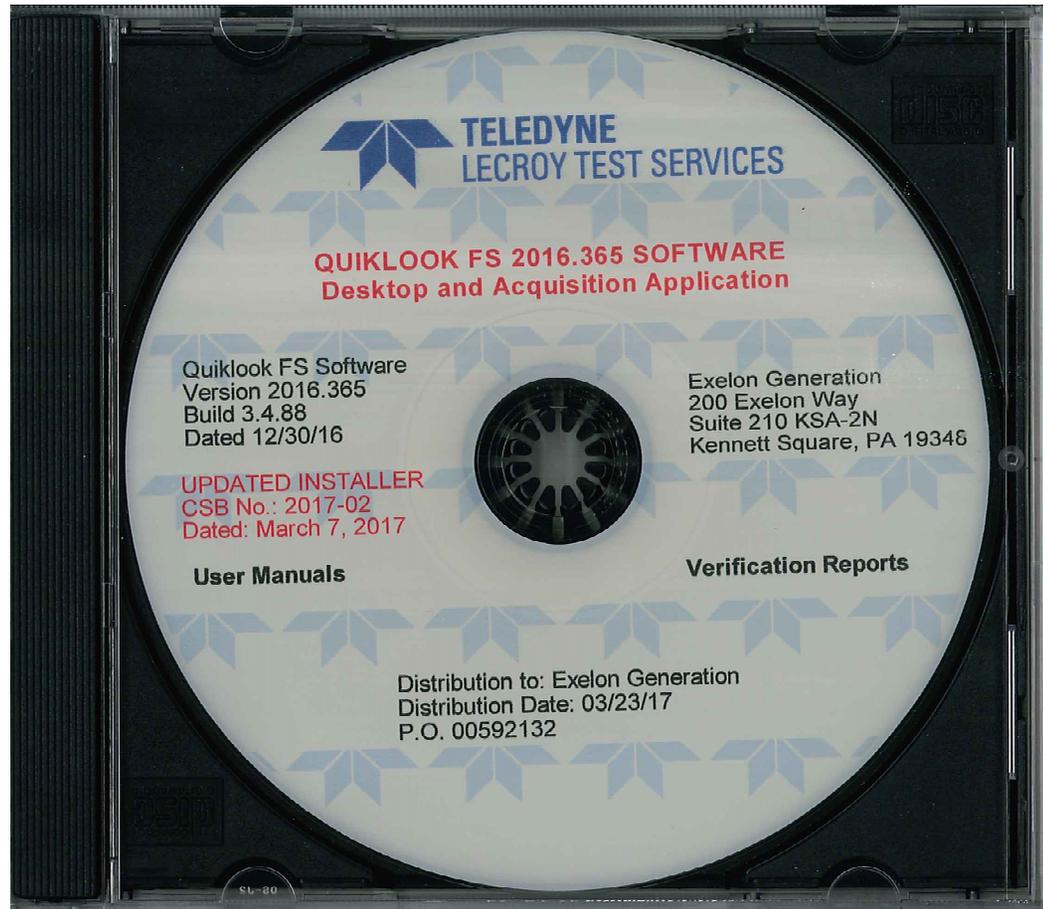
TLTS Quality Assurance  
Manual 4<sup>th</sup> Edition, R0

Nuclear Administrative  
Procedures NAP-1 thru  
NAP-15

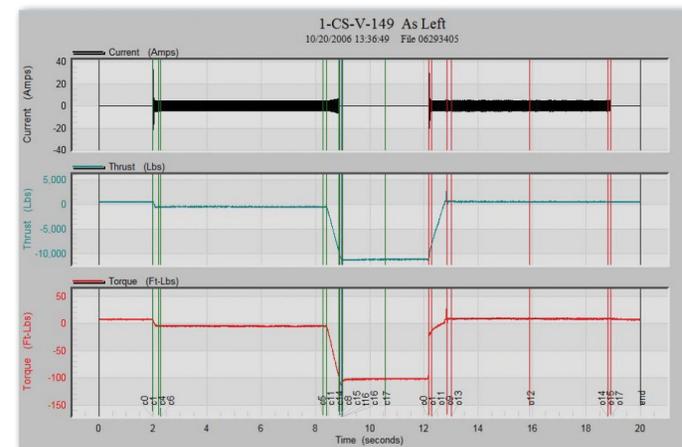
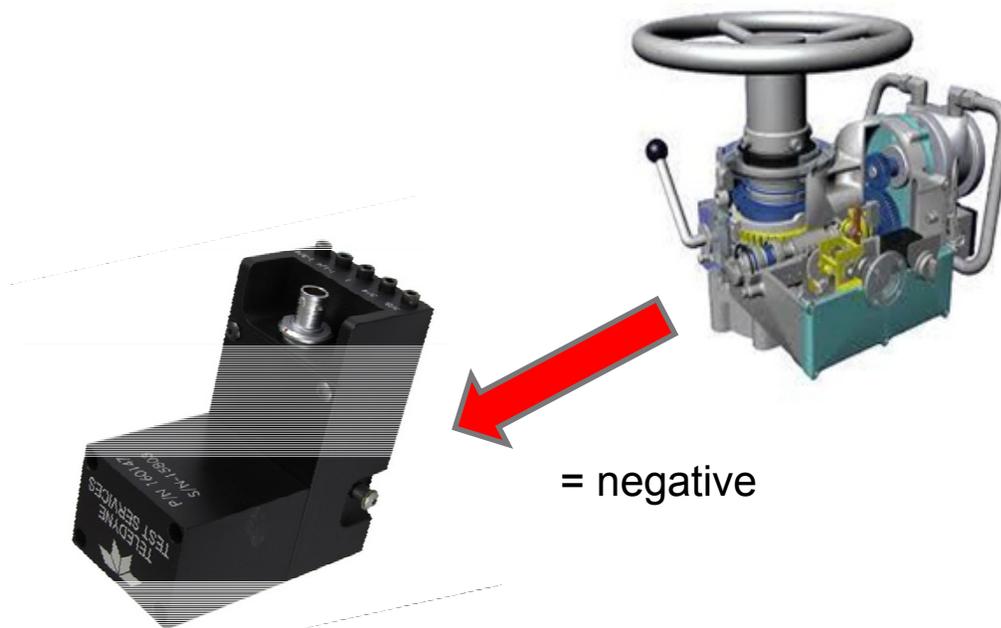
- 2017-01: CSB *Improved Accuracy For SPE* (issued January 31, 2017)
  - The stated uncertainty of digital displacement encoders was improved from  $\pm 0.12\%$  to  **$\pm 0.04\%$  of Full Scale** (or  $\pm 0.012$  inches)
  - Material of the protective housing has been changed from plastic to aluminum
  - Specific Models: QL3 SPE 30 inch, p/n: 160564  
QL3 SPE 50 inch, p/n: 160643



- 2017-02: CSB *QLUtilitySensor Documentation* (issued March 07, 2017)
  - QUIKLOOK software transmittals (CDs) were sent out referencing a previous V&V of QLUtilitySensor.exe



- 2017-03: CSB SPMD Sensitivity (issued August 08, 2017)
  - Past practice for customers using SPMD's on Limitorque actuators has been to use a negative sign convention so that the SPMD trace will look similar to stem thrust and torque traces. TLTS reverted to the negative sign convention on SPMD sensitivity.
  - This notice is simply intended to clarify the standard protocol of sign convention for SPMD's and remind users of their ability to control sign convention as they see fit.



# Any Questions?

THANK YOU



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