Weekly Reporting SNS PPU

WBS P.02.03 Cryomodule Integration (JLab Scope)

September 1, 2023

**Issues:** None.

**Accomplishments this week:**

Management:

* PPU activities are continuing with cryomodule assembly.
* Off-site work efforts continue in the procurement area on end cans.

Engineering & Design:

* Sustaining engineering activities are continuing in order to revise drawing packages based on feedback during the procurement phase with a focus on end can drawing packages.

Procurement:

* One visitor from JLab witnessed the final pressure/leak tests of REC 8 on August 29.
* CM-07 (which has SEC-06 and REC-07) was delivered to ORNL.
* Supply End Cans (SECs):

|  |  |  |
| --- | --- | --- |
| S/N | Status | Estimated Delivery Date |
| 01 | Installed on CM-03 |  |
| 02 | Installed on CM-04 |  |
| 03 | Installed on CM-01 |  |
| 04 | Installed on CM-05 |  |
| 05 | Installed on CM-06 |  |
| 06 | Delivered to JLab. Welded onto PPU-07. The support block is machined, bridge tube bellows is largely skewed due to dimensional deviations on the SEC 06. |  |
| 07 | Installed on CM-02 |  |
| 08 | SEC 08 was delivered to JLab on July 20 after investigations by ORNL. Receiving inspection work is complete. Need to machine the support block. |  |

* Return End Cans (RECs):

|  |  |  |
| --- | --- | --- |
| S/N | Status | Estimated Delivery Date |
| 01 | Installed on CM-03 |  |
| 02 | Installed on CM-01 |  |
| 03 | Installed on CM-05 |  |
| 04 | Installed on CM-02 |  |
| 05 | Installed on CM-06 |  |
| 06 | Installed on CM-04 |  |
| 07 | Delivered to JLab on 5/8. There is a NCR on two Cernox sensors having abnormal electrical resistances that would need to be evaluated during cryomodule cold test. Discovered remnants in the JT valve after removing of the stem. Decide to proceed with testing to see if the JT would seal. |  |
| 08 | AI Inspection of REC08 is complete, REC08 passed its pressure check and received its signature from the AI. Primary Return, Primary Supply and Coupler circuits passed pressure leak check. Shield Circuit has a pressure sensitive leak, ~1e-8 range at 15 PSIG. Early investigation suggests this leak may be in the weld on the female bayonet under the ball valve. Vendor ordered test plugs. Estimated to ship on Sep 11. | Sep 6 |

Production:

* Cryomodule Status:
* CM-07: Delivered to ORNL on August 30.
* CM-08: SEC08 in position and aligned. Welding to start next week.

Project Management:

* Collected Progress
* Held Progress Meeting
* Sent Accrual Information to ORNL

Quality Assurance:

* Continue to monitor quality data for possible trends
* Reported on Open NCRs, Travelers and CAPAs

Project Photos: None.