Weekly Reporting SNS PPU

WBS P.02.03 Cryomodule Integration (JLab Scope)

March 24, 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.
* Shipment of PPU-05 to ORNL on 30-March, moved by one day to accommodate riggers at ORNL.

Engineering & Design:

* Sustaining engineering activities are continuing in order to revise drawing packages based on feedback during the procurement phase.
* Plan for transmitting complete set of CM drawings – Doc Control Group is preparing drawing package. Shared folder at ORNL is identified.

Procurement:

* One JLab visitor visited the end can vendor on March 28 to witness REC 7 bridging tube leak test.
* 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 | Welded onto CM-05 | - |
| 05 | Welded onto CM-06 | - |
| 06 | Delivered to JLab on 6/6. Uncrated, inspections started. Phase 1 dimensional inspection done. Bridge tube angle is off by ~5 degrees. JLAB will try installation of SEC 06 and exercise loosening the hardware at both ends of the elbow/bellows and see how well it corrects. Plan to use on PPU-07. | - |
| 07 | Installed on CM-02 | - |
| 08 | At the vendor. Working on spools under the top plate. | May 26 |

* 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 which will be shipped to ORNL by end of the month. Vendor will prepare a nonconformity report on the leaks discovered during final testing. |  |
| 04 | Installed on CM-02 |  |
| 05 | Final testing getting close to be completed. Working on leak test of external components. REC 3 will be packaged and prepared for shipping. A nonconformity report the broken temperature sensor will be created. | Mar 27 |
| 06 | Installed on CM-04. |  |
| 07 | Working on bridging tube section, welds to shell done. AI test predicted to happen in the week of 4/3. | Apr 14 |
| 08 | Vendor is still looking for the missing JT valve inner bellows assembly. Spares identified at ORNL; developing plan for shipment. All sub-assemblies except the inner of the JT are done. To send spools welds for x-ray (5%). | June 9 |

Production:

* Cryomodule Status:
* CM05: Closing and dispositioning remainder of travelers. Shipping planned for March 30.
* CM06: Awaiting REC delivery in late March; planning to go to CMTF at end of May.
* CM07: Lockdown have been welded. Alignment verification planned for next week.
* CM08: Welding ¼” lines on cold mass assembly.

Project Management:

* Distributed Progress Sheets
* Completed VARs
* Provided Data Call Information
* Updated The CAM Notebook

Quality Assurance:

* Continue to monitor quality data for possible trends.
* Continuing to gather data deliverables for CM05.

Project Photos: None