Weekly Reporting SNS PPU

WBS P.02.03 Cryomodule Integration (JLab Scope)

April 28, 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.
* Plan for transmitting complete set of CM drawings – SNS PPU lead designer is verifying drawing package completeness.

Procurement:

* Next trip to visit the end can vendor is on May 4th to witness end can cold shock and helium leak testing.
* 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 onto CM-06 | - |
| 06 | Delivered to JLab. Uncrated, inspections started. Phase 1 dimensional inspection done. Bridge tube angle is off by ~5 degrees. 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 | At the vendor. Cold mass/shield assembly work complete. Welding vacuum shell. | 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 |  |
| 04 | Installed on CM-02 |  |
| 05 | Delivered to JLab on 3/31. Inspection work complete. REC 5 is in position on CM-06. Bridge tube bellows has large deformation. Support block needs to be made new. |  |
| 06 | Installed on CM-04  |  |
| 07 | Final testing complete. Has been shipped, on the way to JLAB. | Apr 26 departs from Vendor |
| 08 | Album 1 submitted but missing photos of critical welds, which are not all done yet. Welding of subassemblies continue. Getting ready for leak check of subassemblies. JLAB will visit vendor and witness leak check. | June 9 |

Production:

* Cryomodule Status:
* CM-06: REC install I.P.; new interface block being made; rework SEC valve interference I.P.
* CM-07: SEC process piping welding complete; coupler manifold welding I.P.
* CM-08 SF test fit I.P.; alignment scheduled for next week; cold mass assembly complete.

Project Management:

* Collected April Month End Status
* Submitted VARs for signature
* Provided April Accrual information to ORNL

Quality Assurance:

* Continue to monitor quality data for possible trends.
* Continuing to gather/review data deliverables for CM-06.

Project Photos: