Weekly Reporting SNS PPU

WBS P.02.03 Cryomodule Integration (JLab Scope)

March 10, 2023

**Issues:** None

**Accomplishments this week:**

Management:

* PPU activities are continuing with cryomodule assembly and receipt inspection of components.
* 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 – Doc Control Group is preparing drawing package. Shared folder at ORNL is identified.

Procurement:

* On March 7, two JLab employees visited the end can vendor to witness another leak test. The company was not prepared to conduct the 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 | 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 | All parts and sub-assemblies done. Album 1 pictures uploaded to share folder. Pulled components and is getting started setting up the final assembly. Working on welded assembly. In progress, the welder working on this one is currently working part-time due to returning to school. No major progress updates. | Apr 14 |

* 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 | Final testing did not happen on 3/7. Still working on preparation and final set up. Found one faulty Cernox sensor  | Mar 22 (JLab estimate) |
| 06 | Installed on CM-04.  |  |
| 07 | Setup and ready to start on the bridging tube work. | Apr 12 (JLab estimate) |
| 08 | Not much progress: components/spools/etc being prepped, inventory being gathered. MTM currently searching for CD Valve inner bellows assembly. It may become necessary for us to hunt down a replacement if it cannot be located. | Apr 28 |

Production:

* Cryomodule Status:
* CM05: In CTMF - All testing is completed and warm up is in progress.
* CM06: Awaiting REC delivery in late March.
* CM07: Cold mass aligned. Data review in progress.
* CM08: Preparing inner magnetic shielding for installation.

Project Management:

* Updated February Monthly EV
* Provided Monthly EV Package to ORNL
* Provided February Month End Manpower Data
* Updated CAM Notebook

Quality Assurance:

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

Project Photos: None.