Weekly Reporting

WBS 1.01.07 JLAB Management

Week of December 11-17, 2015

**Issues:**

Need Niobium to be delivered to the cavity vendors.

Need final evaluation of the use of 2500 HP motors for the CPs at SLAC.

**Accomplishments this week:**

Submitted the PL Monthly Report Summary.

Reviewed and analyzed EV data.

Submitted VARs as appropriate.

Started collecting schedule progress (early due to the holiday).

**Upcoming Activities:**

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of December 11-17, 2015

**Issues:** pCM component schedules; JLab pCM schedule is driven by the availability of parts including bellows, magnetic shielding, and GHRP assembly. Need to ship cavity materials to vendors.

**Accomplishments this week:**

Participated in DOE review.

Progress on testing end cap fabrication continues. Vendor has completed bayonet box vacuum vessels.

Material has been released and is being shipped to RI. Expect release of materials and shipment to Zanon before end of December. NbTi materials at JLab to shipped to DESY for forward onto Zanon.

Vendor Qualification Cavity Status:

**Zanon**

AES025 – Tested Monday at JLab; Qo = 4.5 x 10^10 (corrected for SST flanges), 4.0 x 10^10 (uncorrected) at 18 MV/m. No FE. Quench limit at 20.7 MV/m.

AES014 – Shipped to JLab; arrival expected Thursday, plan to test Monday next week

**RI**

AES023 – Shipped to JLab; in customs receipt; arrival expected next week

RI023 – EP complete; arrival expected first week Jan 2016

Manufacturing drawings from RI are under review. Helium vessel proposed design from Zanon under review.

GHRP parts received from FNAL. Parts inventoried – some missing items identified and communicated to FNAL SOTR. Awaiting detailed list of modifications from FNAL.

SOTR and Lead technician will travel to FNAL for training on soldering leads for SC magnet week of January 4, 2016.

SOTR, Procurement Lead and CAM are planning to travel to DESY week of 18-JAN along with FNAL colleagues to discuss production BPM and HOM Absorber procurements via DESY.

Planning to receive 3 R&K SSAs at JLab on or before 23-December. Plans for R&K expert to visit 14-15 January for installation check-out are underway. Connectors and hardware has been ordered.

Recovery plan for copper-plated bellows is being implemented. Eight long bellows at SLAC – four have been returned to Ameriflex due to nonconforming materials. Four are ready for shipment to FNAL. Three long bellows processed and ready for installation at JLab, two more are in receipt inspection; balance of four due Monday. Long spools are in process at vendor and SLAC. Two short bellows have been sent to SLAC. Two short bellows at Epner expected to arrive at JLab before the holiday.

CMTF coax waveguide parts are being prepared for installation. Fall protection is being installed this Friday at cave penetration.

**QUALITY**

JLab and Fermilab had another QA Coordination meeting. In this meeting, SOTRs provided status updates on cavity vendor qualification, Cavity Nb material shipments, bellows and spools activities. Jamie provided an update on the status of the GHRPs. We also talked about Fermilab and JLab point of contacts for shipping & receiving of components and assemblies between the partner labs.

In the QA Coordination meeting, we also discussed the changes to the SLAC LCLSII QA Plan, which was recently updated to Rev -1 and released to the SLAC Document Repository. The changes in the Plan are reflective of what Mike Skonicki had been proposing. No new actions or changes are necessary to the JLAB SQAP. JLab remains in compliance to the requirements of the QA Plan.

Johnny worked with the staff at Fermilab Computer Center to acquire access to the Team Center PLM System and also to the Fermilab’s CMM & Inspection Data. eBOMs, Component and Assembly drawings are stored in Team Center while the CMM & Inspection Data are stored in a different location, thus requiring separate logins through the Citrix connections. Johnny will provide demo to JLab staff on how to access the Fermilab info.

Provided back-up support to SOTR in the JLab processing of cavity string bellows and spools. Different parts are in the various stages of inspection, leak check, cleaning, and blister tests. The level of activities for parts throughout Epner, JLab, Fermilab and SLAC must now take into account of the Stainless Steel material discrepancies found on the bellows. Management of the activities and path forward is being handled by the SOTRs with the technical project team.

**Upcoming Activities:**

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of December 11-17, 2015

Week of December 11-17, 2015

**Issues:** Warm helium compressor vendor ready to order 1st set of CP1 warm helium compressor motors, SLAC is unsure they can start the larger 2500HP motor without causing large voltage dip. SLAC has requested postponing ordering of 2500HP warm helium compressor motors at least until SLAC analysis is received in December.

**Accomplishments this week:**

DOE CD-2/3 review presentations were delivered inclusive of the cryogenic plant (1.04.08) and Cryoplant Installation and Commissioning. Reviewed the recommendations from the review this week.

The weekly design coordination meeting was held with the 4.5K cold box vendor (Air Liquide). All action items are being properly addressed in preparation of a preliminary design review in January 2016. A plan to witness a performance test of the turbine brake system is also being schedule in January 2016.

An interview was held for a SLAC cryogenic controls engineer who will be assigned work at JLab for the LCLSII cryogenic plant Antonio C. de Lira will be visiting JLab to go over relocation Jan 11-15th.

CP1 warm helium compressor vendor is ready to place orders for motors, compressor bodies, and heat exchangers on schedule. SLAC has requested holding up on order for 2500HP motors until power study is completed in December

Design work continued for the compressor room warm helium gas piping installation design. Design completion remains set for January 2016.

**Upcoming Activities:**

Warm Helium Compressor Vendor CDR, week of January 7th

4.5K Cold Box Turbine Brake Operations Demonstration , January 2016

Antonio de Lira Visit Jan 11-15th

4.5K Cold Box PDR, January 2016

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of December 11-17, 2015

**Issues:** None

**Accomplishments this week:** No report – on vacation.

**Upcoming Activities:** None