Weekly Reporting

WBS 1.01.07 JLAB Management

Week of December 4-10, 2015

**Issues**

**Accomplishments this week:**

Participation in CD 2/3 review.

**Upcoming Activities:**

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of December 4-10, 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 TTC2015 at SLAC, and in DOE review.

Progress on testing end cap fabrication continues. Vendor has completed bayonet box vacuum vessels and is preparing to ship them to JLab.

Material has been released and is being shipped to RI. Expect release of materials and shipment to Zanon before end of December.

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 next week

**RI**

AES023 – Shipped to JLab; arrival expected next week

RI023 – EP complete; being prepared for shipment

Manufacturing drawings from RI and Zanon are under review.

GHRP parts received from FNAL. Next step is receipt inspection then minor modifications. Awaiting detailed list of modifications from FNAL.

Plans to send JLab technician to FNAL for training on soldering leads for SC magnet have been made for an early January visit.

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.

Recovery plan for copper-plated bellows is being implemented. Eight long bellows at SLAC. Nine long bellows at Epner. Long spools are in process at vendor and SLAC. Four short bellows have been completed dimensional inspection.

CMTF coax waveguide parts are being prepared for installation. Task hazards have been analyzed; some fall protection is being implemented prior to installation.

Cavity Tuners - Responses to our RFPs for sole source procurements of Piezos and Stepper Motors are in house.

**QUALITY**

Providing 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. Meanwhile, Epner continues to process the latest batches of bellows.

Support was provided to the JLab Procurement department with interviews for the Procurement Administrator I position. Interviews were completed. Rating reports were submitted to the leader of the interview panel.

**Upcoming Activities:**

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of December 4-10, 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.

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

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

4.5K Cold Box PDR, January 2016

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of December 4-10, 2015

**Issues:** None

**Accomplishments this week:**

* LLRF prototyping: Tested stepper board. Had teleconference with FNAL concerning the FEM interlock electronics.
* LLRF coordination: prepared for DOE review. Put together program for the LBNL LLRF team meeting.
* CMTF RF: Began working on system prints for the CMTF RF and instrumentation.

**Upcoming Activities:** None