Weekly Reporting

WBS 1.01.07 JLAB Management

Week of November 13-19, 2015

**Issues:** Need to get material to Nb material to the cavity vendors.

**Accomplishments this week:**

JLab PMCS, CP, CM, and PO travel to and participation in ICR.

**Upcoming Activities:**

* TTC Meeting 1-4-December
* DOE CD-2/3 Review, 8-11 December

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of November 13-19, 2015

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

**Accomplishments this week:**

Participating in ICER at SLAC.

Progress on testing end cap fabrication continues. Internal piping assemblies are completed and undergoing leak checking.

Vendor Qualification Cavity Status:

**Zanon**

AES025 - processing completed; being prepared for shipment to JLab on Monday 11/23.

AES014 - doping completed; proceeding to electropolish.

**RI**

AES023 – post-doping inspection completed; being prepared for electropolish.

RI023 – being prepared for furnace doping run.

SOTR and production lead to visited FNAL Wednesday in order to review GHRP assembly procedures and sub-assembly modifications.

Recovery plan for copper-plated bellows is being implemented. Balance of 17 long bellows arrived at JLab 17-NOV; 4 parts being expedited through inspection and will be send to SLAC later this week. SOTR and QA rep completed audit and witnessed plating process on first long bellows. Initial visual inspection at vendor was positive. Part arrived at JLab on 17-NOV for inspection and blister-testing.

CMTF coax waveguide parts are being prepared for installation. The penetration around the coax install area is being treated for trace lead dust.

Submitted updated PRs to reflect spending plan for production cavity piezos and stepper motors. Submitted PR for shipping fixtures and shipping caps.

**QUALITY**

Visited Epner the plating vendor for the cavity string bellows and spools and conducted an audit of their plating process. We also hand-carried to Epner a new bellows that has the ‘recovered’ flanges and followed it through the prep, cleaning, plating, and inspection processes. The unit was brought back to JLab and is currently going through the subsequent qualification steps.

Provide support and prepare for interviews for the Procurement Administrator position.

**Upcoming Activities:**

* TTC Meeting, 1-4 December
* DOE CD-2/3 Review, 8-11 December

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of November 13-19, 2015

**Issues:** Warm helium compressor vendor ready to order 1st set of CP1 motors, SLAC is unsure they can start the larger 2500HP motor. Need authorization to proceed with 2500HP motor or stop until SLAC analysis is received in December.

**Accomplishments this week:**

The cryoplant recommendation responses of the Cryogenic System Final Design Review, FAC review, and Directors review were completed.

The procurement specification for the cryogenic plant warm helium gas storage vessels was completed was circulated for approval.

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

The DOE APM Cost Review cost drill down for the CP1 warm helium compressors w/oil removal, CP2 warm helium compressors w/ oil removal, the CP2 4.5K cold box and CP2 2K cold box and the cryoplant installation budgets were presented on November 17 at SLAC

CP1 warm helium compressor vendor is ready to place orders for motors, compressor bodies, and heat exchangers on schedule.

Design work continued for the compressor room warm helium gas piping installation design. Design completion remains set for December 2015.

**QUALITY**

ACR development for the major cryoplant subsystems is planned to be completed.

**Upcoming Activities:**

Warm Helium Compressor Vendor CDR, week of Jan 7th

DOE CD-2/3 Review, Dec 8-11th

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of November 13-19, 2015

**Issues:** None

**Accomplishments this week:**

* LLRF Coordination/Documentation:
  + Working on DOE review presentation.
  + Cryomodule cabling meeting went well last week. We will provide chassis back panels with connectors for the SLAC cable plant with cable recommendations
  + Working on a engineering note to specify RF cable lengths from the cavities and PRL
* Stepper Motor Board: The stepper board is being tested.
* Interlock Board: ARC/IR boards are ready for test. Electrometer and Vac are in CAD.
* FPGA Board: William Brinton is laying out the FPGA board.
* Common Power Supply: Distribution board is being tested will begin later this week.
* CMTF: Racks are being installed in the control room. RF and digital boards for the field control chassis are out for assembly.

Upcoming Activities:

* + Continue with LLRF coordination
  + Review MO/LO proposal
  + Test stepper board and interlock boards.
  + Start chassis assemblies for resonance and interlocks.
  + Team Meeting planned for December 7/8 at LBNL