Weekly Reporting

WBS 1.01.07 JLAB Management

Week of Nov 18-23, 2016

**Issues:**

Funding issues – JLab LLRF is running out of funds and the remaining FY17 funding and commitment profiles need to be finalized.

**Accomplishments this week:**

Updated monthly accruals

Developed a local tool to produce obligation forecasts based on P6 data to understand the lab funding needs

**Upcoming Activities:**

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of Nov 18-23, 2016

**Issues:** Efficient transfer of lessons learned from FNAL pCM assembly in order to reduce JLab pCM assembly duration – currently at last assembly work station. Cost and schedule impacts due to cavity recipe development effort at vendors.

**Accomplishments this week:**

BCR for beamline bellows approved.

BCR to request additional funds for BLA procurement approved. Need to finalize split of FY17/FY18 funding when award is made.

Instructed by project at last BCR facilitation meeting to procure third shipping frame. This additional scope will captured in a bundled BCR.

Preparing EAC for two WBSs – 1.04.06.05 Engineering and Design and 1.04.06.06 Prototype CM.

Cavity Procurement

Attended PCC meeting and reported on vendor meetings from previous week including hold point updates and expected cavity deliveries.

Conducted business meeting on 21-NOV with Zanon to discuss milestone payment modifications, impact on cost and schedule due to possible changes to Bulk EP process, and impact on cost and schedule of possible request to stop production at HP #1 due to performance. In addition, Zanon was asked to consider the request for additional helium vessels (in case some are cut-off and re-welded).

Conducted weekly vendor call with Zanon. First article cavity performance is below expectations. Output from PCC – recommendation to reduce processing temperature during bulk EP. Zanon is making change to the next bulk EP run planned to start today.

Awaiting resolution of design revision to split ring assemblies from FNAL.

Four cavities from RI (TD/900/200) arrived at JLab on 22-NOV. Four cavities from RI (TD/900/200) arrived at FNAL on 22-NOV. Transit time was about one week – these were shipped on 14 and 16 NOV respectively. Still experiencing some problems with customs paperwork transmitted between vendor and freight forwarders.

Next two RI shipments of four cavities each expected to arrive at JLab and FNAL next week. Continuing discussion on routing of cavities from RI and Zanon to partner labs and plans for use in CMs.

pCM assembly activities at Work Station 5:

The Main Coupler line was leak checked. The MC ion pump was started; vacuum level is good at 6e-8 torr. RF Waveguide installation was completed.

Downstream end cap installation completed including internal work: jumpers and GHRP testing cap have been installed, orifice and heat stationing completed, instrumentation added. Downstream compensation coil moved from VV onto end cap permanently.

Low pressure test was completed on return circuit. Cavity frequency was monitored during test. Bayonet Box is ready for use and will be installed 23-NOV.

FNAL visitor on site for support and training for the magnet flange soldering process on Nov-29th.

FNAL visitor on site for support of pCM and VV04 (WXCX) degaussing on Nov. 30-Dec.2.

CM assembly is complete at Workstation 5. CM will be installed in the cave on 30-NOV after degaussing of assembly outside test cave and SSA operational checkout.

Production CM Activities

Continuing to inspect bellows and spools and production tuner frames.

Continued to receive FPCs from CPI and RI.

The CM02 string assembly is on hold at WS2 currently.

Vertical Test L2-201 (Zanon 800/140/NX) on 18-NOV. Previous test results from 31-OCT: Radiation limited with FE onset 8.2 MV/m. Current results - quench limited at 16.6 MV/m, FE onset at 15.0 MV/m, No Qo roll-off noted. Cavity not qualified - major NCR. Re-work path being determined.

JLab staff visited DESY to review shipping cap installation on XFEL CMs, discuss plans for loading/unloading CMs and review transportation plans.

Wrapped degaussing coils on VV04 to be used on CM02.

First mobile degaussing ring is complete.

Cryomodule Test Facility

Heat exchanger modifications are complete. Unit has been re-installed into the CMTF. RF cable installation on-going. SSA check-out with waveguide and controls planned for 28-29 NOV. Labview software work on-going.

**QUALITY**

* Preparing for visit to Zanon in December.
* On-going monitor of Significant NCRs. Reported to SLAC Project QA new Significant NCRs for the vertical testing of Zanon cavity serial # 0201.

**Upcoming Travel:**

* Vendor Visit to Eden Nov 30-Dec 1
* Shipping Frame Vendor Visit Dec 5-7
* Vendor Visit to Zanon to provide feedback on first articles, 14-15 Dec 2016

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of Nov 18-23, 2016

**Issues:**

**Accomplishments this week:**

A meeting was held on Nov 21 with the Smithgroup to discuss gap cryoplant design to advance the installation time schedule.

A 2K cold compressor FDR Part 1 was successfully held Nov 8th at JLab. JLab has received all pre-review documentation from the vendor (Air Liquide) in advance of the review. Additional questions concerning the MTBF of the bearings and electric cabinet floor mounting details was provided by Nov 17 as scheduled

Work continued addressing the 10 Cryoplant PDR recommendations.

The design of the transfer line interface boxes and related transfer line continued through the week. A review of the interface box design and connected transfer line remains set for January 2017.

Technical bid evaluations for the oil removal vessels and helium storage vessels was submitted to the SOTR and has been summarized. A number of site visits is being planned to evaluate vendor capabilities.

A procurement readiness review was held on Nov 21 for the procurement of the helium purifier.

**QUALITY**

* Participated in the PRR on the Helium Purifier System.

**Upcoming Activities:**

* Controls Integration Meeting, at SLAC, Dec 9th
* 2K Cold Compressor Design Review Part 2, Jan 11, 2017
* Interface Box/Transfer Line PDR January 2017

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of Nov 18-23, 2016

**Issues:** None

**Accomplishments this week at JLAB:** No report this week.