Weekly Reporting

WBS 1.01.07 JLAB Management

Week of Sep 23-29, 2016

**Issues:**

**Accomplishments this week:**

Processed BCRs

Submitted accrual

Submitted VARs

DOE presentation slide updates for July progress

Updated BOEs

Kick off meeting for the 2K cold compressors

2K cold box PDR

**Upcoming Activities:**

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of Sep 23-29, 2016

**Issues:** Efficient transfer of lessons learned from FNAL pCM assembly in order to reduce JLab pCM assembly duration. Cost and schedule impacts due to cavity recipe development effort at vendor. Need license for Beamline Absorbers to progress with the procurement.

**Accomplishments this week:**

Preparing presentations for OPA review.

Worked with SM, STL and FNAL STL and CAM on new strategy for management of cavity production.

Completed the BCR (CS-021) for cavity development that includes increased EP, increased baking temperature and four development cavities.

Worked with FNAL colleagues on Flux Expulsion BCR schedule.

Awaiting response from second vendor regarding cost impact of caps. BCR will be prepared once info has been received.

CAM (acting as review chair) completed draft reports for Accelerator Systems Injector Systems Mechanical FDR and Accelerator Systems Cryomodule Installation Planning Peer Review.

Cavity Procurement

RI - The two bare cavities will ship from RI on 5-Oct. The two dressed cavities have a ship date of 18-Oct. HP#3 data has been reviewed for these four cavities. Total of 35 cavities have passed HP#1 and a total of 20 cavities have passed HP#2.

Zanon - the first four first articles shipped from Zanon on 28-Sep, destined for JLab. The next four first articles will ship the first week of October to FNAL. These eight units have the baseline recipe (140/800) and have NX cell material. Next eight cavities (9-16) have pass HP#2. Following eight cavities have passed HP#1 (17-24).

Continued to receive FPCs from CPI and RI. Removing parts in circulation, storing couplers in cabinets and returning PICs to vendors. Warm coupler storage area is essentially complete awaiting only a few minor items.

Reviewed cost estimate for RF processing of 4 sets of FPCs for SLAC at JLab.

Inspecting bellows and spools received from SLAC. Substantial shipping damage on some parts causing rejection. FNAL was shipped a replacement short spool overnight earlier this week.

CMTF HX vendor is making progress – first invoice for materials has been received. Expecting visit to vendor in October.

CM assembly activities:

The 50k intercept magnet lead short is repaired. The last lower shield was installed. All lower shield welding has been completed. Monitored fluxgates during lower shield welding. The 50K shield tuner access doors were fabricated and installed, including PEM fasteners. Instrumentation tucked inside shield. Performed successful test fit of Vacuum vessel over Cold Mass. The floor rails will need minor realignment prior to production. All support post tophats have been removed. MLI blankets have been prepared. Began insulating the 50K shields. Four-poster tooling spacer blocks have been added. Warm to cold beampipes needed for CMTF testing were received. Modification of magnet lead flanges has been completed.

Current CM completion date is 22-NOV in p6. This date has slipped due to 1) an increased time on the four-poster to allow FNAL colleagues to provide critical review and feedback and 2) shifting of labor from LCLS-II to higher priority 12 GeV and CEBAF efforts during late August and early September.

Cryomodule Test Facility

Cable pulling work has been interrupted by testing of an upgraded injector cryomodule. Work to recommence after completion of QCM testing.

CM02 string assembly currently on-hold until modifications to lollipops can be completed – expected 30-Sep. Plan to have string under vacuum by 7-Oct.

**QUALITY**

* Mike Skonicki will visit JLab in November to conduct an assessment on welding of the LCLSII CMs. Date and agenda are forth coming.
* Mike Skonicki has requested a slide on current QA Practices in preparation for the upcoming LCLSII Collaboration meeting on Oct 11, 2016.
* We had the regular LCLSII QA coordination meeting with Fermilab QA. Component statuses, QA concerns and issues were discussed. We also discussed the topic of lessons-learned on the pCM, which came up in the recent production CM PRR that was held at Fermilab.
* Continued to follow up on NCRs in the incoming inspection and assembly processes. Work with SOTRs to determine if any need to be elevated to a Significant Level. Cross-checked with Fermilab QA to determine if any need to be added to the SLAC Significant NCR Dashboard.
* Continued to follow up on the issue of cu-plated components with shipping damages from SLAC.

**Upcoming Travel:**

* Shipping Frame Vendor Visit – 29-30 Sep 2016
* Nomura Plating Expert Visit to JLab – 3 Oct 2016
* Cavity Vendor Visit to RI – First Article Review – 5-6 Oct 2016
* LCLS-II Collaboration Meeting 11 Oct 2016
* DOE Status Review 12-14 Oct 2016
* Vacuum Vessel Visit to China 7-11 Nov 2016

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of Sep 23-29, 2016

**Issues:**

**Accomplishments this week:**

The 4.5K Cold Box vendor reported a 12-week delay in the delivery during the FDR. JLab has requested the vendor recover the delay time in accordance with the contract.

The 2K Cold Box PDR was held on 27 September at JLab. SLAC participants included David Schultz, Greg Hays, Hongyu Bai, Viswanath Ravindranath, and Antonio DeLira. Committee recommendations are currently being addressed.

A BCR presentation was developed in support of transferring the cryoplant installation effort from JLab to SLAC.

Dry run presentations in support of the 12-14th October 2016 DOE review were completed with final presentations posted.

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.

The installation/BIO design review has now been set for 18 Oct 2016. The review charge, committee members, and agenda are under development.

**QUALITY**

JLab QARs participated in the 2K Cold Box PDR held at JLab on Sep 27, 2016.

**Upon coming Activities:**

LCLSII Collab Meeting, 11 Oct 2016

DOE Status Review 12-14 Oct 2016

Installation Design Package PDR 18 Oct 2016

2K Cold Compressor Design Review Part 1, Nov 6 2016

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 Sep 23-29, 2016

**Issues:** None

**Accomplishments this week at JLAB:** No report – on travel.

**Upcoming Activities at JLAB:**

* + Continue prototype tests and assembly (resonance, interlocks, power supply)
	+ DOE Review (October) working on updating LLRF presentation.
	+ Working on test benches.