Weekly Reporting

WBS 1.01.07 JLAB Management

Week of August 10-16, 2017

**Issues:**

**Accomplishments this week:**

Shipped pCM to FNAL.

Presented 2K CB Directed Design Change BCR.

Preparing BCRs for CM Schedule alignment, Fabrication of 133 sheets, 2+2 CMs and CM Testing in LERF BCR.

Continued working with the 4.5K CB vendor to address delivery concerns.

**Upcoming Activities:**

CP Controls Review September 13, 2017

FAC at SLAC September 26-28, 2017

Weekly Reporting

WBS 1.04.06 JLAB Cryomodules

Week of August 10-16, 2017, 2017

**Issues**: Expect delays in cavity shipments due to lack of availability of PICs. Short interruption in vendor deliveries due to August holiday closures at vendor facilities.

**Accomplishments this week:**

LERF as a test LCLS II CM test bed - preparing BCR to bring scope of work into project baseline.

Prepared VARs for CM control account 1.04.06.07 – CM procurements.

Continuing work on schedule re-alignment and 2+2 CM procurement BCRs folding in comments from SLAC management after facilitation meeting.

Preparing BCR for fabrication of 133 replacement cavities.

New Cold Box #3 back online and providing helium to VTA.

Shipped pCM to FNAL on the 14th.

CM02 testing completed and u-tubes were removed on Monday 07-Aug. CM was removed from CMTF on 15-Aug. Evaluating HOM tuning and thermal strap installation in advance of CM03 cooldown.

CM03 at WS-5: Bayonet box installation is in progress. Valve access cover installed. Evaluating HOM tuning and thermal strap installation in advance of cold testing.

CM04 at WS-3: Re-torquing all heat stationing is complete and recheck HOM tuning is in progress. Verifying the HOM tuning procedure.

CM05 at WS-3: Two-phase piping leak check is complete. Installing MLI on small tubes. Magnet lead soldering is in progress.

CM06 at WS-2: Installlation of MLI & Mag shields is complete. Ready to move to WS3.

CM07 at WS-1: String assembly is in progress with all of the cavities on the assembly rail. The string is under vacuum with leak planned to start 15-Aug. Planning for roll-out on 18-Aug with cavities 090, 112, 123, 264, 082, 271, 273 and 124.

Cavity 099 (NX-B950) first test, Quench limited at 18.8 MV/m, Q0(16) = 3.3e10, FE free. Cavity did not qualify and will be set aside.

Future cavity test plans - 122 & 116 (NX-A) test in D7/8; 278/279/281 (TD) test in D5.

PCCM was held on Monday this past week. Cavity delivery schedules – seven cavities are enroute, three each from RI and four each from EZ. More than 95% of RI’s original contract have been shipped. Due to August holidays, there will be an interruption in deliveries during the mid to end of the month.

**QUALITY**:

Met internally with project leadership to discuss the Equipment Transfer Verification process from SLAC.

Continue to monitor SNCR development for the Dashboard reporting to SLAC.

Participated in the LCLSII cryomodule HOM evaluation discussions. A SNCR is being issued. The team continues with the investigation.

**Upcoming Travel:**

E. Zanon Vendor Oversight August (D. Gonella), September 2017 (C. Reece)

FNAL for preparations for pCM testing (N. Huque, R. Legg)

FAC at SLAC 26-28 September

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of August 10-16, 2017

**Issues:**

**Accomplishments this week:**

A BCR presentation was delivered for the 2K Cold Box redesign to increase the vacuum pumping capacity of the 2K cold compressors and the required transfer lines to the 2K cold boxes.

A FDR for the helium purifier was held on August 14, 2017.

4.5K Cold Box Turbine Pods are scheduled to be shipped in September 2017. Shipping coordination is underway with SLAC.

The first compressor skids for Plant #2 is scheduled to be shipped to SLAC during the week of August 14-18. Delivery is being coordinated with SLAC.

The internal support frame for mounting of heat exchangers and vessels is complete for CP#1 4.5K lower cold box. Mounting of heat exchangers and vessels are pending. 50% of the piping spools pieces have been fabricated.

Witness point for the CP#1 upper cold box intermediate leak check is scheduled for the week of August 28th.

**QUALITY**: Inspection Test Plans (ITPs) and dimensional checks surrounding the 4.5K Cold Boxes have been added as an action item to the weekly AL task tracker.

**Upcoming Travel/Reviews:**

CP Controls Specification Review Sep 13, 2017

FAC Review Sep 26-28th

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of August 10-16, 2017

**Issues:** None

**Accomplishments this week at JLab:**

* + LLRF Coordination/Documentation:
  + LLRF Production Estimate: Presented JLAB production plan to JLAB leadership. Given the scope of the project they have asked for meeting to discuss the project in further detail.
  + BCS: Trent and John continue working on the system conceptual design.
  + Curt has been working on LERF CM Test proposal.
  + Resonance/Stepper Motor Board/Chassis:
  + Rama is working on chassis test procedure and test bench with RF technician.
  + Rama to send updated PVs to Larry for both resonance and interlocks.
  + Interlock Board/Chassis:
  + Andrew Burrill held final interlock meeting this week. Arc interlock still needs to be resolved if it will be used in production (SLAC action item). IR interlock has been removed from production.
  + Common Power Supply/Chassis/Boards:
  + Modified power supplies were sent to SLAC. They will send back the ones they have for modification.
  + CMTF

PRC/RFS: Rack has been installed. Dave and Manny are re-installing the LCLSII LLRF chassis this week (between CM tests). This also includes installing the cable plan so that we can switch between the LLRF systems.

**Upcoming Activities:**

* LERF presentation at SLAC early September.
* FAC September 26-28, 2017