Weekly Reporting

WBS 1.01.07 JLAB Management

Week of August 3-9, 2017

**Issues:**

**Accomplishments this week:**

Conducted progress and status meetings for the 1.04.08 CP and 1.04.06 CM WBSs.

Completed review of LERF as an LCLS II CM test bed.

Submitted 100% of the GC Installation Drawing Package to SLAC.

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

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

**Upcoming Activities:**

CP Controls Review August 30, 2017

FAC at SLAC September 26-28, 2017

Weekly Reporting

WBS 1.04.06 JLAB Cryomodules

Week of August 3-9, 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:**

Completed review of LERF as a test LCLS II CM test bed. Planning for BCR to bring scope of work into project baseline.

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

Preparing the pCM for shipping to FNAL on the 14th.

CM02 testing completed and u-tubes were removed on Monday 07-Aug. Evaluating HOM tuning and thermal strap installation. Summary of last week’s tests - BPM Checkout complete, Magnet Test complete (1 Hour at 18 A), Heater Checkout complete, Eight Cavity Run for ~1 hour (pulsed low duty cycle), Six cavities at or above 16 MV/m. Studied HOM temperature behavior at or near Quench gradients.

CM03 Helium circuits leak checked, pressure test is complete, end Cap is installed and bayonet box installation is in progress. Evaluating HOM tuning and thermal strap installation in advance of cold testing.

CM04 Leakcheck of VV is complete, Re-torquing all heat stationing is complete and recheck HOM tuning is in progress.

CM05 Re-torquing heat stations, leak check of two-phase piping is in progress.

CM06 Two-phase pipe leak checking is complete. MLI and mag shields installation is in progress.

CM07 String assembly is in progress with half of the cavities on the assembly rail. Planning for roll-out on 18-Aug with cavities 090, 112, 123, 264, 082, 271, 273 and 124.

Cavity 102 (NX-B950) first test, Admin limited at 24 MV/m, Q0(16) = 4.0e10, FE free. During handling was fast vented. Plan to dissemble, re-rinse, re-assemble and re-test.

Cavity 123 (TD), first test, Q(16) = 2.7e10; quench limited 21.6 MV/m, FE free, Qualified.

Cavity 124 (TD), first test, Q(16) = 3.5e10; Admin limited 24 MV/m, FE free, Qualified.

Future cavity test plans - 099 (NX-B950), 122 & 116 (NX-A) test during the next week in D7/8.

PCCM was held on Monday this past week. Cavity delivery schedules from both vendors have been received. Due to August holidays, there will be an interruption in deliveries during the mid to end of the month.

**QUALITY**:

Participated in the review for the plan to test LCLSII cryomodules in the LERF.

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

Participated in the LCLSII cryomodule HOM evaluation discussions.

Reviewed the Cold & Clean Bellows Thermal Shock Test Plan on the production copper plated beamline bellows.

**Upcoming Travel:**

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

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

FAC at SLAC 26-28 September - TBD

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of August 3-9, 2017

**Issues:**

**Accomplishments this week:**

Significant progress made toward completion of the GC installation package deliverables. JLab submitted documentation to SG & SLAC on Tuesday 8/8. Three additional supportive analytical calculation documents are pending shortly for BIO approval of the design.

Received SLAC BIO authorization to proceed with the oil removal vessels anchorage.

A BCR presentation was developed 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.

Held PDR for the oil processor with PHPK. All required documentation was provided by the vendor and is under final review.

A FDR for the helium purifier is scheduled for August 14, 2017.

4.5K Cold Box Turbine Pods for TC1 and TC4 are scheduled to be shipped in August 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.

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 August 30, 2017

FDRs are scheduled for the Purifier on Aug 14th and the LN2 Dewar on Aug 10.

FAC Review is scheduled for Sept 26-28th

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of August 3-9, 2017

**Issues:** None

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