Weekly Reporting

WBS 1.01.07 JLAB Management

Week of July 17 - 23, 2015

**Issues:**

**Accomplishments this week:**

BCR for CP#2 was approved.

Completed Variance reports for Cryomodule WBS elements as required.

Prepared and distributed a “Cavity Status Report”.

Participated in EV/BOE workshop.

**Upcoming Activities:**

11-13 August 2015 – Cryo System meeting at Jlab with SLAC, FNAL, Cryo consultant and Jlab for integrated system process modeling.

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of July 17-23, 2015

**Issues:** JLab needs to have four vendor qualifications and two dummy load cavities made available for shipment to cavity vendors. Three vendor qualification cavities have been made available as well as two dummy cavities. One more VQ cavity needs to be identified.

**Accomplishments this week:**

The third VQ cavity (RI023) has been identified and is being prepared for baseline testing.

Vendors each have dummy cavities to be used for furnace evaluation.

AES036 was received from FNAL. AES029 was jacketed at FNAL and should arrive next week. JLab now has AES030, 32, 33, 34, 35 and 36 on-site.

Continuing receipt inspection of HOM, FP and BPM cold feedthroughs for pCMs.

Continuing with preparations for HTB testing of AES033 in mid-August, including collaboration with FNAL & SLAC to obtain cold/warm FPC hardware and SSAs. FPC will be installed 7/23 and the assembly will be under vacuum and leak tight 7/24.

ESH&Q and Production staff visited vendor that is re-working CM assembly tooling due to welding and quality issues. Hardware is planned for shipment to JLab in two weeks.

Plans for installation of CM tooling are continuing including procurement and layout of anchors.

Cavity string bellows and spool pieces are being inspected and NCRs are being resolved. Order was placed for copper plating of these parts. SOTR will visit vendor prior to plating components next week.

Hardware for CM end caps (bayonets, piping, etc.) required for testing was received.

**QUALITY**

* Continue to review the draft LCLS-II Production Multi-lab NCR Communication flow chart. This will be among the various topics at the next internal SRF Quality Steering Committee meeting with SRF leadership. Part of the discussions will also include FNAL’s proposed ‘Dashboard’ on material receipt and inspection statuses.

**Upcoming Activities:** None

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of July 17-23, 2015

**Issues:** None

**Accomplishments this week:**

Additional JLab coordination meetings were held to plan manpower and equipment costing to support planned BCRs. Two base line change requests were presented to the change control board and accepted. The first was the de-scoping of the cryoplant to gallery transfer line. The second accepted change request was the addition of a second cryogenic plant to the base line.

Weekly meetings with SLAC Infrastructure continued for planning the new larger cryoplant building for the first and second cryogenic plant. Topics included electrical power and cooling water, equipment layout and work clearances,

**QUALITY**

No Report

**Upcoming Activities:**

11-13 August 2015 – Cryo System meeting at JLab with SLAC, FNAL, Cryo consultant and JLab for integrated system process modeling.

18 August 2015, 2nd JLab hosted visited SLAC Infrastructure and HDR, Inc. cryogenic plant design meeting.

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of July 17-23, 2015

**Issues:** None

**Accomplishments this week:**

1. Last week Larry, Alex, Sandeep and I participated in the High Performance electronics CDR. Much of our time the week before was spent preparing our presentations for the CDR.
2. CDR Response: I am working on a response to the CDR close out report. Some of the questions have ready answers and were even presented during the CDR.
3. Tuner (JLAB): Stepper board is in lay out with the designer.
4. Common Power Supply (JLAB): The first iteration of the common power supply is complete. Individual power supplies and chassis have been chosen and costed by Dave Seidman.
5. Piezo (FNAL): No update Brian was on travel to India to discuss ADS.

Up and Down Converters (FNAL): Ed Cullerton has completed the ESD and working with Dan Klepec they have completed the layouts for the prototypes of both the 6-channel downconverter and the 2-channel upconverter. Testing of the 4-channel upconverter (PIP-II) is in progress. Any modifications to this board will be done to the 2-channel card before it goes out for production. Thursday afternoon we held an internal review of the 2 channel up converter and the 6 channel down-converter. There are minor changes to both of these boards and some more layout details, but they are mostly complete. I would like for there to be a review of these boards by the LCLS-II team before we send them out. I suggest that we do this two weeks from 7/16. We also reviewed Ed’s measurements on the (PIP-II) 4 channel 162.5 MHz up converter card that has most components in common with the 2 channel 1300 MHz card.

1. Digitizer (LBNL): The schematic is 80% done. We revised the netlist and found some problems, which are being addressed now.
2. PRC Chassis (LBNL): Requirement document has been started and 35% complete (have all content, but not yet circulated for comments). Will try to send a first pass this week. The PRC chassis design has started - Andre has received information to start, but was off last week.
3. Firmware and Software (LBNL): Synthesized placeholder for the new ADC driver on BMB7 platform with serial links (LVDS). Successfully tested. Task 10% done.
4. Cost and Schedule (LBNL): The exercise to finalize the plans in P6 took the rest of the week - we estimated the full contribution from LBNL through CD4 and presented to SLAC. In a meeting with SLAC, we modified the timing and scope of some activities to fit within the allocated budget through the FDR. This resulted in moving the start of the pre-series production to after the FDR. We don't expect this will cause a project delay, since these tasks were not on the critical path. The discussion on the tasks and funding to complete the project is still ongoing.
5. PRL: Moved specification meeting to week of July 22.
6. SSA (JLAB): I discussed SSA plans with Dian Yeremian. I plan to visit the US vendor next week.

**Upcoming Activities:**

* PRL Meeting week of July 22.
* ESD drafts end of July.
* LBNL: Develop means to modify spending profile to meet project's available funding. Release the digitizer schematic to SLAC. Provide guidance for PRC chassis engineering design. Complete the plan in P6 till the end of the project. Complete the schematic, netlist and BOM for the digitizer board to SLAC. Release the digitizer schematic to SLAC.

Provide guidance for PRC chassis engineering design.

* FNAL: Continue working on prototypes.
* JLAB: Complete Interlock schematic.