Weekly Reporting

WBS 1.01.07 JLAB Management

Week of June 19-25, 2015

**Issues:**

Still need to make last two cavities available for vendor process development and qualification.

**Accomplishments this week:**

Submitted BCR presentation files for planned June and July BCRs. CP#1, Cavity contract details, and CM assembly labor. CP#2 is all close and will be ready for July.

Presented the recommendation of 4 ½ k Cold Box to LCLS II and developing the PAR to be sent to the DOE a soon as possible.

**Upcoming Activities:** None

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of June 19-25, 2015

**Issues:** JLab needs to have four vendor qualifications and two dummy load cavities made available for shipment to cavity vendors. So far only two vendor qualification cavities have been made available. Two other cavities at FNAL have been identified - AES015 and AES017. Other potential cavities have been discussed but no project guidance has been provided.

**Accomplishments this week:**

Work continues on baseline qualification of two of four cavities for VQ cavities required. AES023 has been baselined. AES025 was vertically tested, did not pass and will be reprocessed.

Plans have been made for Zanon (EZ) to visit JLab to witness doping and EP processes next week. The other cavity vendor is scheduled for the end of the month. Site visits to vendors have been planned for Mid-July.

We are continuing inspection activities for the BPM feedthroughs.

HOM and Field Probe feedthroughs have completed receiving inspection. A subset of these components was shipped to FNAL to support cavity qualification activities.

Sets of cavity vertical testing hardware have been received into inventory. A subset required for cavity qualification at FNAL was shipped this week.

**QUALITY**

* The draft ACS form for the dressed cavity was updated and sent to FermiLab for their final comments.
* A draft of the production version of the Multi-lab NCR Communication flowchart was created and is being reviewed internally.

**Upcoming Activities:**

Cavity Vendor Visits at JLab last week in June

Cavity Vendor Site Visits scheduled for 9-10 July (RI) and 13-14 July (Zanon)

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of June 19-25, 2015

**Issues:** None

**Accomplishments this week:**

The technical evaluation documentation for the 4.5K cold box and warm helium compressors was delivered to procurement and the source selection officers. The best value determination for the 4.5K cold box between the commercial and technical proposals with a recommendation presentation to the Source Selection Officer was completed. The recommendation was presented to SLAC project management.

A table of relief value tag names and sizes for the cryogenic process interfaces for design coordination and past JLab 2K heat exchanger performance was submitted to Fermilab on June 19th. The relief table data included cryoplant source gas flow capacities to the distribution system during a fault event.

Preparations continued for the arrival of 3 SLAC engineers who will be working with JLab on the cryoplant design. This included office space and plans for site access training. Two were scheduled for July 1st, one for August 1st. The arrival dates of the engineers have been delayed.

Additional JLab coordination meetings were held to plan manpower and equipment costing to support planned BCRs for the first and second cryogenic plant. The BCR for the first cryogenic plant was developed and the planned presentation date for the first plant is June 25th. The second plant BCR presentation has been moved to July 16 from June 25th.

Weekly meetings with SLAC Infrastructure resumed for planning the new larger cryoplant building. Discussions this past week has centered on the water and electrical service entrances, control room requirements, and building column locations. Two trips to JLab are scheduled by the A&E/SLAC: one in July, the other TBD in August (possible target date, 2nd week of August).

**QUALITY**

No report.

**Upcoming Activities:** CEC Conference, June 28-July 2, 2015

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Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of June 19-25, 2015

**Issues:** None

**Accomplishments this week:**

1. LLRF FRS: Editing.
2. Tuner: Stepper is with designer.
3. Piezo (FNAL): Investigating a technique developed at NASA to determine the health of the piezo in situ. Reliability is a key parameter for the tuners.
4. LLRF CDR: Working on presentations and coordinating this effort.
5. Up and Down Converters (FNAL): Work continued on the 2-Channel Up-converter.  In discussions and consultation with Larry D., we added amplifiers at the IF input to provide the proper signal interface between the DAC outputs of the FPGA board and the Up-converter.  The schematic, layout, and data sheet were modified to include the changes.  The schematic and layout of the 6-channel receiver has begun and some progress has been made.
6. PRL: Moved specification meeting to week of July 6.
7. SSA: Reviewed the SSA placement with JLAB engineers. Exchanged emails concerning observing final vendor tests.

**Upcoming Activities:**

* PRL Meeting July 7
* CDR July 8
* ESD drafts end of July