Weekly Reporting

WBS 1.01.07 JLAB Management

Week of August 28 -September 2, 2015

**Issues:**

**Accomplishments this week:**

Continued progress on action items from the Cryo modeling workshop meeting held at JLab.

Split active activities in P6 for the new baseline effort

Vendor signed the CP#1 4.5K CB contract.

Final pCM copper plated beamline spool pieces and bellows were received at JLab.

**Upcoming Activities:**

Mike Skonicki is planning to visit JLab on Sep 15th to follow-up on some of the items from the Cross Walk Exercise. In addition, Mike plans to conduct a separate QA Assessment on JLab sometime in October. The assessment may or may not be on site; and the details and expectations will be provided during the Sep visit.

Cryogenics System FDR at SLAC, September 28-30, 2015

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of August 28 -September 2, 2015

**Issues:** pCM component schedules, JLab pCM schedule is driven by the availability of parts.

**Accomplishments this week:**

The first VQ cavity (AES023) is in transit to RI, along with one set of testing hardware.

The second VQ cavity (AES025) is in transit to Zanon, along with one set of testing hardware.

The third and fourth VQ cavities (RI023, AES014) are being prepared for baseline testing.

JLab has eight cavities on-site - AES029, 030, 031, 032, 033, 034, 035 and 036. Considering corrections for testing hardware, six cavities are qualified for string assembly – AES 029, 030, 032, 033, 034, 035. The final two (036, 031) are planned for testing on 9/2 and 9/4.

Two cold couplers received from Cornell show signs of oxidation on the inner conductor and are under evaluation for use in the prototype string. This issue is being resolved with SLAC.

Final two cold couplers were received from SLAC, and are undergoing receipt inspection.

Continuing with preparations for HTB testing of AES033. HTB was cooled down on Wednesday, 8/26. Updated plan to begin RF testing Friday, 9/4.

SSA water connections are completed. Hook up of electrical service and integrating PSS connections is complete.

Began installation of cold mass assembly fixture (four-poster) – specifically drilling holes and pull testing anchors.

Currently performing receipt inspection on cu-plated bellows assemblies needed for cavity string assembly.

Shipped 8 bpm feedthroughs to FNAL.

Participated in CM FDR close-out meetings with FNAL and SLAC.

**QUALITY**

ACS documents for the HOMFTs have been sent to FNAL for review, and the Cavity String Bellows & Spool documents will soon follow. JLab will continue to work on the Tuner and HOM Absorbers ACS documents.

**Upcoming Activities:**

* 13-18 September 2015 – SRF2015, Vancouver
* 28-30 September 2015 – Cryosystems FDR at SLAC

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of August 28 -September 2, 2015

**Issues:** Proposed (the cryomodule Rev 1 EN heat load document) cryomodule shield heat leak appears to exceed the refrigeration shield capacity of a single plant.

**Accomplishments this week:**

Diane Fairley and Kevin Morrison from SLAC visited JLab Tuesday/Wednesday, Sept 1-2nd to coordinate controls for the cryoplant. Discussions included a tour of the JLab cryogenic plants, interface signals, control display screens, and actively monitoring the control of the plants.

Preparations continued for the Integrated Cryogenic Systems review to be held at SLAC Sept 23-26th.

A draft version of the 2K cold compressors (JLab 79222-S001) and helium gas storage vessels (JLab 79729-S001) procurement specifications were released for comment. Comments were received and are in the process of being incorporated into the procurement specification.

A warm helium compressor procurement presentation was made to DOE. Documentation will be sent to DOE week of Aug 31 for approval.

John Pucci, engineer from SLAC, has relocated to Virginia and has joined the JLab cryogenic group for the LCLS-II Project.

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**

Reviewed the QA requirements on the draft technical specifications for the various CryoPlant subsystem assemblies (i.e. ambient air heat exchanger, 10K liter He dewar, purifier compressor, & etc.)

**Upcoming Activities:**

Sept 28-30th, Cryogenics System Final Design Review hosted by SLAC

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of August 28 -September 2, 2015

**Issues:** None

**Accomplishments this week:**

* Stepper Motor Board: Stepper motor controller board - sent it for the review. If I don't hear anything back by Friday morning, I will send the board out.
* CMTF: SSA is ready for test. Waiting for TOSP.
* Power supply chassis: Working on break out connector/filter design.
* Last week, met with the LLRF controls people from SLAC.

**Upcoming Activities:**

* Continue working on boards and chassis.