Weekly Reporting

WBS 1.01.07 JLAB Management

Week of Jan 13-19, 2017

**Issues:**

**Accomplishments this week:**

Completed VARs

Awarded the LN2 dewar contract

Put Oil processor RFP out on the street

Reviewing helium purifier proposals

Attend Cold Compressor FDR

**Upcoming Activities:**

Director’s Review at SLAC 3-5 May 2017

DOE Status Review at SLAC 13-15 June 2017

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of Jan 13-19, 2017

**Issues:** Cost and schedule impacts due to cavity recipe development effort at vendors. Planning and execution of CTF down activities.

**Accomplishments this week:**

CTF down is planned to start 17-FEB. The duration of the downtime has been revised to seven weeks based on accounting for previous work, coordinated activities and updated available resources.

Discussed path forward with SM on EACs for two control accounts – Engineering & Design and prototype CM.

Developing plan for additional cavities and niobium material procurements. Arranging trip to TD to discuss updated Niobium cavity specification.

Production cavity coordination meeting – main topics are evaluating Zanon EP process and NX material performance. Four bare cavities from Zanon are enroute to FNAL for evaluation of EP process. Four dressed cavities from RI have arrived at JLab. Requested 0017 and 0018 from FNAL to return to RI to have helium vessels installed.

Internal review of recommendations from Production Readiness Review held last week. Plan to have a telecon with reviewers in February after pCM testing is complete.

pCM Status

Each cavity has been powered individually. Average gradient is 17.9 MV/m. No sustained field emission observed on seven of eight cavities. Need to confirm preliminary results on cavity six.

Actuated tuners in two cavities.

External coupling is low on four cavities – corrected using three-stub tuners. Some coupler heating is observed but attributed higher fields due to stub tuners.

Expect testing to wrap up by the end of January in advance of CTF down. Some combined cavity tests may be delayed until after the shipping test is completed.

Production Status

CM-03:

Cavities for CM03 - 0035 is in the dewar awaiting cryogens and 0021 has been re-rinsed and is ready to test.

CM-02:

Two-phase piping construction in progress. Waiting on some parts from FNAL for weld kit. Waiting on delivery of magnet 004 – currently in re-test at FNAL. Berry bolts installation in progress.

UCM004: Repaired the two-phase Tee.

VV006: Degaussing coils installed. Leak check completed.

VV008 / UCM008 – received components.

**QUALITY**

Participated in the pCM Workshop held at JLab last week.

Continue to work on downloading and synching issue with the Microsoft One-Drive for the cavity vendor Hold-point data. JLab’s computer center is helping to resolve the issue.

**Upcoming Travel:**

E. Zanon Vendor Visit January 28 - Feb 10

Nb Material and Bellows Plating Vendor Visit January 30 - Feb 7

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of Jan 13-19, 2017

**Issues:**

**Accomplishments this week:**

LN2 dewar proposals have been fully evaluated and award placed.

Provided design documentation and 3D model of the cryoplant to SmithGroup for their design assessment. A meeting between SLAC, JLab and Smithgroup is planned for January 25 at JLab.

Preparation began to support the Integrated Controls Workshop to be held at SLAC on February 8th.

Received vendor proposals for the Helium Purifier System. Technical evaluations are underway

The second phase of the 2K cold compressor FDR was held on January 11th at the Air Liquide R&D center in France. In attendance were the design team from Air Liquide, JLab procurement, JLab SOTR, and JLab CAM. In preparation of the review all review material was received as planned prior to the review and made available to the project. The review was available by video conference and was attended by SLAC engineers and JLab QA/QC. Questions from the reviewers are in the process of being addressed with submittal to the vendor planned by end of the week.

**QUALITY**

No Report

**Upcoming Travel/Reviews:**

Interface Box/Transfer Line PDR January 2017

4.5K Cold Box Manufacturing Kick Off Meeting, January 31-Feb 1

Controls Integration Workshop, SLAC, Feb 8

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of Jan 13-19, 2017

**Issues:** None

**Accomplishments this week at JLAB:**

* LLRF Coordination/Documentation:
  + Heater: Board is being assembled.
  + JLAB Production cost estimate sent to SLAC.
  + Buncher Interlocks: Reviewing the I/O document sent by Gang.
* Resonance/Stepper Motor Board/Chassis:
  + CMTF test by the end of January. Software development continues to be slowed down by competing JLAB projects supporting CEBAF operations.
* Interlock Board/Chassis:
  + 2nd Chassis installed in the CMTF.
* Common Power Supply/Chassis:
  + Five power supplies are complete.
  + Gun PS Chassis/Board: Working on the design internally. Present plan is to modify the power supply break out board to support the additional RF amplifiers in the RFS/PRC chassis. We are waiting on information from LBNL.
* CMTF
  + We are supporting on going cavity and cryomodule tests.
  + Participated in pCM workshop last week.

**Upcoming Activities:**

* + Team Meeting moved to January (FNAL), 4th week.
  + JLAB/FNAL pCM tests in January/February
  + FDR March