Weekly Reporting

WBS 1.01.07 JLAB Management

Week of March 29 – April 4, 2018

**Issues:**

Waiting on DOE approval for the SRF cavity award

**Accomplishments this week:**

Vendor visit to PHPK for the monthly schedule update. Waiting on the delivery of the ALATUS report.

Finalizing an oil processor contract modification to add oil storage tanks

LHe dewars are in transit to SLAC.

**Upcoming Activities:**

7 May – Collaboration Meeting @ SLAC

8-10 May – OPA Review @ SLAC

15-17 May – LCLS-II HE Director’s CD-1 Review

19-21 June – LCLS-HE CD-1 Review

Weekly Reporting

WBS 1.04.06 JLAB Cryomodules

Week of March 29 to April 04, 2018

**Issues**:

Production hold due to BPM leaks.

**Accomplishments this week:**

Prepared EAC for cryomodule control accounts.

Reviewed monthly progress update internally.

Cavity award package at DOE. Need final confirmation of quantity to award.

Developing plan for reworking (27) NX900 cavities as an alternative.

New BPM assembly procedures and travelers reviewed and approved. Restart inside cleanroom began 02-April.

Retro-fit travelers and procedures drafts are complete and under review in advance of restart on 11-April. This includes slow bleed up, BPM hardware replacement and retrofit travelers and procedures.

Continue evaluation of completed CMs and planning for CM rework. Finalized p6 what-if schedule. Developing cost for additional fixtures and equipment. This is includes evaluating a request from SM for an additional four-poster and additional shipping fixture.

Completed internal QA audit. Reviewed draft report.

HX modifications to piping is nearly complete. Expect leak check and pressure testing next week.

Shipping SOTR is at SLAC participating in preparation for return shipment to FNAL.

J1.3-01 - @ WS6; Waiting to move to WS4 for VV removal

J1.3-02 - @ WS6; Idle

J1.3-03, J1.3-04 - Moved to storage atop UITF.

J1.3-05 - Moved to WS5; Installing gas guard valves; Preparing to move to LERF.

J1.3-07 - @ WS5. Removing bayonet box and end cap.

J1.3-08 - @ WS4; CM hardware rework being reevaluated; Portable cleanroom installed in preparation for beamline vent.

J1.3-09, J1.3-10 @ WS3 – UCM hardware evaluation continuing.

J1.3-10 - Alignment complete; Tuner installation complete; Removing, loctiting and reinstalling fasteners on UCM.

J1.3-11 – Two-phase pipe leak check complete; WS2 work complete. Waiting to move to WS3.

J1.3-12 – String preparations occurring this week. String build starts next Monday.

J1.3-13 – 8 cavities have been qualified for the string. Details from cavity tests were presented at SRF weekly meeting.

**QUALITY**:

The Project Cryomodule Assembly QA report was released Friday for review and feedback.  As previously noted, the scope focused on bolt retention and proper torque values for various elements, including the pCM. Recommendations included:  
- creation of an adjunct traveler that details acceptance criteria and test methods, to be utilized at both JLab and FNAL  
- establishment of identical acceptance criteria for individual items / call-outs; discontinue use of "as per drawing" confirmations (both JLab and FNAL)  
- correction of WXCX fastener quality issues, including acceptance criteria and plans for inspections and verification (both JLab and FNAL)  
- significant attention and presence at WXCX to ensure corrective actions are carried out (FNAL)  
- approval of WXCX documentation prior to shipment (inspection reports, certs, NCRs, etc) by FNAL  
- classification of fastener defects found at the partner Labs as Significant NCRs (both JLab and FNAL)  
  
Additionally, a Technical Review was held to compare XFEL drawings and specifications against LCLS-II design adaptations, including assembly, transport and installation.  JLab continues to recommend that high risk, future-build issues be appropriately identified and their associated QA processes evaluated for fault points.  
  
Additionally, an internal assessment of JLab Cryomodule QA was conducted.  The most significant issue identified was notification and JLab review of Cryomodule related drawing and specification changes. This was also communicated to the Project review team but not included in the report circulated by SLAC.  
  
A SLAC representative and 3 vendors worked on the SSAs with the non-conforming eyebolts on Monday.  Although the work required lifting and movement of the equipment, the eyebolts were not used and remain tagged.

**Upcoming Travel/Meetings:**

EZ Vendor Visit Apr TBD (Gonella)

EZ Vendor Visit May TBD (H. Park)

EZ Vendor Visit Jun TBD (C. Reece)

Weekly Reporting

WBS 1.04.06 Cryomodules - LERF Conversion

Week of March 29 – April 4, 2018

**Issues:**  None

**LERF accomplishments this week:** No report.

IP address listing for all devices can be found at: <https://wiki.jlab.org/lerf/index.php/Network>

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of March 29 – April 4, 2018

**Issues:**

**Accomplishments this week:**

**2K Cold Box (no change from last week)**

1. The request for proposals (RFP) was issued; 07-Mar-2018.
   * Proposals are due back on the 9th of April.
2. FDR was held 28-March-2018
   * The committee supports the project decision to go out for RFP early.
   * The final report included four recommendations.
   * The installation scope shall be assigned to the vendor and GC prior to delivery.
3. All reports and presentation materials have been posted to the SLAC site.

**4.5K Cold Box Status**

1. Monthly schedule review held at PHPK with JLab & ALATUS.
2. PHPK is continuing to work to make progress on the final leak check.
   1. Internal piping leak found and repaired; in process of repairing another.
3. Factory witness of final leak check is expected next week.
4. LCB – Performing leak check of internal piping.
5. UCB2 - All pressure vessel installed, piping is being added. Internal framework is finished. Bottom head and skirt assembly is nearly completed.
6. LCB2 - Pieces delivered this morning to build frame; plan to begin fabrication of internal frame today.
7. Cryoduct - Complete.

**Interface Boxes (no Change)**

1. Engineering change request (ECR) received from SLAC 05-Mar-2018.
   1. JLab suggested u-tube crossover in lieu of internal piping change; SLAC cryo engineering evaluating.
2. Vendor proposals are competitive and technical evaluations complete.
3. Procurement going back to potential vendors for clarification of proposals.
4. Award expected early April 2018.

**Cryoplant Engineering Status**

* Engineering has completed the design and preparation for the 2K cold box FDR
* The Interface box award is on schedule for early April.
* The FMEA and specifications for the Instrumentation & controls effort are on schedule to complete this month.
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**QUALITY**:

* Planning to attend final leak test of CP#1 Upper Cold Box in April.
* Internal JLab/Fermi QA audit of the project held last week.
  + Final report issued.

**Upcoming Travel/Reviews:**

* 4.5K cold box final leak check ~Week of Apr 9th
* 4.5K cold box re-assembly meeting @SLAC Postponed
* 2nd MCC Vendor Site visit (acceptance testing) TBD
* Visit to GHe vendor for acceptance Week of 09-Apr

1. DOE OPA Review May 8-10th