Weekly Reporting

WBS 1.01.07 JLAB Management

Week of May 5-10, 2017

**Issues:**

**Accomplishments this week:**

Cryoplant Replan BCR was presented.

Began addressing recommendations from last week’s Director’s Review.

Preparing a JLab Director’s Review of the Cryoplant Installation Design Completion.

Executed a contract mod for 8 additional RI cavities.

He Purifier Vendor conducted PDR.

Held kick-off meeting with LHe dewar vendor.

**Upcoming Activities:**

International Particle Accelerator Conference 14-19 May

Collaboration Meeting 12 June 2017

DOE Status Review at SLAC 13-15 June 2017

SRF 2017 in China July 17-21, 2017

FAC at SLAC July 25-27, 2017 (Tentative)

Weekly Reporting

WBS 1.04.6 JLAB Cryomodules

Week of May 5-10, 2017

**Issues:** Impact on cryomodule assembly schedule due to design changes and parts availability associated with microphonics. Insufficient quantities of PICs may lead to delays in shipments from cavity vendors.

**Accomplishments this week:**

Participated in Director’s Review at SLAC.

Executed a contract modification with RI for 8 optional cavities.

Preparing presentation for BCR to fabricate 18-20 cavities at RI from material that EZ had on hand. Reviewed with Deputy SM.

Reviewed agenda for an early coordination meeting at vendor that is producing HOM BLAs.

A planned CTF interruption for commissioning of the new CTF cold box beginning 22-May and ending by 4-June.

Cavity Status

PCC meeting was held this week – topics of focus included proposed recipes for recovering cavities, process control related to final EP and steps for recovering cavities with helium tanks.

Continuing with vendor on-site support at Zanon. Four bare restart cavities tested successfully at FNAL – three passed with no FE and only one requires a re-rinse due to FE.

Zanon has completed cavities: Hold point 1 for CAV256 – CAV273 (NCR for 266), Hold point 2 for CAV256 – 265, and Hold point 3 for CAV256 – 269.

RI has completed cavities: Hold Point 1 thru CAV0114, Hold Point 2 thru CAV0097 except 84, and Hold Point 3 thru CAV0090.

Next JLab shipment - CAV0087, CAV0088, CAV0089, CAV0090 – redirected to DESY for testing. These are planned for testing later this week.

Next FNAL shipment - CAV0091, CAV0092, CAV0093, CAV0094 – en route.

DESY testing – Four qualified cavities (CAV0059, CAV0060, CAV0056, CAV0053) have been returned to RI.

pCM Status

Tuners and piezos have been evaluated. The Qext was set and verified for all eight couplers at 4e7. Maximum gradients for cavities 1, 3 and 4 are consistent with pre-shipping test levels. One-hour runs have been conducted on all three. SSA for cavity 2 is experiencing communications issues. Testing continues on a 7-day week / 2 shift per day schedule.

Production Status

CM-02 (currently at WS5):

High pressure test of line A complete. Installation of GHRP and helium jumpers on End Cap complete. Thermal shield and instrumentation installed prior to EndCap installation. Bayonet box instrumentation in progress.

CM-03 (currently at WS3):

Magnet lead soldering is complete. String alignment is in final phase. Demagnetization of tuner parts in progress.

CM-04 (currently at WS12:

Gate valves were leak checked on assembled string. String rolled out to WS2. Berry bolts were installed. Two-phase piping welding started. HV heaters glued on. SC magnet installed.

CM-05

Eight cavities are qualified for the string including three tested qualified cavities (057, 061, 062) received from DESY on 8-May. The last qualified cavity (080) tested in 5mG field reached Q0(16) = 2.4e10, quenched at 22.5 MV/m and was FE free. Three of the cavities have Qo slightly below 2.5e10 with Emax averaging greater than 20 MV/m. String preparations started on 8-May. Plan to start rinse/dry/assembly on 15-May.

CM-06

Four cavities qualified at DESY are planned for string 06. These shipped from DESY to RI on 10-May. Two cavities (082, 083) are planned for testing this week.

**QUALITY**

Participated remotely in the Director’s Review at SLAC last week.

Received and reviewed the revised procedure from SLAC on Equipment Transfer Verification process.

Ian Evans will visit JLab on May 15 & 16 to look at work planning integration, communication, safety practices and lessons-learned in the areas of cryomodule assembly and test.

**Upcoming Travel:**

E. Zanon Vendor Oversight May 6-19 (A. Palczewski)

HOM BLA Vendor Kick-Off Mtg – May 14-18 (H. Park, E. Daly, T. Peshehonoff)

E. Zanon Vendor Oversight May 16-26 (C. Reece)

E. Zanon Vendor Visit May 22 (K. Wilson, M. Laney)

E. Zanon Vendor Oversight May 30-Jun 10 (A. Palczewski)

SRF 2017 Lanzhou, China July 17-22 (A. Palczewski, C. Reece, N. Huque, L. Zhao, V. Bookwalter, K. Davis, G. Cheng)

WXCX Vendor Visit July 24-28 (Cheng, Fischer)

Weekly Reporting

WBS 1.04.08 JLAB Cryoplant System

Week of May 5-10, 2017

**Issues:**

**Accomplishments this week:**

* No report.

**QUALITY**

Participated remotely in the Director’s Review at SLAC last week.

**Upcoming Travel/Reviews:**

DOE Review, SLAC, June 13-15th 2017

2K Cold Box FDR Closeout, June 20, 2017

FAC Review, SLAC, late July 2017 - tentative

Weekly Reporting

WBS 1.02.03.05.12 LLRF

Week of May 5-10, 2017

**Issues:** None

**Accomplishments this week at JLab:** No report.