**LCLS-II DECEMBER PROJECT STATUS REPORT**

**DATE:** January 6, 2015

**LOCATION OF PROJECT:** Jefferson Lab

**SENIOR TEAM LEAD:** Joe Preble

**MONTHLY PROGRESS**

Summary

JLab continues to make good progress in all areas. Prepared for and participated in the CD-2/3 Review. Cryogenic plant procurements are progressing well including advancing the schedule where possible, notably for the warm helium compressors. Design and procurement activities continued for the remaining plant procurements. JLab is waiting on the SLAC electrical grid analysis before ordering the 2500 HP motors for the warm helium compressors. Cryomodule testing infrastructure is progressing and on schedule to be ready for the pCM testing. Significant advances have been made on procurements with production options and new production orders placed. The SRF cavity schedule is delayed by the material delivery delays. The pCM assembly continues to be delayed by bellows delivery schedule.

Management

Cost, schedule, and scope are being managed. Inputs have been provided for several BCRs keeping P6 updated as appropriate.

Cryogenic Plant

Completed the Cryoplant recommendation responses of the Cryogenic System Final Design Review, FAC Review, and Director’s Review. CP1 warm helium compressor vendor is ready to place orders for motors, compressor bodies, and heat exchangers on schedule. We are on hold for the largest warm compressor motors, 2500 HP, until a power study is completed in December. The 4.5 K cold box vendor design is advancing and the PDR planned for January has moved to February. We continue to look for additional staff. Interviews were held for a SLAC cryogenic controls engineer and a warm piping engineer who will be assigned work at JLab for the LCLS-II cryogenic plant.

Cryomodules

The phase 1, vendor qualification for Nitrogen doping cavities, of the SRF cavity phase contract is advancing well and Zannon has completed the qualification process and are ready for phase 2 and 3. Phase 2 and 3 are delayed due to delays in Nb materials. Procurement actions for 2 of 3 cavity tuner sub-assemblies have been started, one has bee placed and the second is waiting contract signature from the vendor. E. Daly chaired cryomodule technical reviews at FNAL. The pCM schedule continues to be on hold for Cu plated bellows. Recovery plan for copper-plated bellow is being implemented; eight long bellows at SLAC; nine long bellows at Epner. Long spools are in process at vendor and SLAC. Four short bellows completed dimensional inspection. Vendor has completed bayonet box vacuum vessels and is preparing to ship them to JLab. Reviewed manufacturing drawings from RI and Zanon. GHRP parts received from FNAL.

LLRF:

Prototype hardware is advancing well. (tested stepper board, Arc/IR, Electrometer, FPGA boards). CMTF work continues (SSAs, racks, RF and digital boards, and cabling).

ESH - QA

Working with Fermilab on ACSs and other new QA requests coming from Mike Skonicki. Submitted one slide on the topic of Partner Lab QA Readiness Status for the CD-2/3 Review. Served on interview panel for the Procurement Administrator I position.