Long Shutdown Integration Meeting

July 11, 2013

F224-225, 10:00 a.m.

MINUTES

Presentations available at:

https://www.jlab.org/div_dept/directorate/proj_mgmt/lsd/index.html

• Introduction F. Pilat

• Outcome of CAB R1/R2 Discussion

- o Director's review of commissioning plan (June 6th and 7th) with 9 recommendations
 - Recommendations 3 9 : Arne is organizing responses and have assigned people to each
 - 1: consider rescheduling ARR to another time...we proposed August
 - 2: Consider increasing ARR team membership with appropriate experts
 - Met July 2nd to review 1&2 recommendations
 - Group almost concurred with option: 2-stage ARR review: part 1 in august focused on safety topics with follow up meeting in Oct and with a subset of the ARR committee to look over operability issues.
 - HCO process to start mid Sept too late for Aug review
 - Will work towards being in a position to obtain signatures in Aug, and if further work is needed – process in place to obtain signature in Oct
 - Oct review panel will be held to follow up on safety issues and review operability issues that is external and internal and familiar with accelerator
 - Fulvia will send the document around please provide feedback

• General discussion notes:

- ESR cooldown discussions ongoing for starting Oct in 2014 (budget initiated this discussion).
- o Cryogens for linac (25 modules can be cold/full)

LSDD Report

D. Napier

See presentation for full details

Schedule Status

- Will be done Friday and Dianne organizing LSD core team to review status/priorities/resources, etc.
- Hall A work (not included in presentation): Making good progress in Cryo upgrade, slowly progressing on Compton, Target is on admin hold pending decision regarding air conditioning in the acc. Tunnel.
- o Additional Hall D work (not included in presentation): Significant progress on cooling the magnet with temperatures being in the 10-25 Kelvin ranges. Dumping liquid helium dewars every day to boost the performance of the refrigerator but the frig is plugged at this point. The plan is to continue cooling until tomorrow afternoon and then shutdown the system, put the frig on warm

up, blow the plugs Monday, and then pick up where we left off continuing the cooldown and filling next week.

• Status/Findings of Pre-HCO Reviews

S. Suhring

- o See presentation for full details
- o System reviews (Pre-HCO) ongoing
- 9 items for system owners/presenters to present. Many of these items fold into ARR
- o FML (6/20) & Cryo (6/27) has already presented
- o Safety systems is presenting today (July 11th) at 1:30 at A110
- o <u>Draft</u> findings (not all impact startup on Nov 4th). Not final or reviewed by all yet. Available in presentation.

• Commissioning Update

A. Freyberger

- See presentation for full details
- o 113 days to Beam
- o 67 days to HCO
- o Path to beam & acc readiness review
 - Sept 19th end of installation
 - Beam operations Nov 4th
 - Installation work beyond Sept 19th:
 - Cryo, SRF, etc
 - System reviews (That Steve presented) is shown on the schedule
 - After system reviews –then geographical reviews then HCO
 - Radcon measurements being integrated into beam operations to validate numbers/calculations
 - HCO program (FML is first up to use the new program/software)
- o Comm planning team is meeting every Monday and notes are sent out to CAB.
- 5 weeks away from ARR. Working with Bob May to set up agenda and talks for the review
 - Added cyber security/software QA & team member Karen White
 - Dianne helping Bob add piece to ARR plan (lines of inquiry) for this addition
 - Bob working details for review

• Cryomodule Commissioning Status

M. Drury, J. Preble

- See presentation for full details
- o C50 recovery (except 2L16) good news compared to numbers from 6GeV run
- o 2L16 and 1L05 planned for helium processing
- o C20's started. Priorities were established to commission C50's before C20s
- See presentation for graphs for progress/energy
- o On 8/26: No 2K so CM commissioning will flat line
 - What will be done prior and what's left after 2K comes back?
- o 4 weeks from early Oct to Nov time to commission

• Cryogenics Update

B. Merz

- o Email update provided below
- On the accelerator ops side of the house: re-cooling the Hall D solenoid for further testing. CHl#1 is supporting accelerator cryomodule commissioning in the linacs.

o On the 12 GeV side: continuing to finish the CHL#2 4.5K cold box to linac transfer line connections and the 4.5K cold box vendor (Linde) is on site to address the final punch list of items which came out of the performance testing.

Around the room

• 12 GeV Accelerator

- L. Harwood
- o Beam transport: working well into Aug. Not as fast as re-baseline plan. Initial plan was to be done late July. Using float now.
- Arc 1 Box PS ships tomorrow, next one next week. Both will arrive end of month
- o 20A trims on site
- 12 GeV Physics

G. Young

Physics

- R. Ent, J. Gomez, W. Akers
- o Hall C: working towards 10 hour days/6 days a week for SHMS
- Walt is working on hurricane contingency plan
 - Generator for ESB and other buildings., EEL rooms etc
 - Looking like a reasonable budget solutions
 - Pay retainer to have generators secured 3 days before event.
 - SVT dehumidifier for room being planned as this is the major concern for this location
 - Generator for accelerators no not needed.
 - Flood gates for Halls B&C:
 - Software in place now to detect when national weather service sends a specific warning and notifies appropriate personnel (ops, halls, etc). But access has changed and system is currently down working this
 - New ones made (3ft) with clamp locks and now only 1 guy is needed to install (and within 5 minutes). If money is available, then automatic flood gates for Hall B would be of most benefit. Flood sensors are in place.
- FEL
- Operability
- Commissioning, CASA
- Engineering, Cryogenic
- Facilities
- ESH&Q
- PMI

- G. Neil, R. Walker
- S. Suhring, A. Freyberger
- M. Spata
- W. Oren
- B. Sperlazza
- M. Logue, D. Owen
- P. Collins, K. Krug