# Long Shutdown Integration Meeting

#### June 5, 2013

F324-325, 10:00 a.m.

#### **MINUTES**

https://www.jlab.org/div\_dept/directorate/proj\_mgmt/lsd/index.html
Issues/Actions Noted in Red Font

#### • Introduction

#### F. Pilat

- Impacts of reduced work week discussions within in Accelerator division
- Clarity on rules/regulations from HR on weekend/shift work (ie can we have a subset of people that work a different reduced work week than others) if we cannot do this then there will be more than a 20% impact.
  - CM commissioning (SRF & RF group)
  - Labor laws when a reduced work week is imposed, you cannot work around it.
    - This is a minimum 6 week delay for accelerator work
    - Physics work being evaluated
    - Contractors can still work weekends, and exempt people can still come in and check work. FML is reviewing the impacts.
    - Have to consider keeping work safe with vendors/contractors working
    - Deliveries for Cryo are a 24/7 operations (2 techs) nonexempt support this work and can be paid

#### LSDD Schedule Status

# D. Napier

- See presentation for full details
- o Progress sheets due back to PMI by 4 June –send in if you haven't already done so.
- $\circ$  Plan to have end of May 2013 progress completed by 10 June
- Changes being implemented:
  - 12GeV Hall B & C ETC

# LSDD Report

# M. Bevins

- o See presentation for full details
- o Next LSDD starting 5 June 2013 Will Oren
- AC installation started in new zones in N/S linacs
- o PEPPo dismantling complete

- 0L/0R & NW tangent dipole installation and initial alignment completed, vac connects underway
- o SRF commissioning ongoing
- o Cont. Cable terminations trim/temp switches
- o 1L23 Waveguide installation
- o 1S + hall d line dipoles installation
- o Vacuum rebuild 1R complete. Beamline fab continues...reconnects underway in 1S and hall d beamline
- o LCW copper and hose hookups in 1S/2S/2R/2T
- o Dipole installation in extraction (2T)
- o Discussion notes:
  - HB and HC dipoles measurements about 1 to 2 weeks away from completion
  - LSDD feedback good experience, improvements in tools are great
- Lessons learned from 1R areas:
  - DC power would have liked to get in earlier to terminate cables before magnet installation
  - Fiducials (dipole side) did not go back in the same orientation they were put back in, and some damages

# • Cryogenics Update

# W. Oren

- o Revised schedule presented (NOTE: reduced work hours not reflected in this schedule)
- o Schedule shown is 7 day work week/shifts as needed
- CHL1 section of the schedule is driven by CM commissioning.
   Impacts of reduced work week on this work will be reflected in this schedule
- ESR operations section of the schedule is driven by 12GeV schedule and testing power supplies (Hall C)
- HDR operations section of the schedule is driven by HD magnet (24/7 operations)
- Color code:
  - Yellow = up/down or questionable
  - Blue = running
  - Red = 300K (warm)
- o CHL2 shutdown 18 May
- o 12GeV project CHL2 not complete yet as Linde is putting in parts, etc and then a run to proof their fixes (maybe July/Aug)
- o Hall C cooldown early July was the plan. ESR-CHL transfer line used. Meeting this week for discussion as this is competing with Hall D and other transfer line work. Cryo working with Hall C (P.

Brindza) on this now. HC power supplies are in and just need cryo to test.

- HDR operations: cooldown start (date?).
  - Meeting yesterday (W. Akers): 2 week running window. Trying to slow down early work and then cool down only once. Augmenting with dewar (done last time and will be done again next time).
- CTF operations 1 day down for CTF to do maintenance (was originally thought to be 1 week and now only 1 day is needed).
   Relief valve on LN2 dewar (CATS item).
  - LN2 dewar eng/design/fab install early Oct. Maintenance down, dewar connection & recovery early Jan

#### • Commissioning Update

#### A. Freyberger

- o Acc maintenance support:
  - DC power only has about 1 FTE supporting
  - RF is well supported as it is happening with CM commissioning
  - Cryo is at 18FTEs (does not include contract guys)
- o 6-6-13 is the Director's review of the commissioning plan
  - L102 starts at 0800 and goes all day (will include a tour of the tunnel)
  - Preparations has been very valuable, 2 weeks ago met with Commissioning Advisory Board
  - Work spilling over after the down nominally ends (mid Sept):
    - CHL work (2 plants connected to machine),
    - C50-11 and R100 commissioned after 4K operations

# • TLA status, move to TestLab

# R. Yasky (or designee)

- o B. Sperlazza for R. Yasky
- o No update provided for TLA or move to Test Lab
- o Impacts of reduced work week:
  - Test lab renovation b/c it is a contract going full steam ahead (mortenson)
  - If contractors doing same work as during the work week, they can work weekends without jlab supervision but they are required to provide their own safety/management supervision
  - Counting house and mcc renovation will have no impacts and both planned for completion end of June
  - N/S linac AC is planned for completion Sept (MRI is the contractor) – no impact
  - Standard FML operations (landscaping) can be modified for reduced work week

• C. Jones is shifting gears from supporting the test lab operations and into the maintenance for accelerator (there could be impacts here, but being evaluated)

### Cryomodule Commissioning Status

M. Drury (or designee)

- o C100
  - C100-10 moving to NL 6-6-13 (114MV)
  - 1L24 (C100-7) finishing tonight (108MV)
  - 1L23 next few days
- o C50
  - 5 C50s completed, working on the 6<sup>th</sup> in SL
- o C20s
  - 6 finished, and working on 2 more now
- o 9 CMs in NL (including C100s) ahead of schedule
- o 5CMs in SL a little behind schedule, but no issues
- o Identified 700MVs so far
- CM commissioning impacts
  - 7 days work week and ~10 people (includes on-call people)
  - Cutting 3 days out of 7 is a big impact
  - J. Preble & M. Drury working on impact plans/weekend work/scenarios for reduced work week
    - Trying to figure out minimum support needed for this work
    - SSO and crew chief needed for weekend work
    - Other on-call people?
    - Cryogenics (on-call)
    - If we do just 4 days a week (and must be second shift) then slips to end of Sept.
    - Not much gained if lengthening the current shift due to impacts on other people working during the day, people working other jobs that support CM commissioning
    - 25<sup>th</sup> / 26<sup>th</sup> June re-programming deadline or will have to reduce work week.

#### Around the room

• 12 GeV Accelerator

L. Harwood

- o RF group is down 2 people: balancing cm recommissioning/12gev cm commissioning. Evaluating the work load and priorities.
- o Beam transport fixed number of people and work so just delays straight/line
- o 6 week delay has no affect on CD4A, has impacts on level 2 milestones in the 12GeV schedule
- o Arc 1 box supply Danfysik is being tested
- 12 GeV Physics

G. Young

Physics

- R. Ent, J. Gomez, W. Akers
- SHMS steel fabrication Hall C started this week and will be impacted (only one SOTR)
- o Hall B is largely distributed doing detector work now and almost every building has detector parts in it. As we approach storm season (mid July to discuss mitigations). Last storm season we had generators on buildings with sensitive equipment and need to review generator rentals for these various buildings.

• FEL

G. Neil, R. Walker

- o No funding from the Navy this is certain now
- o No activities in the FEL, people transferred off will stay where they are
- Will review what to do in the Fall (this is when the FEL Navy money was originally anticipated)
- o F100 refurbishment (VA funded) continues along with buncher cavity work
- o FML work request will continue as well
- Operability

S. Suhring, A. Freyberger

- o Going through software tasks as well to evaluate impacts of reduced work week
- Paul (Ops) is putting in a new hire for 2 operators to have these vacant spots filled – important to get them in early for training. Will evaluate if this can be delayed. 2 months before beam delivery is when they are needed.
- Commissioning, CASA

M. Spata

• Engineering, Cryogenic

W. Oren

- o New alignment guy coming in this week and another one on their way
- Facilities (CHL pipe)

B. Sperlazza

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ESH&Q

M. Logue, D. Owen

- o Pass on to the troops: awareness that historically when we have a spike in events (like this reduced work week), there is a spike in safety injuries.
- PMI

P. Collins, K. Krug