

Lab Status / AEM Meeting Notes

Monday April 24, 2017

<https://indico.fnal.gov/conferenceDisplay.py?confId=14363>

Incidents:

- None reported.

Accelerator Operations:

- LINAC, Booster, MI & Recycler running well.
- NuMI: 1.39E19 POT.
- BNB: 1.10E19 POT.
- SY120: MI52 Septa B replaced. There were some vacuum instabilities over weekend. Only 11.9 hours of beam to SeaQuest, 49.6 hours to MTest, 76.3 hours to MCenter for LArIAT.
- Downtime planned April 25.
- Future schedule can be found: <http://www-ad.fnal.gov/ops/schedule.html>
- PIP-II Injector test: Shutdown to install full MEBT.
- FAST: 300 MeV beamline construction continues.
- LCLSII: Cryo plant started up. Installation wrapping up. Expect power testing next week.

MicroBooNE:

- Stable running. 96.9% uptime.

MINERvA: (April 13-19)

- 97.3% uptime (64.6% with MINOS ND). Several MINOS magnet trips resulted in a period with magnet off (14-17April). To mitigate problem, one pair of feeder cables disconnected and isolated. No trips since then.

NOvA:

- Running smoothly. 98.8% FD uptime.

SeaQuest:

- Running smoothly when there is beam. 86% good proton utilization.

g-2:

- All 24 calorimeters have been installed & fiber-optic connections tested. Kicker test performed to check for induced noise in detectors.
- Plan to complete ORCs by May 5. Shifts start May 1st. Plan to be ready for beam June 1st.

PPD:

- DES submitted an observing request to NOAO for year 5.

- DESI - Upcoming "Engineering Model" challenge at LBL to test integration of the DESI focal plane hardware (fiber positioners) with a fiber view camera and the instrument control system at the end of May.
- CMS is closed. Expect to turn on the magnet Wednesday. All installations continue to be successful. Focus for Phase 1 is moving to HCAL Barrel front end, which has test beam with prototype system in July.
- Mu2e. The parts for modifying the winding machine down in Tupelo are installed and the machine is being commissioned. They are working on conductor tensioning (push/pull adjustments). A full Tracker panel has been assembled in Lab 3.

ND:

- protoDUNE SP: Installation workshop at CERN last week.
- LArIAT: Various TPC and pLAPPD readout and computing issues resolved.
- SBN program is awaiting the signing of the CERN-DOE neutrino protocol addendum. Needed before CERN technicians arrive on May 1st.
- SBN FD: Building punch-list complete.

LBNF:

- Anxiously waiting to see if budget passed / FY17 CR continues.

TD:

- SRF R&D: First 2.6 GHz cavity tested reached 38 MV/m, study of 2.6/650 MHz ongoing.
- LCLS-II SRF: Progress on CM02, CM03, CM04, CM05 and CM06.
- PIP-II SRF: Progress on 650 Mz 1-cell cavities and spoke cavity.
- LCLS II magnets: SPQA105 repaired, cold checkout performed, magnetic measurements starts on Monday, resolving discrepancy report on SPQA105
- LARP magnets: Three different 4.2 m production-length coils are manufactured simultaneously,, preparation for the re-testing of the first 150-mm aperture short model with increased axial pre-load
- AS magnets: A refurbished IQB magnet for MI is assembled. .Preparation for the first coil epoxy impregnation for the Muon g-2 EDWA magnet (spare) is in progress. LBNF extraction kicker prototype assembly is in progress
- Mu2e magnets: Making steady progress toward testing the Transport Solenoid proto module in the test facility.
- PIPII magnets: Prepared for magnetic measurements: MEBT quadrupole triplet magnets from BARC
- G-2 magnets: More than half of the SC inflector cable is insulated. Parts are prepared for winding.
- 15T dipole R&D – Conceptual design studies of 15 T dipoles is in progress. Coil #, NB₃Sn, (outer coil) is prepared for curing
- Infrastructure (IB1) – removing old Tevatron equipment, continuing with feeder removal from the TeV PS, cable trays, feeder cables
- LCLS- II : Progress on Cryogenic Distribution System

Computing Operations:

- CCD: (i) April 21: Managed print services rebooted due to queue backup (30 mins). (ii) April 22: NOvA FD lost connectivity to FNAL due to internet2 cut (15 mins). (iii) Beware – cyber trespassers have found ZOOM meeting IDs without passwords on public internet. Need to avoid unprotected meetings having IDs that are publically available.
- SCD: (i) FIFE Operations: Network maintenance complete, nodes back online. (ii) CMS production at full speed again.

Office of Communication:

- “Build the Dream” STEM conference at Fermilab on Saturday April 29.
- New posters going up on LINAC tour route.

Directorate:

- Also waiting to see if FY17 CR continues.