



MicroBooNE Pre-Commissioning Needs



January 7, 2014

General Comments

- ▶ Do/Can we really understand our needs?
 - ▶ New building
 - ▶ New detector – high purity cryogenics system, very low noise electronics
- ▶ Pre-commissioning is a transitional phase between project-driven activities to meet project deliverables and experiment-driven commissioning
 - ▶ Many systems are close to meeting their “CD-4” deliverables
 - ▶ TPC, readout electronics, slow monitoring
 - ▶ Expect pre-commissioning to end at completion of CD-4 in June
- ▶ All FTE levels in this note refer to the period Jan – June FY14
- ▶ Project funding is insufficient for all needs
- ▶ A commissioning team exists for each of the systems described on the following slides
 - ▶ Largely post-docs and students with senior physicist advisors

Pre-commissioning needs

- ▶ **Cryogenics & LAr fill (B. Carls, R. Acciarri)**
 - ▶ **Activities:**
 - ▶ Complete Phase I testing at LArTF (w/o cryostat)
 - ▶ Install cryostat in LArTF in February
 - ▶ Conduct project review of Phase II of the cryogenics system
 - ▶ Insulate cryostat (contract)
 - ▶ Complete Phase II piping and commission – Mar - June
 - ▶ **Needs:**
 - ▶ Continued support of 2 FTE engineers + 2 FTE technician + 1 FTE drafting through June

Pre-commissioning needs

▶ DAQ (W. Ketchum)

▶ Activities:

- ▶ LArTF DAQ server sysadmin support from SCD/FEF
- ▶ Small fraction of G. Lukhanin & K. Biery for DAQ & Run Control consulting
- ▶ PPD Online support familiarity/training

▶ Needs:

- ▶ Estimated ½ FTE effort in FY14 for SCD – in FY14 budget plan(?)
- ▶ PPD?

▶ Control Room (A. Schukraft, J. Zennamo)

▶ Activities:

- ▶ Procure PCs, monitors, etc and set up

▶ Needs:

- ▶ \$15k budget submitted to Steve Brice in August 2013

Pre-commissioning needs

- ▶ LArTF & experiment (B. Littlejohn)
 - ▶ Activities:
 - ▶ Building management – Leonard Nelson
 - ▶ Experiment liaison familiarity, training & working – TBD
 - ▶ Engineering support, e.g. electrical infrastructure, noise abatement
 - ▶ Needs:
 - ▶ Building management ?
 - ▶ Experiment liaison ~50%
 - ▶ Linda Bagby ~75%
 - ▶ Jim Kilmer ~10%

Pre-commissioning teams with no currently understood commissioning needs

- ▶ Laser calibration system (T. Strauss)
 - ▶ Bern to provide technician & engineering support
- ▶ Readout electronics (G. Karagiorgi)
 - ▶ BNL and Nevis
- ▶ Beam (T. Miceli)
- ▶ Online monitoring (L. Kalousis)
- ▶ PMTs (M. Toups)
- ▶ HV (S. Lockwitz)
- ▶ Slow monitoring (S. Gollapini)