DUNE Project Status

Jolie Macier DUNE PMG Meeting November 17, 2015



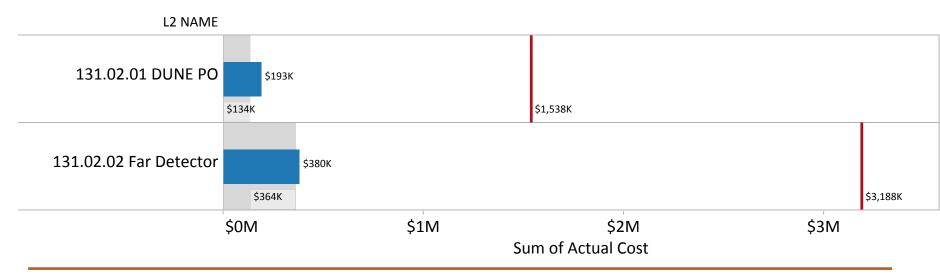
Outline

- Management Update
- Progress on prototypes
- Interfaces with LBNF
- FD Design Status
- Collaboration News

Management Update – Budget Status

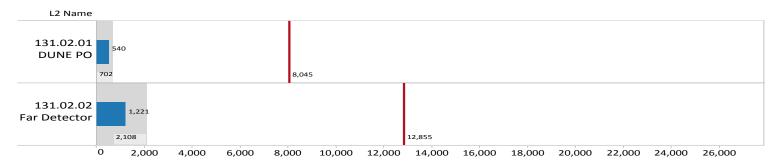
DUNE FY16 Obligations L2 NAME \$1,538K 131.02.01 DUNE PO \$141K \$134K \$5,665K 131.02.02 Far Detector \$216K \$2,511K \$0M \$1M \$2M \$3M \$5M \$6M \$7M \$8M \$9M \$10M \$11M \$4M

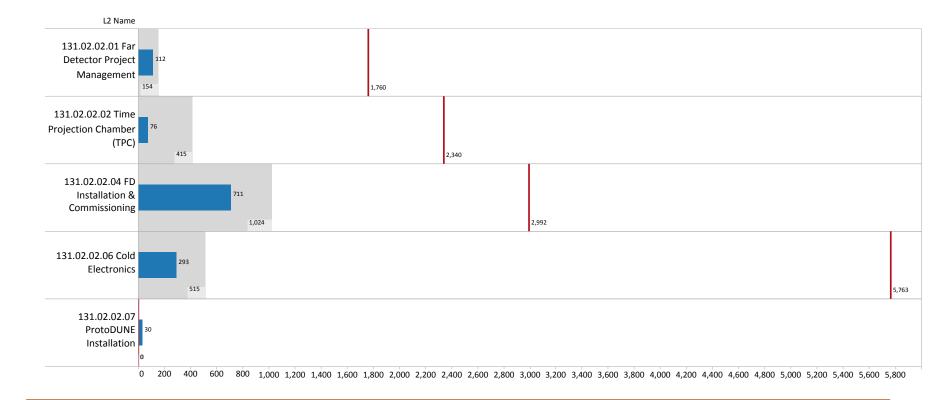
DUNE FY16 Cost



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Management Update – Budget Status, FY16 hours



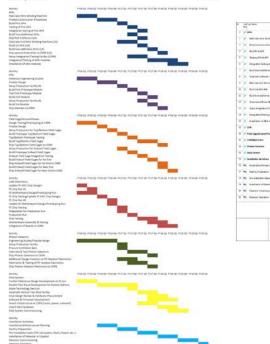


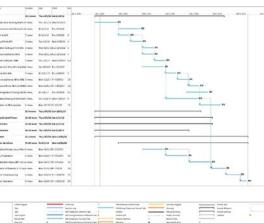
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Management Update – Schedule Status

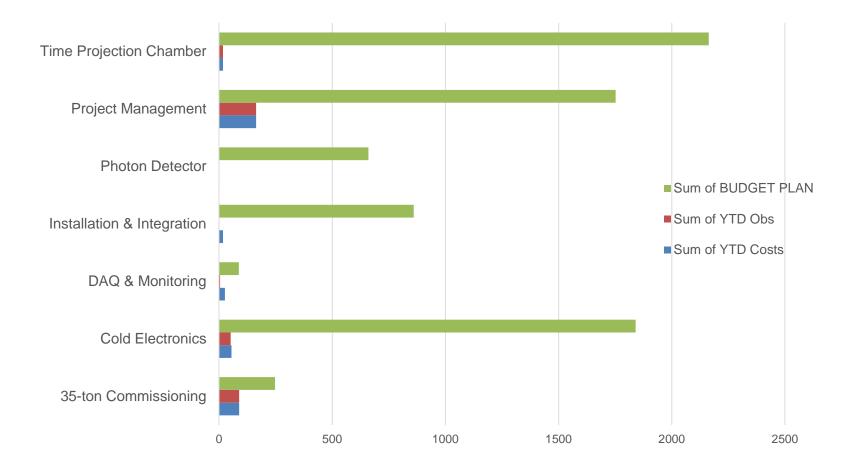
Milestone Activity	Schedule Date	WBS
T4 MS - ProtoDUNE Production Readiness Review	1/15/2016	on track
T5 MS - ProtoDUNE TPC Production readiness review	1/22/2016	on track
T6 MS - HotCarrierLife Review Complete	1/8/2016	on track

- Schedule update underway
 - Managers have been tasked with updating the project schedule to ensure all interfaces for protoDUNE design, delivery, installation, and commissioning





Management Update – Budget Status; by L3 WBS



Management Update

- New DUNE-US Project Manager in place
- Schedule review in process
- Evaluating resource opportunities coincident with the winding down of operational activities in Ash River & Soudan, Minnesota
- Working to obtain waiver that will allow for the duty-free entry of detector components produced outside of the U.S.

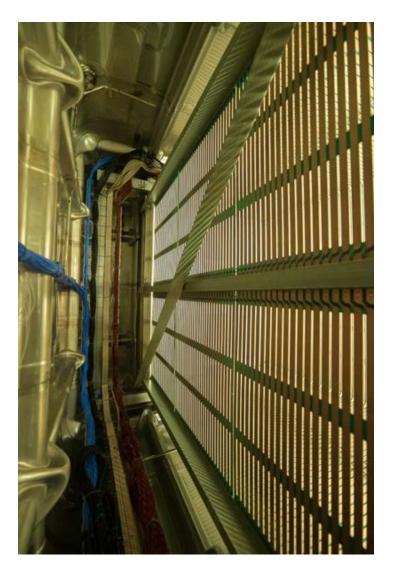
Progress on Prototypes – 35-ton

- Detector Installation Complete
- Cryostat is being sealed this week
- Purge & cool-down expected to commence post-Thanksgiving
- Anticipate cryostat being filled in December and data collection taking place from January to March of 2016
- Good progress on improving the functionality and reliability of the DAQ system
- Shift schedule positions filled through January; looking to fill shifts in February & March

Progress on Prototypes – 35-ton







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Progress on Prototypes – ProtoDUNE

- CERN SPS Committee recommended formal approval at its October 20-21 meeting
- ProtoDUNE cryostat design readiness review planned for December 17-18 at Fermilab
- In the process of identifying ProtoDUNE management team (Coordinator, Deputy Coordinator, and Manager)
- Engineering integration meetings at CERN last week focused on finalizing ProtoDUNE cryostat interfaces (more on this in next presentation)

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Interfaces with LBNF – CD3a Reviews

- Directors Review (October 27-29) & DOE Review (December 2-4)
 - Main focus for DUNE is ensuring that all interfaces to the far site conventional facilities are well understood and documented
 - Directors Review recommendation: "Define milestones to capture and control requirements, interfaces and parameters needed to complete the final design for the CD-3a scope and integrate these milestones into the final design schedule before the CD-3a IPR." – COMPLETE
 - Primary DUNE message: detector designs are compatible with the proposed designs for the Conventional Facilities (CF)

Interfaces with LBNF – FSCF Interface Issues

Continue to refine requirements through the start of CF final design work in spring 2016

- Follow-up discussion on proposed DAQ infrastructure requirements at most recent DUNE Technical Board meeting (November 4th)
 - General agreement that the currently defined CF requirements for DAQ infrastructure (e.g. power, cooling, rack space, & optical fiber network) allow for implementation of the majority of "reasonable" options being considered by DUNE for its far detector DAQ
 - Workshop scheduled for November 20th
- Joint LBNF/DUNE Control Room Requirements Workshop planned for November 16th (phone) and December 16th (FNAL)
 - Conventional facilities plan includes both the underground control room in the central utility cavern and a small above-ground control room in the Ross Dry Building
 - Workshop is scheduled to better understand the requirements for these control rooms prior to preparation of the final design

FD Design Status

- Report from last week's ProtoDUNE engineering workshop – next presentation
- Upcoming Technical Reviews/Workshops
 - Review of Cold Electronics development status on November 18th
 - Workshop for developing common DAQ system solutions for planned future neutrino detectors at Fermilab on November 20th

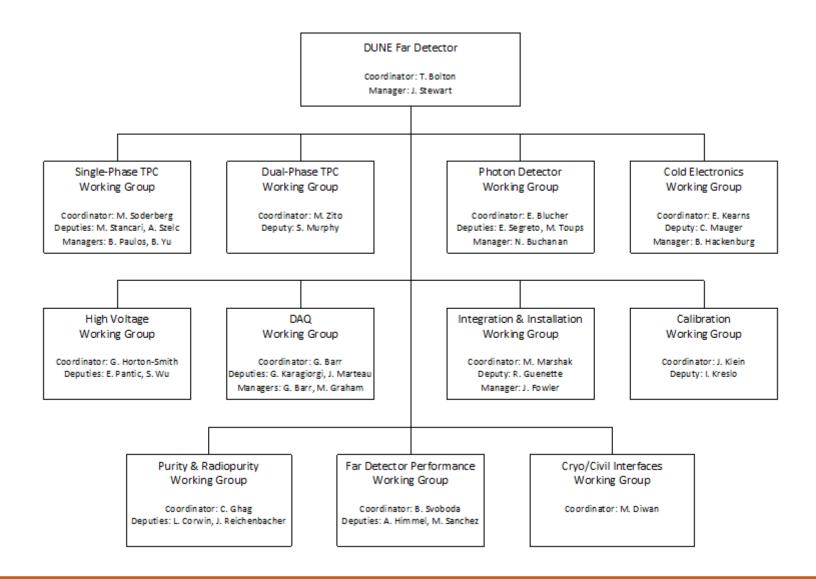
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 ProtoDUNE cyrostat design review will take place at Fermilab on December 17th -18th

Collaboration News

- Next collaboration meeting January 12-15, 2016
- Working groups established & functioning with well-defined charges and regular meetings (Next Slide)
- The high-level structure of the ProtoDUNE organization has been defined and the search for the top-level management team is ongoing

Collaboration DUNE FD Organization



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