Fermilab

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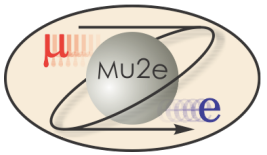
Mu2e Project CD-2/3b Follow-up Summary



Ron Ray
Mu2e Project Manager
2/4/15

CD-3b Summary

CD-3b Costs	Base Cost	Contingency	Total
Detector Hall	$12.3M	$2.3M	$14.6M
TS Modules	$5.8M	$3.0M	$8.8M
Total	**$18.1M**	**$5.3M**	**$23.4M**

Risk of proceeding with TS Module procurement is small

- TS Modules drive the overall design of the TS. Design of other TS components well along. Risk to TS Module design from completion of design of other components is negligible.
- Natural extension of CD-3a approval of solenoid conductor
  - Fabrication of production TS conductor well along and on schedule
- TS Modules are on the critical path. Delaying TS Module fabrication until CD-3c will delay the overall project by 12 months.
  - $6M base cost of TS Modules significantly less than the cost of a 12 month delay of the project.

Charge Questions

1. Have the Project and the Laboratory responded satisfactorily to the recommendations of the previous DOE review?

   Yes

   – Recommendations to be completed prior to CD-2 fully satisfied
   – Recommendations for TS Modules on track
   – Good progress on Recommendations required prior to CD-3c
   – In particular:
     - EVMS fully implemented and helping to manage project
     - Change Control fully implemented and helping to control evolution of project
     - Project Office positions all filled

Charge Questions

2. Is the detailed design sufficiently mature and appropriately reviewed so that the project can continue, as planned, with the procurement and fabrication work that will be approved by CD-3b.

   YES

   - Detector Hall is ready to go.
   - TS Module Design Complete. Drawings Complete.
   - Successful TS Module Final Design Review
   - TS Module design has significant Ic margin, significant temperature margin, significant mechanical margins and demonstrated manufacturing technique.
   - TS Module Prototype is a fully manufactured prototype that is being used to validate design. Additional stress tests to approximate system operating conditions and confirm margins.
   - Acquisition strategy in place. Modeled after PS/DS strategy.
   - Defined plan to approve procurement after successful prototype tests.

Charge Questions

3. Are there any outstanding issues that need to be addressed?

   We have addressed all of the recommendations.

Summary

- We are ready for CD-2 for the full project.
- We are ready for CD-3b for the Detector Hall and the TS Modules.