First Executive Session
Director's Status and Progress Review
of the
Proton Plan

August 15-16, 2006

L. Edward Temple, Jr.

Agenda for Exec Session

- Charge to Reviewers
- Review Agenda
- Reporting Out Structure
  - Findings, Comments, and Recommendations
- Assignments
  - Technical Reviewer Assignments
- Discussion

Charge

Please review progress relative to the plan presented in the August 2005 Director's Review.

- Closely review progress through the recent extended shutdown.
- Review the plan to complete, looking most closely at effort planned in detail through the summer 2007 shutdown.
- Identify any outstanding technical and/or management issues that require attention.

As you review progress to date please note the team's responses to Recommendations from the prior Director's Review held in August 2005.

The Committee is asked to present findings, comments, and recommendations in a closeout session with the Proton Plan team, AD Management, and Fermilab Management at the end of the review and in a concise written report soon thereafter.

Agenda

Tuesday, Aug. 15

8:00 – 8:30M	30	Executive Session (Racetrack, WH7Xover)	Ed Temple
Plenary Talks in the Racetrack			
8:30 – 8:40 AM	10	Introduction	Steve Holmes
8:40 – 9:15 AM	35	Proton Plan Overview, Progress, and Parameter Table	Eric Prebys
9:15 – 9:45 AM	30	Response to Director's Review Recommendations	Jeff Sims
9:45 – 10:25 AM	40	Summary and effect of shutdown work	Eric Prebys
10:25 – 10:40 AM	15	**BREAK**	
10:40 – 11:00 AM	20	General Linac Upgrades (WBS 1.1)	Larry Allen
11:00 – 11:30 AM	30	Linac LLRF (WBS 1.1.4)	Ed Cullerton
11:30 – 12:00 Noon	30	General Booster Upgrade (WBS 1.2)	Bill Pellico
12:00 – 12:30 PM	30	Booster Corrector System (WBS 1.2.3)	Craig Drennan/ Dave Harding
12:30 – 1:30 PM		**LUNCH**	
1:30 – 2:00 PM	30	General Main Injector Upgrades (WBS 1.3)	Ioanis Kourbanis
2:00 – 2:30 PM	30	Main Injector RF (WBS 1.3.4)	Tim Berenc
2:30 – 3:00 PM	30	Projections	Eric Prebys
3:00 – 3:15 PM	15	**BREAK**	
3:15 – 3:45 PM	30	Cost and Schedule	Jeff Sims
3:45 – 4:00 PM	15	Summary	Eric Prebys
4:00 – 6:15 PM		Executive Session (Racetrack, WH7Xover)	Ed Temple

Wednesday, Aug. 16

9:00 – 1:00 PM	Closeout Dry Run with working lunch (Racetrack, WH7Xover)
1:00 – 2:00 PM	Closeout (Racetrack, WH7Xover)

Report Outline and Reviewer Assignments

Executive Summary	Ed Temple
1.0 Introduction	Dean Hoffer
2.0 Linac Upgrades (WBS 1.1)	Mike Brennan, Ali Nassiri
3.0 Booster Upgrades (WBS 1.2)	Phil Martin, Jie Wei
4.0 Main Injector Upgrades (WBS 1.3)	Flemming Pedersen, Ali Nassiri, Greg Bock
5.0 Project Management	Bill Boroski, Dean Hoffer, Ed Temple
6.0 Cost and Schedule	Dean Hoffer, Bill Boroski, Ed Temple

Note underlined names are the primary writer.

Run II Luminosity Improvements

- Run II is not a construction project
- Run II is a complex campaign of operations, maintenance, upgrades, R&D and studies

Quote from Dan Lehman report to HEPAP following a Run II Luminosity Lehman Review

Proton Plan is a “Campaign”

- As such we apply an appropriately tailored selection of project management tools
  - Design Documentation
  - Work Breakdown Structure
  - Cost Estimate
  - Resource Loaded Schedule
  - Change Control
  - Monthly Management Review / Report

Reporting Structure

- Review findings, comments, and recommendations should be presented in writing at a closeout with the Collaboration and Fermilab management.
- Section for each “Level 2” WBS plus Cost, Schedule, Management and Science sections.

Findings, Comments, and Recommendations

- Findings
  - Findings are statements of fact that summarize noteworthy information presented during the review.
- Comments
  - Comments are judgment statements about the facts presented during the review. The reviewers' comments are based on their experiences and expertise.
  - The comments are to be evaluated by the project team and actions taken as deemed appropriate.
- Recommendations
  - Recommendations are statements of actions that should be addressed by the project team.
  - A response to the recommendation is expected and that the actions taken would be reported on during future reviews.

Examples of Findings, Comments, and Recommendations

[NOvA CD-1 Director's Review @ Fermilab]

Findings

- Adhesive choice has an impact on work schedule and ventilation system design. The baseline adhesive was listed as 3M2216 and was said to have a safety factor of 5 for buckling. However a Devcon adhesive was discussed a great deal also. The Devcon adhesive has a sheer strength which was approximately 150% better but it contained a toxic solvent which the 3M2216 did not.

- An adhesive dispenser will be used to apply the adhesive to attach the modules together and to attach the blocks together. The adhesive dispenser can't be defined until the adhesive is chosen.

Examples of Findings, Comments, and Recommendations (continued)

[NOvA CD-1 Director's Review @ Fermilab]

Comment

- Adhesive needs to be determined as quickly as possible to meet timelines. If the 3M2216 meets the design SF of 5 for buckling and over a SF of 4 for shear stress between the planes it seems like it should be used over the Devcon adhesive which has toxic solvent vapors. Adhesive choice will affect assembly and the building (exhaust required) requirements.

Recommendation

1. Determine which adhesive to use as soon as possible. This affects building design and assembly time.

Reviewer Write-ups

- Write-up template is posted on Director's Review Webpage. http://www.fnal.gov/directorate/OPMO/Projects/PP/DirRev/2006/08_15/review.htm
- Write-ups are to be sent to Terry Erickson at terickson@fnal.gov prior to 8:30 AM on Wednesday, August 16 for the Closeout Dry Run
- A final report will be issued within 2 weeks after the closeout.

Discussion

- Questions and Answers