

Executive Session
Director's CD-3b Cost &
Schedule Mini-Review of the
NOvA Project

July 14, 2009

Dean A. Hoffer

Agenda for Exec Session

- Charge to Reviewers
- Review Agenda
- Assignments
- Reporting Out Structure
- Discussion

Charge

This charge is for the Committee to conduct a Director's CD-3b mini-Review of the NOvA Project. The purpose of this review is to evaluate the project's readiness for approval of Critical Decision 3b (Approval to Start Full Construction) and that the project is prepared for the DOE Independent Project Review for CD-3b scheduled for July 21-23, 2009.

On September 25, 2008, DOE approved CD-3a (Approve Limited Construction). With CD-3a, DOE approved long lead procurements and a limited set of other construction activities. A limited number of items beyond the CD-3a list have been approved by DOE for procurement in support of the 2009 recovery Act (RA). CD-3b will be an approval of the remaining items of construction necessary prior to CD-4.

The NOvA project will fabricate and install upgrades to the Fermilab proton source and NuMI facility to enhance the neutrino beam intensity, and will build two neutrino detectors to use this beam. (a smaller "near detector" on the Fermilab site and a larger "far detector" 810 kilometers away in Northern Minnesota).

The NOvA Project Acquisition Strategy calls for Northern Minnesota site preparation work, access road upgrade and far detector enclosure construction to be completed by the University of Minnesota under a financial assistance agreement. These construction costs are captured as part of the Other Project Costs and therefore part of the Total Project Costs. The project management team and the university are work together to ensure proper integration of the university's efforts into the overall project. CD-3a approval covered site preparation and access road construction, and a subsequent DOE approval was provided to start construction of the far detector enclosure building in support of the Recovery Act.

Charge Continued

The first part of this review occurred on June 16-18, 2009 and focused on the technical scope of this project. The NOvA project presented the status of their final design work. The review Committee validated the progress on final design and assessed their plans to complete the remaining design work. This assessment included confirming that appropriate resources are available to complete the final design as planned. The final report for this part of the Director's Review may be found at

http://www.fnal.gov/directorate/OPMO/Projects/NOvA/DirRev/2009/06_16/FINAL-ReportDRCD3bNOVA06-16-09.pdf

In your review, please evaluate whether the project is prepared to enter the construction phase beyond the CD-3a and Recovery Act approved activities. NOvA's cost and schedule had not been updated by the time of the first part of the Director's Review, but need to be reviewed prior to DOE's Independent Project Review. The second part or mini-Review of the cost and schedule will occur on July 14, 2009. This cost and schedule mini-Review should specifically address only items number 2 and 3 below. Items 1,4 and 5 were fully addressed during the first part of the review.

1. Final Design: Is the design sufficiently mature so that the project can initiate procurement and construction? For those elements of the design that are still not finalized, has the project convincingly shown that there are no major issues that need to be addressed and that they are on a clear path to a final design?
2. Baseline Cost and Schedule: Is the approach in updating the cost and schedule appear to be sound and defensible? When the updates are completed should the following two questions be able to be answered by the DOE IPR (Are the current project cost and schedule projections consistent with the approved baseline cost and schedule? Is the contingency remaining adequate for the risks?)?

Charge Continued

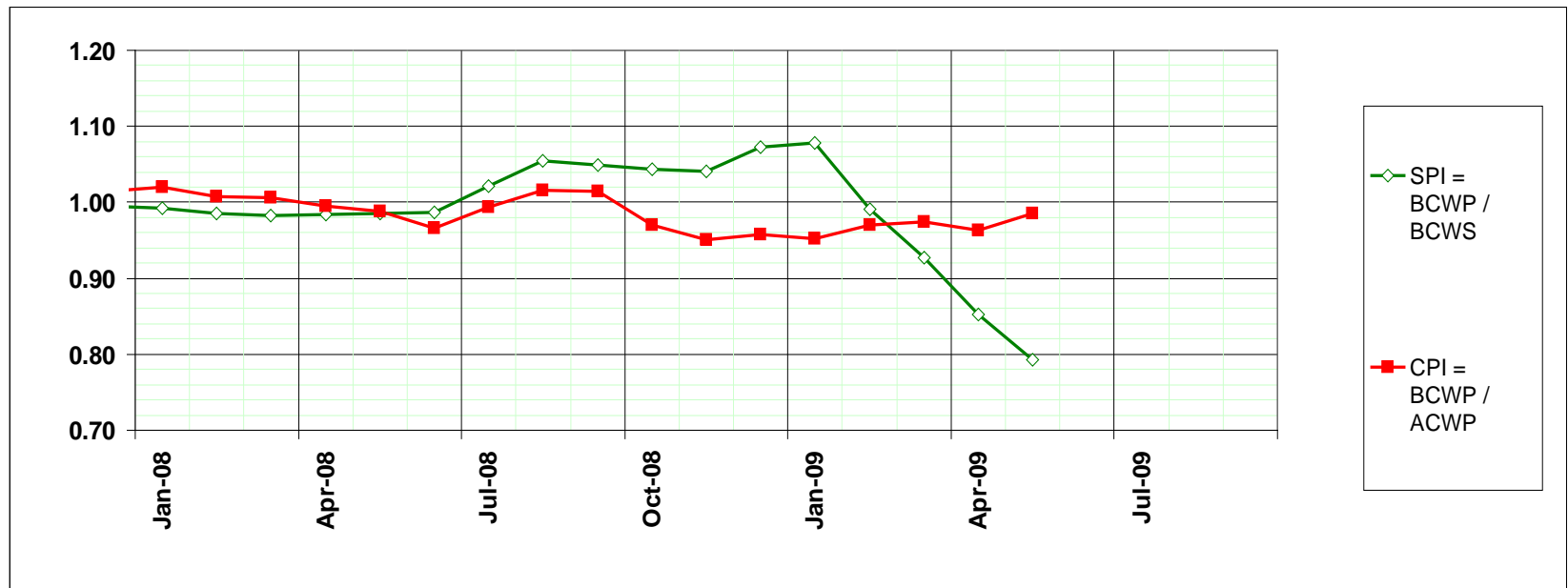
3. Management: Evaluate the management structure as to its adequacy to deliver the proposed final design within specifications, budget, and schedule. Has the project responded satisfactorily to the recommendations from the previous independent project review?
4. Construction: Has there been adequate progress on the construction activities approved under CD-3a? Have Fermilab and the project done the necessary preparations to execute the remaining construction activities?
5. Documentation: Is the documentation required by DOE Order 413.3A for CD-3b complete? Has the CD-2 documentation been updated to reflect any changes resulting from the final design?

Finally, the committee should present findings, comments, and conclusions at a closeout meeting with NOvA's and Fermilab's management and provide a written report soon after the review.

Additional Assessment

- DOE OECM is looking to change PARS for the NOvA Project from Green to Red/ Yellow
- NOvA is to present a plan on how they are to get back to green
- The Review Team to evaluate NOvA's plan to determine if it is appropriate and adheres to the EVMS standard, and make recommendation if needed

NOvA's May Report



Agenda

Tuesday, July 14, 2009

8:00 am	Executive Session	Dean Hoffer
8:15 am	Project Overview	John Cooper
9:00 am	ETC Procedure	Bill Freeman
9:20 am	Changes by Level 2 WBS	Bill Freeman
10:00 am	Break	
10:15 am	Q&A with NOvA Project Office	
11:15 am	Executive Session	Dean Hoffer
12:00 pm	Lunch	
1:00 pm	Working Session and Report Writing	
3:00 pm	Full Committee Executive Session Dry Run	Dean Hoffer
4:00 pm	Closeout Presentations	Dean Hoffer

Reviewer Assignments

Executive Summary	<u>Dean Hoffer</u>
1.0 Introduction	<u>Dean Hoffer</u>
2.0 Cost	<u>Bill Boroski</u> Rich Stanek
3.0 Schedule	<u>Cathy Lavelle</u> Fran Clark Mike Lindgren
4.0 Charge Questions	
4.1 Baseline Cost and Schedule: Is the approach in updating the cost and schedule appear to be sound and defensible? When the updates are completed should the following two questions be able to be answered by the DOE IPR (Are the current project cost and schedule projections consistent with the approved baseline cost and schedule? Is the contingency remaining adequate for the risks?)?	<u>Fran Clark</u> Cathy Lavelle
4.2 Management: Evaluate the management structure as to its adequacy to deliver the proposed final design within specifications, budget, and schedule. Has the project responded satisfactorily to the recommendations from the previous independent project review?	<u>Rick Stanek</u> Mike Lindgren

- Note underlined names are the primary writer.

Reporting Structure

- Review findings, comments, and recommendations should be presented in writing at a closeout with the Collaboration and Fermilab management.

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.

Reporting Structure

- Answer the charge questions. Answers should be short and precise.
- Any additional actions required to be completed by the project team to acceptably address the review charge are to be documented as Recommendations
- Answers to the questions and any recommendations should be presented in writing at a closeout with NOvA's and Fermilab's management.

Reviewer Write-ups

- Write-up template is posted on Director's Review Webpage.
http://www.fnal.gov/directorate/OPMO/Projects/NOvA/DirRev/2009/07_14/Closeout&FinalReportNOvAJul16-17_2009.docx
- Write-ups are to be sent to Terry Erickson at terickson@fnal.gov prior to 2:40 PM Today, July 14 for preparations for the Closeout Dry Run
- This Closeout Presentation will be considered the Final Report.

Discussion

- Questions and Answers