



NOvA Project Status

July 17, 2007

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Interactions with DOE

- Mike has talked with Robin
 - 15 kt (& \$ 260 M) is sufficient scope to meet the mission need
 - Would only go back to OMB if below 15 kt
 - Likely long delay iterating with OMB??
- Our interpretation
 - Should be well above 15 kt for DOE CD-2



Cooperative Agreement Status

- Chicago Operations says
 - 1 month to negotiate
 - Several weeks for “Business Review” in DC
 - Should complete all by September 1
- Marvin Marshak (U of Minn) has not yet heard from Chicago Office
 - Regents approved RGU status on July 11
 - Regents heard first reading of land acquisition on July 11, would approve in August meeting
 - But question on CA status came up in both discussions
- First meeting with Hines (Project Management Contractor selected by U of Minn / Fermilab “integrated construction team”)
 - In Minneapolis on July 10
 - Another meeting scheduled for late July on reporting for Earned Value



EA Status

EA Chapter	URS original schedule	1st URS draft	2nd iteration from URS (w updated figures & including NOVA comments)	to DOE	DOE NEPA Team approved	Notify neighbors	Letter to 3 states starts 30 day comment
1	22-Jun	25-Jun	9-Jul	11-Jul			
2	22-Jun	25-Jun	9-Jul	11-Jul			
3	22-Jun	3-Jul	9-Jul	11-Jul			
4	22-Jun	27-Jun	9-Jul	11-Jul			
5	25-Jun	13-Jul	16-Jul				
6	26-Jun	29-Jun					
Table of Contents	27-Jun	9-Jul					
Exec Summary	27-Jun						
List of Permits	27-Jun						
Glossary	27-Jun						
References	27-Jun	16-Jul					
List of Preparers	27-Jun						
Appendix A = EAW		22-Jun	22-Jun	?			
Appendix B = Biological Resource Review							
Appendix C = MSDS							
Complete Document	27-Jun						

DOE – URS – NOVA meeting Thurs 7/19

Minnesota EAW	SEH revision	Regents Approved	Environmental Quality Board published = 30 day start
	22-Jun	11-Jul	30-Jul



Cost & Schedule Status (a)

	11-Jun Plan	Complete	Comments	Result
at Director's Review				Escalated cost was \$ 37.4 M over \$ 260 M guidance
Fix Errors in Director's Review 18 kt version	20-Jun	22-Jun	27 errors found & fixed	net savings of \$ 2.45 M
Implement Cost Savings Ideas in the 18 kt version (but leave kt at 18)	19-Jul		42 ideas suggested, 26 approved by PM	<u>Estimates indicate a net savings of \$ 21.37 M (not escalated)</u> Several cost increases also identified
Tune kt to match \$ 260 M				
version 1	25-Jul			
version 2	31-Jul			
Ready for next reviews	6-Aug			



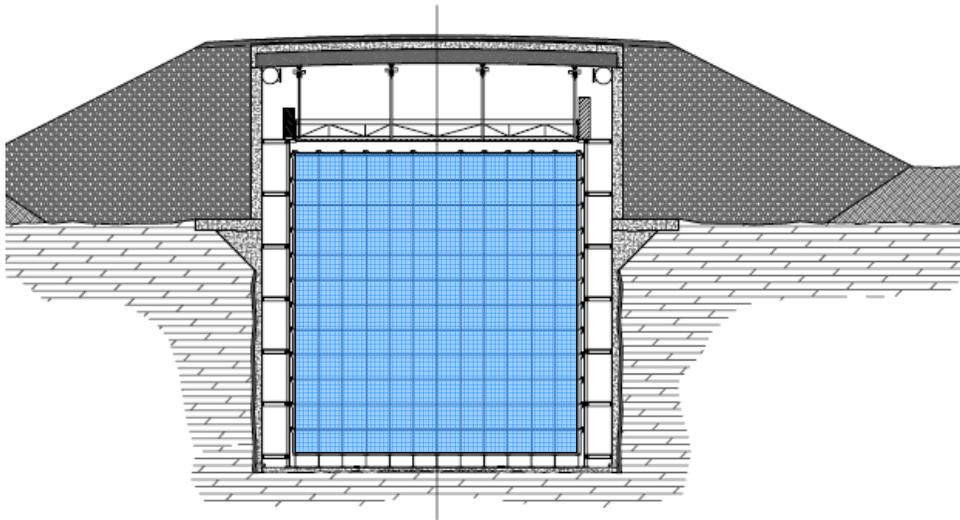
Cost & Schedule Status (b)

- Full spreadsheet posted, has comments throughout
 - Suggestions total \$ 34.1 M, up from \$ 24.5 M two weeks ago
 - Approved changes total \$ 21.4 M, up from \$ 9.0 M two weeks ago
 - Pending changes total \$ 0.7 M
 - Rejected changes total \$ 12.0 M
- **Major Changes since July 3:**
 - Move gap kickers off-project, saves \$3,900 K
 - Nancy will say more
 - Optimization of kicker designs saves \$2,400 K
 - Remove bumper systems (still needs Chris Jensen sign-off)
 - Move Far Detector to east edge of pit saves \$1,700 K
 - Slide coming
 - Error found in barite cost, saves \$ 832 K
 - Shorten building by 24 ft saves \$ 720 K
 - Maximum detector size reduced from 20 kt to ~ 18.4 kt
 - Reduce scintillator fluor content saves ~ \$1,400 K
 - Fluor = pseudocumene + waveshifters
 - This one still being tested at Indiana for light yield
 - Assume will get duty free status on fiber, saves \$903 K



Move Far Detector to one wall in deep pit

At Director's Review

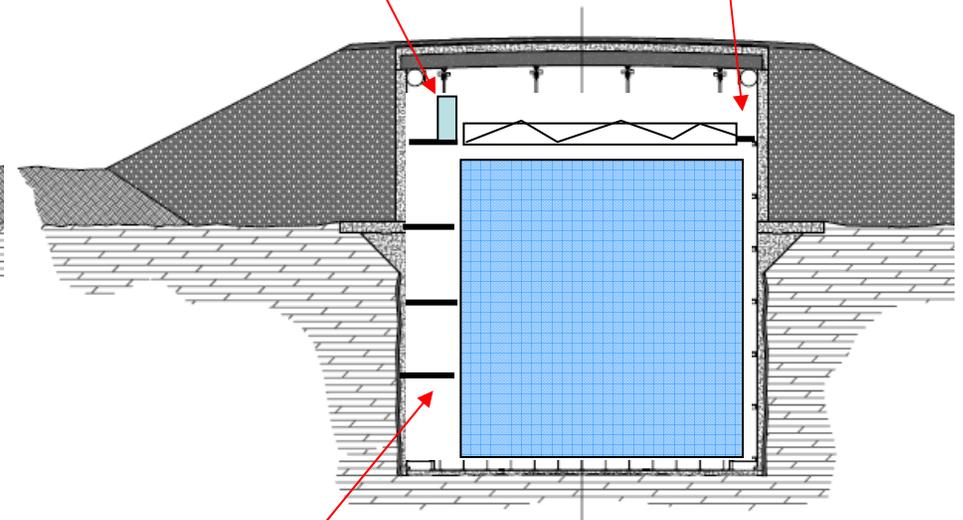


7 catwalks on each side
(~ \$ 2.7 M)
service 2 horizontal modules each

Racks both sides at top

Racks on one side

3 ft exit catwalk,
only at top



4 catwalks service
3 horizontal modules each

Wider catwalks allow mobile
Stairs / platforms and keep legal
Exit width



Cost & Schedule Status (c)

- Bill Freeman worklist:

Task	Dates	Comment
Change TPC start date from April 1 to May 1 on all tasks	done, 16-Jul	Saves ~ \$ 400 K
Fix WBS 2.5 to reflect One Factory, not two	17-Jul ??	
Drop some WBS 2.8 tasks (move to CA operations)		See spreadsheet
Rest of the Cost Savings require Resource Changes in concert with Level 2 managers	??	
Some of these will be estimates		
Steve Dixon is doing a lot of building changes		may run beyond August 1
Dave Ayres is doing a lot of assembly changes		may run beyond August 1
due to detector move to one side		
We will have to go back for new quotes, but want to wait until kt fixed		This may take time
Get contingency on all IPND tasks		cost increase, no scope contingency left
Performance Measurement Techniques on R&D	before August	
Status May and June = status R&D	before August	



Cost & Schedule Status (d)

- Ready for one-by-one L2 reviews Aug 6 – 17 ??
 - Starting to discuss what format would be most useful for getting the Project ready for the next review
- Followed by all day C&S review on August 21 ??
 - We won't do this until we are really ready
- Cost savings also imply much more TDR work
 - Building drawings, ~ 3 weeks effort
 - Scintillator filling system, cable run design, water cooling system

