



Project Status

John Cooper



Overall Project Summary Status Report

- Ray Orbach approved NOvA CD-2 yesterday (9/15/2008)
- **WE ARE HAPPY !**
 - But everyone should realize how this went relative to our expectations from long ago. (future projects be warned)



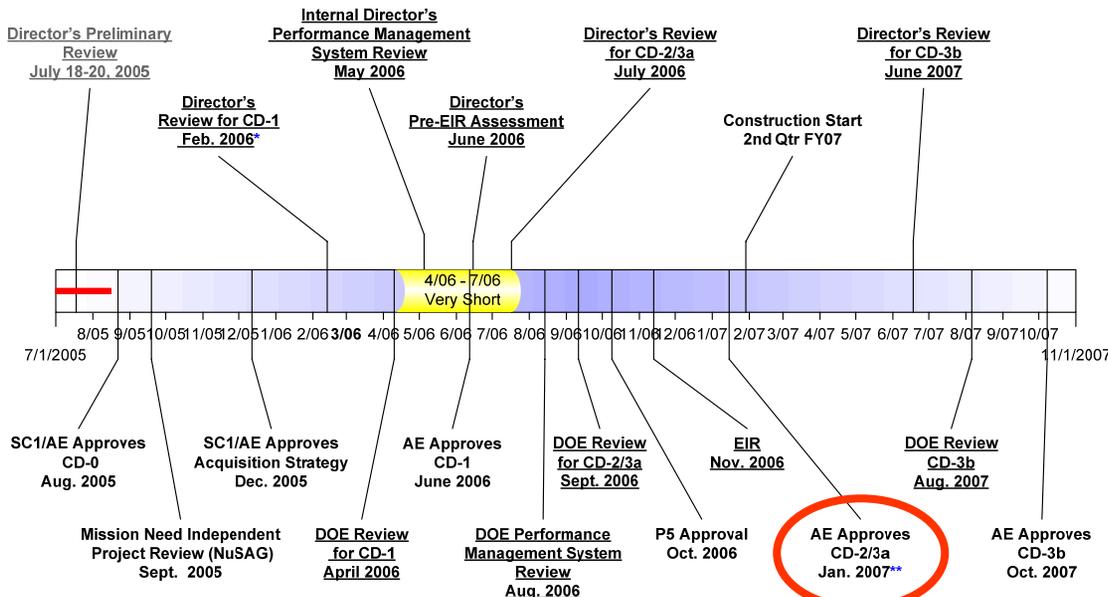
DRAFT NOvA Project Timeline for Critical Decisions & Reviews

Updated 16-Aug-05

1st WGM



Fermilab



37 months,
not 17

Note:
 * 6 months after L-2 Managers
 ** 18 months after L-2 Managers



Overall Project Summary Status Report

- **CD-3a “internal ESAAB” at OHEP**
scheduled for October 24, 2008.
 - **This approval would now be at the Dennis Kovar level**
- **NOvA will go with the CD-3a list already reviewed by Dan Lehman in Oct 2007 (draft document from Pepin)**
 - **ANU: ~ 6,200 K\$ base cost for**
 - Magnet Tooling
 - Recycler stands, cables
 - Recycler RF
 - Kicker System parts
 - Recycler Instrumentation
 - Main Injector RF
 - PS
 - Profile Monitor upgrades
 - **SITE AND BUILDING: ~ 8,900 K\$ base cost on Cooperative Agreement for**
 - Site Prep Package (road and excavation)
 - Utilities upgrade
 - **SCINTILLATOR: ~ 2,100 K\$ base cost for**
 - All the waveshifting powders.
 - **ELECTRONICS: ~ 115 K\$ base cost for**
 - Packaging the ADCs
 - **~ 17.3 M total (base cost)**
 - **Nothing on the list for**
 - FIBER, PVC EXTRUSIONS, PVC MODULES, DAQ, NEAR or FAR DETECTOR ASSEMBLY



Overall Project Summary Status Report

- **Marvin Marshak on Land Acquisition**
(remember this is a U Minn contribution !!)
 - Purchase of parcel owned LaMinora Properties, Forest Capital subsidiary
 - We believe the documents are in final form; they will be signed by Bev Rinke, Forest Capital.
 - Acquisition of permanent easement 100' wide for access road and utilities and 200' wide temporary construction easement from Meriwether Land and Timber, Forest Capital subsidiary
 - We believe the documents are in final form; they have been sent by Forest Capital's attorney to Boston for signature.
 - Purchase of parcel owned by State of Minnesota
 - We have a signed purchase agreement with the State of Minnesota, Department of Natural Resources, and will close on this parcel at approximately the same time we are able to close on the LaMinora Properties parcel.
 - Acquisition of permanent easement 100' wide for access road and utilities and the truck turnaround area and 200' wide temporary construction easement from St. Louis County
 - We are waiting for the State of Minnesota/DNR to St. Louis County easement to be completed. We believe we are close to a final agreement with St. Louis County. Once the DNR-St. Louis County easement is completed, we will be ready to execute the St. Louis County to University agreement. We just heard this week the considerations for both easements the DNR will be requiring.
 - Purchase agreement to wetland credits
 - We have signed the revised purchase agreement (including the additional wetland credits needed) and it has been sent to the seller for signature.
 - Lease for construction staging area
 - The State of Minnesota/DNR has recently requested a discussion on the lease form. We have asked the two attorneys representing the DNR and the University to discuss the matter directly.



Overall Project Summary Status Report

- **Marvin Marshak: Dealing with a Continuing Resolution**
 - Cash flow and scheduling: I met with University Associate Vice President Mike Perkins and Hines lead person Chuck McNabney. We discussed the following schedule:
 - Burns and McDonnell complete bid package in early December
 - University issues Request for Proposals for ENTIRE bid project around Christmas
 - Bids due late January
 - Review bids in February
 - Issue Notice to Proceed at beginning of March
 - Contractor on site in April; moves in heavy equipment before ground thaws
 - The expected cash flow is:
 - about \$3 million available beginning Nov. 1
 - remainder of funds for first phase before Notice to Proceed
 - Mike Perkins seemed agreeable to all of this. We agreed that I would send him a written memo, so there would be a record of agreement to this plan.
 - **Cooper comments:**
 - We are counting on Mike Perkins to know what the University will and will not accept based on a CR level of funding
 - Full funding still required by March 1 (could be tight)



Overall Project Summary Status Report

- **Army Corps of Engineers Wetlands permit**
 - Marvin: Steve Webster and Sally Arnold are still working on the interface with the SHPO and the ACE.
 - Steve: Livengood letter to SHPO with latest road changes went out yesterday, copy to ACE
- **Separate subject: Near Detector Cavern**
 - We (Russ Alber and Dixon Bogert) got back the initial Harza conceptual design study
 - They did do a technical review
 - Cost estimated at \$ 4.979 M (includes 30% contingency)
 - Vs. our estimate at \$ 2.760 M (but with additional 100% cont)
 - **Caveat: Harza says accuracy of their estimate is -30% to +50%, doesn't agree with 30% contingency in my mind**
 - **Dixon and Russ are checking details**



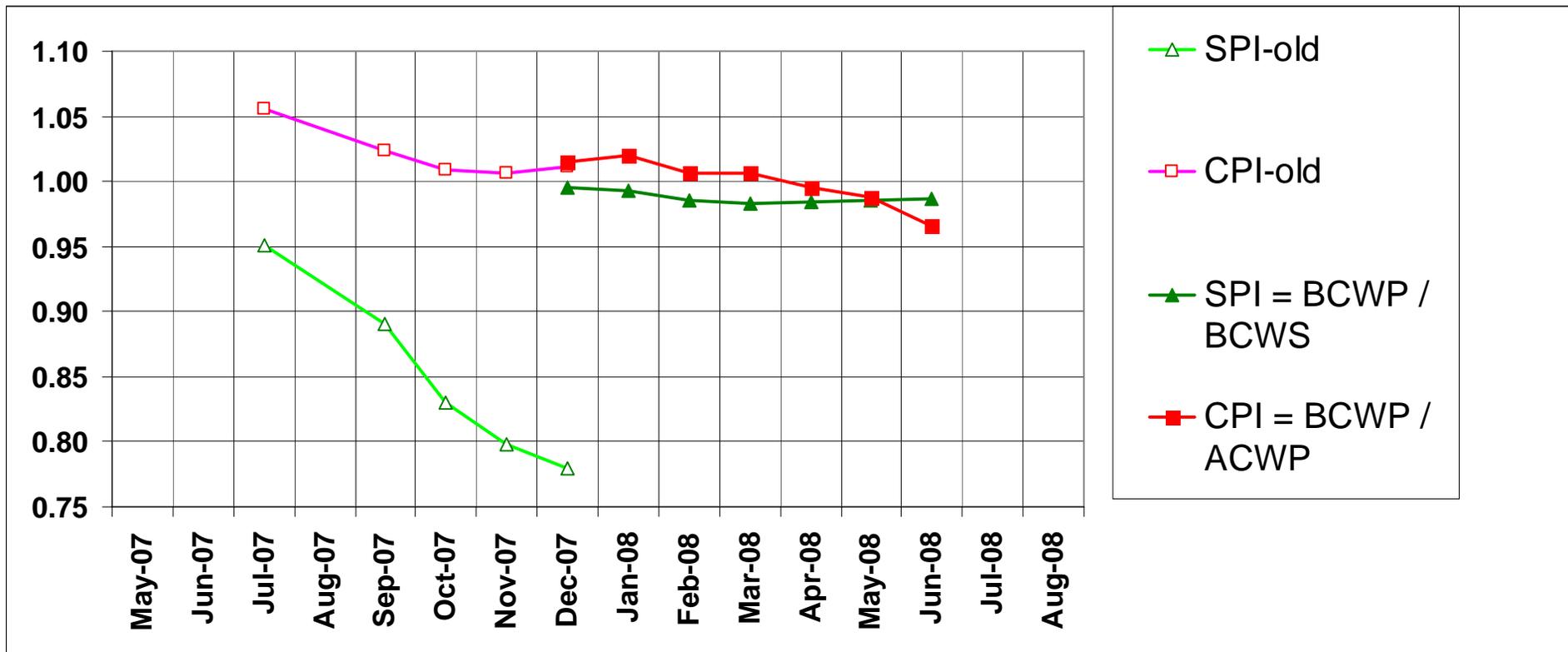
Status of Action items from Aug 19

- Date of next meeting? Frequency? (Peter)
 - **Here we are, Every 3rd Tuesday then?**
- Signatures on Change Requests
 - **DONE Aug 19**
- Need help from procurement in getting NOvA reqs out on the Supplementary Funding in spite of usual year-end clog.
 - **Got help on \$1M to Minnesota**, but this action item continues
- Need to keep working the Cooperative Agreement funding in FY09 issue within DOE
 - **Worked the Minnesota side first as reported above.**
- Need to keep looking at our plan to replace / delay C Div. effort
 - **No progress**
- Project needs to review CD-3a list
 - **DONE**
- Then think about when to have a CD-3a micro-review
 - **Scheduled** at first opportunity to get Dennis after CD-2 signed (Oct 24)
- Project needs to understand when “final” designs will be in hand as a prerequisite to a CD-3b review sometime next year
 - **Still thinking**
- We need to hear an update on the EVMS certification process
 - **Project met with Dean on Aug 28,**
 - **I met with Steve Holmes and Peter Garbincius yesterday**
 - more meetings required.....
- Report on NOvA Accelerator and NuMI Upgrade at next meeting
 - **See next talk by Nancy**



Financial Summary EVMS

- CPI & SPI for May 2007 – April 2008 (latest status)



- CPI always close to 1.0, so cost estimate is good
- SPI fell to 0.78 in “old” RLS (reviews & FY08 CR), \$3.5M behind on \$17.1M of tasks
- SPI in “new” RLS is good, but only ~ 0.75M\$ of tasks since January



Schedule Summary: Milestones by Level

 Nova Project L.0 - L.4 Milestones Milestone Gantt Chart Filter: Rolling_15_Month_Window_L0_L4_MilestonesOnly							Baseline Date  Current Forecast Date  Management Reporting Date  Completed Milestone 												
Activity Desc.	Baseline Date	Forecast/Actual Date	Management Reporting Date	Reporting Milestone Float	Baseline Variance	08		FY09											
						Q3	Q4	Q1	Q2	Q3	Q4								
L.0 -- DOE - Acquisition Executive Milestone						Time Now - 01Jul08													
CD-2	01Oct08	01Oct08	01Oct08	0	0														
L.1 -- DOE - OHEP Associate Director Milestone																			
CD-3a	02Feb09	02Feb09	02Feb09	0	0														
L.2 -- DOE- NOVA Project Director Milestone																			
Carolyn																			
EA Sent Out for Public Comment	01Apr08	27Mar08	01Apr08	2d	2d														
DOE OHEP CD-2 Mini-review	30Apr08	30Apr08	30Jul08	62d	-1d														
EA Public Comment Period Completed	30Apr08	30Apr08	30Apr08	-1d	0														
Historic Preservation Act Programmatic Agreement Signed	30May08	23May08	30Aug08	68d	3d														
DOE OECM CD-2 EIR Follow-up review	02Jun08	01Jul08	30Aug08	43d	-21d														
EA Comments Answered	12Jun08	11Jun08	01Sep08	56d	1d														
CD-2 ESAAB	16Jun08	16Jul08	30Sep08	53d	-21d														
FONSI	25Jul08	15Jun08	15Sep08	65d	31d														
DOE OECM - FRA EVMS Readiness Assessment	01Oct08	01Oct08	01Oct08	0	0														
DOE OECM - FRA EVMS Certification Review	01Dec08	01Dec08	01Dec08	-1d	0														
DOE OHEP CD-3a Mini-review	15Jan09	15Jan09	15Jan09	0	0														
Site preparation purchase order released	06Apr09	06Apr09	06Oct09	127d	0														
Waveshifter PO issued	22May09	22May09	23Nov09	127d	0														
DOE OECM - FRA EVMS Certified	01Jun09	01Jun09	01Jun09	-1d	0														
DOE OHEP CD-3b Review	01Jun09	01Jun09	01Jun09	-1d	0														
L.3 -- Fermilab Associate Director Milestone																			
Garbincius																			
Director's CD-2 Mini-review	17Apr08	17Apr08	17Apr08	-1d	-1d														
CD-3a Funds Available	02Feb09	02Feb09	01May09	64d	0														
FY09 Funds Available	02Feb09	02Feb09	01May09	64d	0														
2009 Shutdown Begun	06Apr09	06Apr09	06Jul09	63d	0														
Director's CD-3b Review	01May09	01May09	03Aug09	64d	0														



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						Q3	Q4	Q1	Q2	Q3	Q4		
L.4 - WBS L1 Manager's Milestone Cooper													
Prototype scintillator production completed	17Feb09	17Feb09		0	0								
PC for raw PVC resin for 16-cell vertical extrusions released	20Apr09	20Apr09		0	0								
MI RF Cavities Bus Bar Fabrication & Installation Complete	29May09	29May09		0	0								
2009 Shutdowns Completed	12Jun09	12Jun09		0	0								
IPND WLS fiber production completed	05Jul09	05Jul09		0	0								
DAQ software ready for IPND	15Jul09	15Jul09		0	0								
Full-scale block assembly prototype testing completed	23Jul09	23Jul09		0	0								
IPND modules for first S-plane segment completed	04Aug09	04Aug09		0	0								
IPND data concentrators ready for installation	21Aug09	21Aug09		0	0								
IPND module production 50% complete	18Sep09	18Sep09		0	0								



Risk Summary

- Main Concern in the near term:
Cooperative Agreement in during a Continuing Resolution
 - Want to start construction in March or April, no later than May
 - Must have first phase funding at U Minnesota before they can issue a notice to proceed
 - See slide 5
- Usual other risks
 - FY09 funding overall
 - Cost estimates – Near Cavern is worrying, will need the next design stage to see if we are in trouble



Procurements

- 1M\$ to Univ of Minnesota to substitute for CA
 - This gets us the final design by ~ Dec 1
 - P.O. out Aug 25
- 5 more requisitions in the system to move 780 K\$ of funds to ANL and Universities as we get FY08 and some FY09 SOWs signed.
 - Still need help getting these out this year.
- Other Fermilab requisitions expected around ~ FY end:
 - 118K\$ for kicker pulse cable: requisition is in the system now
 - 350K\$ APD order coming
 - 75 K\$ fiber order coming
 - 75K\$ A&E Near Cavern advanced design is possible



Labor Resources

- Have Dave Pushka, Ang Lee, Karen Kephart, some of John Voirin,
 - Still haven't recovered Ernie Villegas for integration CAD model,
 - Still missing a replacement for Don Friend (designer),
 - Still haven't recovered time Etta Johnson (Admin)
- CD unable to return resources to DAQ, WBS 1.7
 - This is not solved
 - Can recover only part time of L3 manager & only in a few months
 - Computing Professionals not available for a year
 - We have added Peter Shanahan at L3 (some PPD impact)
- Project Office
 - Ron Ray now Mu2e Project Manager
 - Will spend some time on NOvA, amount not clear
 - Dave Ayres retired, now moving to West Coast ~ end of Oct (?)
 - Pat Lukens will be L2 Manager when Dave leaves



Project Office, then & now

NOvA Project Office Staff					
		December before Omnibus Bill	Today	non-NOvA assignments	NOvA long term needs
John Cooper	Project Manager	1.00	1.00		
Ron Ray	Deputy Proj Manager	1.00	-	Mu2e Project Manager	
Nancy Grossman	Assoc Proj Manager, L2 ANU	1.00	0.50	AD office	
Elaine McCluskey	Config Control, L2 ANU deputy	1.00	0.50	EVMS, Project X	
Suzanne Saxer	Financial Officer	0.95	0.50	MINERvA, EVMS	need full time
Bill Freeman	Scheduler	0.95	0.80	EVMS	need full time
Harry Ferguson	Scheduler	1.00	0.50	EVMS, DUSEL docs (Gina)	need full time
Ken Doman	Scheduler, ANU	0.75	0.10	Mu2e and MINERvA?	still need some time
Bob Bernstein	Documents, Expediter	0.50	-	Mu2e spokesperson	
Alan Wehman	Web and Docdb support	1.00	0.33	phased retirement, 60%	
Etta Johnson	Administrative Support	1.00	-	SiDet	need full time
	FTE total:	10.2	4.2		



Change Request Status

- Nothing new to be signed here.
- Several new small CRs in our system

CR #	CO Title	Final Cost Impact (no contingency)	Final Schedule Impact	Date Closed	Awaiting
Changes with Status: Submitted					
38	ANU Change PDS Magnet Design, PDS and PDD Magnet Count	\$0.00			W Freeman
41	APD Modules - Add QE Test Design	\$0.00			W Freeman
43	Budget Shift from WBS 2.1.2.1 to 1.1.4.7.x	\$0.00			W Freeman
44	Fiber QA Facility and QA of IPND Fiber	\$0.00			Freeman
46	53 Mhz RF - Move Tuner Power Supply Purchase to Prototype Phase	\$0.00			Freeman
Total Final Cost:		<input type="text" value="\$0.00"/>			
Changes with Status: Prelim Approval					
36	APD Modules - Add Very Low Flow Cooling Test	\$5,826.60			Mualem
45	FEB Prototype III Design Change	\$3,130.50			Mualem
Total Final Cost:		<input type="text" value="\$8,957.10"/>			



Action items

- Need help in maintaining Project Office staff
 - Stop looking at NOvA for people to help new projects,
 - we have enough to do keeping ourselves afloat,
 - EVMS will take effort
- Would appreciate continued help from Procurement in getting NOvA reqs out on the Supplementary Funding in spite of the usual year-end clog.
 - See slide 12
- Need to keep looking at our plan to replace / delay C Div. effort
- Need to keep working the Cooperative Agreement funding in FY09 issue within DOE
 - Worked the Minnesota side first as reported on slide 5
 - but still need ~ \$3M in November, CR or not.
- Project needs to understand when “final” designs will be in hand as a prerequisite to a CD-3b review sometime next year
 - Note NSLS-II Director’s Review took step of writing a Project document claiming that “final” = 75% overall with details for separate parts (one only 30% “final”)
 - Will that document survive Dan Lehman?
 - Steve Tkaczyk (while here for DES) indicates that should be OK if on path to “final” with no apparent show-stoppers