



Project Financial and Schedule Status and Summary

Greg Bock



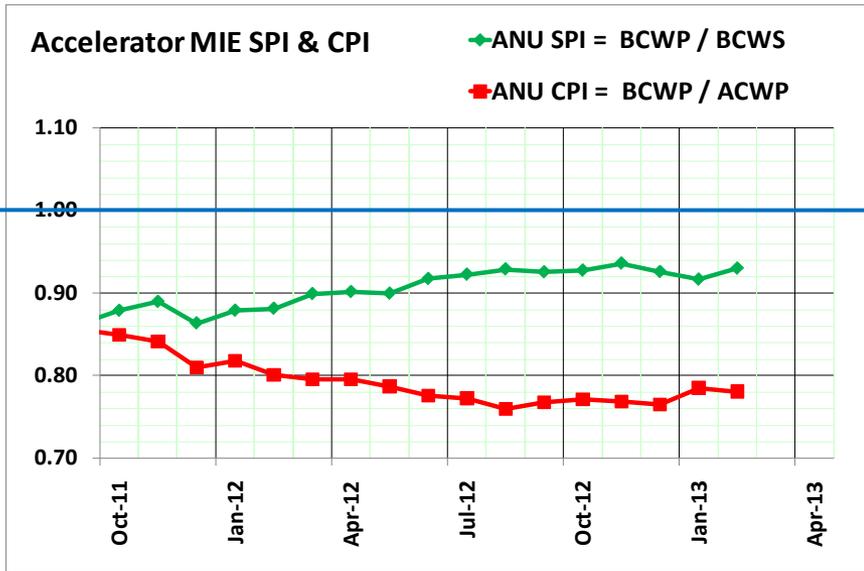
EVMS Reporting Overview

- Data now available through **February** 2013
 - SPI = **0.969**, compare to 0.968 in Jan, 0.970 in Dec, 0.975 in Nov, 0.972
 - CPI = **0.943**, compare to 0.949 in Jan, 0.937 in Dec, 0.940 in Nov, 0.934

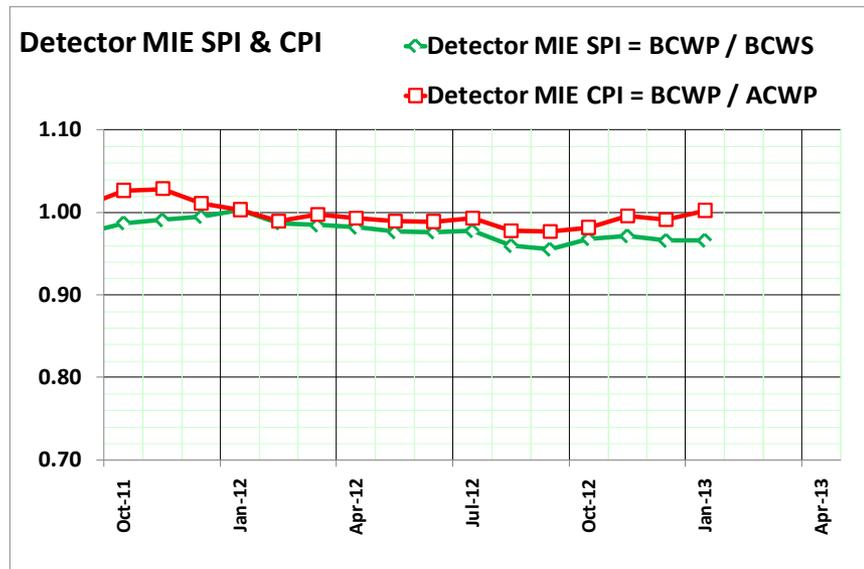




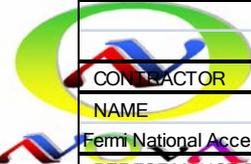
SPI & CPI for Active Work



- ANU CPI had a long slide down to 0.76 last Aug, then at 0.78 in Jan-Feb after:
 - Installed Sept Change Request doubling the labor estimate on unstarted tasks
 - Moved 3rd RF cavity off-project in Jan
- Meanwhile the SPI trends up, then ~ flat in Aug - Feb around 0.93.



- Detector still relatively constant near 1.0 for both indices
 - SPI=0.96, CPI=0.99 in Feb



**COST PERFORMANCE REPORT
FORMAT 1 - WORK BREAKDOWN STRUCTURE**

CPR1 Feb 2013

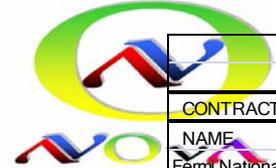
CONTRACTOR				CONTRACT				PROGRAM			
NAME				NAME				NAME			
Fermi National Accelerator Laboratory								NOvA project			
								FROM 01-Feb-2013			
								TO 28-Feb-2013			

PERFORMANCE DATA													
CTC-FndSrc CTC[2] Results... ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		LATEST REVISED ESTIMATE	VARIANCE	
	WORK	WORK	WORK	SCHEDULE	COST	WORK	WORK	WORK	SCHEDULE	COST			
	SCHEDULED	PERFORMED	PERFORMED	SCHEDULE	COST	SCHEDULED	PERFORMED	PERFORMED	SCHEDULE	COST	BUDGETED	ESTIMATE	VARIANCE
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
DA DOE-ACEL MIE													
2.0 ANU Construction													
Fully burdened AY\$k	406	839	1,313	434	(474)	34,924	32,484	41,627	(2,440)	(9,142)	35,197	42,524	(7,327)
CTC-FndSrcTotals:	406	839	1,313	434	(474)	34,924	32,484	41,627	(2,440)	(9,142)	35,197	42,524	(7,327)
DC DOE-CA													
2.1 Site and Building													
Fully burdened AY\$k	0	0	0	0	0	35,060	35,060	34,872	0	188	35,060	34,872	188
CTC-FndSrcTotals:	0	0	0	0	0	35,060	35,060	34,872	0	188	35,060	34,872	188
DD DOE-ACEL R&D													
1.0 ANU R&D													
Fully burdened AY\$k	0	0	0	0	0	7,025	7,025	6,615	0	410	7,025	6,615	410
CTC-FndSrcTotals:	0	0	0	0	0	7,025	7,025	6,615	0	410	7,025	6,615	410
DE DOE-DET MIE													
2.1 Site and Building													
Fully burdened AY\$k	0	0	0	0	0	7,131	7,131	6,164	0	967	7,131	6,164	967
2.10 NOvA Project Management													
Fully burdened AY\$k	179	179	214	0	(34)	9,763	9,763	8,690	0	1,073	11,331	10,258	1,073
2.2 Liquid Scintillator													
Fully burdened AY\$k	702	355	764	(347)	(409)	11,374	10,616	11,076	(758)	(459)	21,120	21,798	(677)
2.3 WLS Fiber													
Fully burdened AY\$k	0	0	11	0	(11)	13,036	13,028	13,300	(8)	(271)	13,039	13,311	(271)
2.4 PVC Extrusions													
Fully burdened AY\$k	1,129	1,101	1,129	(28)	(28)	26,570	24,947	25,448	(1,623)	(501)	33,193	33,724	(530)
2.5 PVC Modules													
Fully burdened AY\$k	794	586	298	(208)	288	16,240	16,057	13,386	(183)	2,671	23,325	20,639	2,686
2.6 Electronics													
Fully burdened AY\$k	272	294	434	22	(140)	8,530	7,725	7,902	(805)	(178)	11,767	11,957	(190)
2.7 DAQ													
Fully burdened AY\$k	27	86	92	59	(6)	4,226	3,613	4,398	(613)	(785)	4,454	5,181	(727)
2.8 Near Detector Assembly													
Fully burdened AY\$k	502	544	736	42	(192)	9,951	10,452	11,257	501	(805)	12,236	13,077	(841)
2.9 Far Detector Assembly													
Fully burdened AY\$k	644	596	1,178	(48)	(582)	15,583	14,563	17,093	(1,019)	(2,529)	22,588	25,032	(2,444)
CTC-FndSrcTotals:	4,249	3,741	4,855	(508)	(1,114)	122,404	117,895	118,713	(4,508)	(817)	160,184	161,139	(955)

See Paul Derwent talk

Accruals are now current

Accruals are now current



**COST PERFORMANCE
FORMAT 1 - WORK BREAKDC**

CPR1 Feb 2013 continued

CONTRACTOR						CONTRACT								
NAME						NAME						NOVA project		
Fermi National Accelerator Laboratory												TO 28-Feb-2013		
PERFORMANCE DATA														
CTC-FndSrc CTC[2] Results... ITEM	CURRENT PERIOD						CUMULATIVE TO DATE					AT COMPLETION		
	BUDGETED COST		ACTUAL COST	VARIANCE			BUDGETED COST		ACTUAL COST	VARIANCE			LATEST REVISED	
	WORK SCHEDULED	WORK PERFORMED	WORK PERFORMED	SCHEDULE	COST	WORK SCHEDULED	WORK PERFORMED	WORK PERFORMED	SCHEDULE	COST	BUDGETED	ESTIMATE	VARIANCE	
DO DOE- OPS														
1.0 ANU R&D														
Fully burdened AY\$k	0	58	4	58	54	1,818	1,766	1,379	(51)	387	1,818	1,432	386	
2.7 DAQ														
Fully burdened AY\$k	20	20	0	0	20	41	41	0	0	41	192	151	41	
CTC-FndSrcTotals:	20	79	4	58	75	1,859	1,808	1,379	(51)	429	2,010	1,582	427	
DR DOE-POST CD-1 DET R&D														
1.1 Site and Building R&D														
Fully burdened AY\$k	0	0	0	0	0	2,275	2,275	1,627	0	647	2,275	1,627	647	
1.2 Liquid Scintillator R&D														
Fully burdened AY\$k	0	0	0	0	0	297	297	389	0	(92)	297	389	(92)	
1.3 WLS Fiber R&D														
Fully burdened AY\$k	0	0	0	0	0	341	341	375	0	(34)	341	375	(34)	
1.4 PVC Extrusion R&D														
Fully burdened AY\$k	0	0	0	0	0	1,369	1,369	2,083	0	(714)	1,369	2,083	(714)	
1.5 PVC Module R&D														
Fully burdened AY\$k	0	0	0	0	0	2,260	2,260	2,421	0	(160)	2,260	2,421	(160)	
1.6 Electronics R&D														
Fully burdened AY\$k	0	0	0	0	0	2,028	2,028	2,600	0	(572)	2,028	2,600	(572)	
1.7 DAQ R&D														
Fully burdened AY\$k	0	0	0	0	0	1,635	1,635	2,822	0	(1,186)	1,635	2,822	(1,186)	
1.8 Detector Assembly R&D														
Fully burdened AY\$k	0	0	0	0	0	3,123	3,123	4,931	0	(1,808)	3,123	4,931	(1,808)	
1.9 Project Management R&D														
Fully burdened AY\$k	0	0	0	0	0	383	383	559	0	(176)	383	559	(176)	
CTC-FndSrcTotals:	0	0	0	0	0	13,711	13,711	17,806	0	(4,095)	13,711	17,806	(4,095)	
DY DOE CD-0 TO CD-1 R&D														
1.9 Project Management R&D														
Fully burdened AY\$k	0	0	0	0	0	8,801	8,801	8,801	0	0	8,801	8,801	0	
CTC-FndSrcTotals:	0	0	0	0	0	8,801	8,801	8,801	0	0	8,801	8,801	0	
Undist. Budget											0	0	0	
Sub Total	4,675	4,659	6,172	(16)	(1,514)	223,783	216,784	229,812	(7,000)	(13,028)	261,987	273,339	(11,352)	
Management Resrv.											0	0	0	
Total	4,675	4,659	6,172	(16)	(1,514)	223,783	216,784	229,812	(7,000)	(13,028)	261,987	273,339	(11,352)	

**Note - The NOVA project has been instructed not to report contingency in Cobra. The contingency is held by DOE and will be reported by the FPD.



Details of Feb status

- Cost VARs
 - 2.0 ANU -474 K\$ related to RF Cavity #3 move off-project
 - Expect +100 K\$ swing next month and done
 - 2.2 Liquid Scintillator looks like a mismatched accrual and status by 200 K\$
 - 2.8 was +350 K\$ last month, -192 K\$ this month, again invoicing and status mismatch
 - 2.5, 2.6, and 2.9 are now correctly accrued
- Overall, looks like we are understating our contingency this month by ~ 300 K\$

CR & ETC Update Process

Monthly updates for each L2 system ongoing

Number of newly discovered activities and corresponding cost increase seem to be decreasing as one would expect

Jan

Count of Status- 1/16/13		
Cnt %	Row Labels	Total
67%	a) Tasks are complete, no change necessary	304
10%	b) Not changed, tasks will complete by end of CY13, and ETC forecast keeps track of anticipated contingency use	44
18%	c) Reviewed, no changes required	81
3%	d) Updated, CR completed	14
0%	d) Updated, Needs CR	1
2%	e) New activity, new BOE, CR completed	9
Grand Total		453

Feb

Count of Status- 2/13/13		
Cnt %	Row Labels	Total
76%	a) Tasks are complete, no change necessary	350
2%	b) Not changed, tasks will complete by end of shutdown	11
11%	c) Reviewed, no changes required	49
6%	d) Updated, CR completed	26
1%	d) Updated, CR needed, in Dec ETC update	5
2%	e) New activity, new BOE, CR completed	10
1%	k) New activity, BOE completed and CR in progress	3
1%	l) Reviewed, need more info, check status next month	4
Grand Total		458

Mar

Count of Status- 3/14/13		
Cnt %	Row Labels	Total
78%	a) Tasks are complete, no change necessary	359
3%	b) Not changed, tasks will complete by end of shutdown	15
12%	c) Reviewed, no changes required	57
4%	d) Updated, CR completed	17
1%	d) Updated, ETC completed	6
1%	e) New activity, new BOE, CR completed	5
0%	k) New activity, BOE completed and CR in progress	1
0%	l) Reviewed, need more info, check status next month	2
Grand Total		462

The logo for NOVA, featuring a stylized 'N' and 'O' in a green and yellow oval, with 'NOVA' written below in a colorful, multi-colored font.

CRs in February

- We can get this from Harry on Monday



ETC actions and

ETC changes = 412 K\$, dominated by 408 K\$ for mineral oil price change

ETC#	Item	WBS items/affected control accounts	CAM	estimated amount	NOvA-doc number for details	date of email approval	Disposition or resolution
27	EAC/ETC adjustment to 3 block-filling tasks in conjunction with CR619; these three tasks have baseline dates already in the past so they were not included in CR619 update; but their EACs are being changed to be consistent with the other filling task changes	2.9.4.4.4, 2.9.4.4.5, 2.9.4.4.6	Lukens (Tesarek)	1,664 AY\$ EAC/ETC increase relative to previous EAC	8731	27-Feb-13	processed in Open Plan on 27Feb13
28	EAC/ETC adjustment based on increase of mineral oil price from \$3.80 per gallon to \$4.05 per gallon (AY\$)	2.2.1.5.4.1, 2.2.1.5.4.6, 2.2.1.5.4.8, 2.2.1.5.4.10	Mufson	\$408,296 (AY\$) EAC/ETC increase relative to previous EAC (based on \$3.80 per gal.); (\$212,312) VAC relative to current BAC (based on \$3.92 per gallon)	8746	1-Mar-13	processed in Open Plan on 01Mar13
29	EAC/ETC to add M&S to each di-block APD installation and checkout task (14 tasks in total). Originally submitted as CR624, but it was agreed to process as just an EAC/ETC change, not a baseline change.	2.9.4.6.35 thru 2.9.4.6.48	Lukens (Tesarek)	1,885 AY\$ EAC/ETC increase in Open Plan relative to previous EAC (\$427,634 before --> 429,519 After)	8691	1-Mar-13	processed in Open Plan on 01Mar13

Possible ETCs found, being watched, not enough info yet

WBS	Unincorporated Findings	Corrective Action	Possible Price Range	Comments
2.4	We need more resin to produce the 21,504 extrusions needed for a complete Far Detector	The Project is investigating how much is needed and the cost.	0 - 400 K\$	How many more extrusions need to be made (extrusions still left to make plus spares)? Depends on Minnesota good modules, Extrutech good extrusions, WBS 2.9 definition of good relative to specs. Zero \$ is possible.
2.5	Possible need for additional crane to keep up with assembly rate at Ash	Waiting for more information	0 - 40 K\$	This would be for additional sanding capacity if needed
2.9	The material and labor for the bookend at the Far Detector	Waiting for more information	0 - \$123 K\$	Until we have a better estimate of how much this will cost the collaboration, we are holding off with a change
2.9	Material and Labor for Far Detector Outfitting	Waiting for more information	0?	Until we have more information on how long each task takes (i.e. APD installation) we will not have the exact \$ amount. Once enough data is collect to calculate the duration a change request may be submitted.



AY\$ by Level 2 with MIE/OPC split

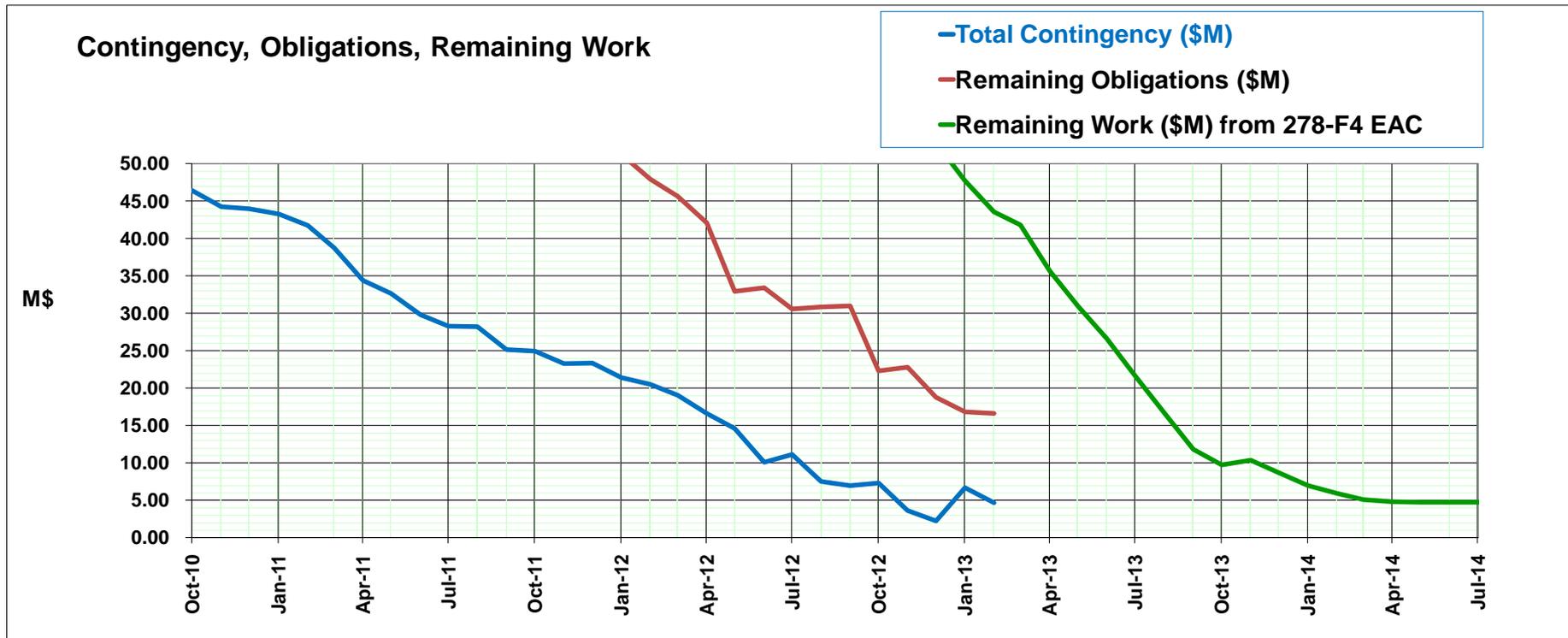
	WBS	Items	NOVA Costs to Date (\$M)	NOVA 's Cost Estimate AY \$M (for March 1, 2013 to project end)									
			as of	Estimated Cost (with indirects)			Mgmt Reserve Estimate			Contingency %			Total
			28-Feb-2013	M&S	Labor ¹	Total	M&S	Labor ¹	Total	M&S	Labor ¹	Total	Cost
TEC	2.0	Accelerator & NuMI Upgrades	\$ 41.6	\$ (1.3)	\$ 2.2	\$ 0.9	\$ -	\$ -	\$ -	0%	0%	0%	\$ 42.5
	2.1	Far Detector Site and Building	\$ 6.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%	\$ 6.2
	2.2	Liquid Scintillator	\$ 11.1	\$ 10.5	\$ 0.2	\$ 10.7	\$ -	\$ -	\$ -	0%	0%	0%	\$ 21.8
	2.3	Wave-Length-Shifting Fiber	\$ 13.3	\$ 0.0	\$ 0.0	\$ 0.0	\$ -	\$ -	\$ -	0%	0%	0%	\$ 13.3
	2.4	PVC Extrusions	\$ 25.4	\$ 7.9	\$ 0.3	\$ 8.3	\$ -	\$ -	\$ -	0%	0%	0%	\$ 33.7
	2.5	PVC Modules	\$ 13.4	\$ 2.4	\$ 4.8	\$ 7.3	\$ -	\$ -	\$ -	0%	0%	0%	\$ 20.6
	2.6	Electronics Production	\$ 7.9	\$ 3.1	\$ 1.0	\$ 4.1	\$ -	\$ -	\$ -	0%	0%	0%	\$ 12.0
	2.7	Data Acquisition System	\$ 4.4	\$ 0.4	\$ 0.3	\$ 0.8	\$ -	\$ -	\$ -	0%	0%	0%	\$ 5.2
	2.8	Near Detector Assembly	\$ 11.3	\$ 1.1	\$ 0.7	\$ 1.8	\$ -	\$ -	\$ -	0%	0%	0%	\$ 13.1
	2.9	Far Detector Assembly	\$ 17.1	\$ 2.8	\$ 5.2	\$ 7.9	\$ -	\$ -	\$ -	0%	0%	0%	\$ 25.0
	2.10	Project Management	\$ 8.7	\$ 0.1	\$ 1.5	\$ 1.6	\$ -	\$ -	\$ -	0%	0%	0%	\$ 10.3
		Subtotal Construction	\$ 160.3	\$ 27.1	\$ 16.2	\$ 43.3	\$ -	\$ -	\$ -	0%	0%	0%	\$ 203.7
OPC		R&D - Accelerator	\$ 6.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%	\$ 6.6
		R&D - Detector	\$ 26.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%	\$ 26.6
		Cooperative Agreement	\$ 34.9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%	\$ 34.9
		Operating - Accelerator	\$ 1.4	\$ 0.0	\$ 0.0	\$ 0.1	\$ -	\$ -	\$ -	0%	0%	0%	\$ 1.4
		Operating - Detector	\$ -	\$ -	\$ 0.2	\$ 0.2	\$ -	\$ -	\$ -	0%	0%	0%	\$ 0.2
		Total OPC:	\$ 69.5	\$ 0.0	\$ 0.2	\$ 0.2	\$ -	\$ -	\$ -	0%	0%	0%	\$ 69.7
		Contingency										4.661	
		TPC:	\$ 229.8	\$ 27.1	\$ 16.4	\$ 43.5	\$ -	\$ -	\$ 4.7	0%	0%	11%	\$ 278.000

- **4.661 M\$ Contingency**

- This is 10.7% of remaining work (4.661 / 43.527)
- This is 28.1% of remaining Obligations
- 273.339 (EAC) - 256.764 obligated = 16.575 M\$ yet to obligate



Contingency History



- This illustrates the difference between Remaining Obligations and Remaining Work.

EVMS Reporting Overview

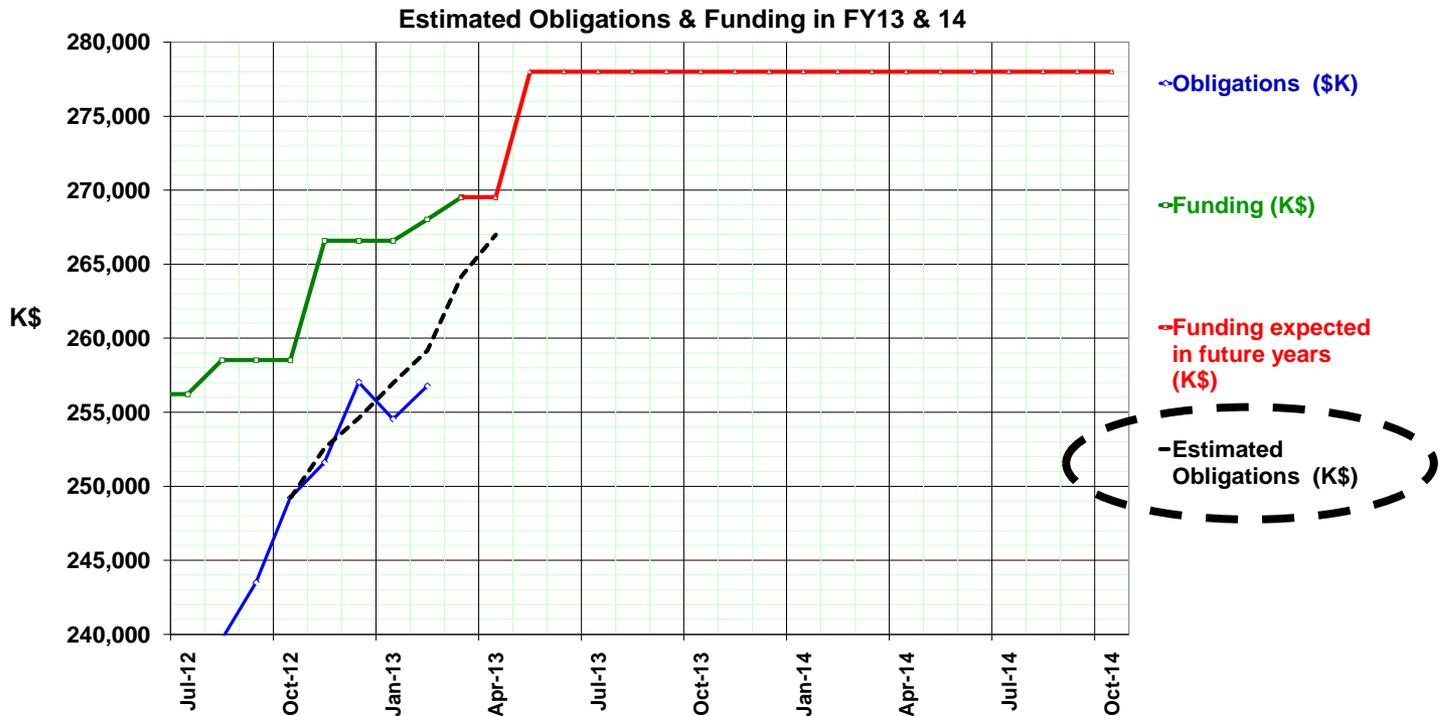
- Basic data in BCWS, BCWP, ACWP, **Funding & Obligations** through **Feb 2013**
 - BCWS = Budgeted cost of work Scheduled
 - BCWP = Budgeted cost of work Performed
 - ACWP = Actual cost of work Performed
- Project is 82.8 % complete ($BCWP/BAC = 216.8 \text{ M\$} / 262.0 \text{ M\$}$)
 - BAC = Budget at Completion (using EAC = 273.3, get 79%)
- Project is 98.0 % obligated, ($Obligations/BAC = 256.8 / 262.0$)
 - EAC = Estimate at Completion (using EAC, get 94%)





Look to have avoided Funding trouble ~ Apr 1

- 5/12 FY13 initially, 1/12 in Feb 2013, Guidance is 1.5 M\$ in March
- Extrapolation of obligations (**estimated, not exact**) looked tight at April 1
 - Helped to move RF Cavity #3 & Prototype Det Bldg off-project in Jan
- Initially cut back on Minnesota P.O.s to under 50% of FY13 need for Minneapolis Factory and Ash River Assembly
 - Now proceeding with the rest of those P.O.s





NOvA December 2012 Budget Status

Not updated, remove?

- TPC \$ 278.0 M
- ETC \$ 52.8 M
- Remaining Budget \$ 55.1 M

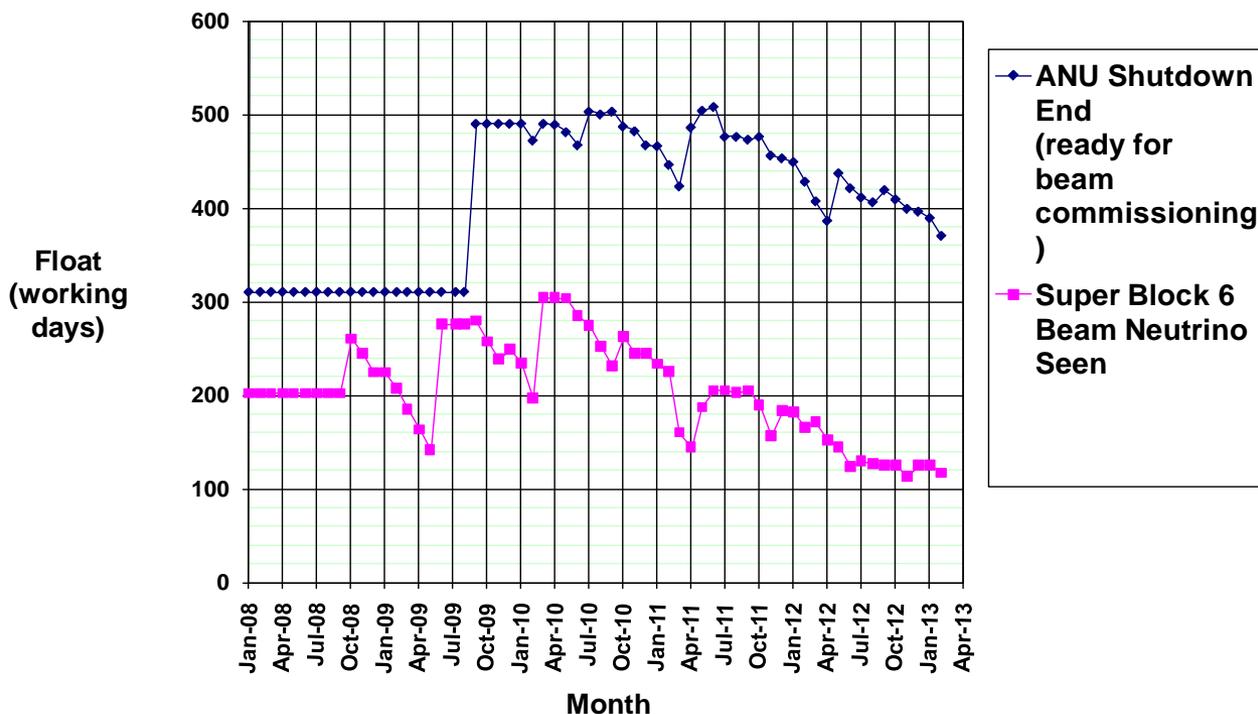
- Contingency \$ 2.2 M
- Anticipated additions \$ 3.3 M



Schedule Contingency: Float to CD-4

- **ANU lost 19 days of float in February -- Now at 370 days**
 - Kicker and RF schedules are still the real drivers for the end of the shutdown
 - This implies ready for beam on June 7, but we are forecasting May 17, 2013
- **The Detector lost 8 days of float in February -- Now at 117 days**
 - This is driven by APD delivery & testing of APDs for the 28th block.
 - But zero float between filling last di-block and start of APD installation last di-block.
 - As noted in J. Cooper's talk, both of these efforts are ramping up the pipeline speeds even though the final Ash River work has demonstrated the full rate can be attained.

Tracking Float to CD-4





Schedule Contingency Summary

- As of **Feb 28**, we have **117** working days float to CD-4
- As of **Feb 30**, we have **21** months to CD-4 = **438** working days
 - CD-4 is end of November, 2014
- Schedule Contingency is $117 / (438 - 117)$ days = **36%**.



Nova_Project Milestone Gantt Chart

Nova_Milestones_L1_L2 = [BOOL.T] and ESDATE >= {10/1/08}
February 2013 Status

Baseline Date 
Completed Milestone 
Current Forecast Date 

DOE – Fed Project Director

Activity Desc.	Baseline Date	Forecast / Actual Date	Baseline Variance	FY11				FY12				FY13				FY14			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
L.2 -- DOE- NOVA Project Director Milestone																			
DOE OEMC - FRA EVMS Readiness Assessment	01Oct08	09Jan09	-67d																
DOE OEMC - FRA EVMS Certification Review	01Dec08	15May09	-114d																
DOE OHEP CD-3a Mini-review	15Jan09	24Oct08	52d																
Site preparation purchase order released	06Apr09	22May09	-34d																
Waveshifter PO issued	22May09	08Jun09	-10d																
DOE OEMC - FRA EVMS Certified	01Jun09	28Jan10	-164d																
DOE OHEP CD-3b Review	01Jun09	23Jul09	-37d																
Extrusion PO issued	01Oct09	11Dec09	-49d																
WLS fiber PO issued	02Nov09	01Sep09	42d																
Decision point for buying additional waveshifter powders	11May10	01Dec09	109d																
IPND blocks (4 of 6) completed	12Jul10	09Jul10	0																
Mineral oil PO issued	01Oct10	07May10	101d																
APDs PO issued	18Jul11	15Aug11	-21d																
Block pivoter completed	30Apr12	30Apr12	-1d																
Decision point for buying additional WLS fiber	03Jul12	03Jul12	-1d																
Decision point for buying additional extrusions, modules, mineral oil, pseudocumene	13Feb13	31Jan13	8d																
MI Ring Modifications Ready for Beam Transport	01Jul13	17May13	29d																
RR Modifications Ready for Beam Transport	01Jul13	07Jun13	15d																
Ready to Commission Upgrades with Medium Energy Neutrino Beam	01Jul13	07Jun13	15d																
Decision point for buying additional APDs	29Jul13	31Jan13	124d																



Milestones held by Directorate

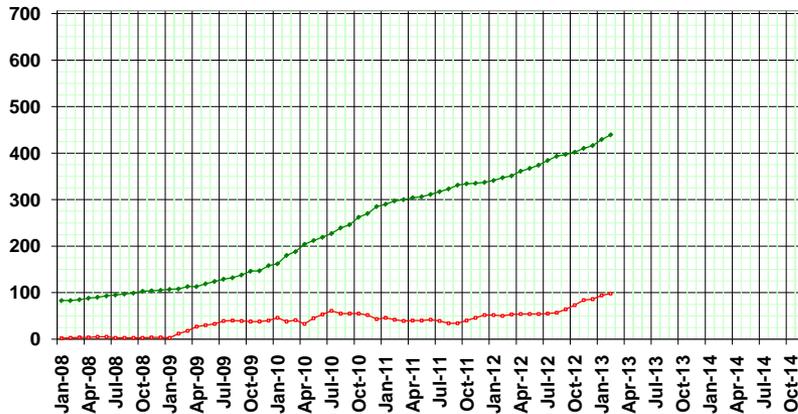
 Nova_Project Milestone Gantt Chart Milestone_L3_L4 = [BOOL.T] and (ESDATE >= {10/01/08} or BSDATE >= {10/01/08}) and BFDATE NOT_EMPTY February 2013 Status TimeNow: 01Mar13					Baseline Date ▼			Completed Milestone ★			Current Forecast Date ▲																					
Activity ID	Activity Desc.	Baseline Date	Forecast or Actual Date	Baseline Variance	FY09				FY10				FY11				FY12				FY13				FY14							
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3					
2.5.3.3.2.45.44	Far detector module assembly started	16Mar12	29Feb12	11d																	★											
2.7.2.1.2.8	Production data concentrators received	30Mar12	28Nov12	-169d																												
2.10.10.5	Accelerator Shutdown Begun	30Apr12	30Apr12	0																												
2.0.3.2.4.3	NuMI ME Target/Carrier/Baffle Assembly Complete	20Aug12	20Aug12	0																												
2.10.9.11	FY13 Funds Available	01Nov12	29Nov12	-19d																												
2.0.2.2.5.4	MI RF Cavities (2) Installation & Testing Complete	16Nov12	06Dec12	-13d																												
2.0.4.3.13	ANU Shielding Assessment Updates Complete	30Nov12	01Mar13	-60d																												
2.0.1.2.8.5	RR All Kicker Systems Ready for Beam	10Dec12	12Apr13	-84d																												
2.2.4.3.80	Scintillator production for 14 kt completed	08Nov13	11Apr14	-103d																												
2.9.4.5.37	Superblock 6 outfitting completed	14Jan14	14Apr14	-63d																												
2.10.9.27	FNAL/Nova Internal Operational Readiness Review and CD-4 Readiness Review Assessment Completed	02Sep14	02Sep14	0																												



Analysis of all milestones

- **439 of 706 now complete**
 – 10 completed in **February**
- **Behind on 98**

Milestones since Jan 2008



♦Total Milestones completed
 ♦Milestones uncompleted and behind schedule

Cumulative Tally as of 01Mar13
 For Milestone Dates >= 12Apr07

Count of Milestone Description		
Computed Status	Milestone Level	Total
Complete	L.0	2
	L.1	7
	L.2	27
	L.3	23
	L.4	48
	L.5	332
Complete Total		439
Planned	L.0	1
	L.1	4
	L.2	7
	L.3	5
	L.4	34
	L.5	216
Planned Total		267
Grand Total		706

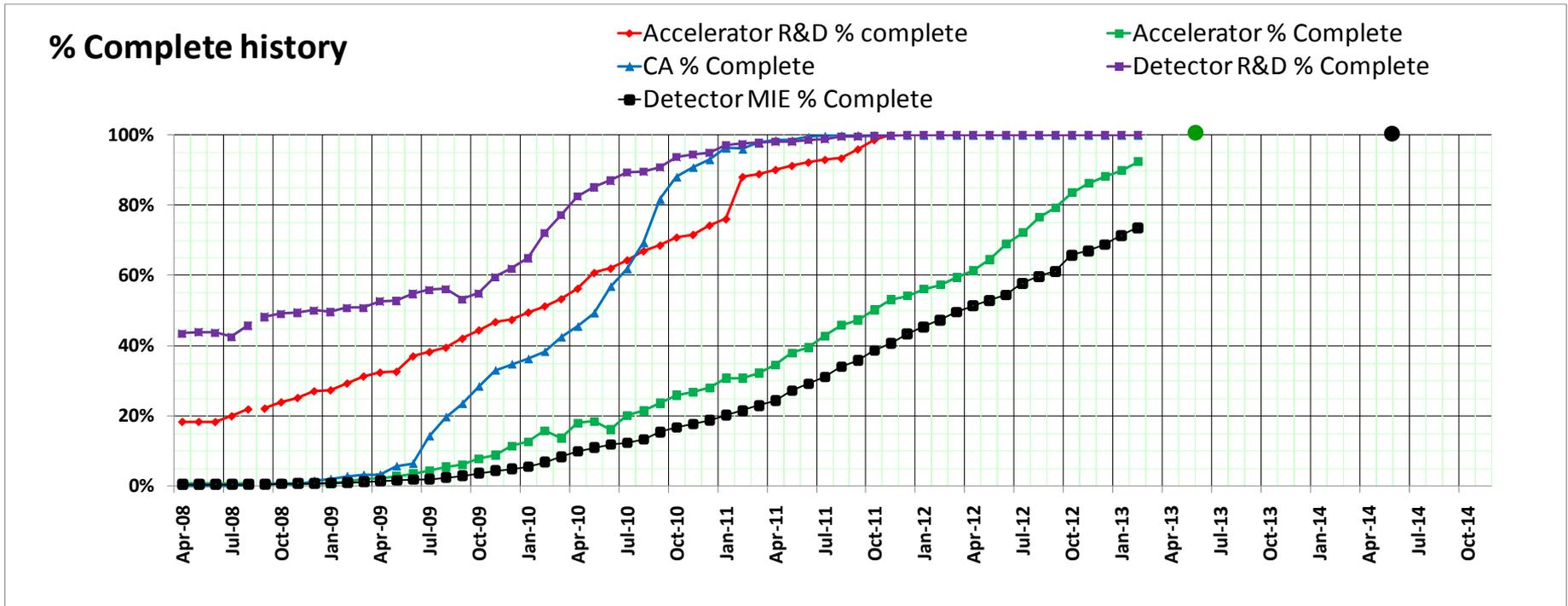
Slipping/Missed Milestones as of 01Mar13

Count of Milestone Description		
Computed Status	Milestone Level	Total
Planned	L.3	2
	L.4	14
	L.5	82
Planned Total		98

Milestones Completed in February 2013

Count of Milestone Description		
Computed Status	Milestone Level	Total
Complete	L.4	2
	L.5	8
Complete Total		10

% Complete history for the 5 Main parts of the Project



- **ANU at 88%, to be complete by ~ June 2013**
- **Detector at 74%, to be complete by ~ June 2014**
- **Building & Detector R&D & ANU R&D are all done**



Nova – ETC committee

(P. Mantsch, T.J. Sarlina, H. Brown)

Remove??

Objectives:

- Update the BOEs and ETC for each of the level 2 tasks.
- Examine remaining risks with L2 managers and update the risk register as needed.
- A monthly updated ETC
- Follow up findings and recommendations of the Internal Nova Assessment Committee of DEC 2012.

Status:

- Meetings with nine key L2 and L3 managers - first round of meetings to be completed within a week.
- BOE's being updated.
- Risks being reevaluated.
- Written reports to John Cooper and Greg Bock.



Summary comments

- Project is in very good technical shape (Cosmic rays in March and Fermilab neutrinos in June, risks retiring), but poor financial shape
- On the financial front:
 - Since the November reviews, concentrated on getting the EAC right
 - ANU work nearing end and has a recent (January) ETC review
 - APD's are arriving, module and assembly work continues on schedule. Filling and outfitting underway and approaching scheduled rate .
 - Since review reporting date, more than \$20M of work accomplished.
 - Added management and ETC reviews
 - Recommendations from reviews are completed or underway
 - Expect improved numbers in February, along with an overall assessment
 - Risks that are uppermost in our minds now:
 - Someone gets hurt or something gets broken
 - Our tracking of costs is misleading, i.e.late or missing accruals, etc
 - Our ETC does not stay current
 - Funding arrives too late