

**PrincetonUniversity Plasma Physics Laboratory
PPPL COST PERFORMANCE REPORT WORKBREAKDOWN STRUCTURE**

NCSX

****** Cumulative to date FY03, FY04 & FY05******

OCTOBER

CUMULATIVE TO DATE (from 4/1/03) (k)								ECP39	
Budgeted Cost			VARIANCES				Budget Thru FY06		
BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI			
1 - Stellarator Core Systems	31,414	30,962	30,944	-452	.99	18	1.00	44,349	
12 Vacuum Vessel Systems	7,061	6,821	6,859	-240	.97	-38	.99	9,159	
CLOSED 1201 - Vacuum Vessel Prelim Dsn		424	424	424		1.00	0	1.00	424
CLOSED 1202 - Vacuum Vessel R&D		1,770	1,770	1,771		1.00	-1	1.00	1,770
1203 - Vacuum Vessel Final Dsn		1,001	969	969	-32	.97	0	1.00	1,098
1204-VV Sys Procurements (non VVSA)		1		4	-1		-4		193
CLOSED 1206 - VV Field Weld Joint R&D		16	16	16		1.00	0	1.00	16
1250 - Vacuum Vessel Fabrication		3,849	3,642	3,674 (1)	-207	.95	-32	.99	5,658
13 Conventional Coils	1,571	1,606	1,585	35	1.02	21	1.01	2,765	
1301 - TF Design		946	944	945	-2	1.00	-1	1.00	946
1302 - PF and CS Design		3			-3				11
1350 - TF Coil Fabr Prep		432	476	443	44	1.10	34	1.08	743
1351 - TF Coil Fabr Supplies		190	180	197	-10	.95	-17	.91	811
1361 - TF Fabrication			6						254
14 Modular Coils	19,414	19,163	19,117	-251	.99	46	1.00	27,311	
CLOSED 1401 - Mod Coil Prel.Dsn		304	304	304		1.00	0	1.00	304
CLOSED 1402 - Mod.Coil Analyses		239	239	239		1.00	0	1.00	239
1403 - Modular Coil Final Design (includes job 1421 coil interface hw dsn)		3,237	3,163	3,250	-74	.98	-86	.97	3,339
CLOSED 1404-MCWF R&D & 1st Prod Casting		2,544	2,544	2,544		1.00	0	1.00	2,544
CLOSED 1405-Mod Coil Winding R&D Prep		168	168	168		1.00		1.00	168
CLOSED 1406 - Mod. Coil Winding Facility		2,247	2,247	2,247		1.00	0	1.00	2,247
CLOSED 1407 -Mod Coil Winding Facility		2,546	2,546	2,546		1.00	0	1.00	2,546
1408-Mod Coil Winding Supplies		666	642	605	-24	.96	37	1.06	1,638
CLOSED 1409 - Mod. Coil Test Stand		916	916	916		1.00	0	1.00	916
CLOSED 1410 MC Twisted Racetrack Fabr		1,050	1,050	1,050		1.00	0	1.00	1,050
1411-MCWF Fabrication S005242		4,302	4,180	4,114 (2)	-122	.97	66	1.02	8,098
CLOSED 1412 - Complete Winding Facilities		537	537	537		1.00	0	1.00	537
CLOSED 1413 - Mod Coil Fracture Analysis		28	28	28		1.00	0	1.01	28
1414 - Coil Testing		164	164	174		1.00	-10	.94	276
CLOSED 1415 - Dimensional Control Testing		24	24	24		1.00	0	1.00	24
1416 - Mod Coil Type A&B Final Design		135	87	35	-48	.65	52	2.47	756
CLOSED 1419 - Winding Facility Modification		48	48	48		1.00	0	.99	48
1451 - Mod Coil Winding		259	275	287	16	1.06	-12	.96	2,553
15 Structures	78	78	75		1.00	3	1.05	208	
1501 - Structures Design		78	78	75		1.00	3	1.05	208
16 - Coil Services								-	
17 Cryostat and Base	374	372	388	-2	.99	-16	.96	377	
1701-Cryostat&Base Sprt Strct Dsn		374	372	388	-2	.99	-16	.96	377
18 Field Period Assembly	1,381	1,394	1,396	13	1.01	-3	1.00	2,526	
CLOSED 1801-Field Period Assly		61	61	61		1.00	0	1.00	61
1802 - FP Assy Oversight&Support		380	380	382		1.00	-2	1.00	718
1803- FP Assy Toolg/Constructability		501	515	506	14	1.03	9	1.02	933
1804-FP Assy Measurement		439	438	447	-1	1.00	-10	.98	452
1810 - Field Period Assembly									362

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		Budgeted Cost		ACWP	VARIANCES				Budget Thru FY06
		BCWS	BCWP		Sch Var	SPI	Cst Var	CPI	
19	1901 - Stellarator Core Mngt&Integr	1,535	1,529	1,525	-6	1.00	3	1.00	2,003
2	- Plasma Heating,Fueling & Vac Sys	349	349	347		1.00	2	1.01	349
	CLOSED 2001-VPS Gas& Cond Sys Oversight	64	64	63		1.00	1	1.02	64
	CLOSED 2501 - Neutral Beam Refurbishment	285	285	284		1.00	1	1.00	285
3	- Diagnostics	458	431	433	-27	.94	-2	1.00	770
31	3101 Magnetic Diagnostics	177	150	152	-27	.85	-2	.99	425
39	3901 - Diagnostics sys Integration	281	281	281	0	1.00	0	1.00	345
4	- Electrical Power Systems	554	541	574	-13	.98	-33	.94	742
41	4101 - AC Power	107	107	107		1.00	0	1.00	107
43	4301 - DC Systems	240	240	262		1.00	-22	.92	314
44	4401 - Control & Protection	55	55	65		1.00	-10	.85	55
45	4501 - Power Sys Dsn & Integr	151	138	138	-13	.91	0	1.00	265
46	4601 - FCPC Bldg Mods	1	1	1		1.00	0	.77	1
5	- Central I&C Systems	33	33	33		1.00	0	1.00	33
58	5801 -Central I&C Integr	33	33	33		1.00	0	1.00	33
6	- Facility Systems	24	24	24		1.00	0	.99	24
	6163 - Facility Systems Support FY04	15	15	15		1.00	0	1.01	15
	62 - Cryogenic Systems								-
	63 - Utility Systems								-
	CLOSED 6501 - Facility Systems Integration	9	9	9		1.00	0	.96	9
7	- Test Cell Prep & Machine Assy	897	899	912	2	1.00	-13	.99	915
	CLOSED 7101 - Shield Wall Modif	32	32	32		1.00	0	1.00	32
	7201 - Control Room Walls&Floors								-
	7301 - Platform Design &	71	72	74	1	1.01	-2	.97	71
	7401 - TC Prep & Mach Assy Planning	794	795	805	1	1.00	-10	.99	812
8	- Project Oversight & Support	6,543	6,543	6,533		1.00	10	1.00	8,665
81	Project Management and Control	3,084	3,084	3,075		1.00	9	1.00	4,126
	8101 - Project Management & Control	2,007	2,007	2,008		1.00	-1	1.00	2,588
	8102 - NCSX MIE Management ORNL	270	270	272		1.00	-2	.99	429
	8998 - Allocations	807	807	796		1.00	11	1.01	1,109
82	Project Engineering	2,989	2,989	2,988		1.00	1	1.00	4,069
	8202 - Engr Mgmt & Sys Eng Support	1,668	1,668	1,670		1.00	-2	1.00	2,241
	8203 - Design Integration	698	698	697		1.00	1	1.00	826
	8204 - Systems Analysis	518	518	531		1.00	-13	.98	724
	8205 - Dimensional Control Coord.	105	105	90		1.00	15	1.17	278
84	Project Physics	470	470	470		1.00	0	1.00	470
	CLOSED 8401 - Project Physcis	324	324	324		1.00	0	1.00	324
	CLOSED 8402 - Project Physics MIE ORNL	146	146	146		1.00	0	1.00	146
	Subtotal	40,272	39,782	39,799	-490	.99	-17	1.00	55,848
	Contingency/Management Reserve								1,295
	Anticipated Incremental Funding								1,370
	Anticipated 3% hold back on FY06 BA								(518)
	DCMA QA Inspection services								75
	TOTAL PROJECT								58,070

(1) Reflects accrual increase of \$ 107k based on MTM's June earned value report

(2) Reflects accrual reduction of \$ 211 k based on EIO's June earned value report