

**Princeton University Plasma Physics Laboratory
PPPL COST PERFORMANCE REPORT WORK BREAKDOWN STRUCTURE**

NCSX

**** Cumulative to date FY03, FY04 , FY05 & FY06****

NOVEMBER 2006

CUMULATIVE TO DATE (from 4/1/03) (k)

ECP 52

		Budgeted Cost				VARIANCES				Budget
		BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI	Thru FY07	
1	- Stellarator Core Systems	46,885	46,468	47,985	-417	.99	-1,516	.97	56,654	
12	Vacuum Vessel Systems	9,560	9,560	9,623	0	1.00	-63	.99	9,677	
	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	
	CLOSED 1203 - Vacuum Vessel Final Dsn	1,218	1,218	1,220		1.00	-2	1.00	1,218	
	CLOSED 1206 - VV Field Weld Joint R&D	16	16	16		1.00	0	.98	16	
	CLOSED 1250 - Vacuum Vessel Fabrication	5,809	5,809	5,815		1.00	-6	1.00	5,808	
	1204-VV Sys Procurements (non VVSA)	324	324	378	0	1.00	-54	.86	441	
13	Conventional Coils	3,004	3,021	2,957	17	1.01	64	1.02	4,331	
	CLOSED 1301 - TF Design	970	970	970		1.00	0	1.00	971	
	1302 - PF Design			19			-19		132	
	1303 - Central Solenoid Support Design	106	117	138	11	1.10	-21	.85	106	
	1350 - TF Coil Fabr Prep	547	547	536		1.00	11	1.02	547	
	1351 - TF Coil Fabr Supplies	470	464	453	-6	.99	11	1.02	470	
	1361 - TF Fabrication	910	923	841 (3)	13	1.01	82	1.10	1,797	
	1352 - PF Coil Procurement								276	
	1353 - CS Structure Procurement								32	
14	Modular Coils	29,075	28,750	30,136	-325	.99	-1,386	.95	34,127	
	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	
	CLOSED 1404-MCWF R&D & 1st Prod Casting	2,543	2,543	2,554		1.00	-11	1.00	2,543	
	CLOSED 1405-Mod Coil Winding R&D Prep	168	168	168		1.00		1.00	168	

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CLOSED	1406	-	Mod. Coil Winding Facility	2,263	2,263	2,263		1.00	0	1.00	2,263
CLOSED	1407	-	Mod Coil Winding Facility	2,571	2,571	2,570		1.00	2	1.00	2,571
CLOSED	1410	-	MC Twisted Racetrack Fabr	1,050	1,050	1,050		1.00	0	1.00	1,050
CLOSED	1412	-	Complete Winding Facilities	541	541	541		1.00	0	1.00	541
CLOSED	1413	-	Mod Coil Fracture Analysis	28	28	28		1.00	0	1.01	28
CLOSED	1409	-	Mod. Coil Test Stand	826	826	833		1.00	-7	.99	826
CLOSED	1414	-	Coil Testing	675	675	639		1.00	36	1.06	675
CLOSED	1415	-	Dimensional Control Testing	24	24	24		1.00	0	1.00	24
CLOSED	1419	-	Winding Facility Modification	55	55	48		1.00	7	1.14	55
			Mod Coil Design (incl job 1421 coil interface hw dsn and 1416)	4,096	4,008	4,072	-88	.98	-63	.98	4,376
			1408-Mod Coil Winding Supplies	1,773	1,725	1,957	-48	.97	-232	.88	1,948
			1431 - Mod Coil Interface hardware								699
			1411-MCWF Fabrication S005242	8,910	8,669	8,720 (2)	-240	.97	-51	.99	9,844
			1451 - Mod Coil Winding (incl 1459 punch list and unplanned work)	2,978	3,007	4,090	29	1.01	-1,083	.74	5,910
			1460 - 3rd Winding Fixture	31	53	37	22	1.71	16	1.43	63
			15 Structures	133	125	143	-9	.94	-18	.87	708
			1501 - Structures Design	133	125	139	-9	.94	-14	.90	218
			1550 - Structures Procurement			4			-4		490
			16 1601 - Coil Services	3	3	3		1.00	0	1.07	174
			17 Cryostat and Base	425	425	417		1.00	8	1.02	485
			1701-Cryostat&Base Sprt Strct Dsn	425	425	417		1.00	8	1.02	482
			1751 - Cryostat Procurement								-

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		Budgeted Cost			VARIANCES					
		BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI		
	1752 - Base Support Structure Procurement									3
	18 Field Period Assembly	2,644	2,542	2,698	-101	.96	-156	.94		4,937
	<i>CLOSED</i> 1801-Field Period Assy	65	65	64		1.00	0	1.00		65
	1802 - FP Assy Oversight Support	785	786	754	1	1.00	32	1.04		1,338
	1803- FP Assy Tooling/Constructability	923	872	1,007	-52	.94	-135	.87		1,170
	1804-FP Assy Measurement	551	552	559	0	1.00	-7	.99		564
	1805 - FP Assy Hardware & Fixt Procurement	10	1	7	-9	.09	-6	.13		305
	1806 - FP Assy Specs and Drawings	32	33	4	0	1.00	29	8.99		210
	1810 - Field Period Assembly plus 1859 unplanned work	277	235	304	-42	.85	-68	.77		1,285
	19 1901 - Stellarator Core Mngt & Integr	2,042	2,042	2,008	1	1.00	34	1.02		2,215
	2 - Plasma Heating, Fueling & Vac Sys	348	348	348		1.00	0	1.00		348
	<i>CLOSED</i> 2001-VPS Gas& Cond Sys Oversight	64	64	63		1.00	1	1.01		63
	<i>CLOSED</i> 2501 - Neutral Beam Refurbishment	285	285	285		1.00	0	1.00		285
	3 - Diagnostics	784	738	808	-46	.94	-70	.91		875
	31 3101 Magnetic Diagnostics	434	388	481	-46	.89	-93	.81		500
	39 3901 - Diagnostics sys Integration	350	350	327	0	1.00	23	1.07		375
	4 - Electrical Power Systems	721	721	714		1.00	7	1.01		722
	41 4101 - AC Power	108	108	107		1.00	1	1.01		108
	43 4301 - DC Systems	382	382	370		1.00	12	1.03		382
	44 4401 - Control & Protection	82	82	81		1.00	2	1.02		82
	45 4501 - Power Sys Dsn & Integr	148	148	155		1.00	-7	.95		148
	46 4601 - FCPC Bldg Mods	1	1	1		1.00		1.00		1
	5 - Central I&C Systems	46	46	33		1.00	13	1.38		46
	58 5801 -Central I&C Integr	46	46	33		1.00	13	1.38		46
	6 - Facility Systems	24	24	24	0	1.02	0	1.01		24
	6163 - Facility Systems Support FY04	15	15	15		1.00	0	1.01		15

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<i>CLOSED</i> 6501 - Facility Systems Integration				9	9	9	0	1.04	0	1.00	9
7 - Test Cell Prep & Machine Assy				938	942	952	5	1.00	-10	.99	974
<i>CLOSED</i> 7101 - Shield Wall Modif				32	33	33	1	1.02	0	1.00	33
7301 - Platform Design &				75	76	76	1	1.02	0	1.00	75
7401 - TC Prep & Mach Assy Planning				831	834	844	3	1.00	-10	.99	866
8 - Project Oversight & Support				9,340	9,343	9,405	3	1.00	-62	.99	11,002
81 Project Management and Control				4,369	4,367	4,361	-3	1.00	6	1.00	5,228
8101 - Project Management & Control				2,663	2,664	2,639	0	1.00	25	1.01	3,196
8102 - NCSX MIE Management ORNL				446	443	466	-3	.99	-23	.95	496
8998 - Allocations				1,260	1,260	1,257	0	1.00	4	1.00	1,536
82 Project Engineering				4,501	4,506	4,574	6	1.00	-68	.99	5,303
8202 - Engr Mgmt & Sys Eng Support				2,366	2,367	2,382	0	1.00	-15	.99	2,781
8203 - Design Integration				879	884	889	5	1.01	-5	.99	1,036
8204 - Systems Analysis				1,012	1,012	1,061	0	1.00	-49	.95	1,216
8205 - Dimensional Control Coord.				244	244	242	0	1.00	2	1.01	270
84 Project Physics				470	470	470		1.00	0	1.00	471
<i>CLOSED</i> 8401 - Project Physics				324	324	324		1.00	0	1.00	325
<i>CLOSED</i> 8402 - Project Physics MIE ORNL				146	146	146		1.00	-1	1.00	146
Subtotal				59,085	58,631	60,269	-455	.99	-1,638	.97	70,643
Contingency set-aside for cumulative cost variance											1,638
FY07 Contingency free balance											1,876
DCMA QA Inspection services											75
TOTAL PROJECT											74,232
(2) Reflects an reduction of \$206k cost accrual based on the vendor's November earned value report											
(3) No accrual adjustments for October											