

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

NCSX

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

SEPTEMBER 2006

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

ECP 50

		Budgeted Cost				VARIANCES				Budget
		BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI	Thru FY06	
1	- Stellarator Core Systems	44,999	44,032	45,535	-966	.98	-1,503	.97	44,999	
12	Vacuum Vessel Systems	9,413	9,328	9,470	-84	.99	-142	.99	9,413	
	CLOSED 1201 - Vacuum Vessel Prelim Dsn	424	424	424	0	1.00	0	1.00	424	
	CLOSED 1202 - Vacuum Vessel R&D	1,770	1,770	1,771	0	1.00	0	1.00	1,770	
	CLOSED 1203 - Vacuum Vessel Final Dsn	1,270	1,248	1,217	-22	.98	30	1.03	1,270	
	1204-VV Sys Procurements (non VVSA)	249	188	233	-62	.75	-45	.81	249	
	CLOSED 1206 - VV Field Weld Joint R&D	16	16	16		1.00	0	.98	16	
	1250 - Vacuum Vessel Fabrication	5,683	5,683	5,809 (1)	0	1.00	-126	.98	5,683	
13	Conventional Coils	3,015	2,701	2,723	-313	.90	-22	.99	3,015	
	1301 - TF Design	966	939	970	-27	.97	-32	.97	966	
	1302 - PF Design	11		19	-11		-19		11	
	1303 - Central Solenoid Support Design	117	106	133	-11	.91	-26	.80	117	
	1350 - TF Coil Fabr Prep	547	547	536	0	1.00	11	1.02	547	
	1351 - TF Coil Fabr Supplies	470	461	452	-9	.98	9	1.02	470	
	1361 - TF Fabrication	904	648	613 (3)	-256	.72	35	1.06	904	
14	Modular Coils	27,503	27,187	28,462	-316	.99	-1,275	.96	27,503	
	CLOSED 1401 - Mod Coil Prel.Dsn	304	304	304	0	1.00	0	1.00	304	
	CLOSED 1402 - Mod.Coil Analyses	239	239	239	0	1.00	0	1.00	239	
	1403 - MoCoil Final Dsn (incl job 1421 coil interface hw dsn)1416 - Mod Coil Type A&B Final Design	4,134	3,836	3,959	-298	.93	-124	.97	4,134	
	CLOSED 1404-MCWF R&D & 1st Prod Casting	2,544	2,544	2,543	0	1.00	1	1.00	2,544	
	CLOSED 1405-Mod Coil Winding R&D Prep	168	168	168	0	1.00	0	1.00	168	
	CLOSED 1406 - Mod. Coil Winding Facility	2,264	2,264	2,263		1.00	1	1.00	2,264	
	CLOSED 1407 -Mod Coil Winding Facility	2,571	2,571	2,570		1.00	2	1.00	2,571	
	1408-Mod Coil Winding Supplies	1,767	1,641	1,756	-127	.93	-115	.93	1,767	
	CLOSED 1410 MC Twisted Racetrack Fabr	1,050	1,050	1,050	0	1.00	1	1.00	1,050	
	1411-MCWF Fabrication S005242	7,796	8,065	8,102 (2)	269	1.03	-37	1.00	7,796	
	CLOSED 1412 - Complete Winding Facilities	541	541	541		1.00	0	1.00	541	
	CLOSED 1413 - Mod Coil Fracture Analysis	28	28	28	0	1.01	0	1.01	28	
	CLOSED 1409 - Mod. Coil Test Stand	826	826	833	0	1.00	-7	.99	826	
	CLOSED 1414 - Coil Testing	675	675	639	0	1.00	36	1.06	675	
	CLOSED 1415 - Dimensional Control Testing	24	24	24	0	.99	0	.99	24	
	CLOSED 1419 - Winding Facility Modification	55	55	48		1.00	7	1.14	55	
	1451 - Mod Coil Winding (incl 1459 unplanned work)	2,517	2,356	3,396	-161	.94	-1,040	.69	2,517	
15	Structures	139	99	117	-40	.71	-18	.84	139	
	1501 - Structures Design	139	99	113	-40	.71	-14	.87	139	
	1550 - Structures Procurement			4			-4		-	
16	16 - Coil Services	3	3	3		1.00	0	1.07	3	
17	Cryostat and Base	487	425	417	-62	.87	8	1.02	487	
	1701-Cryostat&Base Sprt Strct Dsn	487	425	417	-62	.87	8	1.02	487	
18	Field Period Assembly	2,433	2,282	2,392	-151	.94	-110	.95	2,433	
	CLOSED 1801-Field Period Assly	65	65	64		1.00	0	1.00	65	
	1802 - FP Assy Oversight&Support	664	663	675	-1	1.00	-12	.98	664	
	1803- FP Assy Tooling/Constructability	954	838	943	-116	.88	-105	.89	954	
	1804-FP Assy Measurement	549	549	548	-1	1.00	1	1.00	549	

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		CUMULATIVE TO DATE (from 4/1/03) (k)							Budget Thru FY06
		Budgeted Cost			VARIANCES				
		BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI	
	1810 - Field Period Assembly	200	168	161	-32	.84	6	1.04	200
19	1901 - Stellarator Core Mngt & Integr	2,007	2,007	1,951	0	1.00	55	1.03	2,007
	2 - Plasma Heating, Fueling & Vac Sys	348	348	348	0	1.00		1.00	348
	CLOSED 2001-VPS Gas& Cond Sys Oversight	64	63	63	-1	.99		1.00	63
	CLOSED 2501 - Neutral Beam Refurbishment	285	285	285	0	1.00		1.00	285
	3 - Diagnostics	757	732	787	-25	.97	-55	.93	757
31	3101 Magnetic Diagnostics	411	387	470	-25	.94	-83	.82	411
39	3901 - Diagnostics sys Integration	345	345	318	0	1.00	28	1.09	345
	4 - Electrical Power Systems	757	722	710	-34	.95	12	1.02	757
41	4101 - AC Power	107	108	107	1	1.01	0	1.00	107
43	4301 - DC Systems	382	382	370	0	1.00	13	1.03	382
44	4401 - Control & Protection	82	83	81	0	1.00	2	1.03	82
45	4501 - Power Sys Dsn & Integr	184	148	152	-36	.80	-4	.98	184
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
	62 - Cryogenic Systems								-
	63 - Utility Systems								-
	CLOSED 6501 - Facility Systems Integration	9	9	9	0	1.04	0	1.00	9
	7 - Test Cell Prep & Machine Assy	938	942	947	4	1.00	-5	.99	938
	CLOSED 7101 - Shield Wall Modif	32	33	33	1	1.02	0	1.00	32
	7201 - Control Room Walls&Floors								-
	7301 - Platform Design &	75	76	76	1	1.02	0	1.00	75
	7401 - TC Prep & Mach Assy Planning	831	833	839	2	1.00	-5	.99	831
	8 - Project Oversight & Support	8,768	8,769	9,002	1	1.00	-233	.97	8,766
81	Project Management and Control	4,126	4,126	4,189	0	1.00	-63	.98	4,126
	8101 - Project Management & Control	2,588	2,588	2,556	0	1.00	33	1.01	2,588
	8102 - NCSX MIE Management ORNL	429	429	430	0	1.00	-1	1.00	429
	8998 - Allocations	1,109	1,109	1,204	0	1.00	-95	.92	1,109
82	Project Engineering	4,172	4,172	4,342		1.00	-170	.96	4,171
	8202 - Engr Mgmt & Sys Eng Support	2,241	2,241	2,281		1.00	-40	.98	2,241
	8203 - Design Integration	827	827	853	0	1.00	-26	.97	826
	8204 - Systems Analysis	826	826	970	0	1.00	-145	.85	826
	8205 - Dimensional Control Coord.	279	279	239	0	1.00	40	1.17	278
84	Project Physics	470	471	470	1	1.00	1	1.00	470
	CLOSED 8401 - Project Physics	324	324	324	0	1.00	1	1.00	324
	CLOSED 8402 - Project Physics MIE ORNL	146	146	146	1	1.00	0	1.00	146
	Subtotal	56,635	55,615	57,387	-1,020	.98	-1,772	.97	56,635
	Contingency/Management Reserve								508
	Incremental Funding								1,291
	1% hold back on FY06 BA								(172)
	DCMA QA Inspection services								75
	TOTAL PROJECT								58,337