

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

NCSX

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

JULY 2006

ECP 50

		CUMULATIVE TO DATE (from 4/1/03) (k)							Budget Thru FY06
		Budgeted Cost			VARIANCES				
		BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI	
1 - Stellarator Core Systems		42,227	41,852	43,070	-375	.99	-1,218	.97	45,007
12 Vacuum Vessel Systems		8,863	9,043	9,149	180	1.02	-107	.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
	1203 - Vacuum Vessel Final Dsn	1,270	1,253	1,183	-17	.99	70	1.06	1,270
	1204-VV Sys Procurements (non VVSA)	246	185	241	-61	.75	-56	.77	249
CLOSED	1206 - VV Field Weld Joint R&D	16	16	16	0	1.03	0	1.00	16
	1250 - Vacuum Vessel Fabrication	5,136	5,394	5,515	258	1.05	-121	.98	5,683
13 Conventional Coils		2,449	2,337	2,383	-112	.95	-45	.98	3,023
	1301 - TF Design	966	965	973	-1	1.00	-8	.99	966
	1302 - PF Design			21			-21		11
	1303 - Central Solenoid Support Design	111	100	108	-11	.90	-8	.93	117
	1350 - TF Coil Fabr Prep	547	547	549		1.00	-2	1.00	547
	1351 - TF Coil Fabr Supplies	470	461	459	-9	.98	2	1.01	470
	1361 - TF Fabrication	356	265	274	-91	.74	-10	.96	913
14 Modular Coils		26,336	25,939	26,936	-397	.98	-997	.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		1.00	239
	1403 - MoCoil Final Dsn (incl job 1421 coil interface hw dsn)	3,644	3,489	3,495	-155	.96			3,688
	1416 - Mod Coil Type A&B Final Design	374	310	350	-64	.83	-6	1.00	446
CLOSED	1404-MCWF R&D & 1st Prod Casting	2,544	2,544	2,544	0	1.00	0	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	2,264		1.00	0	1.00	2,264
CLOSED	1407 -Mod Coil Winding Facility	2,571	2,571	2,571		1.00	0	1.00	2,571
	1408-Mod Coil Winding Supplies	1,702	1,463	1,544	-239	.86	-81	.95	1,767
CLOSED	1410 MC Twisted Racetrack Fabr	1,050	1,050	1,051	0	1.00	-1	1.00	1,050

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	1411-MCWF Fabrication S005242	7,370	7,538	7,633	168	1.02	-95	.99	7,796
CLOSED	1412 - Complete Winding Facilities	541	541	542		1.00	-1	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	826	0	1.00	0	1.00	826
CLOSED	1414 - Coil Testing	675	675	676	0	1.00	-1	1.00	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)	1,957	1,850	2,628	-107	.95	-778	.70	2,517
15	Structures	82	98	121	15	1.19	-23	.81	139
	1501 - Structures Design	82	98	117	15	1.19	-19	.84	139
	1550 - Structures Procurement			4			-4		-
16	16 - Coil Services	3	3	3		1.00	0	1.00	3
17	Cryostat and Base	451	421	420	-31	.93	0	1.00	487
	1701-Cryost&Base Sprt Strct Dsn	451	421	420	-31	.93	0	1.00	487
18	Field Period Assembly	2,125	2,094	2,178	-31	.99	-84	.96	2,433
CLOSED	1801-Field Period Assly	65	65	65		1.00	0	1.00	65
	1802 - FP Assy Oversight&Support	598	598	619	0	1.00	-21	.97	664
	1803- FP Assy Tooling/Constructability	798	801	867	3	1.00	-66	.92	954
	1804-FP Assy Measurement	546	545	533	-1	1.00	12	1.02	549
	1810 - Field Period Assembly	119	86	95	-33	.72	-9	.91	200
19	1901 - Stellarator Core Mngtt&Integr	1,918	1,918	1,881	0	1.00	38	1.02	2,007
2	Plasma Heating, Fueling & Vac Sys	348	349	348	1	1.00	1	1.00	348
CLOSED	2001-VPS Gas& Cond Sys Oversight	64	64	63	1	1.01	1	1.02	63
CLOSED	2501 - Neutral Beam Refurbishment	285	285	285	1	1.00	0	1.00	285
3	Diagnostics	742	718	776	-24	.97	-59	.92	757
31	3101 Magnetic Diagnostics	409	384	461	-24	.94	-76	.83	411
39	3901 - Diagnostics sys Integration	333	333	316	0	1.00	17	1.06	345

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		BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI		
4 - Electrical Power Systems		757	722	723		-34	.95	-1	1.00	757
41	4101 - AC Power	107	108	107		1	1.01	0	1.00	107
43	4301 - DC Systems	382	382	382		0	1.00	0	1.00	382
44	4401 - Control & Protection	82	83	83		0	1.00	0	1.00	82
45	4501 - Power Sys Dsn & Integr	184	148	149		-36	.80	-1	.99	184
46	4601 - FCPC Bldg Mods	1	1	1			1.00		1.00	1
5 - Central I&C Systems		41	41	33		0	1.00	8	1.24	46
58	5801 -Central I&C Integr	41	41	33		0	1.00	8	1.24	46
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									-
<i>CLOSED</i>	6501 - Facility Systems Integration	9	9	9			1.00	0	.96	9
7 - Test Cell Prep & Machine Assy		938	941	949		4	1.00	-8	.99	938
<i>CLOSED</i>	7101 - Shield Wall Modif	32	32	33			1.00	-1	.98	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	841		2	1.00	-8	.99	831
8 - Project Oversight & Support		8,357	8,356	8,690		0	1.00	-334	.96	8,766
81 Project Management and Control		3,930	3,929	3,983		0	1.00	-53	.99	4,126
	8101 - Project Management & Control	2,479	2,478	2,519		0	1.00	-40	.98	2,588
	8102 - NCSX MIE Management ORNL	399	399	403		0	1.00	-4	.99	429
	8998 - Allocations	1,052	1,052	1,061		0	1.00	-9	.99	1,109
82 Project Engineering		3,957	3,957	4,238		0	1.00	-280	.93	4,171
	8202 - Engr Mgmt & Sys Eng Support	2,133	2,133	2,204		0	1.00	-71	.97	2,241
	8203 - Design Integration	802	802	830			1.00	-28	.97	826
	8204 - Systems Analysis	776	776	961		0	1.00	-185	.81	826
	8205 - Dimensional Control Coord.	246	246	242		0	1.00	4	1.02	278
84 Project Physics		470	470	470		0	1.00	0	1.00	470
<i>CLOSED</i>	8401 - Project Physics	324	324	324			1.00	0	1.00	324
<i>CLOSED</i>	8402 - Project Physics MIE ORNL	146	146	146		0	1.00	0	1.00	146
Subtotal		53,433	53,003	54,615		-429	.99	-1,611	.97	56,643
Contingency/Management Reserve										500
Incremental Funding										1,291
1% hold back on FY06 BA										(172)
DCMA QA Inspection services										75
TOTAL PROJECT										58,337
	(1) Reflects accrual DECREASE of \$155 k based on MTM's earned value report									
	(2) Reflects accrual DECREASE of \$ 68 k based on EIO's earned value report									