

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

NCSX

**** Cumulative to date FY03, FY04 , FY05, FY06 and FY07****

MARCH 2007

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

ECP 53

		CUMULATIVE TO DATE (from 4/1/03) (k)								Budget Thru FY07
		Budgeted Cost			VARIANCES					
		BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI		
1 - Stellarator Core Systems		51,618	50,691	52,606		-927	.98	-1,915	.96	57,483
12 Vacuum Vessel Systems		9,564	9,570	9,720		6	1.00	-150	.98	9,650
	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	1,217			1.00	0	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	5,808	5,808	5,786			1.00	22	1.00	5,808
	1204-VV Sys Procurements (non VVSA)	329	335	506		6	1.02	-171	.66	414
13 Conventional Coils		3,344	3,211	3,206		-132	.96	5	1.00	3,967
	CLOSED 1301 - TF Design	970	971	970		1	1.00	1	1.00	971
	1302 - PF Design			19				-19		70
	CLOSED 1303 - Central Solenoid Support Design	106	117	155		11	1.10	-38	.76	106
	1350 - TF Coil Fabr Prep	547	547	536			1.00	11	1.02	547
	CLOSED 1351 - TF Coil Fabr Supplies	470	470	483		0	1.00	-13	.97	470
	1361 - TF Fabrication	1,250	1,107	1,043		-143	.89	64	1.06	1,803
	1352 - PF Coil Procurement									-
	1353 - CS Structure Procurement									-
14 Modular Coils		32,503	31,923	33,550		-580	.98	-1,627	.95	36,071
	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
	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 Job 1403, 1416 Coil Design, Job 1421 Interface design	5,070	4,573	4,356		-497	.90	216	1.05	5,617
	Job 1429 Interface R&D/Test	153	111	136		-43	.72	-26	.81	368

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	1408-Mod Coil Winding Supplies	2,067	1,926	2,324	-141	.93	-398	.83	2,245		
	1411-MCWF Fabrication S005242	9,464	9,626	9,743 (1)	162	1.02	-117	.99	9,844		
	1451 - Mod Coil Winding (incl 1459 punch list and unplanned work)	4,401	4,341	5,672	-60	.99	-1,331	.77	6,650		
	<i>CLOSED</i> 1460 - 3rd Winding Fixture	60	60	57	0	.99	3	1.05	60		
15	Structures	212	201	289	-10	.95	-87	.70	348		
	1501 - Structures Design	212	201	284	-10	.95	-83	.71	348		
	1550 - Structures Procurement			4			-4				
16	1601 - Coil Services	13	3	3	-10	.22	0	1.07	23		
17	Cryostat and Base	429	428	430	-1	1.00	-2	.99	514		
	1701-Cryostat design	429	428	430	-1	1.00	-2	.99	380		
	1702-Base Support structure design								133		
	1751 - Cryostat Procurement								-		
	1752 - Base Support Structure Procurement								1		
18	Field Period Assembly	3,434	3,247	3,310	-188	.95	-63	.98	4,678		
	<i>CLOSED</i> 1801-Field Period Assy	65	65	64		1.00	0	1.00	65		
	1802 - FP Assy Oversight Support	1,041	1,032	922	-8	.99	111	1.12	1,458		
	1803- FP Assy Tooling/Constructability	939	899	1,122	-40	.96	-223	.80	994		
	<i>CLOSED</i> 1804-FP Assy Measurement	564	564	559		1.00	5	1.01	564		
	1805 - FP Assy Hardware & Fixt Procurement	3	2	7	-1	.73	-4	.35	193		
	1806 - FP Assy Specs and Drawings	159	39	27	-120	.25	13	1.48	221		
	1810 - Field Period Assembly plus 1859 unplanned work	664	645	609	-19	.97	35	1.06	1,183		
19	1901 - Stellarator Core Mngt & Integr	2,119	2,107	2,098	-11	.99	9	1.00	2,232		
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		844	795	922	-48	.94	-127	.86	877		
31	3101 Magnetic Diagnostics	479	431	583	-48	.90	-152	.74	492		
39	3901 - Diagnostics sys Integration	365	365	340	0	1.00	25	1.07	385		
4 - Electrical Power Systems		709	731	720	22	1.03	11	1.02	714		
41	4101 - AC Power	93	109	107	17	1.18	2	1.02	93		
43	4301 - DC Systems	382	383	370	1	1.00	13	1.04	382		

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44	4401 - Control & Protection	82	83	81	1	1.01	2	1.03	82	
45	4501 - Power Sys Dsn & Integr	151	155	161	4	1.02	-6	.96	155	
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		1.00	0	1.01	24	
	6163 - Facility Systems Support FY04	15	15	15		1.00	0	1.01	15	
	<i>CLOSED</i> 6501 - Facility Systems Integration	9	9	9		1.00	0	1.00	9	
7	- Test Cell Prep & Machine Assy	942	942	953	0	1.00	-12	.99	965	
	<i>CLOSED</i> 7101 - Shield Wall Modif	33	33	33		1.00	0	1.00	33	
	7301 - Platform Design &	76	76	76		1.00	0	1.00	75	
	7401 - TC Prep & Mach Assy Planning	833	833	845	0	1.00	-12	.99	857	
8	- Project Oversight & Support	9,980	9,976	10,289	-4	1.00	-313	.97	11,086	
81	Project Management and Control	4,646	4,651	4,713	6	1.00	-62	.99	5,127	
	8101 - Project Management & Control	2,826	2,829	2,786	3	1.00	43	1.02	3,108	
	8102 - NCSX MIE Management ORNL	462	462	537		1.00	-75	.86	497	
	8998 - Allocations	1,358	1,360	1,390	3	1.00	-30	.98	1,522	
82	Project Engineering	4,864	4,855	5,106	-10	1.00	-251	.95	5,488	
	8202 - Engr Mgmt & Sys Eng Support	2,535	2,520	2,590	-15	.99	-70	.97	2,798	
	8203 - Design Integration	947	947	964	0	1.00	-17	.98	1,097	
	8204 - Systems Analysis	1,093	1,093	1,246	0	1.00	-153	.88	1,220	
	8205 - Dimensional Control Coord.	270	275	284	6	1.02	-9	.97	333	
	8210 - Project Rebaseline Estimating	20	20	23		1.00	-3	.88	40	
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	64,510	63,553	65,896	-957	.99	-2,343	.96	71,541	
	Contingency set-aside for cumulative cost variance								2,343	
	FY07 Contingency free balance								272	
	DCMA QA Inspection services								75	
	TOTAL PROJECT								74,232	
	(1) Over accrued by \$61k based on vendors earned value report.									