

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

NCSX

**** Cumulative to date FY03 & FY04 ****

MARCH FY04

	CURRENT MONTH			CUMULATIVE TO DATE (from 4/1/03) (k)							ECP5 Budget Baseline (k)
	BCWS	BCWP	ACWP	Budgeted Cost			VARIANCES				
				BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI	
1 - Stellarator Core Systems	1,439	920	959	8,789	8,102	8,513	-688	.92	-412	.95	15,089
12 Vacuum Vessel Systems	249	171	166	2,195	2,046	2,076	-149	.93	-29	.99	3,292
1201 - Vacuum Vessel Dsn			0	424	424	424	0	1.00	0	1.00	424
1202- Vacuum Vessel R&D	108	51	73	1,413	1,297	1,356	-116	.92	-59	.96	1,603
1203- Vacuum Vessel Final Dsn	141	120	93	358	325	295	-33	.91	29	1.10	578
1204- WBS 12 Procure/Fab/Title III											687
13 Conventional Coils	25	11	32	303	311	226	8	1.03	85	1.37	510
1301- Conventional Coils Prel Design	25	11	32	303	311	226	8	1.03	85	1.37	409
1303- TF/PF Coil Final design											100
1304 - WBS 13 Procure/Fab/Title III											
14 Modular Coils	804	651	682	5,199	4,935	5,483	-264	.95	-549	.90	8,812
1401 - Mod. Coil Design (casting&winding)			0	303	303	304	0	1.00	-1	1.00	303
1402 - Mod.Coil Analyses			0	239	239	239	0	1.00		1.00	239
1403- Mod. Coil Final Design	217	239	134	610	502	840	-108	.82	-338	.597	1,041
1404- Mod Coil Winding Form R&D	163	73	115	1,239	1,084	1,258	-155	.87	-174	.86	2,256
1405- Mod. Coil R&D prep			0	168	168	168	0	1.00	0	1.00	168
1406- Mod. Coil Winding R&D	169	113	157	1,459	1,288	1,314	-171	.88	-26	.98	1,612
1407- MC Winding Facilities	184	212	247	904	1,111	1,120	208	1.23	-8	.99	1,981
1408-Mod Coil Winding Supplies			0	30	30	30	0	1.00		1.00	216
1409- Mod. Coil Test Stand	68	14	29	245	209	204	-36	.85	5	1.02	262
1410- Mod Coil Prototype Winding	2			2		6	-2		-6		175
1411- Mod Coil Winding Form Fab											559
15 1501 - Structures Design	3	0	1	60	54	15	-6	.90	38	3.47	241
16 1601 - Coil Services Design											
17 1701 - Cryostat & Base Support Struc		0	10	12	12	39	0	1.00	-26	.32	173
18 Field Period Assembly	269	32	20	445	151	105	-294	.34	46	1.44	1,100
1801 - Field Period Assembly Design			0	61	61	61	0	1.00	0	1.00	61
1802- FP Assy Oversight&Support	26	23	16	72	66	31	-7	.91	35	2.11	219
1803- FP Assy Tooling /Constructability	61	0	1	118	4	4	-114	.03	-1	.86	522
1804- FP Assy Measurement Sys	182	9	3	193	20	8	-173	.11	12	2.48	299
1901 - Stellarator Core Management&	88	55	48	576	593	570	17	1.03	23	1.04	962
2 - Plasma Heating, Fueling & Vac Syste	14	24	8	264	264	235	1	1.00	30	1.13	308
2001 - VPS,Gas & Cond sys Design/Ove			0	60	60	63	0	1.00	-3	.96	60
2501 - Neutral Beam Refurbishment	14	24	8	203	204	172	1	1.00	32	1.19	247
3 - Diagnostics	7	7	4	194	194	193	0	1.00	0	1.00	234
39 3901 - Diagnostics systems Integratio	7	7	4	194	194	193	0	1.00	0	1.00	234
4 - Electrical Power Systems	62	22	28	231	171	205	-59	.74	-34	.84	683
41 4101- AC Power	1	2		2	2		-1	.79	2		10
43 4301- DC Systems	29	11	20	69	44	48	-25	.64	-5	.91	343
44 4401- Control & Protection	16	4		16	4		-11	.28	4		89
45 4501- Power Sys Dsn & Integr	16	4	7	143	120	155	-23	.84	-35	.77	216
46 4601- FCPC Bldg Mods			0	1	1	1	0	1.08		1.00	25
5 - Central I&C Systems	1	1		18	18	28	0	.99	-10	.65	13
58 5801 - Central I&C Integration & Overs	1	1		18	18	28	0	.99	-10	.65	13
6 - Facility Systems	3	3		25	25	24	0	1.00	1	1.03	41
61 6163- Facility Systems FY04 support	3	3		16	16	15	0	1.00	1	1.04	32
65 6501 - Facility Sys Integration FY03			0	9	9	9	0	1.02	0	1.00	9
7 - Test Cell Preparation and Machine A	22	22	25	326	320	274	-6	.98	46	1.17	599
71 7101 - Shield Wall Modifications Desig			0	32	32	32	0	1.00		1.00	32
72 7201- Control Room Walls/Floors											48
73 7301- Platform Design&Fab				7			-7				90
74 7401- TC Prep & Mach Assy Planning	22	22	25	288	288	241	0	1.00	46	1.19	429
8 - Project Oversight and Support	206	221	278	2,482	2,503	2,605	20	1.01	-103	.96	3,647
81 Project Management and Control	97	96	109	1,085	1,085	1,148	0	1.00	-62	.95	1,623
8101 - Project Management and Control	62	62	76	773	773	833	0	1.00	-60	.93	1,117
8102 - NCSX MIE Management ORNL	11	11	11	119	119	117	0	1.00	2	1.02	179
8998 - Allocations	24	24	23	194	194	198	0	1.00	-4	.98	327
82 Project Engineering	95	110	133	1,065	1,085	1,085	20	1.02	0	1.00	1,611
8202 - Engineering Mgmt & Sys Engr Sup	56	57	66	609	609	620	0	1.00	-11	.98	923
8203 - Design Integration	23	23	46	307	307	367	0	1.00	-59	.84	436
8204 - Systems Analysis	16	30	21	149	169	99	20	1.14	71	1.72	253
84 Project Physics	15	14	35	332	332	372	0	1.00	-40	.89	413
8401 - Project Physcis	9	9	13	260	260	275	0	1.00	-15	.95	310
8402 - Project Physics MIE ORNL	6	5	22	72	72	97	0	1.00	-25	.74	103
Subtotal	1,756	1,220	1,302	12,329	11,597	12,078	-733	.94	-481	.96	20,613

Management Reserve Plan

BA setaside for VVSA and MCWF contracts	400
Expanded/Increased Scope (contingency draw)	845
Accelerated Scope	711
Institutional	800
Free balance retained	449

TOTAL PPPL/ORNL FUNDING

FY03 cost of 5,942 + FY03 carryover of 1,955 + FY04 BA of 15,921 = **23,818**