

**Princeton University Plasma Physics Laboratory
PPPL COST PERFORMANCE REPORT WORKBREAKDOWN STRUCTURE**

NCSX

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

AUGUST FY04

	CUMULATIVE TO DATE (from 4/1/03) (k)								ECP 14 Budget Baseline (k)
	Budgeted Cost			VARIANCES					
	BCWS	BCWP	ACWP	Sch Var	SPI	Cst Var	CPI		
1 - Stellarator Core Systems	13,725	13,227	13,435	-498	.96	-208	.98	14,508	
12 Vacuum Vessel Systems	2,817	2,793	2,723	-25	.99	70	1.03	2,872	
1201 - Vacuum Vessel Dsn	424	425	424	0	1.00	0	1.00	424	
1202- Vacuum Vessel R&D	1,751	1,742	1,706	-9	.99	36	1.02	1,759	
1203- Vacuum Vessel Final Dsn	616	599	592	-17	.97	8	1.01	645	
1204- WBS 12 Procure/Fab/Title III	26	27		0	1.01	27		44	
13 Conventional Coils	383	385	404	2	1.01	-19	.95	418	
1301- Conventional Coils Prel Design	334	338	404	4	1.01	-66	.84	367	
1303- TF/PF Coil Final design	49	47		-2	.96	47		51	
1304 - WBS 13 Procure/Fab/Title III									
14 Modular Coils	8,924	8,484	8,954	-441	.95	-471	.95	9,510	
1401 - Mod. Coil Design (casting&wind	303	303	304		1.00	-1	1.00	303	
1402 - Mod.Coil Analyses	239	239	239	0	1.00	0	1.00	239	
1403- Mod. Coil Final Design	1,691	1,591	1,662	-99	.94	-71	.96	1,848	
1404- Mod Coil Winding Form R&D	2,063	1,973	1,772	-90	.96	200	1.11	2,189	
1405- Mod. Coil R&D prep	168	168	168		1.00	0	1.00	168	
1406- Mod. Coil Winding R&D	1,870	1,841	2,084	-29	.98	-243	.88	1,914	
1407- MC Winding Facilities	2,069	1,956	2,340	-112	.95	-384	.84	2,201	
1408-Mod Coil Winding Supplies	97	32	38	-65	.33	-5	.86	162	
1409- Mod. Coil Test Stand	408	363	340	-45	.89	23	1.07	466	
1410- Mod Coil Prototype Winding			7			-7			
1411- Mod Coil Winding Form Fab	17	17		0	1.00	17		22	
15 1501 - Structures Design	61	54	18	-7	.89	36	2.97	61	
16 1601 - Coil Services Design									
17 1701 - Cryostat & Base Support Stru	150	147	103	-3	.98	44	1.42	173	
18 Field Period Assembly	484	484	364	0	1.00	120	1.33	522	
1801 - Field Period Assembly Design	61	61	61	0	1.00	0	1.00	61	
1802- FP Assy Oversight&Support	190	190	125	0	1.00	65	1.52	219	
1803- FP Assy Tooling /Constructability			8			-8			
1804- FP Assy Measurement Sys	233	233	169	0	1.00	64	1.38	241	
19 1901 - Stellarator Core Management	906	881	870	-25	.97	12	1.01	953	
2 - Plasma Heating, Fueling & Vac Sys	353	353	352	0	1.00	1	1.00	369	
2001 - VPS, Gas & Cond sys Design/O	60	60	63	0	1.00	-3	.96	60	
2501 - Neutral Beam Refurbishment	293	293	289	0	1.00	3	1.01	309	
3 - Diagnostics	227	227	228	0	1.00	-1	1.00	234	
39 3901 - Diagnostics systems Integrati	227	227	228	0	1.00	-1	1.00	234	
4 - Electrical Power Systems	448	433	404	-15	.97	29	1.07	817	
41 4101- AC Power	171	155	80	-16	.9	75	1.9	179	
43 4301- DC Systems	130	128	176	-2	.98	-48	.73	463	
44 4401- Control & Protection	5	5	9	0	1.04	-4	.56	6	
45 4501- Power Sys Dsn & Integr	141	144	137	3	1.02	7	1.05	167	
46 4601- FCPC Bldg Mods	1	1	1	0	1.08		1.00	1	
5 - Central I&C Systems	23	23	31	0	1.00	-7	.76	24	
58 5801 - Central I&C Integration & Ove	23	23	31	0	1.00	-7	.76	24	
6 - Facility Systems	39	39	25	0	1.00	14	1.56	41	
61 6163- Facility Systems FY04 suppor	30	30	16	0	1.00	14	1.89	32	
65 6501 - Facility Sys Integration FY03	9	9	9	0	1.02	0	1.00	9	
7 - Test Cell Preparation and Machine	446	391	363	-55	.88	28	1.08	498	
71 7101 - Shield Wall Modifications Des	32	32	32		1.00	0	1.00	32	
72 7201- Control Room Walls/Floors									
73 7301- Platform Design&Fab	17			-17				42	
74 7401- TC Prep & Mach Assy Plannir	397	359	331	-38	.90	28	1.08	423	
8 - Project Oversight and Support	3,460	3,460	3,775	0	1.00	-315	.92	3,646	
81 Project Management and Control	1,535	1,535	1,606	0	1.00	-71	.96	1,623	
8101 - Project Management and Contr	1,061	1,061	1,192	0	1.00	-131	.89	1,118	
8102 - NCSX MIE Management ORNL	169	169	150	0	1.00	19	1.12	179	
8998 - Allocations	305	305	263	0	1.00	42	1.16	327	
82 Project Engineering	1,526	1,526	1,702	0	1.00	-175	.90	1,611	
8202 - Engineering Mgmt & Sys Engr S	871	871	947	0	1.00	-76	.92	922	
8203 - Design Integration	415	415	538	0	1.00	-123	.77	436	
8204 - Systems Analysis	240	240	216	0	1.00	24	1.11	253	
84 Project Physics	399	399	468	0	1.00	-69	.85	412	
8401 - Project Physics	302	302	322	0	1.00	-20	.94	310	
8402 - Project Physics MIE ORNL	97	97	146	0	1.00	-49	.66	102	
Subtotal	18,721	18,153	18,614	-567	.97	-460	.98	20,137	
Free balance								3,681	
TOTAL PPPL/ORNL FUNDING	FY03 cost of 5,942 + FY03 carryover of 1,955 + FY04 BA of 15,921 =							23,818	