


Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year							
									FY04	FY05	FY06	FY07	FY08	FY09	FY10	
<b>cc 9450 - NCSX Fabrication (MIE)</b>																
<b>11 - In-Vessel Components</b>																
<b>Job: 1101 - Limiter Adv Conc/Prel Dsn-GORANSON</b>																
<b>FY03 Actual Cost</b>																
1101-100	Update Conceptual Design	78*	15JUL03A	30SEP03A		100	60.00	60.00	0.058k							
<b>12 - Vacuum Vessel Systems</b>																
<b>Job: 1201 - Vacuum Vessel Prelim Dsn-GORANSON</b>																
<b>FY03 Actual Cost</b>																
1201-002	Apr-Sept MIE Cost ORNL	47	01APR03A	30SEP03A		100	319,050.00	319,050.00								
1201-003	Apr-MSept MIE Cost PPPL	47	01APR03A	30SEP03A		100	105,370.00	105,370.00								
1201-500	WBS 12 & 14 PDR	0		07OCT03A			0.00	0.00								
<b>Job: 1202 - Vacuum Vessel R&amp;D - VIOLA</b>																
<b>FY03 Actual Cost</b>																
1202-002	Apr-Sept MIE Cost ORNL	47	01APR03A	30SEP03A		100	60.00	60.00								
1202-003	Apr-Sept MIE Cost PPPL	47	01APR03A	30SEP03A		100	128,340.00	128,340.00								
<b>Vessel Weld Joint R&amp;D</b>																
1203-405	Field Weld joint design and Specific spool piece	61*	01DEC03A	26FEB04	201	15	5,791.05	38,607.00								
1202-690	Purchase Spool piece	40	27FEB04*	22APR04	201		0.00	0.00								
1202-700	Machine pipe	10	23APR04*	06MAY04	201		0.00	8,424.00								
1202-702	Machine Flanges	10	07MAY04	20MAY04	201		0.00	8,424.00								
1202-704	Weld Flanges	10	21MAY04	04JUN04	201		0.00	8,424.00								
1202-706	Perform Test Welds	10	07JUN04	18JUN04	201		0.00	8,424.00								
1202-708	Install Thermocouples	1	21JUN04	21JUN04	201		0.00	842.40								
1202-709	Measure Distortion & temp on backside weld	10	22JUN04	06JUL04	201		0.00	21,280.00								
1202-710	Prepare Report	4	07JUL04	12JUL04	201		0.00	3,214.00								
1202-711	Supervision/QA	55*	23APR04	12JUL04	201		0.00	60,196.80								
<b>VV Subcontractor Oversight</b>																
1202-400	Oversight and Contract Management	79*	01OCT03A	02JAN04A		LOE	62,738.00	62,738.00								
1202-401	Oversight and Contract Management	63*	05JAN04A	31MAR04	1,387	LOE	15,433.94	48,687.50								
1202-402	Oversight and Contract Management	85*	01APR04*	30JUL04	1,302	LOE	0.00	18,572.50								
<b>Major Tool Subcontract (S04344F)</b>																
1202-303	MT-Issue VVSA MIT/QA plans and C&S Est (3.1)	0*	02JUN03A	13JUN03A		100	17,153.60	17,153.60								
1202-305	MT-Issue Draft MIT/QA plan (3.2.1)	15	13JUN03A	27JUN03A		100	10,050.56	10,050.56								
1202-310	MT-Incorp Comments & Reissue MIT/QA Plan (3.2.1)	0*	10JUL03A	17JUL03A		100	0.00	0.00								
1202-315	Fiinalize SOW/contract & Release MT for PVVS Fab	52*	18JUL03A	15AUG03A		100	0.00	0.00								
1202-320	MT-PPPL Fabrication Release	0		15AUG03A		100	0.00	0.00								
1202-324	MT-PVVS Begin Fabrication (3.2.2)	56*	18AUG03A	30SEP03A		100	368,464.16	368,464.16								

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						WBS14- 2/20; WBS 7 -2/20
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year									
									FY04	FY05	FY06	FY07	FY08	FY09	FY10			
1202-325	MT-PVVS Complete Fabrication (3.2.2) [A/ 1]	90*	10NOV03A	17MAR04	222	85	246,597.99	290,115.28										
1202-325A	Vist MT for welding	3	02FEB04*	04FEB04	1,446		0.00	2,584.00										
1202-327	PPPL Receipt Inspection of MT PVVS	10	18MAR04	31MAR04	218		0.00	14,148.00										
1202-330	MT-Final MIT/QA plans for VVSA (3.3.1)	19	27MAY04	23JUN04	197		0.00	6,370.00										
1202-335	MT-Firm Fixed Price Proposal for VVSA (3.3.2)	19	27MAY04	23JUN04	197		0.00	6,370.00										
<b>Rohwedder Subcontract (S04345F)</b>																		
1202-403	RW-Issue VVSA MIT/QA plans and C&S Est (3.1)	0*	02JUN03A	13JUN03A		100	71,888.08	71,888.08										
1202-405	RW-Issue Draft MIT/QA plan (3.2.1)	76*	13JUN03A	27JUN03A		100	19,352.16	19,352.16										
1202-410	RW-Incorp Comments&Reissue MIT/QA Plan (3.2.1)	0*	10JUL03A	17JUL03A		100	0.00	0.00										
1202-415	Finalize SOW/contract & Release MT for PVVS Fab	52*	18JUL03A	15AUG03A		100	0.00	0.00										
1202-420	RW-PPPL Fabrication Release	0		15AUG03A		100	0.00	0.00										
1202-424	RW-PVVS Begin Fabrication (3.2.2)	131*	18AUG03A	30SEP03A		100	143,280.88	143,280.88										
1202-424A	RW identify fabricator	1	01DEC03A	15DEC03A		100	0.00	0.00										
1202-424B	PPPL approve new fabricator	1	16DEC03A	31DEC03A		100	0.00	0.00										
1202-424C	PPPL review fabricator QA	20*	02FEB04*	27FEB04	1,429	80	0.00	0.00										
1202-424D	PPPL visit fabricator (Jan)	2	02FEB04*	03FEB04	1,447		0.00	0.00										
1202-424E	PPPL visit fabricator (Feb)	2	16FEB04*	17FEB04	1,437		0.00	0.00										
1202-425	RW-PVVS Complete Fabrication (3.2.2)	118*	01OCT03A	17MAR04	222	38	69,742.33	183,532.44										
1202-427	PPPL Receipt Inspection of RW PVVS	10	18MAR04	31MAR04	218		0.00	14,148.00										
1202-430	RW-Final MIT/QA plans for VVSA (3.3.1)	19	27MAY04	23JUN04	197		0.00	23,709.14										
1202-435	RW-Firm Fixed Price Proposal for VVSA (3.3.2)	19	27MAY04	23JUN04	197		0.00	15,122.38										
<b>Job: 1203 - Vacuum Vessel Final Dsn-GORANSON</b>																		
<b>Closeout PDR Design Deliverables</b>																		
1203-101	Prepare documents for PDR closeout	62*	03NOV03A	30JAN04A		100	7,721.40	7,721.40										
1203-111	Response to chits, prepare FY04 WP/WAF/Checklist	25	01OCT03A	31OCT03A		100	7,721.40	7,721.40										
1203-121	Review, revise, and approve SRD	93*	01NOV03A	15MAR04	1,423	60	4,632.84	7,721.40										
1203-131	Complete preliminary design of insulation and he	122*	10NOV03A	30APR04	1,389	95	7,275.21	11,582.10										
<b>PDR Recommendations</b>																		
1203-400	350c Bakeout Study	94*	03NOV03A	31DEC03A		100	25,738.00	25,738.00										
1203-401	Analysis & testing of tube attachment method	20	01DEC03A	31DEC03A		100	0.00	0.00										
1203-402	Determine thermal expansion vv to mcc clearance	39*	01NOV03A	31DEC03A		100	0.00	0.00										
1203-403	Determine cost of fabrication	20	01DEC03A	31DEC03A		100	0.00	0.00										
1203-404	DECISION TO PROCEED WITH 350c BAKEOUT	0		31DEC03A		100	0.00	0.00										
<b>Final Design Tasks</b>																		
121-000	Evaluate port ext & welding**PDR #10 & 11 &24	162	01JUL04*	28FEB05	1,161		0.00	11,973.12										

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 ECP5 Schedule  
 Progress Bar  
 Critical Activity

ECP5

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year							
									FY04	FY05	FY06	FY07	FY08	FY09	FY10	
1203-141	Finalize Spec for VVSA	50	16FEB04*	23APR04	96		0.00	18,067.60								
1203-151	Update VVSA Drawings	102*	01DEC03A	23APR04	96	25	31,850.78	127,403.10								
1203-161	Finalize & Sign All ICDs	71*	17NOV03A	26FEB04	132	25	3,860.70	15,442.80								
1203-181	Start Thermal Analyses	82*	01NOV03A	30JAN04A		100	23,012.76	23,012.76								
1203-191	Start Eddy Current Analyses	87*	03NOV03A	30JAN04A		100	3,536.05	3,536.05								
1203-202	Start Port Nozzle Analysis	63*	02JAN04A	30JAN04A		100	5,142.40	5,142.40								
1203-232	Structural Analysis of Vac Vsl	65	02FEB04	30APR04	96		0.00	77,136.00								
1203-233	Check structural analysis	10	03MAY04	14MAY04	96		0.00	12,856.00								
1203-234	Perform Global Seismic Analysis	30	01MAR04*	09APR04	1,404		0.00	38,568.00								
1203-235	Perform Local Thermal Analysis	20	02MAR04*	29MAR04	110		0.00	15,442.80								
1203-236	Check Local Thermal Analysis	20	30MAR04	26APR04	110		0.00	15,442.80								
1203-237	Perform Thermal-Hydraulic Analysis VV htg/clng	20	01MAR04*	26MAR04	111		0.00	10,295.20								
1203-238	Check Thermal-Hydraulic Analysis VV htg/clng	20	29MAR04	23APR04	111		0.00	12,856.00								
1203-239	Perform Analysis of VV Supports	20	30MAR04*	26APR04	100		0.00	10,295.20								
1203-240	Check Analysis of VV Supports	10	27APR04	10MAY04	100		0.00	5,147.60								
1203-201	Update/Perform FMECA Analyses	44*	02FEB04*	01APR04	107		0.00	6,428.00								
1203-241	Check FMECA Analyses	20	02APR04*	29APR04	107		0.00	0.00								
1203-261	Provide Input to FP assy, Install & Startup Plan	128*	01OCT03A	31MAR04	1,401	75	9,651.75	12,869.00								
1203-291	Update Design Basis Document	20*	21APR04*	18MAY04	94		0.00	2,059.04								
1203-301	Update Cost and Schedule Estimates	20*	21APR04*	18MAY04	94		0.00	3,088.56								
1203-321	Assemble FDR Drawing Package, Check & Promote	32*	01APR04*	14MAY04	96		0.00	4,118.08								
1203-331	Prepare Presentations	15	26APR04*	14MAY04	96		0.00	12,869.00								
125-001	Title I design WBS 125 local I&C	43	22MAR04*	19MAY04	93		0.00	10,192.25								
1203-341	Conduct VVSA FDR	0		19MAY04	93		0.00	0.00								
1203-311	Prepare Final Design ECP	10	20MAY04*	03JUN04	1,366		0.00	3,088.56								
1203-361	Final Design of Insulation and Heating/Cooling	230*	03NOV03A	28FEB05	265	30	9,338.12	31,127.06								
1203-271	Develop Assembly & Installation Procedures	167*	01JUL04*	28FEB05	265		0.00	44,133.45								
122-011	Title II design WBS 122 Thermal insulation	167*	01JUL04*	28FEB05	265		0.00	42,921.58								
124-011	Title II design WBS 124 VV supports	167*	01JUL04*	28FEB05	265		0.00	21,574.43								
125-011	Title II design WBS 125 local I&C	167*	01JUL04*	28FEB05	265		0.00	10,787.22								
1203-900	Comprehensive WBS 12 FDR	0		28FEB05	265		0.00	0.00								
<b>Vacuum Vessel Vendor Selection</b>																
121-6-6	Finalize tech Doc package & Resolve chits	15	06MAY04	26MAY04	193		0.00	1,286.90								
121-6-8	Evaluate and Select VV Production Vendor	16	24JUN04	16JUL04	193		0.00	2,901.90								
121-6-83	Negotiate with vendor	9	19JUL04	29JUL04	193		0.00	1,615.00								

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 ECP5 Schedule  
 Progress Bar  
 Critical Activity

ECP5

**NCSX Baseline (ECP5)**  
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10						
									FY04							FY05							FY06							FY07							FY08							FY09							FY10						
121-6-85	DOE Approve VV Selection & contract	11	30JUL04	13AUG04	193		0.00	0.00																																																	
121-6-9	Award VV Production Vendor (Phase funded)	0		13AUG04	193		0.00	0.00																																																	
121-36-9.2	Release for Fabrication	0		20AUG04	193		0.00	0.00																																																	
<b>Job:1204 - WBS 12 Title III, Procure,Fabricate</b>																																																									
121-031	VVSA Title III engr	639*	21MAY04*	22NOV06	736		0.00	238,831.20																																																	
121-038	FAB VVSA ba=6/2.27/0 BO=4/2.17/3	303	23AUG04	28OCT05	198		0.00	2,955,260.87																																																	
121-038P	FAB VVSA NB ports	303	23AUG04	28OCT05	314		0.00	150,367.60																																																	
122-030	SPEA VV Thermal Insulation	65	05JUL05	03OCT05	112		0.00	0.00																																																	
122-036.9	Award VV Insulation	0		03OCT05*	112		0.00	0.00																																																	
122-037	VV Insulation Procurement WBS 122	105	04OCT05*	03MAR06	112		0.00	110,493.05																																																	
122-031	Title III engr WBS 122	176	24JUN05	03MAR06	922		0.00	21,460.89																																																	
123-030	SPEA VV Heating & Cooling	65	01JUL05	30SEP05	113		0.00	0.00																																																	
123-036.9	Award VV Heating/Cooling Distribution	0		30SEP05	113		0.00	0.00																																																	
123-037	VV Heating/Cooling Distr Procurement WBS 123	65	03OCT05*	05JAN06	113		0.00	321,760.80																																																	
123-041	VV Heating/Cooling Fab/Assy WBS 123	40	06JAN06	02MAR06	113		0.00	14,744.50																																																	
123-031	Title III engr WBS 123	135	24JUN05	05JAN06	963		0.00	8,194.72																																																	
124-030	SPEA VV Supports	65	08JUL05	06OCT05	138		0.00	0.00																																																	
124-036.9	Award VV Supports	0		06OCT05	138		0.00	0.00																																																	
124-037	VV Supports Procurement WBS 124	100	07OCT05*	01MAR06	138		0.00	31,450.50																																																	
124-041	VV Supports Fab/assy WBS 124	20	02MAR06	29MAR06	138		0.00	660.60																																																	
124-031	Title III engr WBS 124	165	08JUL05	01MAR06	924		0.00	8,940.72																																																	
125-015	Title III design Local I&C	61	03OCT05*	29DEC05	238		0.00	2,608.38																																																	
125-037	Procurement Local I&C	60	04OCT05*	29DEC05	238		0.00	3,132.00																																																	
<b>13 - Conventional Coils</b>																																																									
<b>Job: 1301 - Conventional Coils Prel Design-KALISH</b>																																																									
<b>FY03 Actual Cost</b>																																																									
1301-0002	Apr-Sept MIE Cost ORNL	64*	01APR03A	30SEP03A		100	0.00	0.00																																																	
1301-0003	Apr-Sept MIE Cost PPPL	64*	01APR03A	30SEP03A		100	91,660.00	91,660.00																																																	
1402-004	Subcontract analysis support for PDR	41*	01OCT03A	26NOV03A		100	5,096.00	5,096.00																																																	
1402-005	VV/MCC PDR support	37*	01OCT03A	31OCT03A		100	4,178.20	4,178.20																																																	
1301-100	Prepare Scope Sheet to define interfaces	76*	03NOV03A	27FEB04	1,410	10	964.20	9,642.00																																																	
1301-105	Prepare Interface Dwg for ICD's	92	01DEC03A	15APR04	140	50	2,410.50	4,821.00																																																	
1301-110	Finalize ICDs	10	16APR04	29APR04	140		0.00	4,821.00																																																	
1301-115	Update design Basis Document	11	01APR04*	15APR04	150		0.00	7,231.50																																																	

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04												FY05												FY06												FY07												FY08												FY09												FY10											
1301-120	Finalize SRD	11	01MAR04*	15MAR04	173		0.00	4,821.00	Kalish= 30																																																																																			
1301-140	Complete Draft SOW	10	02JAN04A	15JAN04A		100	4,821.00	4,821.00	Kalish= 30																																																																																			
1301-145	Post Draft SOW on WEB to Solicit Vendr Input	2	16JAN04A	19JAN04A		100	1,285.60	1,285.60	Kalish=30																																																																																			
1301-150	Vendor Responses	60*	02FEB04*	23APR04	144		0.00	7,231.50	Kalish= 45																																																																																			
1301-155	Trim Coil Layouts	59*	01OCT03A	23DEC03A		100	55,762.90	55,762.90	Kalish= 35 ;Rushinski= 312																																																																																			
1301-160	Trim Coil Leads	98*	01DEC03A	23APR04	144	100	2,743.47	7,070.80	Kalish= 4 ;Rushinski= 40																																																																																			
1301-165	PF1-PF3 Support System Layouts	15	01DEC03A	30JAN04A		100	21,373.10	21,373.10	Kalish= 13 ;Rushinski= 120																																																																																			
163-001	Title I design CS sprt struc	98*	01DEC03A	23APR04	144		22,647.82	58,370.66	ORNLEM=34;Kalish=212;Rushinski=124																																																																																			
1301-170	New Lead Details	10	01DEC03A	23DEC03A		100	14,141.60	14,141.60	Kalish= 8 ;Rushinski= 80																																																																																			
1301-175	Iterate & Finalize Design	86*	02JAN04A	30APR04	139	30	8,870.64	29,568.80	Kalish= 24;Rushinski= 160																																																																																			
1301-180	Update ANSYS model & structure	113*	03NOV03A	20APR04	144	50	4,178.20	8,356.40	Kalish= 5 ;MYATT=47																																																																																			
1301-185	FEA Analysis Coils,Stress deflection	98*	01DEC03A	23APR04	144	50	6,186.95	12,373.90	Kalish= 7 ;MYATT=70																																																																																			
1301-190	FEA Analysis PF Supports,Stress Deflection	3*	21APR04	23APR04	144		0.00	12,373.90	Kalish= 7 ; MYATT=70																																																																																			
1301-195	Seismic Analysis	15	26NOV03A	26NOV03A		N/R	12,373.90	12,373.90	Kalish= 7 ;MYATT= 70																																																																																			
1301-125	Update Cost and Schedule	55*	09FEB04*	23APR04	144		0.00	9,642.00	Kalish= 60																																																																																			
1301-130	Prepare for PDR	6	23APR04	30APR04	139		0.00	7,713.60	Kalish= 48																																																																																			
133-010	Title I design WBS 134 Conv Coil I&C	40	01MAR04*	23APR04	422		0.00	14,784.40	Kalish =92hr ;																																																																																			
1301-135	PDR	0		30APR04*	139		0.00	0.00																																																																																				
<b>Job: 1303 - WBS 13 Final Design -KALISH</b>																																																																																												
131-011	Title II design WBS 131 TF coils	106*	03MAY04*	30SEP04	139		0.00	100,189.87	Rushinski=290;Kalish=275;ornlem=73																																																																																			
131-012	WBS 13 TF FDR	0		30SEP04	139		0.00	0.00																																																																																				
141-011	Title II design WBS 132 PF coils	249	01OCT04*	30SEP05	187		0.00	167,006.83	Rushinski=732;Kalish=439;ornlem=109																																																																																			
163-011	Title II design CS sprt struc	249	01OCT04*	30SEP05	187		0.00	53,216.38	ORNLEM=34;Kalish=212;Rushinski=124																																																																																			
133-011	Title II design WBS 134 Conv Coil I&C	125	06APR05	30SEP05	187		0.00	15,198.40	Kalish =92hr ;																																																																																			
184-011	Title II design WBS 133 Ext trim coils	125	06APR05*	30SEP05	259		0.00	39,983.57	Rushinski=114;Kalish=141;ornlem=31																																																																																			
141-012	WBS 13 PF/CS SPRT FDR	0		30SEP05	187		0.00	0.00																																																																																				
<b>Job: 1304 - WBS 13 Procure/Fab/Title III-KALISH</b>																																																																																												
<b>TF Coils</b>																																																																																												
131-034	Bid & Award TF Coils	45	20OCT04*	23DEC04	126		0.00	0.00																																																																																				
131-035	TF Coils Awarded	0	17JAN05*		117		0.00	0.00																																																																																				
131-037	TF Coil Procurement [A/1]	425	17JAN05	15SEP06	117		0.00	1,233,928.97	41=500\$K ; 4e = \$551.99k; 35=02\$K ;																																																																																			
131-037A	TF Coil cost correction	241	06OCT05	15SEP06	117		0.00	81,707.61	4e = \$77.01k;																																																																																			
131-038	All TF Coils Delivered	0		15SEP06	117		0.00	0.00																																																																																				
131-031	Title III engr	433*	13JAN05*	29SEP06	761		0.00	130,456.04	Kalish=666hr; ornlem=62;Rushinski=96																																																																																			

Run Date 24FEB04 10:53

ECP5 Schedule
   
 Progress Bar
   
 Critical Activity

ECP5

**NCSX Baseline**  
**(ECP5)**  
**First Plasma May 2008**

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Rev B  
 WBS 12-2/18; WBS 13- 2/19  
 WBS14- 2/20; WBS 7 -2/20

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10						
<b>PF Coils</b>																																																									
141-035	Bid & Award PF Coils	45	30JAN06	31MAR06	154		0.00	0.00																																																	
141-036	PF Coils Awarded	0	03APR06*		154		0.00	0.00																																																	
143-037	PF 4 Procurement [A/1]	155	03APR06	08NOV06	158		0.00	224,756.29																																																	
144-037	PF 5 Procurement [A/1]	155	03APR06	08NOV06	158		0.00	239,130.45																																																	
145-037	PF 6 Procurement [A/1]	155	03APR06	08NOV06	158		0.00	211,469.78																																																	
141-037	PF OH Solenoid Procurement PF1 [A/1]	205	01MAY06*	26FEB07	134		0.00	173,241.98																																																	
141B-037	PF OH Solenoid Procurement PF2 [A/1]	205	01MAY06*	26FEB07	134		0.00	138,102.22																																																	
142-037	PF OH Solenoid Procurement PF3 [A/1]	205	01MAY06*	26FEB07	134		0.00	146,668.65																																																	
141-031	Title III engr WBS 132	268	30JAN06*	22FEB07	665		0.00	141,578.37																																																	
<b>CS Support Structure</b>																																																									
163-035	Bid & Award CS Support Struct	45	21DEC05	01MAR06	132		0.00	0.00																																																	
163-036.9	Award CS Support Structure	0		01MAR06*	132		0.00	0.00																																																	
163-037	CS Support Structure Procurement/Fab	249	02MAR06*	28FEB07	132		0.00	195,207.78																																																	
163-015	Title III design CS sprt struc	294	21DEC05	28FEB07	661		0.00	57,061.93																																																	
<b>Trim Coils</b>																																																									
184-035	Bid & Award Ext Trim Coils	45	01AUG05	03OCT05	258		0.00	0.00																																																	
184-036	Award External Trim Coils	0		03OCT05*	258		0.00	0.00																																																	
184-037	External Trim Coil Procurement/Fab	87	04OCT05	13FEB06	258		0.00	275,015.70																																																	
184-015	Title III WBS 133 Rxt Trim Coils	147	01AUG05	06MAR06	907		0.00	57,039.77																																																	
<b>TF/PF Load I&amp;C</b>																																																									
133-015	Title III WBS 134 Conv Coil I&C	130	05JUN06*	07DEC06	714		0.00	3,696.20																																																	
133-037	Conv Coil I&C WBS 134 Proc & Install	130	05JUN06*	07DEC06	185		0.00	66,610.52																																																	
<b>14 - Modular Coils</b>																																																									
<b>Job: 1401 - Mod Coil Prel.Dsn-WILLIAMSON</b>																																																									
<b>FY03 Actual Cost</b>																																																									
1401-002	Apr-Sept MIE Cost ORNL	64*	01APR03A	30SEP03A		100	303,040.00	303,040.00																																																	
1401-003	Apr-Sept MIE Cost PPPL	64*	01APR03A	30SEP03A		100	0.00	0.00																																																	
<b>Job: 1402 - Mod.Coil Analyses-WILLIAMSON</b>																																																									
<b>FY03 Actual Cost</b>																																																									
1402-002	Apr-Sept MIE Cost ORNL	64*	01APR03A	30SEP03A		100	84,220.00	84,220.00																																																	
1402-003	Apr-Sept MIE Cost PPPL	64*	01APR03A	30SEP03A		100	154,920.00	154,920.00																																																	
<b>Job: 1403 - WBS 14 Final Design-WILLIAMSON</b>																																																									
<b>PDR/PBR Prep</b>																																																									
1403-04	Plan response to PDR chits	23	01OCT03A	31OCT03A		100	2,573.80	2,573.80																																																	
1403-05	Prepare FY04 WP / WAF / Checklists	21	08OCT03A	14OCT03A		100	2,573.80	2,573.80																																																	
1403-06	Prepare documents for PDR closeout	52*	15OCT03A	24DEC03A		100	10,295.20	10,295.20																																																	

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**NCSX Baseline (ECP5)**  
 First Plasma May 2008  
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Rev B  
 WBS 12-2/18; WBS 13- 2/19  
 WBS14- 2/20; WBS 7 -2/20



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year							
									FY04	FY05	FY06	FY07	FY08	FY09	FY10	
1403-07	Prepare PBR documentation	19*	31OCT03A	18NOV03A		100	2,573.80	2,573.80	Williamson=20							
1403-08	Performance Baseline Review	0		18NOV03A		100	0.00	0.00								
<b>Requirements/Config and Interfaces</b>																
1403-10	Review, revise, and approve SRD	95*	15OCT03A	27FEB04	142	60	1,544.28	2,573.80	Williamson=20							
1403-11	Prepare assembly / interface drawings for ICDS	94*	15OCT03A	26FEB04	137	60	6,177.12	10,295.20	Hargrove,Lovett,=80							
1403-12	Finalize and approve all ICDS	10*	02FEB04*	13FEB04	146	60	3,088.56	5,147.60	Williamson=40							
1403-13	Finalize winding pack ref xsec, conductor dims	45*	15OCT03A	26NOV03A		100	2,573.80	2,573.80	Williamson=20							
1403-14	Revise winding form and windings/asm models	75*	15OCT03A	30JAN04A		100	41,309.49	41,309.49	Hargrove,Williamson,Lovett=320							
1403-15	Prepare winding form asm / detail drawings	82*	03NOV03A	27FEB04	1,434	70	28,826.56	41,180.80	Lovett,Hargrove,=320							
<b>Analysis - Thermal &amp; Electrical</b>																
1403-21	Document electrical, insulation parameters	56*	15OCT03A	19DEC03A		100	2,573.80	2,573.80	Williamson=20							
1403-22	Update thermal analysis to current WP design	51*	22OCT03A	19DEC03A		100	5,147.60	5,147.60	Williamson=40							
1403-23	Update thermo-hydraulic analysis of coils	58*	01DEC03A	23FEB04	155	10	642.80	6,428.00	Dahlgren=40							
1403-25	Check EM loads calculation for ref scenarios	43*	02FEB04*	31MAR04	128		0.00	5,147.60	Williamson=40							
1403-26	Perform scan of EM fault load conditions	85*	01DEC03A	31MAR04	128	30	3,088.56	10,295.20	Williamson=80							
1403-26.1	Check thermal & electrical calculations	43*	02FEB04*	31MAR04	128		0.00	10,295.20	Williamson=80							
1403-27	Prepare thermal, electrical analysis report	63	02FEB04*	28APR04	108		0.00	20,590.40	Williamson=160							
<b>Analysis - Structural</b>																
141TITILE2P	PDR #1,4,26 Access,Tolerance Budget,Bolting	78*	02FEB04*	19MAY04	1,352		0.00	26,896.21	Ornlem=209							
1403-29	Complete ANSYS model of coil structure asm	140*	15OCT03A	30APR04	106	40	64,280.00	160,700.00	Fan=80+920							
1403-30	Analyze global stress /deflect winding form asm	128*	31OCT03A	30APR04	106	40	6,428.00	16,070.00	Fan=40+60							
1403-31	Analyze stress in bolted connections	65*	02FEB04*	30APR04	106	40	2,571.20	6,428.00	Fan=40							
1403-32	Update MECHANICA model of 3 coil types	95*	15OCT03A	27FEB04	151	30	3,088.56	10,295.20	Freudenberg=80							
1403-33	Anlyz wind pack deflect/stress fo thrml, EM lds	43*	02FEB04*	31MAR04	128	30	1,544.28	5,147.60	Freudenberg=40							
1403-34	Analyze and optimize clamp locations	43*	02FEB04*	31MAR04	128	30	1,544.28	5,147.60	Freudenberg=40							
1403-35	Update ABAQUS model 3 coil types w/clamp geom	140*	15OCT03A	30APR04	106	20	3,374.70	16,873.50	Myatt=80+25							
1403-36	Analyze clamps&stress due to thrml, EM loading	83	02FEB04*	26MAY04	88		0.00	10,445.50	Myatt=40+25							
1403-37	Prepare ABAQUS model of coil elec leads region	65*	02FEB04*	30APR04	106		0.00	16,873.50	Myatt=80+25							
1403-38	Analyze stress/deflection in leads	83	02FEB04*	26MAY04	88		0.00	10,445.50	Myatt=40+25							
1403-39	Analyze gravity, equip, seismic loading	75	02FEB04*	14MAY04	96		0.00	6,428.00	Fan=40							
1403-40	Analyze combined loads and fault conditions	23	31MAR04*	30APR04	106		0.00	6,428.00	Fan=40							
1403-40.1	Check Structural Calculations	82	02FEB04*	25MAY04	89		0.00	10,295.20	Williamson=80							
1403-40.1A	Prepare plate element model of coil structure	65*	02FEB04*	30APR04	106		0.00	10,295.20	Williamson=+80							
1403-40.1B	Confirm global deflection/stress, re-inf of shel	64*	03FEB04*	30APR04	106		0.00	10,295.20	Williamson=+80							
1403-40.1C	Check all struct calculkations	54*	17FEB04*	30APR04	106		0.00	10,295.20	Williamson=+80							
1403-40.2A	Develop multi-filament model of all coils	11*	02FEB04*	16FEB04	120		0.00	5,147.60	ORNLEM=+40							

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 ECP5 Schedule  
 Progress Bar  
 Critical Activity

ECP5 **NCSX Baseline (ECP5)** Sheet 7 of 43

**First Plasma May 2008**

Rev B  
WBS 12-2/18; WBS 13- 2/19  
WBS14- 2/20; WBS 7 -2/20

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04 FY05 FY06 FY07 FY08 FY09 FY10											
									Gantt chart area with resource bars and milestones											
1403-40.2B	Confirm Plasma performance & surface quality	10	17FEB04	01MAR04	130		0.00	6,428.00	Ku=+40											
1403-40.2C	Model expected deflections under thermal/EM load	20	17FEB04	15MAR04	120		0.00	10,295.20	ORNLEM=+80											
1403-40.2D	Confirm plasma performance & surface quality	20	16MAR04	12APR04	120		0.00	12,856.00	Ku=+80											
1403-41	Prepare structural analysis report	45*	01MAR04*	30APR04	106		0.00	20,590.40	Williamson=160											
<b>Winding Form FDR Prep</b>																				
1403-43	Incorporate changes due to prototype fabr	55	16FEB04*	30APR04	106		0.00	10,423.89	Williamson, Lovett, Hargrove=80											
1403-44	Prepare final drawings for winding forms, asm	51	20FEB04*	30APR04	106		0.00	82,232.91	Jones, Lovett, Hargrove=640											
1403-45	Check and promote models / drawings	15	15APR04*	05MAY04	103		0.00	41,180.80	Jones, Williamson, Cole, Lovett, Hargrove=320											
1403-46	Update build-to specification / SOW	58	16FEB04*	05MAY04	103		0.00	15,442.80	Williamson=120											
1403-47	Prepare failure modes assessment (FMECA)	58	16FEB04*	05MAY04	103		0.00	15,442.80	Williamson=120											
1403-48	Update design basis document	33	17MAR04*	30APR04	106		0.00	15,442.80	Williamson=120											
1403-49	Update cost / schedule estimates	55	16FEB04*	30APR04	106		0.00	15,442.80	Williamson=120											
1403-49.1	Process ECP for all changes	63	16FEB04*	12MAY04	98		0.00	5,147.60	Williamson=40											
1403-50	Prepare FDR documentation / presentations	9	30APR04*	12MAY04	98		0.00	10,295.20	Williamson=80											
1403-50.1	Release EIO/JPP f/flow solidif & mach simulation	0	01MAR04*		171		0.00	0.00	▼											
1403-50.2	Prepare Prelim Bid Package	15	13APR04	03MAY04	129		0.00	0.00	▼											
1403-50.5	Prelim Bid Package Released	0		03MAY04*	129		0.00	0.00	▼											
1403-51	Final Design Review	0		19MAY04*	93		0.00	0.00	▼											
C-081.1	JOULE MILESTONE #4 - CD-3 Readiness	0		19MAY04	93		0.00	0.00	▼ JOULE MILESTONE #4 CD-3 Readiness: complete preparations for CD-3 determination. 4th QUARTER FY04 (FDR's for WBS 12, 1 & 14 Completed)											
<b>Post FDR Update &amp; Planning</b>																				
1403-53	Resolve FDR comments and recommendations	15	20MAY04	10JUN04	117		0.00	15,442.80	Williamson=120											
1403-54	Final bid package( specs,models,dwgs)	13	24MAY04	10JUN04	117		0.00	20,590.40	Williamson, Lovett, Hargrove, Cole, Jones=160											
C-071	Project eval cost proposals & select vendor	40	02JUL04	27AUG04	117		0.00	0.00	▼											
C-081	Castings-Award Mfg contract (phase funded)	0	30AUG04*		117		0.00	0.00	▼											
<b>Winding and Assembly Design-Prototype (typeC)</b>																				
1403-100	Winding & Insulation Dwgs (8)-Prototype	60	02JAN04A	23APR04	144	24	1,297.20	5,404.98	Lovett= 21 ; Hargrove= 21											
1403-101	Leads & crossover Dwgs (10)-Prototype	60	02JAN04A	23APR04	144	24	1,606.06	6,691.88	Lovett= 26 ; Hargrove= 26											
1403-102	G-10 Filler Dwgs (24)-Prototype	60	02JAN04A	23APR04	144	24	3,891.58	16,214.94	Lovett= 63 ; Hargrove= 63											
1403-103	Clamp Dwgs (5)-Prototype	60	02JAN04A	23APR04	144	24	803.02	3,345.94	Lovett= 13 ; Hargrove= 13											
1403-104	Chill Plate Dwgs (66)-Prototype	60	02JAN04A	23APR04	144	24	10,686.42	44,526.74	Lovett= 173 ; Hargrove= 173											
1403-105	Installation Dwgs (1)-Prototype	60	02JAN04A	23APR04	144	24	185.32	772.14	Lovett= 3 ; Hargrove= 3											
1403-106	Cooling Schematic Dwgs (1)-Prototype	60	02JAN04A	23APR04	144	24	185.32	772.14	Lovett= 3 ; Hargrove= 3											
1403-107	Electrical Schematic Dwgs (1)-Prototype	60	02JAN04A	23APR04	144	24	185.32	772.14	Lovett= 3 ; Hargrove= 3											
1403-108	I&C Dwgs (1) -Prototype	60	02JAN04A	23APR04	144	24	185.32	772.14	Lovett= 3 ; Hargrove= 3											

Run Date	24FEB04 10:53	 ECP5 Schedule  Progress Bar  Critical Activity	ECP5	<b>NCSX Baseline (ECP5)</b> <b>First Plasma May 2008</b>	Sheet 8 of 43	Rev B WBS 12-2/18; WBS 13- 2/19 WBS14- 2/20; WBS 7 -2/20
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04												FY05												FY06												FY07												FY08												FY09												FY10											
1403-60	Update design basis document	30	15MAR04	23APR04	144		0.00	15,442.80	Williamson=120																																																																																			
1403-20	Prototype FDR (Type C Drawings)	0		23APR04	144		0.00	0.00	▼																																																																																			
1403-59	Update build-to specifications	30	26MAY04	08JUL04	142		0.00	15,442.80	Williamson=120																																																																																			
1403-20.1	Prototype Fab Readiness Review	0		08JUL04	142		0.00	0.00	▼																																																																																			
<b>Winding and Assembly Design-Type C</b>																																																																																												
1403-200	Winding & Insulation Dwgs (8)-Type C Updates	20	29JUL04	25AUG04	122		0.00	1,029.52	Lovett= 4 ; Hargrove= 4																																																																																			
1403-201	Leads & crossover Dwgs (10)-Type C Updates	20	29JUL04	25AUG04	122		0.00	1,286.90	Lovett= 5 ; Hargrove= 5																																																																																			
1403-202	G-10 Filler Dwgs (24)-Type C Updates	20	29JUL04	25AUG04	122		0.00	3,088.56	Lovett= 12 ; Hargrove= 12																																																																																			
1403-203	Clamp Dwgs (5)-Type C Updates	20	29JUL04	25AUG04	122		0.00	643.45	Lovett= 3 ; Hargrove= 2																																																																																			
1403-204	Chill Plate Dwgs (66)-Type C Updates	20	29JUL04	25AUG04	122		0.00	8,493.54	Lovett= 33 ; Hargrove= 33																																																																																			
1403-205	Installation Dwgs (1)-Type C Updates	20	29JUL04	25AUG04	122		0.00	257.38	Lovett= 1 ; Hargrove= 1																																																																																			
1403-206	Cooling Schematic Dwgs (1)-Type C Updates	20	29JUL04	25AUG04	122		0.00	257.38	Lovett= 1 ; Hargrove= 1																																																																																			
1403-207	Electrical Schematic Dwgs (1)-Type C Updates	20	29JUL04	25AUG04	122		0.00	257.38	Lovett= 1 ; Hargrove= 1																																																																																			
1403-208	I&C Dwgs (1) -Type C Updates	20	29JUL04	25AUG04	122		0.00	257.38	Lovett= 1 ; Hargrove= 1																																																																																			
1403-58C	Check and promote models / drawings -Type C	20	29JUL04	25AUG04	122		0.00	17,373.15	Cole,Williamson,Lovett,Hargrove,Jones=120																																																																																			
1403-61	Update cost / schedule estimates	30	15JUL04	25AUG04	122		0.00	15,442.80	Williamson=120																																																																																			
1403-62	Prepare FDR documentation / presentations	20	29JUL04	25AUG04	122		0.00	10,295.20	Williamson=80																																																																																			
1403-70	Final Design Review Production Type C	0		25AUG04	122		0.00	0.00	▼																																																																																			
1403-70.05	Update MIT/QA Plans for Type C Winding Fab	20	19NOV04	20DEC04	122		0.00	2,817.40	Williamson=20																																																																																			
1403-70.1	Fab Readiness Review - Production Type C	0		20DEC04	122		0.00	0.00	▼																																																																																			
<b>Winding and Assembly Design-Type A</b>																																																																																												
1403-300	Winding & Insulation Dwgs (8)-Type A	95	14JUL04	24NOV04	128		0.00	5,614.98	Lovett= 21 ; Hargrove= 21																																																																																			
1403-301	Leads & crossover Dwgs (10)-Type A	95	14JUL04	24NOV04	128		0.00	6,951.90	Lovett= 26 ; Hargrove= 26																																																																																			
1403-302	G-10 Filler Dwgs (24)-Type A	95	14JUL04	24NOV04	128		0.00	16,844.96	Lovett= 63 ; Hargrove= 63																																																																																			
1403-303	Clamp Dwgs (5)-Type A	95	14JUL04	24NOV04	128		0.00	3,475.94	Lovett= 13 ; Hargrove= 13																																																																																			
1403-304	Chill Plate Dwgs (66)-Type A	95	14JUL04	24NOV04	128		0.00	46,256.82	Lovett= 173 ; Hargrove= 173																																																																																			
1403-305	Installation Dwgs (1)-Type A	95	14JUL04	24NOV04	128		0.00	802.14	Lovett= 3 ; Hargrove= 3																																																																																			
1403-306	Cooling Schematic Dwgs (1)-Type A	95	14JUL04	24NOV04	128		0.00	802.14	Lovett= 3 ; Hargrove= 3																																																																																			
1403-307	Electrical Schematic Dwgs (1)-Type A	95	14JUL04	24NOV04	128		0.00	802.14	Lovett= 3 ; Hargrove= 3																																																																																			
1403-308	I&C Dwgs (1) -Type A	95	14JUL04	24NOV04	128		0.00	802.14	Lovett= 3 ; Hargrove= 3																																																																																			
1403-58A	Check and promote models / drawings -Type A	15	04NOV04	24NOV04	128		0.00	19,017.45	Cole,Williamson,Lovett,Hargrove,Jones=120																																																																																			
1403-71	Final Design Review Production Type A	0		24NOV04	128		0.00	0.00	▼																																																																																			
1403-71.05	Update MIT/QA Plans for Type C Winding Fab	20	04MAY05	01JUN05	128		0.00	2,817.40	Williamson=20																																																																																			
1403-71.1	Fab Readiness Review - Production Type A	0		01JUN05	128		0.00	0.00	▼																																																																																			
<b>Winding and Assembly Design-Type B</b>																																																																																												
1403-400	Winding & Insulation Dwgs (8)-Type B	95	27DEC04	09MAY05	125		0.00	5,916.54	Lovett= 21 ; Hargrove= 21																																																																																			

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Gantt Chart											
									FY04	FY05	FY06	FY07	FY08	FY09	FY10					
1403-401	Leads & crossover Dwgs (10)-Type B	95	27DEC04	09MAY05	125		0.00	7,325.24	[Gantt Bar] Lovett= 26 ; Hargrove= 26											
1403-402	G-10 Filler Dwgs (24)-Type B	95	27DEC04	09MAY05	125		0.00	17,749.62	[Gantt Bar] Lovett= 63 ; Hargrove= 63											
1403-403	Clamp Dwgs (5)-Type B	95	27DEC04	09MAY05	125		0.00	3,662.62	[Gantt Bar] Lovett= 13 ; Hargrove= 13											
1403-404	Chill Plate Dwgs (66)-TypeB	95	27DEC04	09MAY05	125		0.00	48,741.02	[Gantt Bar] Lovett= 173 ; Hargrove= 173											
1403-405	Installation Dwgs (1)-Type B	95	27DEC04	09MAY05	125		0.00	845.22	[Gantt Bar] Lovett= 3 ; Hargrove= 3											
1403-406	Cooling Schematic Dwgs (1)-Type B	95	27DEC04	09MAY05	125		0.00	845.22	[Gantt Bar] Lovett= 3 ; Hargrove= 3											
1403-407	Electrical Schematic Dwgs (1)-Type B	95	27DEC04	09MAY05	125		0.00	845.22	[Gantt Bar] Lovett= 3 ; Hargrove= 3											
1403-408	I&C Dwgs (1) -Type B	95	27DEC04	09MAY05	125		0.00	845.22	[Gantt Bar] Lovett= 3 ; Hargrove= 3											
1403-58B	Check and promote models / drawings -Type B	15	19APR05	09MAY05	125		0.00	19,017.45	[Gantt Bar] Cole,Williamson,Lovett,Hargrove,Jones=120											
1403-72	Final Design Review Production Type B	0		09MAY05	125		0.00	0.00	[Gantt Bar]											
1403-72.05	Update MIT/QA Plans for Type C Winding Fab	20	13OCT05	09NOV05	125		0.00	2,898.20	[Gantt Bar] Williamson=20											
1403-72.1	Fab Readiness Review - Production Type B	0		09NOV05	125		0.00	0.00	[Gantt Bar]											
142TITL3	Titel III Design-Coil Winding & Assembly	498*	01OCT04*	29SEP06	761		0.00	423,168.36	[Gantt Bar] WILLIAMSON=2524 travel=\$36k											
<b>Job:1404-Mod Coil Winding Form R&amp;D-HEITZENROEDER</b>																				
<b>FY03 Actual Cost</b>																				
1404-002	Apr-Sept YTD MIE Cost ORNL	64*	01APR03A	30SEP03A		100	100,220.00	100,220.00	[Gantt Bar]											
1404-003	Apr-Sept YTD MIE Cost PPPL	64*	01APR03A	30SEP03A		100	64,670.00	64,670.00	[Gantt Bar]											
<b>Prototype Design Issues</b>																				
1404-109.J	JOULE MILESTONE #1-Authorize Prototype Fab	0		20OCT03A			0.00	0.00	[Gantt Bar] JOULE MILESTONE #1 Authorize Prototype Fabrication - Modular Coil Winding Forms and Vacuum Vessel. 1st QUARTER FY04											
1404-110.J	JOULE MILESTONE #3-Prototype Casting Made	0		26MAR04	67		0.00	0.00	[Gantt Bar] JOULE MILESTONE #3 Prototype Casting Made 3rd QUARTER FY04											
1404-65	Fabrication oversight by Project	168*	01OCT03A	26MAY04	1,371	LOE	38,074.78	75,246.60	[Gantt Bar] Nelson,Heitzenroeder,=528											
<b>EIO Subcontract (S04341F)</b>																				
1404-100	EIO-Cost FY03	10	01MAY03A	30SEP03A		100	307,170.24	307,170.24	[Gantt Bar] 41=\$254.28											
1404-110X	EIO-forecast increase	176*	21OCT03A	28JUN04	1,344		132,120.00	293,600.00	[Gantt Bar] 4e=293.6											
1404-68	Authorization by PPPL	0		20OCT03A			0.00	0.00	[Gantt Bar]											
1404-69	Oversight / reporting (4.1 & 4.2)	138*	21OCT03A	04MAY04	1,387		34,883.11	67,865.98	[Gantt Bar] 41=\$ 53.27 k <encumbered FY03>											
1404-70	Process model	27	21OCT03A	26NOV03A		100	44,590.00	44,590.00	[Gantt Bar] 41=\$ 35 k <encumbered FY03>											
1404-71	Build pattern	42*	01DEC03A	21JAN04A		100	44,590.00	44,590.00	[Gantt Bar] 41=\$ 35 k <encumbered FY03>											
1404-72	EIO Make casting	16*	22JAN04A	12FEB04	98		19,485.83	44,590.00	[Gantt Bar] 41=\$ 35 k <encumbered FY03>											
1404-73	Inspect, repair, heat treat	31*	13FEB04	26MAR04	140		0.00	44,590.00	[Gantt Bar] 41=\$ 35 k <encumbered FY03>											
1404-74	Ship, setup for machining	10	26APR04	07MAY04	120		0.00	60,897.20	[Gantt Bar] 41=\$ 47.8 k <encumbered FY03>											
1404-75	Perform machining	30*	10MAY04*	21JUN04	120		0.00	74,274.10	[Gantt Bar] 41=\$ 4.65k; 4e=\$ 68.35 k <encumbered FY03>											
1404-76	Final inspection	2	22JUN04	23JUN04	120		0.00	7,500.00	[Gantt Bar] 4e=\$ 7.5 k <encumbered FY03>											

Run Date 24FEB04 10:53


  
 ECP5 Schedule  
 Progress Bar  
 Critical Activity

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04												FY05												FY06												FY07												FY08												FY09												FY10											
1404-77	Ship to PPPL	3	24JUN04	28JUN04	120		0.00	2,570.00																																																																																				
1404-77.1	EIO-Deliver Prototype	0		28JUN04	120		0.00	0.00																																																																																				
1404-78	Flow solid & machine simulation for Production	34*	13MAY04*	30JUN04	118		0.00	40,000.00																																																																																				
1404-79	Final MIT/QA plan	30	20MAY04	01JUL04	117		0.00	19,990.00																																																																																				
1404-80	Fixed price proposal	30	20MAY04	01JUL04	117		0.00	11,960.00																																																																																				
<b>JP Pattern Subcontract (S04340F)</b>																																																																																												
1404-200	JPP- cost FY03	10	01MAY03A	30SEP03A		100	92,170.40	92,170.40																																																																																				
1404-210X	PPPL add'l-forecast increase	105*	02FEB04	28JUN04	1,344		0.00	200,000.00																																																																																				
1404-82	Authorization by PPPL to begin Fabrication	0		20OCT03A			0.00	0.00																																																																																				
1404-83	Oversight / reporting	138*	21OCT03A	04MAY04	1,387	LOE	30,030.78	58,425.64																																																																																				
1404-84	Process model	125*	21OCT03A	15APR04	1,400		35,465.20	62,438.74																																																																																				
1404-85	Build pattern	72*	01DEC03A	12MAR04	67		6,619.70	33,098.52																																																																																				
1404-86	JPP Make casting	10*	15MAR04	26MAR04	67		0.00	16,434.60																																																																																				
1404-87	Inspect, repair, heat treat	22*	29MAR04	27APR04	118		0.00	119,998.06																																																																																				
1404-88	Ship, setup for machining	3*	28APR04	30APR04	118		0.00	1,579.76																																																																																				
1404-89	Perform machining	37*	03MAY04	23JUN04	118		0.00	281,450.26																																																																																				
1404-90	Final inspection	3*	24JUN04	28JUN04	118		0.00	8,710.00																																																																																				
1404-91	Ship to PPPL	2	29JUN04	30JUN04	118		0.00	3,120.00																																																																																				
1404-91.1	JPP-Deliver Prototype	0		30JUN04	118		0.00	0.00																																																																																				
1404-92	Flow solid & machine simulation for Production	34*	13MAY04*	30JUN04	118		0.00	40,000.00																																																																																				
1404-93	Final MIT/QA plan	30	20MAY04	01JUL04	117		0.00	8,170.00																																																																																				
1404-94	Fixed price proposal	30	20MAY04	01JUL04	117		0.00	12,150.00																																																																																				
<b>Job: 1405-Mod Coil Winding R&amp;D Prep-CHRZANOWSKI</b>																																																																																												
<b>FY03 Actual Cost</b>																																																																																												
1405-002	Apr-Sep YTD MIE Cost ORNL	64*	01APR03A	30MAY03A			0.00	0.00																																																																																				
1405-003	Apr-Sep YTD MIE Cost PPPL	64*	01APR03A	30MAY03A			168,070.00	168,070.00																																																																																				
<b>Job: 1406 - Mod. Coil Winding R&amp;D-CHRZANOWSKI</b>																																																																																												
<b>FY03 Actual Cost</b>																																																																																												
1406-0002	Apr-Sep YTD MIE Cost ORNL	64*	01APR03A	30SEP03A		100	0.00	0.00																																																																																				
1406-0003	Apr-Sep YTD MIE Cost PPPL	64*	01APR03A	30SEP03A		100	831,120.00	831,120.00																																																																																				
<b>Oversight &amp; Supervision</b>																																																																																												
1406-000	Supervision & Oversight	180*	01OCT03A	22JUN04	1,312	LOE	51,458.88	117,218.40																																																																																				
1406-047	Prepare R&D report	17	23JUN04	16JUL04	1,312		0.00	0.00																																																																																				
1406-048	Testing & Strain Gauge Design	20	01OCT03A	31OCT03A		100	24,253.50	24,253.50																																																																																				
<b>Keystone R&amp;D</b>																																																																																												
1406-001	Purchase 10 spools conductor (twisted racetrack)	40*	03NOV03A	23DEC03A		100	7,644.00	7,644.00																																																																																				

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year						
									FY04	FY05	FY06	FY07	FY08	FY09	FY10
1406-003	Purchase 8 spools conductor (long twisted windin	40*	03NOV03A	23DEC03A		100	7,644.00	7,644.00							
1406-005	Purchase epoxy & Insulation	76*	03NOV03A	27FEB04	213	50	4,693.68	6,370.00							
1406-010	Keystone Test for New Conductor	31*	02JAN04A	13FEB04	194	80	4,915.20	6,144.00							
1406-011	Purchase add'l copper Conductor	35	02FEB04	19MAR04	1,385		0.00	8,918.00							
1406-012	Repeat Keystone Test for New Conductor	10	22MAR04	02APR04	1,385		0.00	6,144.00							
<b>Twisted Racetrack Design (Williamson)</b>															
1406-097	Verify Conductor Dims	3	01OCT03A	03OCT03A		100	2,573.80	2,573.80							
1406-098	Complete Drawings of Casting	21	13OCT03A	26NOV03A		100	15,442.80	15,442.80							
1406-099	Review/Approve Casting Drawings	10	26NOV03A	26NOV03A		100	15,442.80	15,442.80							
1406-101	Prepare Clamp & Chill Plate detail Drawings	80	24NOV03A	19MAR04	118	60	12,354.24	20,590.40							
1406-102	Review/Approve Clamp & Chill Plate Dwgs	10	22MAR04	02APR04	118		0.00	15,442.80							
1406-103	Twisted Racetrack FDR	0		02APR04	118		0.00	0.00							
1406-103.1	Twisted Racetrack Fab Readiness Review	0		16APR04	118		0.00	0.00							
1406-104	Prepare Draft of Coil Test Plan	99*	01OCT03A	27FEB04	1,410	30	1,544.28	5,147.60							
1406-105	Prepare ANSYS thermal analysis model	3	31OCT03A	31OCT03A		100	2,573.80	2,573.80							
1406-106	Analyze Thermal Behavior due to pulse	3	31OCT03A	31OCT03A		100	2,573.80	2,573.80							
1406-107	Calculate EM Loads due to max current	3	03NOV03A	26NOV03A		100	5,147.60	5,147.60							
1406-108	Prep MECHANICA Struct Analysis Model	3	03NOV03A	26NOV03A		100	5,147.60	5,147.60							
1406-109	Analyze Stress/deflection due to cooldown,pulse	5	03NOV03A	26NOV03A		100	5,147.60	5,147.60							
1406-110	Finalize, Approve coil test plan	58*	01DEC03A	27FEB04	231	30	3,088.56	10,295.20							
<b>Twisted Racetrack Fabrication &amp; Winding (Chrzano)</b>															
1406-014	Bid, Evaluate and Award Casting to EIO or JPP	28	01DEC03A	23DEC03A		100	0.00	0.00							
1406-016	Procure casting from EIO (new scope)	43*	02FEB04	31MAR04	140		0.00	127,387.26							
1406-016.1	Inspect & Measure Casting	10	01APR04	14APR04	140		0.00	0.00							
1406-016.5	PPPL Fabricate chill plates and clamps	30	05APR04	14MAY04	118		0.00	22,992.00							
1406-017	Wind twisted racetrack	20	17MAY04	14JUN04	118		0.00	24,576.00							
1406-018	Mold & VPI twisted racetrack	18	14JUL04	06AUG04	118		0.00	18,432.00							
1406-019	Setup coil in test stand	2	09AUG04	10AUG04	118		0.00	10,224.80							
1406-021	Perform tests	5	11AUG04	17AUG04	118		0.00	30,853.60							
1406-023	Section and Evaluate coil turns	5	18AUG04	24AUG04	118		0.00	0.00							
<b>Conductor Property Testing</b>															
1406-029	Fab New Specimen Molds	60*	01DEC03A	25FEB04	161	35	8,047.20	22,992.00							
1406-030	Fab & Pot samples	30*	26JAN04A	05MAR04	154	15	5,529.60	36,864.00							
1406-031	Prep fixtures and test equipt	67*	03NOV03A	16FEB04	147	50	34,617.00	69,234.00							
1406-032	Test samples	31	17FEB04*	30MAR04	147		0.00	64,032.00							

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10																											
1406-033	Prepare Test report	15	17MAR04*	06APR04	147		0.00	12,856.00	Zatz=80																																																																					
1406-034	Conductor/Insulation FDR	0		13APR04*	142		0.00	0.00	▼																																																																					
<b>"inchworm" Twisted Winding</b>																																																																														
1406-119	Join straight sections w/2 end loops	79*	01OCT03A	30JAN04A		100	31,590.00	31,590.00	welder=150; machinist=150																																																																					
1406-120	Wind Conductor	19*	30JAN04A	25FEB04	1,412		976.90	18,432.00	em/tb=240																																																																					
1406-040	JOULE MILESTONE #2-Begin winding on 3D surface	0	30JAN04A				0.00	0.00	JOULE MILESTONE #2 Initiate Winding Process on a 3D Surface & assess Implications f/ Design and Fabrication. 2nd QUARTER FY04																																																																					
<b>Job: 1407 -Mod Coil Winding Facility-CHRZANOWSKI</b>																																																																														
<b>FY03 Actual Cost</b>																																																																														
1407-001	Apr-Sep YTD MIE Cost PPPL	64*	01APR03A	30SEP03A		100	267,550.00	267,550.00																																																																						
<b>Oversight and Supervision</b>																																																																														
1407-002	Winding Facility, Tooling, Materials Oversight	186*	01OCT03A	30JUN04	1,323	LOE	82,190.84	193,390.20	Chrzanowski= 432; Meighan=518 Rafopoulos=432																																																																					
1407-003	Winding Facility, Tooling, Design	250*	01OCT03A	30SEP04	1,259	LOE	43,016.70	136,128.80	PPPL DESIGN=1294 hrs																																																																					
<b>Autoclave, Turning Fixture &amp; other components</b>																																																																														
1407-005	Domes & cylinder Fab & Deliver (PE4226)	18	01DEC03A	23DEC03A		100	20,167.42	20,167.42	41=\$15,825 (PE 4226)																																																																					
1407-006.2	Blower/Elec HW- Fab & Deliver (PE 4218)	18	31OCT03A	31OCT03A		100	509.60	509.60	41=\$0.4k (PE 4218)																																																																					
1407-008	Remaining Autoclave components-Deliver	49	01OCT03A	09MAR04	182	90	10,319.40	11,466.00	41=\$9,000																																																																					
1407-011	Fabricate Autoclave	128*	01OCT03A	08APR04	160	60	97,822.08	163,036.80	em/sm (machinist)=288; em/tb=1728																																																																					
1407-012	Autoclave PTP	5	09APR04	15APR04	160		0.00	9,216.00	em/tb=120																																																																					
1407-100	Fabricate turning fixtures and coil supports	145*	01DEC03A	30JUN04	162	30	91,650.00	305,500.00	Machinist=400; em/tb=2600; 41=\$50k																																																																					
1407-100.2	Fabr turning fixt&coil supports **2nd line**	64	01JUL04	30SEP04	211		0.00	179,400.00	em/sm=100,em/tb=1950,41=\$15																																																																					
1407-098	Final Dwgs for winding clamps	58*	01DEC03A	27FEB04	162	30	0.00	0.00																																																																						
1407-099	Bid,Evaluate & Award Winding Clamps?????	16	01MAR04*	22MAR04	162		0.00	0.00																																																																						
1407-110	Fabricate Winding clamp sets (100)	71*	23MAR04*	30JUN04	162		0.00	80,976.00	Machinist=500; em/tb=120; 41=\$15 k																																																																					
1407-110.2	Fabr Winding clamp sets (100)**2nd line**	64	01OCT04*	11JAN05	147		0.00	40,027.50	em/sm=125,em/tb=90,41=\$15																																																																					
1407-115	Fabricate Conductor payout pool system	107*	02FEB04*	30JUN04	162		0.00	94,258.40	Machinist=144; em/tb=864; 41=\$ 10 k																																																																					
1407-115.2	Fabr Conduct payout spool syst ** 2nd line**	64	01JUL04*	30SEP04	211		0.00	66,297.20	em/sm=36,em/tb=648,41=\$10																																																																					
1407-125	Fabricate VPI tanks & equip/components	87*	01MAR04*	30JUN04	162		0.00	63,898.00	41=\$ 17 k; em/tb=500																																																																					
1407-130	Misc tools & equip	87*	01MAR04*	30JUN04	162		0.00	50,960.00	41=\$ 40 k																																																																					
1407-135	Fabricate Coil support structure (2)	87*	01MAR04*	30JUN04	162		0.00	40,388.00	em/tb= 360; 41=\$ 10 k																																																																					
<b>Area Preparation</b>																																																																														
1407-200	Decon TFTR test Cell Crane	20	26NOV03A	26NOV03A		N/R	18,432.00	18,432.00	em/tb=240																																																																					
1407-202	Setup facility stations	55*	16APR04*	02JUL04	160		0.00	116,647.20	ee/sm=228; em/tb=1200																																																																					
1407-204	Build cleanrooms (2) locations	96	16FEB04*	29JUN04	211		0.00	108,650.00	em/tb=1000; 41=\$25k																																																																					
1407-204.2	Build cleanroom (1 add'l) **2nd line**	65*	30JUN04	30SEP04	211		0.00	54,325.00	em/tb=500,41=\$12.5																																																																					

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 ECP5 Schedule  
 Progress Bar  
 Critical Activity

ECP5

**NCSX Baseline**  
**(ECP5)**  
**First Plasma May 2008**

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Rev B  
 WBS 12-2/18; WBS 13- 2/19  
 WBS14- 2/20; WBS 7 -2/20

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year							
									FY04	FY05	FY06	FY07	FY08	FY09	FY10	
<b>Job:1408-Mod Coil Winding Supplies-CHRZANOWSKI</b>																
<b>FY03 Actual Cost</b>																
1408-001	Apr-Sep YTD MIE Cost PPPL	64	01APR03A	30SEP03A		100	29,790.00	29,790.00								
<b>Epoxy</b>																
1408-111	Epoxy -Spec & Requisition	10	14APR04	27APR04	162		0.00	0.00								
1408-113	Epoxy -Bid & Award	30	28APR04	09JUN04	162		0.00	0.00								
1408-115	Epoxy -Delivery for Prototype	20	10JUN04	08JUL04	162		0.00	6,370.00								
1408-117	Epoxy -1st Delivery for Production	20	21DEC04	19JAN05	122		0.00	19,380.00								
1408-119	Epoxy -2nd Delivery for Production	20	21FEB05	18MAR05	125		0.00	19,380.00								
1408-121	Epoxy -3rd Delivery for Production	20	16MAY05	13JUN05	124		0.00	19,380.00								
1408-123	Epoxy -4th Delivery for Production	20	04AUG05	31AUG05	124		0.00	19,380.00								
1408-125	Epoxy -5th Delivery for Production	20	25OCT05	21NOV05	125		0.00	19,575.00								
1408-127	Epoxy -6th Delivery for Production	20	20JAN06	16FEB06	118		0.00	19,575.00								
<b>Insulation for conductor</b>																
1408-101	Insulation-Spec & Requisition	5	14APR04	20APR04	142		0.00	0.00								
1408-103	Insulation-Bid & Award	30	21APR04	02JUN04	142		0.00	0.00								
1408-105	Insulation-Delivery for Prototype	30	03JUN04	15JUL04	142		0.00	3,822.00								
1408-107	Insulation-Delivery for Production	65	16JUL04	15OCT04	166		0.00	83,980.00								
<b>Copper Conductor</b>																
1408-141	Copper Conductor -Spec & Requisition	10	14APR04	27APR04	147		0.00	0.00								
1408-143	Copper Conductor -Bid & Award	30	28APR04	09JUN04	147		0.00	0.00								
1408-145	Copper Conductor -Delivery for Prototype	35	17JUN04	05AUG04	142		0.00	15,288.00								
1408-147	Copper Conductor -Delivery for Production	50	05NOV04	19JAN05	122		0.00	301,036.00								
<b>Chill Plates and Clamps</b>																
1408-131	Chill plates & clamps -Spec & Requisition	10	26APR04	07MAY04	144		0.00	0.00								
1408-133	Chill plates & clamps -Bid & Award	20	10MAY04	07JUN04	144		0.00	0.00								
1408-135	Chill plates & clamps -Deliver Prototype (type C	40	10JUN04	05AUG04	142		0.00	15,288.00								
1408-137	Chill plates & clamps Production Type C	100	26AUG04	19JAN05	122		0.00	92,700.00								
1408-138	Chill plates & clamps Production Type A	100	09FEB05	29JUN05	128		0.00	93,024.00								
1408-139	Chill plates & clamps Production Type B	100	21JUL05	09DEC05	125		0.00	93,473.28								
<b>G-11 Filler</b>																
1408-151	G-11 Filler Fabrication - Prototype (type c)	65	05MAY04	05AUG04	142		0.00	35,547.20								
1408-153	G-11 Filler Fabrication - Production Type C	75	01OCT04	19JAN05	122		0.00	108,300.00								
1408-154	G-11 Filler Fabrication - Production Type A	150	29NOV04	29JUN05	128		0.00	108,300.00								
1408-155	G-11 Filler Fabrication - Production Type B	150	10MAY05	09DEC05	125		0.00	108,876.00								

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Schedule														
									FY04	FY05	FY06	FY07	FY08	FY09	FY10								
<b>Lead hardware</b>																							
1408-161	Lead hardware Fabrication - Prototype (type c)	65	05MAY04	05AUG04	142		0.00	32,630.00															
1408-163	Lead hardware Fabrication - Production Type C	80	22OCT04	16FEB05	122		0.00	51,984.00															
1408-164	Lead hardware Fabrication - Production Type A	80	09MAR05	29JUN05	128		0.00	51,984.00															
1408-165	Lead hardware Fabrication - Production Type B	80	18AUG05	09DEC05	125		0.00	52,502.40															
<b>Other</b>																							
1408-171	Misc supplies/matt's for Prototype	50	26MAY04	05AUG04	142		0.00	5,096.00															
1408-173	Misc supplies/matt's for Production Windings	50	01OCT04*	13DEC04	147		0.00	32,300.00															
1408-181	VPI Supplies for Prototype(mold epoxy,& hardware	50	26MAY04	05AUG04	142		0.00	10,213.60															
1408-183	VPI Supplies -Epoxy & tape for Production 40%	50	20JUL04*	28SEP04	199		0.00	17,836.00															
1408-184	VPI Supplies -Epoxy & tape for Production 60%	50	01OCT04*	13DEC04	1,233		0.00	28,424.00															
1408-185	VPI Supplies -Valves & Tubing 40%	50	20JUL04*	28SEP04	199		0.00	20,384.00															
1408-186	VPI Supplies -Valves & Tubing 60%	50	01OCT04*	13DEC04	1,233		0.00	31,008.00															
<b>Job: 1409 - Mod. Coil Test Stand-GETTELFINGER</b>																							
<b>Test Stand</b>																							
1409-029	Oversight/Supervision	111*	20OCT03A	02APR04	206	LOE	51,198.56	86,048.00															
1409-025	Design Test Stand	66*	20OCT03A	30JAN04A	100		25,248.00	25,248.00															
1409-026	Install Electrical	56*	01JAN04A	19MAR04	206	42	50,939.62	121,284.80															
1409-027	Cryo Line Installation	35	02FEB04*	19MAR04	206		0.00	29,589.00															
1409-028	System Testing	10	22MAR04	02APR04	206		0.00	0.00															
<b>Job: 1410 Mod Coil Prototype Winding-CHRZANOWSKI</b>																							
<b>Prototype Winding</b>																							
141-3-44	Oversight and materials/supplies	186	29MAR04	20DEC04	137		0.00	131,483.38															
141-3-45	Wind & VPI prototype coil (stations 1 thru 5)	87	06AUG04*	09DEC04	137		0.00	184,736.66															
141-3-46	Test prototype coil (station 6)	7	10DEC04	20DEC04	137		0.00	28,850.00															
141-3-45.1	Complete Prototype Winding (SOW 4.9)	0		20DEC04*	137		0.00	0.00															
141-3-45.2	Final Procedures & Process Plan (SOW 4.10)	30	05NOV04	20DEC04	137		0.00	0.00															
<b>Job: 1411 - Modular Coil Casting Fabrication</b>																							
<b>Type 1 Castings</b>																							
172-031	Title III engr	589*	24MAY04*	29SEP06	761		0.00	289,943.89															
172-037	MCWF FAB ba=6/3.22/1.02 BO=4/2.6/1.84	409*	30AUG04	11APR06	117		0.00	5,274,392.53															
C-121	Castings-C-1-1 (1st MCC form delivered)	75	30AUG04	15DEC04	117		0.00	0.00															
C-181	Castings-C-4-1	18	20DEC04	21JAN05	117		0.00	0.00															
C-261	Castings-C-7-2	18	26JAN05	18FEB05	117		0.00	0.00															
C-321	Castings-C-10-2	18	23FEB05	18MAR05	117		0.00	0.00															

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04														
									FY04	FY05	FY06	FY07	FY08	FY09	FY10								
C-401	Castings-C-13-3	18	23MAR05	15APR05	117		0.00	0.00															
C-461	Castings-C-16-3	18	20APR05	13MAY05	117		0.00	0.00															
<b>Type 2 Castings</b>																							
C-101	Castings-Production casting tooling prep type MI	65	16DEC04	25MAR05	154		0.00	0.00															
C-141	Castings-A-2-1	18	18MAY05	13JUN05	117		0.00	0.00															
C-201	Castings-A-5-1	18	14JUN05	08JUL05	117		0.00	0.00															
C-281	Castings-A-8-2	17	13JUL05	04AUG05	117		0.00	0.00															
C-341	Castings-A-11-2	17	09AUG05	31AUG05	117		0.00	0.00															
C-421	Castings-A-14-3	17	06SEP05	28SEP05	117		0.00	0.00															
C-481	Castings-A-17-3	17	03OCT05	25OCT05	117		0.00	0.00															
<b>Type 3 Castings</b>																							
C-102	Castings-Production casting tooling prep type BU	65	28MAR05	27JUN05	201		0.00	0.00															
C-161B	Castings-B-3-1	17	28OCT05	21NOV05	117		0.00	0.00															
C-221B	Castings-B-6-1	17	28NOV05	20DEC05	117		0.00	0.00															
C-301B	Castings-B-9-2	17	23DEC05	24JAN06	117		0.00	0.00															
C-361B	Castings-B-12-2	17	25JAN06	16FEB06	117		0.00	0.00															
C-441B	Castings-B-15-3	17	21FEB06	15MAR06	117		0.00	0.00															
C-501B	Castings-B-18-3 (last MCC form delivered)	17	20MAR06	11APR06	117		0.00	0.00															
<b>Job: 1421 - Type C Winding/VPI</b>																							
<b>Labor</b>																							
171-040	Winding Oversight (LOE)	442	07DEC04*	14SEP06	772		0.00	635,298.88															
171-041	Modular Coil Winding (18 coils) (see detail sch)	391*	20JAN05	08AUG06	117		0.00	3,138,723.18															
171-041CT	PBR Increment for cold testing	353*	15MAR05	08AUG06	117		0.00	430,218.41															
<b>Period 1</b>																							
P1-001	Prep casting C-1-1 (station 1)	12	04JAN05	19JAN05	122		0.00	0.00															
P1-011	Wind coil C-1-1 (station 2)	38	20JAN05*	14MAR05	122		0.00	0.00															
P1-021	VPI, Test & Ship C-1-1 (1st MCC fabr) (sta 4/5/6)	34	15MAR05	29APR05	167		0.00	0.00															
P1-091	Prep casting C-4-1 (station 1)	12	24JAN05	08FEB05	127		0.00	0.00															
P1-101	Wind coil C-4-1 (station 3)	37	16FEB05*	07APR05	122		0.00	0.00															
P1-111	VPI, Test & Ship C-4-1 (station 4/5/6)	34	08APR05	25MAY05	164		0.00	0.00															
<b>Period 2</b>																							
P2-001	Receive casting C7-2	12	21FEB05	08MAR05	129		0.00	0.00															
P2-011	Wind coil BA-7-2 (station 2)	37	15MAR05	04MAY05	125		0.00	0.00															
P2-021	VPI, Test & Ship C-7-2 (station 4/5/6)	34	05MAY05	22JUN05	160		0.00	0.00															
P2-091	Receive casting C-10-2	12	21MAR05	05APR05	124		0.00	0.00															
P2-101	Wind coil C-10-2 (station 3)	37	08APR05	31MAY05	122		0.00	0.00															

Chrzanowski=2302; Meighan=2302  
Viola =288hr ; EM/TB =38,776 -2,732= 36,044hr  
Raftopolous=1305  
Gettelfinger =216hr ; EM/TB =2592 hr  
ee/tb=1296; ee/sm=360; Marsala=288

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year							
									FY04	FY05	FY06	FY07	FY08	FY09	FY10	
P2-111	VPI,Test & Ship C-10-2 (station 4/5/6)	34	01JUN05	19JUL05	157		0.00	0.00								
<b>Period 3</b>																
P3-001	Receive casting C-13-3	12	18APR05	03MAY05	126		0.00	0.00								
P3-011	Wind coil C-13-3 (station 2)	37	05MAY05	27JUN05	125		0.00	0.00								
P3-021	VPI,test & ship C-13-3 (station 4/5/6)	34	28JUN05	15AUG05	153		0.00	0.00								
P3-091	Receive casting C-16-3	12	16MAY05	01JUN05	121		0.00	0.00								
P3-101	Wind coil C-16-3 (station 3)	37	02JUN05	25JUL05	121		0.00	0.00								
P3-111	VPI,test & ship C-16-3 (station 4/5/6)	34	26JUL05	12SEP05	149		0.00	0.00								
<b>Job: 1422 - Type A Winding/VPI</b>																
<b>Period 1</b>																
P1-031	Receive casting A-2-1	12	14JUN05	29JUN05	123		0.00	0.00								
P1-041	Wind coil A-2-1 (station 2)	37	30JUN05	22AUG05	123		0.00	0.00								
P1-051	VPI, Test & Ship A-2-1 (station 4/5/6)	34	23AUG05	10OCT05	144		0.00	0.00								
P1-121	Receive casting A-5-1	12	11JUL05	26JUL05	120		0.00	0.00								
P1-131	Wind coil A-5-1 (station 3)	37	27JUL05	16SEP05	120		0.00	0.00								
P1-141	VPI,Test & Ship A-5-1 (station 4/5/6)	34	19SEP05	03NOV05	141		0.00	0.00								
<b>Period 2</b>																
P2-031	Receive casting A-8-2	12	05AUG05	22AUG05	123		0.00	0.00								
P2-041	Wind coil A-8-2 (station 2)	37	23AUG05	13OCT05	123		0.00	0.00								
P2-051	VPI,Test & Ship A-8-2 (station 4/5/6)	34	14OCT05	02DEC05	137		0.00	0.00								
P2-121	Receive casting A-11-2	12	01SEP05	19SEP05	119		0.00	0.00								
P2-131	Wind coil A-11-2 (station 3)	37	20SEP05	09NOV05	119		0.00	0.00								
P2-141	VPI, test & Ship A-11-2 (station 4/5/6)	34	10NOV05	06JAN06	133		0.00	0.00								
<b>Period 3</b>																
P3-031	Receive casting A-14-3	12	29SEP05	14OCT05	122		0.00	0.00								
P3-041	Wind coil A-14-3 (station 2)	37	17OCT05	08DEC05	122		0.00	0.00								
P3-051	VPI,Test & ship A-14-3 (station 4/5/6)	34	09DEC05	02FEB06	129		0.00	0.00								
P3-121	Receive casting A-17-3	12	26OCT05	10NOV05	118		0.00	0.00								
P3-131	Wind coil A-17-3 (station 3)	37	11NOV05	12JAN06	118		0.00	0.00								
P3-141	VPI,Test & ship A-17-3 (station 4/5/6)	34	13JAN06	01MAR06	125		0.00	0.00								
<b>Job: 1423 - Type B Winding/VPI</b>																
<b>Period 1</b>																
P1-061	Receive casting B-3-1	12	22NOV05	09DEC05	121		0.00	0.00								
P1-071	Wind coil B-3-1 (station 2)	37	12DEC05	08FEB06	121		0.00	0.00								
P1-081	VPI,Test & Ship B-3-1 (station 4/5/6)	34	09FEB06	28MAR06	121		0.00	0.00								
P1-151	Receive casting B-6-1	12	21DEC05	13JAN06	117		0.00	0.00								

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year						
									FY04	FY05	FY06	FY07	FY08	FY09	FY10
P1-161	Wind coil B-6-1 (station 3)	37	16JAN06	07MAR06	117		0.00	0.00							
P1-171	VPI,Test & Ship B-6-1 (station 4/5/6)	34	08MAR06	24APR06	117		0.00	0.00							
<b>Period 2</b>															
P2-061	Receive casting B-9-2	12	25JAN06	09FEB06	120		0.00	0.00							
P2-071	Wind coil B-9-2 (station 2)	37	10FEB06	03APR06	120		0.00	0.00							
P2-081	VPI,Test & Ship B-9-2 (station 4/5/6)	34	04APR06	19MAY06	120		0.00	0.00							
P2-151	Receive casting B-12-2	12	17FEB06	06MAR06	118		0.00	0.00							
P2-161	Wind coil B-12-2 (station 3)	37	08MAR06	27APR06	117		0.00	0.00							
P2-171	VPI,Test & Ship B-12-2 (station 4/5/6)	34	28APR06	15JUN06	117		0.00	0.00							
<b>Period 3</b>															
P3-061	Receive casting B-15-3	12	16MAR06	31MAR06	121		0.00	0.00							
P3-071	Wind coil B-15-3 (station 2)	37	04APR06	24MAY06	120		0.00	0.00							
P3-081	VPI,Test & ship B-15-3 (station 4/5/6)	34	25MAY06	13JUL06	120		0.00	0.00							
P3-151	Receive casting B-18-3	12	12APR06	27APR06	117		0.00	0.00							
P3-161	Wind coil B-18-3 (station 3)	37	28APR06	20JUN06	117		0.00	0.00							
P3-171	Apply Mold, VPI ,Test & ship B-18-3 (last mcc)	34	21JUN06	08AUG06	117		0.00	0.00							
<b>Job: 1431 - Modular Coil Local I&amp;C</b>															
174-001	Title I design WBS 143 Mod coil local I&C	30	03OCT05*	11NOV05	316		0.00	14,027.29							
174-011	Title II design WBS 143 Mod coil local I&C	30	14NOV05	04JAN06	316		0.00	14,027.29							
174-035	Modular Coil local I&C -Procurement	60	05JAN06	29MAR06	321		0.00	17,395.65							
174-036	Modular Coil local I&C -Title III	80	05JAN06	26APR06	884		0.00	5,529.26							
174-037	Modular Coil local I&C -Install	20	15JAN07*	09FEB07	120		0.00	70,223.20							
<b>15 - Structures</b>															
<b>Job: 1501 - Structures Design- Heitzenroeder</b>															
<b>PDR/PBR Task List</b>															
1501-105	Project PDR	1	07OCT03A	07OCT03A		100	0.00	0.00							
1501-109	Prepare FY 04 WP/WAF	20	31OCT03A	31OCT03A		100	12,856.00	12,856.00							
1501-113	Prepare PBR documentation	10	04NOV03A	18NOV03A		100	6,428.00	6,428.00							
1501-117	Performance baseline review	0		18NOV03A		100	0.00	0.00							
<b>Reqmnts,Configuration, Interfaces and PDR</b>															
1501-121	Rqmnts,Config,Interfaces, PDR (summary task)	136*	21OCT03A	30APR04	236	LOE	0.00	0.00							
1501-125	Update drawings & models based on vendor recomb	30	21OCT03A	26NOV03A		100	28,765.30	28,765.30							
1501-129	Develop a SRD design to spec	26*	02FEB04	08MAR04	265		0.00	6,267.30							
1501-133	Prepare a "scope sheet" which defines all interf	82*	03NOV03A	27FEB04	281	90	5,640.57	6,267.30							
1501-137	Prepare assembly & interface drawings for ICDs	30	23FEB04	02APR04	236		0.00	28,765.30							
1501-141	Finalize and approve all ICDs	20	05APR04	30APR04	236		0.00	6,267.30							

Williamson =97hr ;  
Williamson =97hr ;  
41=\$13.33k  
em//sm=16; WILLIAMSON=26  
em//sm=172; em//tb=576

Heitzenroeder=80  
Heitzenroeder=40  
ea//dm=420; Heitzenroeder=390

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04											
									FY04	FY05	FY06	FY07	FY08	FY09	FY10					
1501-145	Prepare assembly drawings for structure / coils	30	08MAR04	16APR04	236		0.00	28,765.30												
1501-149	Update design basis document; address size and w	10	19APR04	30APR04	236		0.00	6,267.30												
1501-157	Perform RAM & ES&H analyses document in design b	19	06APR04	30APR04	236		0.00	6,267.30												
1501-161	Update cost and schedule	10	19APR04	30APR04	236		0.00	6,267.30												
1501-162	PDR Preparation	15	12APR04	30APR04	236		0.00	6,267.30												
1501-165	Perform PDR (jointly with conventional coils)	0		30APR04*	236		0.00	0.00												
<b>Preliminary Design Analyses</b>																				
1501-169	Design Analyses (summary task)	36*	12MAR04	30APR04	236		0.00	0.00	Heitzenroeder=160; 41=\$ 25 k											
1501-173	Update ANSYS model of coils & structure	21	12MAR04	09APR04	236		0.00	10,548.20												
1501-177	Perform structural stress analyses	21	12MAR04	09APR04	236		0.00	10,548.20												
1501-181	Perform structural deflection analyses	21	12MAR04	09APR04	236		0.00	10,548.20												
1501-185	Check EM loads for reference scenarios	21	02APR04	30APR04	236		0.00	10,548.20												
1501-189	Perform EM combined loads & fault conditions	21	02APR04	30APR04	236		0.00	10,869.60												
1501-221	Prepare Failure Modes Assessment (FMECA)	31	19MAR04	30APR04	236		0.00	4,499.60												
<b>Structures Final Design</b>																				
1501-205	Structures FDR (summary task)	144*	03MAY04	23NOV04	236		0.00	0.00	ea/dm=120; Heitzenroeder=344											
1501-197	Update analyses based on PDR recommendations	30	03MAY04	14JUN04	236		0.00	6,106.60												
1501-201	Independent check of EM/ ANSYS analyses	30	15JUN04	27JUL04	236		0.00	6,106.60												
1501-209	Prepare final drawings	42	03MAY04*	30JUN04	254		0.00	18,962.60												
1501-213	Check & promote models / drawings	22	28JUL04	26AUG04	236		0.00	12,534.60												
1501-217	Update build to spec / sow	20	27AUG04	24SEP04	236		0.00	6,106.60												
1501-225	Update design basis document	20	27SEP04	22OCT04	236		0.00	6,243.40												
1501-229	Update cost & schedule estimates	32	11OCT04	23NOV04	236		0.00	6,277.60												
1501-233	Prepare FDR documentation / presentations	32	11OCT04	23NOV04	236		0.00	6,442.80												
1501-237	Prepare ECP for FDR	32	11OCT04	23NOV04	236		0.00	6,442.80												
1501-241	Hold FDR	0		23NOV04	236		0.00	0.00												
<b>Job: 1520-Structures Procure,Fab,Title III</b>																				
1501-245	Prep Spec,Solicit Bids, and Evaluate Bids	65	05MAY05	05AUG05	124		0.00	0.00												
162-036.9	Award Coil Support Assy	0		05AUG05*	119		0.00	0.00												
162-037	WBS 151Coil Support Assy Procurement [A/1]	249	08AUG05	04AUG06	119		0.00	987,052.92	41=500\$k; 4E = 313.98 ; 35=02\$k ;											
162-031	Title III engr WBS 151	249	08AUG05	04AUG06	800		0.00	153,504.56	Heitzenroeder=720;ea/dm=218;omlem=62											
153.037	WBS 153 Support Structure I&C Procurement/Fab	249	03OCT05*	29SEP06	232		0.00	8,464.20	em//sm=12;em//tb=48;41=\$2.52 k											
153.015	Title III design WBS 153 locall&C	249*	03OCT05*	29SEP06	761		0.00	4,648.46	omlem=26; em//sm=8											

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Rev B  
 WBS 12-2/18; WBS 13- 2/19  
 WBS14- 2/20; WBS 7 -2/20

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year							
									FY04	FY05	FY06	FY07	FY08	FY09	FY10	
<b>16 - Coil Services</b>																
<b>161 - LN2 Distribution</b>																
191-001	Title I design WBS 161 LN2 manifolds&pipng	65	01DEC05*	09MAR06	127		0.00	49,812.41								
191-011	Title II design WBS 161 LN2 manifolds&pipng	60	10MAR06	02JUN06	127		0.00	99,769.73								
191-031	Title III engr WBS 161	280	05JUN06*	17JUL07	564		0.00	14,468.81								
191-037	Procurement WBS 161	130	05JUN06*	07DEC06	127		0.00	69,999.49								
191-038	PDR#17	130	08DEC06*	18JUN07	584		0.00	59,974.72								
191-041	LN2 Manifolds & ppg Fab/assy WBS 161	65	08DEC06*	16MAR07	127		0.00	32,986.60								
191-042	PDR #17,25,3	65	08DEC06*	16MAR07	649		0.00	10,512.80								
<b>162 - Electrical Leads</b>																
132-000	PDR #17 & 25	325	30NOV05*	22MAR07	645		0.00	40,162.88								
132-001	Title I design WBS 162 Coil leads	130	01DEC05*	09JUN06	127		0.00	129,613.39								
132-011	Title II design WBS 162 Coil leads	130	12JUN06	14DEC06	127		0.00	133,039.37								
132-015	Title III design WBS 162 Coil leads	60	15DEC06*	16MAR07	649		0.00	16,105.48								
132-037	Coil Leads Procurement WBS 162	60	15DEC06*	16MAR07	127		0.00	302,334.24								
<b>163 - Coil Protection System</b>																
163.001	Title I design WBS 163 Coil protection	65	03OCT05*	11JAN06	905		0.00	39,029.02								
163.011	Title II design WBS 163 Coil protection	40	12JAN06	08MAR06	905		0.00	39,029.02								
<b>17 - Cryostat and Base Support Structure</b>																
<b>Job:1701-Cryostat&amp;Base Sprt Strct Dsn-GETTLFINGER</b>																
<b>FY03 Actual Cost</b>																
1701-001	Apr-Sept MIE Costs PPPL	54	01APR03A	30SEP03A		100	12,180.00	12,180.00								
<b>171 - Cryostat</b>																
151-001	Title I design WBS 171 cryostat shell & struct	100	03MAY04*	22SEP04	171		0.00	110,056.40								
151-002	Cryostat & Base Support Struct PDR	0		22SEP04	171		0.00	0.00								
161-001	Title I design WBS 172 base support struct	100	03MAY04*	22SEP04	171		0.00	50,507.00								
<b>172 - Base Support Structure</b>																
151-011	Title II design WBS 171 cryostat shell & struct	243*	01OCT04*	22SEP05	171		0.00	226,216.90								
151-012	WBS 17 FDR	0		22SEP05	171		0.00	0.00								
151-031	Title III engr	318	15DEC05	28MAR07	641		0.00	30,815.05								
151-036.8	Prep Spec, Solicit bids, and Select Vendor	65	15DEC05*	23MAR06	124		0.00	0.00								
151-036.9	Award Cryostat Procurement	0		23MAR06	124		0.00	0.00								
151-037	Cryostat Procurement [A/1]	249	24MAR06	22MAR07	124		0.00	479,215.43								
161-011	Title II design WBS 172 base support struct	249	23SEP04	22SEP05	171		0.00	54,706.46								

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10						
161-031	Title III engr WBS 172	150	01DEC05	10JUL06	819		0.00	46,651.32																																																	
161-036.8	Prep Spec, Solicit bids, and Select Vendor	65	01DEC05*	09MAR06	124		0.00	0.00																																																	
161-036.9	Award Machine Base&supports Procurement	0		09MAR06	124		0.00	0.00																																																	
161-037	Machine Base&supports Procurement [A/1]	90	10MAR06	17JUL06	124		0.00	286,302.65																																																	
<b>18 - Field Period Assembly</b>																																																									
<b>Job: 1801-Field Period Assly -CHRZANOWSKI (ORNL)</b>																																																									
<b>FY03 Actual Cost</b>																																																									
1801-001	Apr-Sept MIE Costs PPPL	42	01APR03A	30SEP03A		100	7,750.00	7,750.00																																																	
1801-002	Apr-Sept MIE Costs ORNL	42	01APR03A	30SEP03A		100	53,050.00	53,050.00																																																	
<b>Job: 1802 - FP Assy Oversight&amp;Support-VIOLA</b>																																																									
<b>Oversight and Supervision</b>																																																									
181.100	PPPL EM LOE FY04	242*	13OCT03A	30SEP04	1,259	LOE	22,838.62	77,947.50																																																	
181.200	HP Coverage in the TFTR TC LOE FY04	171*	02FEB04*	30SEP04	1,259		0.00	115,320.00																																																	
181.201	D-Site Shift Supervisor LOE FY04	171*	02FEB04*	30SEP04	1,259		0.00	25,920.40																																																	
181.110	PPPL EM LOE FY05	249*	01OCT04*	30SEP05	1,010		0.00	146,784.00																																																	
181.210	HP Coverage in the TFTR TC LOE FY05	249*	01OCT04*	30SEP05	1,010		0.00	128,440.00																																																	
181.310	ORNL EM LOE FY05	249*	01OCT04*	30SEP05	1,010		0.00	119,316.89																																																	
181.120	PPPL EM LOE FY06	250*	03OCT05*	02OCT06	760		0.00	451,299.93																																																	
181.220	HP Coverage in the TFTR TC LOE FY06	250*	03OCT05*	02OCT06	760		0.00	130,690.04																																																	
181.320	ORNL EM LOE FY06	250*	03OCT05*	02OCT06	760		0.00	122,771.80																																																	
<b>Job: 1803- FP Assy Tooling/Constructability-COLE</b>																																																									
<b>Tooling Design &amp; Fabrication</b>																																																									
713A.010	Design Tooling	171*	02FEB04	30SEP04	268	LOE	0.00	324,951.05																																																	
713A.010A	Requirements & Constructability Peer Review	0		30MAR04*	1,388		0.00	0.00																																																	
713.010B	Tooling & Constructability FDR	0		30SEP04	268		0.00	0.00																																																	
713A.032	Fabricate-TF Coil sub-assy frame/manipulator	195	18MAR05*	22DEC05	210		0.00	10,366.40																																																	
713A.030	Fabricate-VV supporting fixture (3)	195	20APR05*	01FEB06	134		0.00	97,300.00																																																	
713A.031	Fabricate-Modular Coil sub-assy frame/manip/fixt	195	17JUN05*	30MAR06	121		0.00	209,310.73																																																	
713A.033	Fabricate-Full FP support fixture (3)	195	07JUL05*	18APR06	123		0.00	9,757.00																																																	
713A.034	Fabricate-VV port welding fixtures	195	29JUL05*	10MAY06	175		0.00	13,020.00																																																	
713A.040	General procurements	498*	01OCT04*	29SEP06	761		0.00	25,970.00																																																	
713A.050	Welding tools, materials & equip	498*	01OCT04*	29SEP06	761		0.00	58,432.50																																																	
713A.020	Lab Fab/Assy/Installation	403*	25FEB05*	02OCT06	760		0.00	349,167.95																																																	
713A.060	Instl He gas piping from NSTX to D-site tc	85	03OCT05*	08FEB06	925		0.00	46,540.00																																																	
<b>Tooling R&amp;D</b>																																																									
713A.011	Tooling R&D-Design VV/MCWF Mockups inc pdr#20	84*	01DEC03A	05APR04	1,229	10	3,873.57	38,735.69																																																	

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10						
713A.012	Tooling R&D-Procure VV & MCWF Mockups [A/9]	105	06APR04	01SEP04	1,229		0.00	157,976.00	41=\$124.0k																																																
713A.013	Tooling R&D-Inspection & assy trails	50	02SEP04	11NOV04	1,229		0.00	46,979.36	em//sm=72;em//tb=168 Raftopoulos=160																																																
<b>Job: 1804-FP Assy Measurement Sys-RAFTOPOULOS</b>																																																									
<b>Metrology</b>																																																									
740.010	Final Design Measurement systems	181*	19JAN04A	30SEP04	1,259		3,818.23	69,422.40	Raftopoulos= 432																																																
740.011	3-D Scanner/Faro Arm FDR	0		30JAN04A			0.00	0.00	▼																																																
740.015	Prepare Requisition 3-D scanner & Romer Arm	10	30JAN04A	30JAN04A			0.00	0.00																																																	
740.030	Deliver 3-D Scanner & Romer Arm	1	30MAR04*	30MAR04	227		0.00	171,990.00	41=\$ 135 k																																																
740.031	Metrology Software Review	0		30JAN04A			0.00	0.00	▼																																																
740.032	Prepare Met Software Requisition	10	30JAN04A	30JAN04A			0.00	0.00																																																	
740.035	Deliver Metrology Software	53*	02FEB04	14APR04	1,377		0.00	57,266.30	41=\$ 44.95 k R400938																																																
740.041	Laser based GPS Sys Review	0		27APR04*	1,308		0.00	0.00	▼																																																
740.042	Prepare GPS Sys Requisition	10	28APR04	11MAY04	1,308		0.00	0.00																																																	
740.043	Bid,Evaluate & Award GPS sys	20	12MAY04	09JUN04	1,308		0.00	0.00																																																	
740.044	Deliver GPS sys	30	10JUN04	22JUL04	1,308		0.00	127,400.00	\$100k laser based gps sys																																																
740.020	Faculty Prep	95	03OCT05*	22FEB06	162		0.00	60,384.40	em//sm=168;em//tb=392 travel=\$ 6 k																																																
740.045	Purchase- second Faro Arm (was under WBS 14)	102	03MAY04*	24SEP04	1,263		0.00	70,070.00	41=\$ 55 k																																																
740.050	Purchase- targets [A/9]	130	01JUL05*	12JAN06	944		0.00	32,300.00	41=\$ 25 k																																																
<b>1808 - TF/Mod Coil Sub-Assembly</b>																																																									
<b>Modular Coil Sub-assembly</b>																																																									
184-200	Mount/align right mod coil in fixture-Period #1	15	31MAR06	20APR06	121		0.00	47,404.80	em//sm=120;em//sm machinist=48;em//tb=360																																																
184-205	Mount/align left mod coil in fixture-Period #1	12	25APR06	10MAY06	117		0.00	38,980.80	em//sm=96;em//sm machinist=48;em//tb=288																																																
184-210	Mount/align right mod coil in fixture-Period #2	12	22MAY06	07JUN06	125		0.00	38,980.80	em//sm=96;em//sm machinist=48;em//tb=288																																																
184-215	Mount/align left mod coil in fixture-Period #2	12	16JUN06	03JUL06	117		0.00	38,980.80	em//sm=96;em//sm machinist=48;em//tb=288																																																
184-220	Mount/align right mod coil in fixture-Period #3	12	14JUL06	31JUL06	125		0.00	38,980.80	em//sm=96;em//sm machinist=48;em//tb=288																																																
184-225	Mount/align left mod coil in fixture-Period #3	12	09AUG06	24AUG06	117		0.00	38,980.80	em//sm=96;em//sm machinist=48;em//tb=288																																																
P1-000	PDR # 19 MCWF fitup	94	21APR06	01SEP06	780		0.00	16,428.30	em//sm=42, em//tb=147																																																
<b>TF Coil Sub-assembly</b>																																																									
722.010	Receive/Inspect TF & PF Coils	249*	03OCT05*	29SEP06	761		0.00	77,365.60	em//sm=268; em//tb=596																																																
184-100	Assemble 3 TF coils&structure -Right -Period #1	10	17FEB06	02MAR06	176		0.00	34,504.00	em//sm=80; em//tb=320																																																
184-105	Assemble 3 TF coils&structure -Left -Period #1	10	03MAR06	16MAR06	176		0.00	34,504.00	em//sm=80; em//tb=320																																																
184-110	Assemble 3 TF coils&structure -Right -Period #2	10	17MAR06	30MAR06	193		0.00	34,504.00	em//sm=80; em//tb=320																																																
184-115	Assemble 3 TF coils&structure -Left -Period #2	10	26APR06	09MAY06	175		0.00	34,504.00	em//sm=80; em//tb=320																																																
184-120	Assemble 3 TF coils&structure -Right -Period #3	10	21JUL06	03AUG06	142		0.00	34,504.00	em//sm=80; em//tb=320																																																
184-125	Assemble 3 TF coils&structure -Left -Period #3	10	18SEP06	29SEP06	112		0.00	34,504.00	em//sm=80; em//tb=320																																																

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 ECP5 Schedule  
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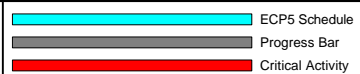
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year							
									FY04	FY05	FY06	FY07	FY08	FY09	FY10	
<b>Job:1810 - Field Period Assembly</b>																
<b>Period 1</b>																
721.010	Area preparations	90	03OCT05*	15FEB06	124		0.00	92,942.40								
725.001	Assemble Field Period #1 (summary task)	92*	28APR06	07SEP06	147		0.00	290,396.00								
P1-180	Rec'v VV,Attach clng tubes &Insul to 1st Period	39	06MAR06	27APR06	112		0.00	95,908.80								
P1-181	Assemble 1st. Field Period - coils/VV	37	28APR06	20JUN06	116		0.00	0.00								
P1-191	Position and weld port assemblies	15	21JUN06	12JUL06	147		0.00	0.00								
P1-201	Bakeout vessel segment to 150 degrees C	6	13JUL06	20JUL06	147		0.00	0.00								
P1-211	vacuum leak check &Ext Trim coil instl	25	21JUL06	24AUG06	147		0.00	0.00								
P1-221	Prepare field period for shipment	5	25AUG06	31AUG06	147		0.00	0.00								
P1-231	Ship 1st. Field period	3	01SEP06	06SEP06	147		0.00	0.00								
P1-241	Field period 1 ready for installation	1	07SEP06	07SEP06	147		0.00	0.00								
<b>Period 2</b>																
725.101	Assemble Field Period #2 (summary task)	91*	23JUN06	31OCT06	129		0.00	295,816.41								
P2-180	Rec'v VV,Attach clng tubes &Insul to 2nd Period	39	28APR06	22JUN06	112		0.00	95,908.80								
P2-181	Assemble 2nd. Field Period- coils/ VV	37	23JUN06	15AUG06	114		0.00	0.00								
P2-191	Position and weld port assemblies	15	16AUG06	06SEP06	129		0.00	0.00								
P2-201	Bakeout vessel segment to 150 degrees C	6	07SEP06	14SEP06	129		0.00	0.00								
P2-211	vacuum leak check &Ext Trim coil instl	25	15SEP06	19OCT06	129		0.00	0.00								
P2-221	Prepare field period for shipment	5	20OCT06	26OCT06	129		0.00	0.00								
P2-231	Ship 2nd. Field period	3	27OCT06	31OCT06	129		0.00	0.00								
P2-241	Field Period 2 ready for installation	1	01NOV06	01NOV06	129		0.00	0.00								
<b>Period 3</b>																
725.201	Assemble Field Period #3 (summary task)	90*	18AUG06	03JAN07	112		0.00	305,343.20								
P3-180	Rec'v VV,Attach clng tubes &Insul to 3rd Period	39	23JUN06*	17AUG06	112		0.00	95,908.80								
P3-181	Assemble 3rd. Field Period - coils/ VV	37	18AUG06	10OCT06	112		0.00	0.00								
P3-191	Position and weld port assemblies	15	11OCT06	31OCT06	112		0.00	0.00								
P3-201	Bakeout vessel segment to 150 degrees C	5	01NOV06	07NOV06	112		0.00	0.00								
P3-211	vacuum leak check &Ext Trim coil instl	25	08NOV06	14DEC06	112		0.00	0.00								
P3-221	Prepare field period for shipment	5	15DEC06	21DEC06	112		0.00	0.00								
P3-231	Ship 3rd. Field Period	3	22DEC06	03JAN07	112		0.00	0.00								
P3-241	3rd. Period ready for installation	1	04JAN07	04JAN07	112		0.00	0.00								
P1-180A	cd-4 350c increment	109	06MAR06	07AUG06	799		0.00	38,544.00								

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year						
									FY04	FY05	FY06	FY07	FY08	FY09	FY10
<b>19 - Stellarator Core Management and Integration</b>															
<b>Job: 1901 - Stellarator Core Mngt&amp;Integr-NELSON</b>															
<b>FY03 Actual Cost</b>															
1901-002	Apr-Sept MIE Costs ORNL	248	01APR03A	30SEP03A		100	187,090.00	187,090.00							
1901-003	Apr-Sept MIE Costs PPPL	248	01APR03A	30SEP03A		100	67,070.00	67,070.00							
<b>191 - Stellarator Core Management &amp; Oversight</b>															
191-4	LOE-FY04 WBS 191-4 Management Activities	250*	01OCT03A	30SEP04	1,259	LOE	46,041.15	145,699.85							
0191-5	LOE-FY05 WBS 191	249*	01OCT04*	30SEP05	1,010	LOE	0.00	185,763.59							
0191-6	LOE-FY06 WBS 191	250*	03OCT05*	02OCT06	526	LOE	0.00	190,877.89							
0191-6X	LOE-FY07 WBS 191	234	03OCT06*	10SEP07	526	LOE	0.00	199,716.12							
0191-91	LOE-FY06 WBS 191 1 mo SO	22	01OCT07*	30OCT07	346	LOE	0.00	20,250.00							
0191-92	LOE-FY06 WBS 191 1 mo SO	21	31OCT07*	28NOV07	346	LOE	0.00	20,250.00							
0191-93	LOE-FY06 WBS 191 1 mo SO	15	03DEC07*	21DEC07	346	LOE	0.00	20,250.00							
0191-94	LOE-FY06 WBS 191 1 mo SO	22	01JAN08*	30JAN08	346	LOE	0.00	20,250.00							
0191-95	LOE-FY06 WBS 191 1 mo SO	22	31JAN08*	29FEB08	346	LOE	0.00	20,250.00							
0191-96	LOE-FY06 WBS 191 1 mo SO	22	03MAR08*	01APR08	346	LOE	0.00	20,250.00							
0191-97	LOE-FY06 WBS 191 1 mo SO	21	02APR08*	30APR08	346	LOE	0.00	20,250.00							
0191-98	LOE-FY06 WBS 191 1 mo SO	21	01MAY08*	30MAY08	346	LOE	0.00	20,250.00							
<b>192 - Stellarator Core Integration &amp; Analysis</b>															
192-4	LOE-FY05 WBS 192-4 Design Integration Activities	250*	01OCT03A	30SEP04	1,259	LOE	75,005.15	237,358.09							
192-4.1	Self consistent models/dwgs f/ Mod Coil & VV FDR	0		14APR04*	1,377		0.00	0.00							
192-4.2	Self consistent models/dwgs Conv Coils&spirt strc	0		01JUN04*	1,344		0.00	0.00							
192-4.4	Stellarator Core Assy dwgs & assy sequence	0		30SEP04*	1,259		0.00	0.00							
192-5	LOE-FY05 WBS 192-5 VV & Coil Services Integr	186*	01OCT03A	30JUN04	1,323	LOE	15,587.58	36,676.65							
192-5.1	VV Helium Line Models	0		01APR04*	1,386		0.00	0.00							
192-5.2	Mod Coil LN2 Lines Layouts	0		01APR04*	1,386		0.00	0.00							
192-5.3	Mod Coil Leads Layouts	0		01APR04*	1,386		0.00	0.00							
192-5.4	PF Coil Leads & Services Layouts	0		15JUN04*	1,334		0.00	0.00							
192-5.5	TF Coil leads & Services Layouts	0		15JUN04*	1,334		0.00	0.00							
192-5.6	External Trim Coil Leads /services Layouts	0		15JUN04*	1,334		0.00	0.00							
192-6	LOE-FY05 WBS 192-6 Integrated Analysis	250*	01OCT03A	30SEP04	1,259	LOE	13,914.05	44,031.80							
192-6.01	Document coil tolerance and trim coil requiremen	31	08MAR04*	19APR04	95		0.00	19,284.00							
192-6.02	Check critical coil tolerance calculations.	20	20APR04	17MAY04	95		0.00	10,295.20							
192-6.03	Invest FARO arm to deter mag field distrib from	26	02FEB04*	08MAR04	237		0.00	25,738.00							
192-6.04	Calc impact omisalignments on mutual inductances	30	09MAR04	19APR04	1,277		0.00	25,738.00							

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ECP5 Schedule
   
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**NCSX Baseline**  
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Gantt Chart											
									FY04	FY05	FY06	FY07	FY08	FY09	FY10					
192-6.05	Determine reqd process for assly tolerances	58	20APR04	12JUL04	1,277		0.00	30,885.60	ORNL engr=240											
192-6.06	Coil positions to minimize islands.	63	13JUL04	08OCT04	1,277		0.00	62,328.00	Hirshman=180, Strickler=300											
192-6.07	Time constant calcs using SPARK	11	19APR04*	03MAY04	105		0.00	6,428.00	Brooks=40											
192-6.08	Indep check time constant calcs using EDDYCUFF	20	17MAY04*	14JUN04	1,359		0.00	10,295.20	Strickler=80											
192-6.09	Revised VV geometry	6	02FEB04*	09FEB04	1,448		0.00	3,214.00	Brooks=20											
192-6.10	MC interf during assly, geometry, assly trajecto	31	02FEB04*	15MAR04	1,423		0.00	34,073.60	Brooks=120, Brown=60, ORNL engr=40											
192-6.11	Range of motion reqts for Assly MC fixture.	20	03MAY04*	28MAY04	1,369		0.00	18,003.60	Brooks=80, Cole=40											
192-6.12	Analysis plan seismic analysis of the stellr co	6	09FEB04*	16FEB04	1,443		0.00	6,428.00	Dahlgren=40											
192-6.1	Final Analysis coil geometry to field error	0		02FEB04*	1,429		0.00	0.00	▼											
192-6.5	Stellarator Core Assy Design criteria	0		02FEB04*	1,429		0.00	0.00	▼											
192-6.2	Final Mod Coil Trajectories	0		01MAR04*	1,409		0.00	0.00	▼											
192-6.6	Stellarator Core Materials Database	0		01MAR04*	1,409		0.00	0.00	▼											
192-6.3	Best fit for mod coil assy on winding measuremen	0		30SEP04*	1,259		0.00	0.00	▼											
0192-5	LOE-FY05 WBS 192	249*	01OCT04*	30SEP05	1,010	LOE	0.00	485,136.72	Brooks=962; Cole 2260-200=2060; om1m&s=\$29.95 ;35= 5 k											
0192-6	LOE-FY06 WBS 192	250	03OCT05*	02OCT06	518	LOE	0.00	152,610.82	Cole=1184-384=800 om1m&s=\$29.95 35= 5 k											
0192-6X	LOE-FY06 WBS 192	242	03OCT06*	20SEP07	518	LOE	0.00	135,038.20	Cole=872+291-563=600 om1m&s=\$29.95 35= 5 k											
0192-91	LOE-F1 mo SO	22	01OCT07*	30OCT07	338	LOE	0.00	16,018.04	COLE=100; om135=.5											
0192-92	LOE-F1 mo SO	22	31OCT07*	03DEC07	338	LOE	0.00	16,018.04	COLE=100; om135=.5											
0192-93	LOE-F1 mo SO	22	04DEC07*	10JAN08	338	LOE	0.00	16,018.04	COLE=100; om135=.5											
0192-94	LOE-F1 mo SO	22	11JAN08*	11FEB08	338	LOE	0.00	16,018.04	COLE=100; om135=.5											
0192-95	LOE-F1 mo SO	22	12FEB08*	12MAR08	338	LOE	0.00	16,018.04	COLE=100; om135=.5											
0192-96	LOE-F1 mo SO	22	13MAR08*	11APR08	338	LOE	0.00	16,018.04	COLE=100; om135=.5											
0192-97	LOE-F1 mo SO	21	14APR08*	12MAY08	338	LOE	0.00	16,018.04	COLE=100; om135=.5											
0192-98	LOE-F1 mo SO	21	13MAY08*	11JUN08	338	LOE	0.00	16,018.04	COLE=100; om135=.5											
<b>21 - Fueling Systems</b>																				
21-10	Eng. Work Planning and Design	65	03OCT05*	05JAN06	238		0.00	13,512.00	Blanchard =80hr ;											
21-15	Design Gas Handling Hardware	65	06JAN06	06APR06	238		0.00	6,606.00	EM/SM =60hr ;											
21-20	Design PLC Controls	65	06JAN06*	06APR06	238		0.00	17,968.00	EE/SM =160hr ;											
21-25	Electrical Drafting for pumping system	65	06JAN06*	06APR06	238		0.00	13,200.00	EA/DM =120hr ;											
21-30	Drafting	65	06JAN06*	06APR06	238		0.00	8,800.00	EA/DM =80hr ;											
21-35	Eng. Work Planning and Design during fab	65	02OCT06*	04JAN07	114		0.00	3,638.00	Blanchard =20hr ;											
21-40	Fabrication/Install Hardware	65	02OCT06*	04JAN07	114		0.00	7,116.00	EM/SM =60hr ;											




Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10						
									FY04							FY05							FY06							FY07							FY08							FY09							FY10						
21-45	Fabrication/installation	65	02OCT06*	04JAN07	114		0.00	53,477.20																						EM//SM =150hr ; EM/TB =200hr ; 41=14\$K ;																											
21-55	Install PLC Controls	65	02OCT06*	04JAN07	114		0.00	9,672.00																						EE//SM =80hr ;																											
21-60	Integrated Systems Testing/Eng	65	02OCT06*	04JAN07	114		0.00	3,638.00																						Blanchard =20hr ;																											
21-65	Integrated Systems Testing/Tech Support	45	05JAN07*	08MAR07	114		0.00	2,418.00																						EE//SM =20hr ;																											
<b>22 - Torus Vacuum Pumping Systems</b>																																																									
<b>Job: 2001-VPS, Gas &amp; Cond Sys Oversight-BLANCHARD</b>																																																									
<b>FY03 Actual Cost</b>																																																									
2001-001	Apr-May MIE Cost	43*	01APR03A	30MAY03A		100	35,300.00	35,300.00																																																	
2001-100	PDR Support	164*	01JUN03A	30SEP03A		LOE	24,896.00	24,896.00	blanchard/provost fy03																																																
<b>FY03 Actual Cost</b>																																																									
22-25	Eng. Work Planning and Design	65	03OCT05*	05JAN06	138		0.00	25,698.00																						Blanchard =100hr ; EM//SM =80hr ;																											
22-30	Design PLC based control system	65	06JAN06*	06APR06	203		0.00	35,936.00																						EE//SM =320hr ;																											
22-35	Electrical Drafting for pumping system	65	06JAN06*	06APR06	203		0.00	23,100.00																						EA/DM =210hr ;																											
22-40	Drafting	65	06JAN06*	06APR06	138		0.00	17,600.00																						EA/DM =160hr ;																											
22-45	Eng. Work Planning and Design during fab	65	07APR06*	10JUL06	138		0.00	15,201.00																						Blanchard =90hr ;																											
22-50	Perform maint. & repair of prmpg sys	65	07APR06*	10JUL06	138		0.00	8,808.00																						EM//SM =80hr ;																											
22-55	Repair and Calibration of vac instrumentation	100	11AUG06*	03JAN07	115		0.00	9,243.20																						EM//SM =80hr ;																											
22-60	Fabrication/installation	100	11AUG06*	03JAN07	115		0.00	114,721.68																						EM//SM =450hr ; EM/TB =380hr ; 41=23\$K ;																											
22-65	Fab PLC conrols	100	11AUG06*	03JAN07	115		0.00	61,571.20																						EE//SM =160hr ; 41=32\$K ;																											
22-70	Integrated Systems Testing/Eng	45	04JAN07*	07MAR07	115		0.00	7,276.00																						Blanchard =40hr ;																											
22-75	Integrated Systems Testing/Tech Support	45	04JAN07*	07MAR07	115		0.00	4,836.00																						EE//SM =40hr ;																											
<b>25 - Neutral Beam Injection System</b>																																																									
<b>Job: 2501 - Neutral Beam Refurbishment-STEVENSON</b>																																																									
<b>FY03 Actual Cost</b>																																																									
2501-001	Apr-Sept MIE Cost	43*	01APR03A	30SEP03A		100	146,310.00	146,310.00																																																	
<b>FY04 Work Plan</b>																																																									
2501-015	Design & Work Planning	227*	03NOV03A	30SEP04	1,259	50	2,712.60	5,425.20	Stevenson=36																																																
2501-020	Layout & Routing	192*	02JAN04A	30SEP04	1,259	30	2,319.84	7,732.80	Carson=72																																																
2501-025	Systems Interfaces	192*	02JAN04A	30SEP04	1,259	10	773.28	7,732.80	Carson=72																																																
2501-030	Power System Local testing	106*	01JAN04A	28MAY04	1,345	75	11,854.09	15,805.45	Carson=80; Gibilisco=40 Halvorsen=16; 41=\$ 1 k; 37 = \$ .25 k																																																
2501-035	Controls Development	128*	02JAN04A	30JUN04	1,323	20	12,858.40	64,292.00	Carson=160; Rossi=320; M&S= \$ 10 k																																																
<b>Refurbishment</b>																																																									
25-100	6) Drafting Support	695*	01OCT04*	25JUN07	588		0.00	108,007.21																						EA/DM =1,040-72=968 ;																											
25-105	7) Refurbish sources	441	03OCT05*	26JUN07	587		0.00	3,977.51																						EE//SM =20hr ; EM/TB =20hr ;																											
25-110	8) Fabricate and install new filaments	438	03OCT05*	21JUN07	590		0.00	6,625.84																						41=02\$K ; EE//SM =20hr ; EM/TB =20hr ;																											



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10						
25-115	9) Refurbish calorimeters as needed	441	03OCT05*	26JUN07	587		0.00	18,559.92																																																	
25-130	12) Dsn,Fan,Instl NBI vacuum system	438	13OCT05*	03JUL07	582		0.00	73,736.99																																																	
25-145	15)Upgrade/Calibr of telemetry, ptical links etc	509*	01OCT04*	29SEP06	774		0.00	63,991.66																																																	
25-155	17) Fab/Instl Front Box Nitrogen Cryopanel.	460	03OCT05*	23JUL07	568		0.00	97,269.14																																																	
25-175	21) Sys Engr & Work Planning Procedures	699*	01OCT04*	29JUN07	584		0.00	70,981.24																																																	
<b>Re-Install Beamline</b>																																																									
25-180	31)Work Planning Procedures	520	03JUN05*	18JUN07	593		0.00	64,528.62																																																	
25-185	32) EAD analysis of platform support capability	104	02OCT06*	28FEB07	670		0.00	3,638.00																																																	
25-190	33) Fabr BL alignment measur fixture,	104	02OCT06*	28FEB07	670		0.00	28,462.00																																																	
25-195	34) Fabr new bellows/electrical break	104	02OCT06*	28FEB07	670		0.00	16,592.00																																																	
25-200	35) Perform alignment measurements	104	02OCT06*	28FEB07	670		0.00	829.60																																																	
25-205	36) Prepare platform for base plate	104	02OCT06*	28FEB07	670		0.00	1,659.20																																																	
25-210	37) Relocate base plate to NCSX location	104	02OCT06*	28FEB07	670		0.00	6,636.80																																																	
25-215	38) Lift NB from Refurb location to NCSX locatio	104	04OCT06*	02MAR07	668		0.00	25,717.60																																																	
25-220	39) Enclose platform around base plate	190	29SEP06*	28JUN07	585		0.00	3,317.16																																																	
<b>Re-Install Cables</b>																																																									
25-225	Cabling-Design & WP Procedures	255	04SEP06*	31AUG07	539		0.00	28,940.86																																																	
25-230	Cabling-Fabr and Install new Junction Box	190	02OCT06*	29JUN07	584		0.00	16,592.00																																																	
25-235	Cabling-Hi-potting cable run and fixing problems	190	02OCT06*	29JUN07	584		0.00	8,296.00																																																	
25-240	Cabling-Install Cable Trays	190	02OCT06*	29JUN07	584		0.00	33,184.00																																																	
25-245	Cabling-Pull cables Arc Room to PVC Junction Box	190	02OCT06*	29JUN07	584		0.00	74,480.00																																																	
25-250	Cabling- M&S f/ trays, fixtures, materials	190	02OCT06*	29JUN07	584		0.00	35,152.00																																																	
<b>Beamline Connections</b>																																																									
25-255	Install weld cables Junction Box to Ion Source.	170	02OCT06*	01JUN07	604		0.00	9,107.20																																																	
25-260	Connect bBL to foreline and exhaust manifold.	170	02OCT06*	01JUN07	604		0.00	4,129.60																																																	
25-265	New PLC. Test system after installation.	170	02OCT06*	01JUN07	604		0.00	3,318.40																																																	
25-270	Connect BL to new manifold & test	170	02OCT06*	01JUN07	604		0.00	3,318.40																																																	
25-275	Connect beamline to new manifold & test.	170	02OCT06*	01JUN07	604		0.00	3,318.40																																																	
25-280	Connect beamline to new manifold and test	170	02OCT06*	01JUN07	604		0.00	1,659.20																																																	
25-285	Install Water System	170	02OCT06*	01JUN07	604		0.00	27,727.20																																																	
25-290	Fab & Install Water Cooled Aperture	170	02OCT06*	01JUN07	604		0.00	19,609.60																																																	
25-295	New PLC for water sys & test	170	02OCT06*	01JUN07	604		0.00	1,659.20																																																	
25-300	Diag Sys-Fab/install new cables	170	02OCT06*	01JUN07	604		0.00	1,659.20																																																	
25-310	Drafting Labor Support	298	03APR06*	01JUN07	604		0.00	55,127.52																																																	

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year						
									FY04	FY05	FY06	FY07	FY08	FY09	FY10
<b>31 - Magnetic Diagnostics</b>															
310-010	Design Mag Diagnostics	94	03OCT05*	21FEB06	129		0.00	44,460.00							
310-015	Fabricate & Install Magnetics on Vessel	108	17MAR06	17AUG06	112		0.00	140,205.50							
310-020	Design other ex-vessel sensors	85	25JUL05*	21NOV05	116		0.00	154,537.34							
310-025	Fab & Install other ex-vessel sensors on coils	105	22NOV05	27APR06	116		0.00	78,406.05							
310-030	Design & FabMagnetic integrators	94	22NOV05*	12APR06	127		0.00	36,491.65							
<b>36 - Edge and Divertor Diagnostics</b>															
361-001	Design Visible Camera sys	130	03OCT05*	12APR06	208		0.00	11,096.00							
361-015	Fab/Assy/Installation Visible Camera	130	28AUG06*	08MAR07	113		0.00	88,191.41							
<b>38 - Electron Beam (EB) Mapping</b>															
380-010	Designe-Beam Probe,Fluor. Screen	88	03OCT05*	13FEB06	278		0.00	42,118.00							
380-015	Fab & Install Beam probe	102	06OCT06	08MAR07	113		0.00	249,952.00							
<b>39 - Diagnostics Integration</b>															
<b>Job: 3901 - Diagnostics sys Integration-JOHNSON</b>															
<b>FY03 Actual Cost</b>															
390-001	LOE Support FY03	151*	01APR03A	30SEP03A		100	155,450.00	155,450.00							
390-100	Finalize VV ports (number,size,locations)	0		30JAN04*	1,430		0.00	0.00							
390-110	Resolve port interferences.Final port config	0		30JAN04*	1,430		0.00	0.00							
390-120	Update port map&revise diag port assignments	0		01MAR04*	1,409		0.00	0.00							
390-130	Rvw status of existing ICD's w/VV & Mod Coils	0		30JAN04*	1,430		0.00	0.00							
390-140	Write ICD's-Define external space for diagnostic	0		01MAR04*	1,409		0.00	0.00							
390-150	Write ICD's-Define space f/racks in cntrl rm	0		01MAR04*	1,409		0.00	0.00							
390-160	Start recruiting diag team at HTPD conference	0		30APR04*	1,365		0.00	0.00							
390-170	Develop space envelopes for SXR	0		30JAN04*	1,430		0.00	0.00							
390-180	Hold CDR's co-wound mag sensors&ext saddle loops	0		30SEP04*	1,259		0.00	0.00							
390-010	LOE Support FY04	250*	01OCT03A	30SEP04	1,259	LOE	24,655.43	78,023.50							

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year								
									FY04	FY05	FY06	FY07	FY08	FY09	FY10		
390-015	LOE Support FY05	249*	01OCT04*	30SEP05	1,010		0.00	183,996.90									
390-020	LOE Support FY06	249*	03OCT05*	29SEP06	761		0.00	187,148.40									
390-025	LOE Support FY07	122*	02OCT06*	30MAR07	469		0.00	99,039.11									
390-901	LOE Support FY07 1mo SO	22	02APR07	01MAY07	469		0.00	17,760.40									
390-902	LOE Support FY07 1mo SO	22	02MAY07	01JUN07	469		0.00	17,760.40									
390-903	LOE Support FY07 1mo SO	21	04JUN07	02JUL07	469		0.00	17,760.40									
390-904	LOE Support FY07 1mo SO	21	03JUL07	01AUG07	469		0.00	17,760.40									
390-905	LOE Support FY07 1mo SO	21	02AUG07	30AUG07	469		0.00	17,760.40									
390-906	LOE Support FY07 1mo SO	21	31AUG07	01OCT07	469		0.00	17,793.33									
390-907	LOE Support FY07 1mo SO	21	02OCT07	30OCT07	469		0.00	18,451.90									
390-908	LOE Support FY07 1mo SO	21	31OCT07	28NOV07	469		0.00	18,451.90									
<b>41 - AC Power</b>																	
<b>Job: 4101 - AC Power-RAMAKRISHNAN</b>																	
<b>411 - Auxiliary AC Power Systems</b>																	
4101-100	Prepare Preliminary One line diagram	171*	02FEB04*	30SEP04	1,259		0.00	9,440.80									
411-1-2	fEx-Test Cell AC Power Dist-Dsn	92*	01OCT04*	18FEB05	385		0.00	19,761.90									
411-1-4	Ex-Test Cell AC Power Dist-Procure	185*	07OCT05*	06JUL06	279		0.00	11,745.00									
411-1-6	Ex-Test Cell AC Power Dist-Install	240	03OCT05*	18SEP06	228		0.00	51,769.40									
411-1-8	Ex-Test Cell AC Power Dist-Commission	100	02OCT06*	28FEB07	119		0.00	46,568.00									
411-2-2	Grounding-Dsn	220*	01OCT04*	19AUG05	225		0.00	29,688.00									
411-2-4	Grounding-Procure	107	03OCT05*	10MAR06	261		0.00	6,525.00									
411-2-6	Grounding-Install	172	13OCT05*	22JUN06	188		0.00	55,912.00									
411-2-8	Grounding-Commission	100	02OCT06*	28FEB07	119		0.00	18,448.00									
411-3-2	Test Cell AC Power Distr-Dsn	220*	01OCT04*	19AUG05	140		0.00	68,024.00									
411-3-4	Test Cell AC Power Distr-Procure	150	29SEP05*	08MAY06	113		0.00	69,612.50									
411-3-6	Test Cell AC Power Distr-Install	207	09MAY06*	08MAR07	113		0.00	61,951.46									
411-3-8	Test Cell AC Power Distr-Commission	121	11SEP06*	08MAR07	113		0.00	31,186.72									
411-4-2	Standby Power for Cryo Sys -Dsn	65	01MAR06*	31MAY06	295		0.00	15,100.00									
411-4-4	Standby Power for Cryo Sys -Procure	130	02OCT06*	11APR07	210		0.00	21,632.00									
411-4-6	Standby Power for Cryo Sys -Install	65	12APR07	13JUL07	210		0.00	51,968.00									

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10						
<b>412 - Experimental AC Power Systems</b>																																																									
412-1-2	D-site Pulsed AC Power Distr-Dsn	253	01OCT04*	06OCT05	189		0.00	10,522.84																																																	
412-1-4	D-site Pulsed AC Power Distr-Procure	179	13OCT05*	03JUL06	251		0.00	6,525.00																																																	
412-1-6	D-site Pulsed AC Power Distr-Install	245	07OCT05	29SEP06	189		0.00	16,043.20																																																	
412-1-8	D-site Pulsed AC Power Distr-Commission	121	03MAY06*	23OCT06	173		0.00	9,741.47																																																	
<b>42 - AC/DC Converters</b>																																																									
<b>422 - D-Site AC/DC Converters</b>																																																									
422-1-8	Transrex power supplies Reactivation	100	02OCT06*	28FEB07	119		0.00	23,534.00																																																	
<b>43 - DC Systems</b>																																																									
<b>Job: 4301 - DC Systems-RAMAKRISHNAN</b>																																																									
<b>FY03 Actual Cost</b>																																																									
4301-001	Apr-Sept MIE Cost	43*	01APR03A	30SEP03A		100	2,390.00	2,390.00																																																	
<b>431 - C-Site DC Systems</b>																																																									
4301-100	Prel Design link box & physical details,location	63	03MAY04*	30JUL04	1,302		0.00	75,124.40																																																	
4301-104	clear EF/OH bldg of stored hardware	10	02FEB04	13FEB04	1,420		0.00	0.00																																																	
431-1-2	Coil DC Cabling to link box (PCTB)-Dsn	153	13OCT05*	25MAY06	659		0.00	38,740.00																																																	
431-1-4	Coil DC Cabling to link box(PCTB)-Procure	190	01SEP06*	07JUN07	591		0.00	52,804.46																																																	
431-1-6	Coil DC Cabling to (PCTB)-Install	108	08JAN07*	07JUN07	591		0.00	9,689.60																																																	
431-2-2	DC Cabling to Coils in TC-Dsn	149	13OCT05*	19MAY06	181		0.00	60,140.00																																																	
431-2-4	DC Cabling to Coils in TC-Procure	190	01JUN06*	07MAR07	174		0.00	60,160.01																																																	
431-2-6	DC Cabling to Coils in TC-Install	108	27SEP06	07MAR07	174		0.00	30,012.22																																																	
<b>432 - D to C-Site DC Systems</b>																																																									
432-100	Prepare Tower SOW and IP for BOA design	10*	03NOV03A	26NOV03A		100	6,141.60	6,141.60																																																	
432-105	BOA design tower supports	71*	12DEC03A	30MAR04	1,202	10	15,975.96	48,412.00																																																	
432-110	Prep SOW and Requisition for tower installation	16	21JUL04	11AUG04	1,124		0.00	23,812.00																																																	
432-115	Bid & Award	35	12AUG04	30SEP04	1,124		0.00	0.00																																																	
432-120	Install Tower Supports	74	01OCT04*	25JAN05	1,124		0.00	403,104.00																																																	
432-1-2	DC Cabling-Dsn	80	01MAR04*	21JUN04	1,124		0.00	28,046.40																																																	
432-1-4.0	Prepare SOW & Requisition for 1000MCM 5kv Cable	30	13AUG04*	24SEP04	1,087		0.00	0.00																																																	
432-1-4.1	Bid & Award - Cable	40	01JUL05*	26AUG05	898		0.00	0.00																																																	
432-1-4.2	Cable Delivery [A/1]	75	03OCT05*	25JAN06	874		0.00	135,928.80																																																	
432-1-4.4	Prepare SOW & Requisition for Cable Installation	30	10AUG04*	21SEP04	1,104		0.00	0.00																																																	
432-1-4.5	Bid & Award Cable Installation	40	02MAY05*	27JUN05	955		0.00	0.00																																																	
432-1-4.7	Procure trays	20	01JUL05*	29JUL05	952		0.00	14,212.00																																																	

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Schedule											
									FY04	FY05	FY06	FY07	FY08	FY09	FY10					
432-1-4.8	Install Trays	41	01AUG05	27SEP05	952		0.00	14,212.00			41=11\$K ;									
432-1-4.6	S/C Install Cable [A/1]	61	01FEB06	26APR06	870		0.00	622,485.00			41=477\$K ;									
432-1-6	DC Cabling-Installation Support	140	03OCT05*	26APR06	870		0.00	29,992.80			EE//EM =120hr ; EE//SM =48hr ; EE//TB =72hr ;									
<b>433 - D-Site DC Systems</b>																				
433-1-2	DC Cabling-Dsn	166	01OCT04*	03JUN05	421		0.00	73,961.60			EA/DM =432hr ; Raki =176hr ;									
433-1-4	DC Cabling-Procure	75	07OCT05*	31JAN06	259		0.00	91,819.80			41=70\$K ;									
433-1-6	DC Cabling-Install	100	03AUG06*	02JAN07	130		0.00	43,784.52			EE//EM =120hr ; EE//SM =120hr ; EE//TB =120hr ;									
433-2-4.0	Design Isolation switch	40	01MAR04*	23APR04	1,230		0.00	6,710.60			raki= 26; ee//sm=26									
433-2-4.1	Prep Spec and Requisition for Isolation Switch	30	26APR04	07JUN04	1,230		0.00	6,710.60			raki= 26; ee//sm=26									
433-2-4.2	Bid & Award Isolation Switch	30	08JUN04	20JUL04	1,230		0.00	0.00												
433-2-4.3	Deliver Isolation Switch	40	21JUL04	15SEP04	1,230		0.00	115,934.00			41=\$ 91 k									
433-2-4.4	Prep SOW and Requisition for IS installation	30	26APR04	07JUN04	1,270		0.00	6,710.60			raki= 26; ee//sm=26									
433-2-4.5	Bid & Award IS Installation	30	08JUN04	20JUL04	1,270		0.00	0.00												
433-2-4.6	Install Isolation Switch	40	16SEP04	10NOV04	1,230		0.00	85,451.90			41=\$ 50 k; ee//tb=80; ee//sm=80; raki=40									
433-3-2	NSTX OH PS changes-Dsn	245*	01OCT04*	26SEP05	119		0.00	17,812.80			VANKIRK =96hr ; Raki =48hr ;									
433-3-6	NSTX OH PS changes-Install	180	03OCT05*	22JUN06	115		0.00	7,012.00			EE//EM =16hr ; EE//SM =40hr ;									
433-3-8	NSTX OH PS changes-Commission	143	23JUN06	23JAN07	115		0.00	3,562.22			EE//EM =08hr ; EE//SM =08hr ; EE//TB =16hr ;									
433-4-2	NSTX TF Power Supply changes-Dsn	238*	01OCT04*	15SEP05	126		0.00	17,812.80			VANKIRK =96hr ; Raki =48hr ;									
433-4-6	NSTX TF Power Supply changes-Install	180	28SEP05*	19JUN06	118		0.00	7,010.04			EE//EM =16hr ; EE//SM =40hr ;									
433-4-8	NSTX TF Power Supply changes-Commission	143	20JUN06	18JAN07	118		0.00	3,556.68			EE//EM =08hr ; EE//SM =08hr ; EE//TB =16hr ;									
<b>44 - Control and protection Systems</b>																				
<b>Job: 4401 - Control &amp; Protection-RAMAKRISHNAN</b>																				
<b>441 - Electrical Interlocks</b>																				
441-1-2	C-site-Dsn	345*	01OCT04*	23FEB06	114		0.00	120,616.10			VANKIRK =480hr ; Raki =440hr ;									
441-1-4	C-site-Procure	149	30SEP05*	08MAY06	300		0.00	26,046.06			41=20\$K ;									
441-1-6	C-site-Install	238	24FEB06*	07FEB07	114		0.00	161,027.72			EE//EM =264hr ; EE//SM =320hr ; EE//TB =1,000hr ;									
441-2-2	D-site-Dsn	345*	01OCT04*	23FEB06	120		0.00	65,417.43			VANKIRK =224hr ; Raki =264hr ;									
441-2-4	D-site-Procure	192	03OCT05*	11JUL06	176		0.00	18,217.80			41=14\$K ;									
441-2-6	D-site-Install	192	24FEB06*	27NOV06	120		0.00	77,399.95			EE//EM =120hr ; EE//SM =200hr ; EE//TB =440hr ;									
441-2-8	D-site-Commission	123	31JUL06*	30JAN07	120		0.00	35,951.61			EE//EM =80hr ; EE//SM =80hr ; EE//TB =160hr ;									
441-3-2	D-to-C-site-Dsn	80	03OCT05*	01FEB06	128		0.00	25,800.00			EA/DM =120hr ; EE//EM =80hr ;									
441-3-4	D-to-C-site-Procure	186*	07OCT05*	07JUL06	178		0.00	6,525.00			41=05\$K ;									
441-3-6	D-to-C-site-Install	200	02FEB06*	13NOV06	128		0.00	23,744.24			EE//EM =40hr ; EE//SM =40hr ; EE//TB =160hr ;									
441-3-8	D-to-C-site-Commission	123	19JUL06*	18JAN07	128		0.00	17,889.95			EE//EM =40hr ; EE//SM =40hr ; EE//TB =80hr ;									

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year									
									FY04	FY05	FY06	FY07	FY08	FY09	FY10			
<b>442 - Kirk Key Interlocks</b>																		
442-1-2	Kirk Keys-Dsn	41	03OCT05*	30NOV05	289		0.00	32,100.00										
442-1-4	Kirk Keys-Procure	185	24OCT05*	21JUL06	130		0.00	13,050.00										
442-1-6	Kirk Keys-Install	68	24JUL06*	26OCT06	130		0.00	31,103.17										
442-1-8	Kirk Keys-Commission	62	27SEP06*	02JAN07	130		0.00	21,784.32										
<b>443 - Real Time Control Systems</b>																		
443-1-2	Develop Control Algorithms-Dsn	142	21APR06*	09NOV06	130		0.00	38,397.97										
<b>444 - Instrument Systems</b>																		
444-1-2	DC Current Transducers (DCCTs)-Dsn	124	13OCT05*	14APR06	126		0.00	15,100.00										
444-1-4	DC Current Transducers (DCCTs)-Procure	164	05DEC05*	01AUG06	191		0.00	46,980.00										
444-1-6	DC Current Transducers (DCCTs)-Install	160	17APR06*	01DEC06	126		0.00	35,115.07										
444-1-8	DC Current Transducers (DCCTs)-Commission	143	08JUN06*	08JAN07	126		0.00	16,521.62										
444-2-2	DC Potential Transducers (DCPTs)-Dsn	95	07OCT05*	28FEB06	119		0.00	30,200.00										
444-2-4	DC Potential Transducers (DCPTs)-Procure	207	30SEP05*	31JUL06	192		0.00	15,659.25										
444-2-6	DC Potential Transducers (DCPTs)-Install	200	01MAR06*	12DEC06	119		0.00	33,603.00										
444-2-8	DC Potential Transducers (DCPTs)-Commission	120	21JUL06*	17JAN07	119		0.00	16,697.40										
444-3-2	DC Shunts-Dsn	122*	01OCT04*	01APR05	415		0.00	14,844.00										
444-3-4	DC Shunts-Procure	224	29SEP05*	22AUG06	176		0.00	41,756.29										
444-3-6	DC Shunts-Install	130	20MAR06*	20SEP06	176		0.00	34,403.20										
444-3-8	DC Shunts-Commission	65	21SEP06*	22DEC06	131		0.00	17,077.81										
444-4-2	Signal Conditioning & Cabling-Dsn	99	23SEP05*	20FEB06	195		0.00	52,846.67										
444-4-4	Signal Conditioning & Cabling-Procure	188	13OCT05*	17JUL06	135		0.00	11,745.00										
444-4-6	Signal Conditioning & Cabling-Install	130	16MAY06*	16NOV06	135		0.00	29,050.34										
444-4-8	Signal Conditioning & Cabling-Commission	65	15SEP06*	18DEC06	135		0.00	21,559.32										
<b>445 - Coil Protection Systems</b>																		
445-1-2	Ground Fault Protection-Dsn	142	01OCT04*	29APR05	282		0.00	21,040.00										
445-1-4	Ground Fault Protection-Procure	187	24NOV04*	26AUG05	199		0.00	3,876.00										
445-1-6	Ground Fault Protection-Install	223	05OCT05*	25AUG06	173		0.00	18,137.60										
445-1-8	Ground Fault Protection-Commission	65	05OCT06*	15JAN07	121		0.00	12,028.80										
445-2-0	Overload Protection & Cabling-Prelim Dsn	131*	01MAR04*	01SEP04	1,279		0.00	89,287.20										
445-2-1	Overload Protection & Cabling-Peer Review	0	02SEP04	01SEP04	1,279		0.00	0.00										
445-2-2	Overload Protection & Cabling-FinalDsn	65	05OCT05*	13JAN06	120		0.00	37,740.00										
445-2-4	Overload Protection & Cabling-Procure	136	30SEP05*	19APR06	173		0.00	36,537.32										

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Gantt Chart											
									FY04	FY05	FY06	FY07	FY08	FY09	FY10					
445-2-6	Overload Protection & Cabling-Install	186	16JAN06*	05OCT06	120		0.00	40,522.14									EE//EM =64hr ; EE//SM =152hr ; EE//TB =168hr ;			
445-2-8	Overload Protection & Cabling-Commission	65	09OCT06	17JAN07	119		0.00	24,268.80									EE//EM =80hr ; EE//SM =32hr ; EE//TB =80hr ;			
<b>446 - Ground Fault Monitoring System</b>																				
446-1-2	GFMS-Dsn	190	03OCT05*	07JUL06	208		0.00	34,652.50									EA//DM =80hr ; EE//EM =120hr ; 41=5			
446-1-4	GFMS-Procure/Fab/Install	130	02OCT06*	11APR07	149		0.00	132,370.40									ee//em=168, ea//dm=48, ee//sm=24041=03\$k ; ee//tb=256, 41=\$35k			
<b>45 - Power System Design and Integration</b>																				
<b>Job: 4501 - Power Sys Dsn &amp; Integr-RAMAKRISHNAN</b>																				
<b>FY03 Actual Cost</b>																				
4501-001	Apr-Sept MIE Cost	43*	01APR03A	30SEP03A		100	112,340.00	112,340.00												
<b>451 - System Design &amp; Interfaces</b>																				
4501-100	Design Drawings	171*	02FEB04*	30SEP04	1,259		0.00	69,832.00									vankirk=320; raki=240			
4501-110	Calculations-Dsn	43*	02FEB04*	31MAR04	1,387		0.00	12,897.60									vankirk=8; raki=80			
451-0-1	C-Site Decision	0	02FEB04	30JAN04*	1,430		0.00	0.00												
451-0-2	Develop SRD	21*	02FEB04*	01MAR04	1,409		0.00	0.00												
451-1-2	Calculations-Dsn	498*	01OCT04*	29SEP06	761		0.00	37,488.00									Raki =240hr ;			
451-2-2	PDR Power system -Dsn	22*	01APR04*	30APR04	1,365		0.00	10,236.00									vankirk=40; rali=40			
451-2-2.1	FDR Power system -Dsn	65	01OCT04*	12JAN05	1,194		0.00	10,520.00									VANKIRK =40hr ; Raki =40hr ;			
451-3-2	Drawings,changes,asbuilts -Elect Dsn Integration	756*	01OCT04*	11OCT07	503		0.00	275,076.00									VANKIRK 960hr ; Raki =1040hr ;			
451-4-2	FDR AC auxiliaries & grounding-Dsn	45	03OCT05*	06DEC05	965		0.00	10,700.00									VANKIRK =40hr ; Raki =40hr ;			
451-6-2	FDR C-Site -Dsn	45	01OCT04*	06DEC04	1,214		0.00	21,040.00									VANKIRK =80hr ; Raki =80hr ;			
451-7-2	FDR DC transmission-Dsn	20*	03MAY04*	28MAY04	1,345		0.00	10,236.00									vankirk =40hr ; raki =40hr ;			
451-8-2	FDR D-Site -Dsn	45	01OCT04*	06DEC04	1,214		0.00	21,040.00									VANKIRK =80hr ; Raki =80hr ;			
<b>452 - Electrical Systems Support</b>																				
452-1-2	Diagnostics AC Power Distr-Dsn	108*	11AUG05*	20JAN06	139		0.00	16,505.06									EA//DM =128hr ; Raki =16hr ;			
452-1-4	Diagnostics AC Power Distr-Procure	248	05OCT05*	02OCT06	178		0.00	1,305.19									41=01\$k ;			
452-1-6	Diagnostics AC Power Distr-Install	217	23JAN06	28NOV06	139		0.00	14,659.67									EE//EM =16hr ; EE//SM =16hr ; EE//TB =128hr ;			
452-1-8	Diagnostics AC Power Distr-Commission	65	23OCT06*	31JAN07	139		0.00	6,021.60									EE//EM =08hr ; EE//SM =16hr ; EE//TB =32hr ;			
452-2-2	Diagnostics sensor cabling-Dsn	97*	11AUG05*	05JAN06	237		0.00	23,748.58									EA//DM =160hr ; Raki =40hr ;			
452-2-4	Diagnostics sensor cabling-Procure	240	05OCT05*	20SEP06	186		0.00	2,610.00									41=02\$k ;			
452-2-6	Diagnostics sensor cabling-Install	130	30MAY06*	01DEC06	136		0.00	20,556.31									EE//EM =24hr ; EE//SM =32hr ; EE//TB =160hr ;			
452-2-8	Diagnostics sensor cabling-Commission	65	26OCT06*	05FEB07	136		0.00	6,021.60									EE//EM =08hr ; EE//SM =16hr ; EE//TB =32hr ;			
<b>453 - System Testing (PTP's)</b>																				
453-1-2	New Procedures	90	06OCT05*	20FEB06	215		0.00	68,000.00									EA//DM =160hr ; EE//EM =320hr ;			
453-1-4	Preop Testing-Procure test equipt	160	10JUL06*	01MAR07	118		0.00	33,366.72									41=25\$k ;			
453-1-8	Testing PTPs, ISTPs	100	09OCT06*	07MAR07	114		0.00	90,618.40									EE//SM =80hr ; EE//TB =376hr ; ee//em=288 ;			

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year						
									FY04	FY05	FY06	FY07	FY08	FY09	FY10
<b>46 - FCPC Building Modifications</b>															
<b>Job: 4601 - FCPC Bldg Mods-RAMAKRISHNAN</b>															
<b>FY03 Actual Cost</b>															
4601-001	Apr-Sept MIE Cost	43*	01APR03A	30SEP03A		100	1,300.00	1,300.00							
4601-100	Clear area in West wing SPS to HVAC equipt	64*	01APR04*	30JUN04	1,323		0.00	24,226.00							
460-2-4	Clear the small Vacuum prep lab -Procure	65	01OCT04*	12JAN05	1,129		0.00	646.00							
460-2-6	Clear the small Vacuum prep lab -Install	65	13JAN05	13APR05	1,129		0.00	12,464.00							
460-3-2	Floor & Wall Penetrations-Dsn	65	01OCT04*	12JAN05	392		0.00	2,968.80							
460-3-4	Floor & Wall Penetrations-Procure	65	13JAN05	13APR05	392		0.00	11,628.00							
460-3-6	Floor & Wall Penetrations-Install	65	14APR05	15JUL05	392		0.00	11,730.40							
460-4-2	Mechanical Modifications-Dsn	65	01APR05*	01JUL05	271		0.00	4,208.00							
460-4-4	Mechanical Modifications-Procure	65	05JUL05	04OCT05	271		0.00	2,584.80							
460-4-6	Mechanical Modifications-Install	65	05OCT05	13JAN06	271		0.00	6,858.40							
<b>51 - TCP/IP Infrastructure Systems</b>															
<b>Job: 5801 -Central I&amp;C Integr &amp; Oversight-OLIARO</b>															
51-01	FY04 LOE support	250*	01OCT03A	30SEP04	1,259	LOE	3,951.39	12,504.40							
51-02	FY05 LOE support	249*	01OCT04*	30SEP05	1,010		0.00	12,848.40							
51-10	Preliminary Design (Title I)	45	21AUG06*	23OCT06	123		0.00	6,246.40							
51-20	Final Network Design (Title II)	20	24OCT06	20NOV06	123		0.00	6,548.00							
51-30	Installation, Testing, Documentation (Title III)	120	21NOV06*	17MAY07	123		0.00	390,879.60							
<b>52 - Central Instrumentation &amp; Control</b>															
52-10	Preliminary Design (Title I)	45	06MAR06*	05MAY06	121		0.00	24,320.00							
52-20	Final Design (Title II)	87	08MAY06	08SEP06	121		0.00	97,280.00							
52-30	Installation, Testing, Documentation (Title III)	173	11SEP06*	21MAY07	121		0.00	456,439.69							
<b>53 - Data Acquisition &amp; Facility Computing</b>															
53-10	Preliminary Design (Title I)	45	08MAR06*	09MAY06	119		0.00	48,640.00							
53-20	Final Design (Title II)	87	10MAY06	12SEP06	119		0.00	72,960.00							
53-30	Coding, Configuration, Testing (Title III)	173	13SEP06*	23MAY07	119		0.00	286,217.26							

■ vankirk=64; raki=48;41=\$ 1 k  
 ee/sm=16; ee/tb=96  
 ■ 41=01\$ ;  
 ■ EE/TB =160hr ;  
 ■ VANKIRK =16hr ; Raki =08hr ;  
 ■ 41=09\$ ;  
 ■ Raki =08hr ; EE/SM =16hr ;  
 ■ EE/TB =112hr ;  
 ■ VANKIRK =16hr ; Raki =16hr ;  
 ■ 41=02\$ ;  
 ■ EE/EM =08hr ; EE/SM =16hr ;  
 ■ EE/TB =48hr ;  
 ■ EC/EM =86hr ;  
 ■ EC/EM =86hr ;  
 ■ EC/EM =40hr ;  
 ■ EC/EM =40hr ;  
 ■ EA/DM =160hr ; EC/EM =520hr ;  
 ■ EE/SM =1,340hr ; 41=92\$ ;  
 ■ EC/EM =160hr ;  
 ■ EC/EM =640hr ;  
 ■ EC/SM =600hr ; EC/EM =1,552hr ;  
 ■ 41=108\$ ;  
 ■ EC/EM =320hr ;  
 ■ EC/EM =480hr ;  
 ■ EC/EM =1,280hr ; 41=57.7\$ ;

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)											
									FY04	FY05	FY06	FY07	FY08	FY09	FY10				
<b>54 - Facility Timing &amp; Synchronization</b>																			
54-10	Preliminary Design (Title I)	45	01JUN06*	03AUG06	119		0.00	36,480.00											
54-20	Final Design (Title II)	65	04AUG06	03NOV06	119		0.00	56,340.00											
54-30	Installation, Testing, Documentation (Title III)	135	06NOV06	23MAY07	119		0.00	259,211.60											
<b>55 - Real Time Plasma &amp; Power Supply Control Sys</b>																			
55-10	Preliminary Design (Title I)	45	01AUG06*	03OCT06	137		0.00	12,201.60											
55-20	Final Design (Title II)	20	04OCT06	31OCT06	137		0.00	13,096.00											
55-30	Installation, Testing, Documentation (Title III)	120	10NOV06	08MAY07	130		0.00	267,982.40											
<b>56 - Central Safety Interlock Systems</b>																			
56-10	Preliminary Design (Title I)	87	15MAY06*	15SEP06	136		0.00	24,320.00											
56-20	Final Design (Title II)	45	18SEP06	17NOV06	136		0.00	25,776.00											
56-30	Installation, Testing, Documentation (Title III)	108	20NOV06	30APR07	136		0.00	349,830.00											
<b>57 - Control Room Facility</b>																			
57-10	Preliminary Design (Title I)	45	01SEP06*	03NOV06	147		0.00	12,680.00											
57-20	Final Design (Title II)	20	06NOV06	05DEC06	147		0.00	13,096.00											
57-30	Installation, Testing, Documentation (Title III)	87	06DEC06	13APR07	147		0.00	93,938.00											
<b>61 - Water Systems</b>																			
<b>611 - C-Site Cooling System</b>																			
615.011	Engr recommissioning of C-Site Water systems	44	03JUL06*	01SEP06	160		0.00	9,796.20											
615.021	Replace valves, resins, filters	65	06OCT06*	16JAN07	137		0.00	143,473.60											
<b>612 - NB Water Cooling Systems</b>																			
622.001	WBS 612 Preliminary design	79	30MAY06*	19SEP06	147		0.00	35,824.00											
622.011	WBS 612 Final Design	60	20SEP06	14DEC06	147		0.00	23,802.66											
622.021	WBS 612 Assembly/Fabrication/Installation	80	26JAN07*	17MAY07	123		0.00	180,299.92											
<b>613 - Vacuum Pumping System</b>																			
623.010	LOE WBS 612	410*	06OCT04*	31MAY06	846		0.00	10,033.20											
623.011	Design WBS 612	118	01JUN06*	15NOV06	133		0.00	22,793.02											
623.021	WBS 612 Assembly/Fabrication/Installation	40	13DEC06*	14FEB07	116		0.00	67,180.00											

EC//EM =240hr ;  
 EC//EM =360hr ;  
 EC//SM =700hr ; EC//EM =960hr ;  
 41=25\$sk ;

EC//EM =80hr ;  
 EC//EM =80hr ;  
 EC//EM =480hr ; EC//SM =1,200hr ;  
 41=53\$sk ;

EC//EM =160hr ;  
 EC//EM =160hr ;  
 EC//EM =780hr ; EE//SM =1,200hr ;  
 41=57\$sk ;

EC//EM =80hr ;  
 EC//EM =80hr ;  
 EC//EM =160hr ; EE//SM =200hr ;  
 EC//SM =300hr ; 41=11\$sk ;

em/em=58  
 em/tb=216;41=\$92.3 k

em/em=160; ea/dm=80  
 em/em=80; ea/dm=80  
 em/em=260; em/tb=620; 41=\$58.71k

BLANCHARD=60  
 em/em=80; ea/dm=80  
 em/em=80; em/tb=288; 41=\$20.5k

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10						
<b>614 - Bakeout Water System</b>																																																									
625.001	WBS 614 Preliminary design	58	03OCT05*	23DEC05	368		0.00	12,178.00																																																	
625.011	WBS 614 Final Design	62	03JAN06	29MAR06	368		0.00	12,178.00																																																	
625.021	WBS 614 Assembly/Fabrication	40	26MAR07	18MAY07	122		0.00	14,153.80																																																	
<b>62 - Cryogenic Systems</b>																																																									
<b>621 - LN2-LHe Supply System</b>																																																									
631-001	Preliminary Design	65	19MAY06*	21AUG06	137		0.00	15,032.10																																																	
631-010	Final Design	65	22AUG06	21NOV06	137		0.00	35,902.27																																																	
631-015	Fab/Assy/Installation	65	08FEB07*	09MAY07	129		0.00	82,963.10																																																	
631-020	Procurement	88	06DEC06*	16APR07	129		0.00	118,976.00																																																	
<b>622 - LN2 Coil Cooling Supply</b>																																																									
632-001	Preliminary Design	65	15MAY06*	15AUG06	116		0.00	15,032.10																																																	
632-010	Final Design	65	16AUG06	15NOV06	116		0.00	29,337.35																																																	
632-015	Fab/Assy/Installation	110	18DEC06*	29MAY07	116		0.00	114,018.60																																																	
632-020	Procurement	130	16NOV06*	29MAY07	116		0.00	116,001.60																																																	
<b>623 - GN2 Cryostat Cooling System</b>																																																									
633-001	Preliminary Design	65	12APR06*	13JUL06	139		0.00	15,032.10																																																	
633-010	Final Design	65	14JUL06	13OCT06	139		0.00	24,114.72																																																	
633-015	Fab/Assy/Installation	88	11JAN07*	14MAY07	126		0.00	72,933.10																																																	
633-020	Procurement	130	02NOV06*	14MAY07	126		0.00	108,092.40																																																	
<b>63 - Utility Systems</b>																																																									
640.010	FY04/05 LOE support	489*	06OCT04*	21SEP06	767		0.00	16,749.14																																																	
640.011	Design GN2, Air & Vent Systems	117	26MAY06*	09NOV06	150		0.00	31,706.87																																																	
640.021	Assembly/Fabrication	40	19DEC06*	20FEB07	125		0.00	72,413.80																																																	
<b>64 - PFC/VV Heating &amp; Cooling</b>																																																									
650.001	Preliminary Design	50	26MAY06*	07AUG06	122		0.00	40,172.00																																																	
650.005	Final Design	65	08AUG06	07NOV06	122		0.00	118,749.29																																																	
650.010	Lab Fab/Assy/Installation	130	08NOV06*	18MAY07	122		0.00	286,477.00																																																	
650.012	Procured Hardware/Material	130	08NOV06*	18MAY07	122		0.00	172,650.40																																																	
650.015	Procured Installation/Assy	43	21MAR07*	18MAY07	122		0.00	10,816.00																																																	

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 ECP5 Schedule  
 Progress Bar  
 Critical Activity

ECP5


**NCSX Baseline (ECP5)**  
**First Plasma May 2008**

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Rev B  
 WBS 12-2/18; WBS 13- 2/19  
 WBS14- 2/20; WBS 7 -2/20

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year						
									FY04	FY05	FY06	FY07	FY08	FY09	FY10
<b>65 - Facility Systems Integration</b>															
<b>Job: 6163 - Facility Systems Support FY04</b>															
65-03	LOE WBS 6	250*	01OCT03A	30SEP04	1,259	LOE	10,181.52	32,220.00							
									Kalish=100;Gettelfinger=100						
<b>Job: 6501 - Facility Systems Integration-DUDEK</b>															
<b>FY03 Actual Cost</b>															
6501-001	Apr-Sept MIE Cost PPPL	0	01APR03A	30SEP03A			9,380.00	9,380.00							
<b>71 - Shield Wall Seismic Modifications</b>															
<b>Job: 7101 - Shield Wall Modif Design-PERRY</b>															
<b>FY03 Actual Cost</b>															
7101-000	Apr-Sept MIE Cost PPPL	66	01APR03A	30SEP03A			32,150.00	32,150.00							
<b>72 - Control Room Refurbishment</b>															
<b>Job: 7201 - Control Room Walls&amp;Floors-PERRY</b>															
710.001	Block Wall east side control room	41	01JUN04*	28JUL04	1,284		0.00	39,512.00							
711B.050	Complete Control Room Flooring	20	29JUL04	25AUG04	1,284	85	0.00	8,107.20							
									ee/tb=200; 41=\$8k ee/sm Edwards= 24 hrs; em/tb NB techs 72 hrs						
<b>73 - Platform Design &amp; Fabrication</b>															
<b>Job: 7301 - Platform Design &amp; Fab-PERRY</b>															
712.008	Update Platform Specification	12*	02FEB04*	17FEB04	1,354		0.00	6,460.00							
712.009	Platform PDR	0		17FEB04*	1,354		0.00	0.00							
711A.040	Platform nut plates	63*	02JUL04*	30SEP04	1,259	75	0.00	28,922.00							
712.010	Final Design	64*	01JUL04*	30SEP04	1,283		0.00	54,170.00							
									Perry=40 em/tb mech shop =360 hrs;41=\$1k PERRY=140;ea/dm=300						
<b>Job: 7401 - TC Prep &amp; Mach Assy Planning-PERRY</b>															
712.020	Fab & Assemble Platform	132	03OCT05*	10APR06	212		0.00	24,296.30							
712.030	Miscs Hardware/Material	132	03OCT05*	10APR06	896		0.00	45,675.00							
									PERRY=410;em/sm=23;em/tb=250 41=\$35k						
<b>74 - Machine Assembly Planning and Oversight</b>															
<b>Job: 7401 - TC Prep &amp; Mach Assy Planning-PERRY</b>															
<b>FY03 Actual Cost</b>															
7401-001	Apr-Sept MIE Cost PPPL	66	01APR03A	30SEP03A			131,680.00	131,680.00							
<b>Oversight and Supervision</b>															
711A.020	LOE FY04	256*	01OCT03A	30SEP04	1,283	LOE	49,764.97	149,894.50							
<b>Project Scope</b>															
714.010	LOE FY05	249	01OCT04*	30SEP05	522		0.00	236,807.20							
714.020	LOE FY06 prior to assy starting	122	03OCT05	31MAR06	522		0.00	118,111.86							
714.030	LOE FY07 thru first plasma	366	03APR06	14SEP07	522		0.00	542,474.94							
714.031	WBS 7 mgt stretch out cost	180*	11SEP07*	30MAY08	346		0.00	287,396.72							
									Perry=863;ea/dm=100 PERRY=863;em/sm=863 em/em=423;em/sm=423 em/em=1851;em/sm=1851 em/em=936;em/sm=936						

Run Date 24FEB04 10:54


 ECP5 Schedule  
 Progress Bar  
 Critical Activity

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year						
									FY04	FY05	FY06	FY07	FY08	FY09	FY10
<b>FED/Infrastructure Support (non Project cost)</b>															
613.010	Remove Shield Walls ** GPP **	86*	02FEB04*	01JUN04	1,368		0.00	0.00							
613.015	Fabricate New Bottom Course of Blocks **GPP**	87*	15MAR04*	15JUL04	1,337		0.00	0.00							
613.017	Install New Bottom Course **GPP**	107*	02AUG04*	04JAN05	1,219		0.00	0.00							
613.020	Remove south PLT shielding (cc 7230)	111*	12JAN04A	15JUN04	1,358		0.00	0.00							
613.025	Dispose of old south PLT shielding **GPP**	44*	15JUN04*	16AUG04	1,315		0.00	0.00							
EXFAC003	Clear PBX control room & Safe PBX (cc7230)	110*	27JAN03A	30JUN03A		100	0.00	0.00							
EXFAC004	Remove Fire protection PLT wall (cc7230)	21	01MAY03A	09MAY03A		100	0.00	0.00							
EXFAC005	Remove Fire Protection under platform (cc7230)	21	01APR03A	30APR03A		100	0.00	0.00							
EXFAC006	Remove Fire Protection Control rm walls(cc7230)	21	01MAY03A	09MAY03A		100	0.00	0.00							
EXFAC007	Remove PBX Base Plates cc7230)	45*	01MAR04*	30APR04	1,174	100	0.00	0.00							
GPP001	GPP-Upgarde C-Site central chilled wtr plant*TBD	1	01OCT02A	01OCT02A			0.00	0.00							
GPP004	GPP-Roofing Design	171*	02FEB04*	30SEP04	1,010		0.00	0.00							
GPP004.1	GPP-Roofing Install	249*	01OCT04*	30SEP05	1,010		0.00	0.00							
GPP005	GPP-Test Cell lighting Design	64*	01APR04*	30JUN04	1,259		0.00	0.00							
GPP005.1	GPP-Test Cell lighting Install	64	01JUL04	30SEP04	1,259		0.00	0.00							
GPP006	GPP-Test Cell HVAC/dew point control Design	120	01OCT04*	30MAR05	1,011		0.00	0.00							
GPP006.1	GPP-Test Cell HVAC/dew point control Install	128	31MAR05	29SEP05	1,011		0.00	0.00							
GPP007	GPP-C-Site elevators Design	64	02FEB04*	29APR04	1,302		0.00	0.00							
GPP007.1	GPP-C-Site elevators Install	64	30APR04	30JUL04	1,302		0.00	0.00							
GPP008	GPP-Fire suppression high bay design	64	01APR04*	30JUN04	1,259		0.00	0.00							
GPP008.1	GPP-Fire suppression high bay install	64	01JUL04	30SEP04	1,259		0.00	0.00							
GPP009	Control Room Lights & Outlets design	121*	01OCT04*	31MAR05	1,010		0.00	0.00							
GPP009.1	Control Room Lights & Outlets install	64	01APR05	30JUN05	1,010		0.00	0.00							
GPP010	Control Room HVAC Design	121*	01OCT04*	31MAR05	1,010		0.00	0.00							
GPP010.1	Control Room HVAC Install	64	01APR05	30JUN05	1,010		0.00	0.00							
GPP011	Control Room Ceiling Design	64	01APR05*	30JUN05	1,010		0.00	0.00							
GPP011.1	Control Room Ceiling Install	64	01JUL05	30SEP05	1,010		0.00	0.00							
GPP012	Control Rm Fire Detection & Suppression Design	121*	01OCT04*	31MAR05	1,010		0.00	0.00							
GPP012.1	Control RmFire Detection & Suppression Install	64	01APR05	30JUN05	1,010		0.00	0.00							
<b>Test Cell Modifications &amp; Upgrades</b>															
613.030	Test Cell copper ground plane cuts	25	03MAY04*	07JUN04	1,198		0.00	10,490.00							
713.010	General procurements	128*	01APR04*	30SEP04	1,283		0.00	19,110.00							
7502-000	Outlet Design	65*	02FEB04*	30APR04	1,199		0.00	25,272.00							
7502-001	Test Cell 110v outlets	40	01JUL04*	26AUG04	1,283		0.00	14,268.80							

Run Date 24FEB04 10:54



ECP5

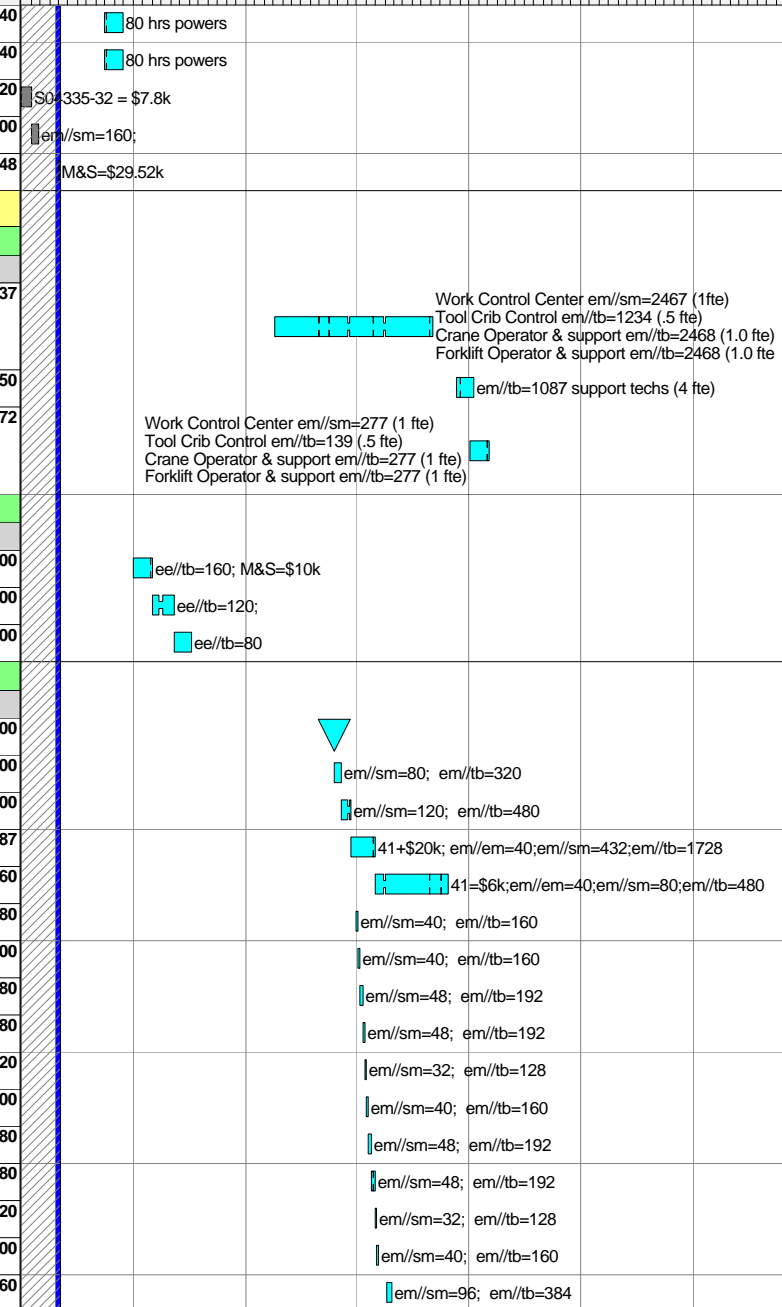
NCSX Baseline (ECP5)  
First Plasma May 2008

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Rev B  
WBS 12-2/18; WBS 13- 2/19  
WBS14- 2/20; WBS 7 -2/20




Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year								
									FY04	FY05	FY06	FY07	FY08	FY09	FY10		
7502-002	Test Cell 208v outlets	40	01JUL04*	26AUG04	1,283		0.00	7,134.40									
7502-010	Ready Rooms (under control room) 110v outlets	40	01JUL04*	26AUG04	1,157		0.00	7,134.40									
7502-011	Cable Removal in test cell (S04335-32)	0*	01OCT03A	31OCT03A		100	9,937.20	9,937.20									
7502-025	TC Floor penetration covers	42	03NOV03A	26NOV03A		100	16,848.00	16,848.00									
EXFAC001.1	Complete Crane Modifications (S04354)	0*	02FEB04A	30JAN04A		100	37,608.48	37,608.48									
<b>75 - Test Cell and Basement Assembly Operations</b>																	
<b>7501 - Construction Support Crew</b>																	
7501-05	Construction Support Crew during machine assy	356	05JAN06	04JUN07	112		0.00	794,815.37									
7501-06	Construction Support Crew during e-beam mapping	41	22AUG07	18OCT07	498		0.00	94,025.50									
7501-07	Construction Support Crew during cryostat instl	40	05OCT07	03DEC07	468		0.00	92,837.72									
<b>7502 - Test Cell Facility Preparations</b>																	
7502-020	Resurface TC floor	42	04OCT04*	02DEC04	1,132		0.00	30,248.00									
7502-030	TC Floor firesealing	42	03DEC04*	09FEB05	1,132		0.00	12,996.00									
7502-035	Control room firesealing	42	10FEB05*	08APR05	1,132		0.00	8,664.00									
<b>7503 - Machine Assembly</b>																	
730.1000	Begin Assembly Activities	0	18JUL06*		124		0.00	0.00									
730.1020	Install & Level Support Base Plates	15	18JUL06	07AUG06	124		0.00	34,504.00									
730.1030	Install/Level Machine Support Columns	25	08AUG06	12SEP06	124		0.00	51,756.00									
730.1040	Install Platform	55	13SEP06	30NOV06	124		0.00	231,277.87									
730.1050	Install Lighting, Fire Det/Supprs under platform	160	01DEC06	24JUL07	559		0.00	70,761.60									
730.1060	Install Lower Cryostat Floor	5	27SEP06	03OCT06	124		0.00	17,784.80									
730.1070	Install Lower PF 3,4,5&6 into prelim position	5	04OCT06	10OCT06	124		0.00	18,584.00									
730.1081	1st Field Period Assembly-Position	6	11OCT06	18OCT06	124		0.00	22,300.80									
730.1081X	*****PBR add1st Field Period Assembly-Position	6	19OCT06	26OCT06	124		0.00	22,300.80									
730.1082	1st Field Period Assembly-Weld	4	27OCT06	01NOV06	124		0.00	14,867.20									
730.1083	1st Field Period Assembly-Leak Check	5	02NOV06	08NOV06	124		0.00	18,584.00									
730.1091	2nd Field Period Assembly-Position	6	09NOV06	16NOV06	124		0.00	22,300.80									
730.1091X	****PBR add2nd Field Period Assembly-Position	6	17NOV06	28NOV06	124		0.00	22,300.80									
730.1092	2nd Field Period Assembly-Weld	4	29NOV06	04DEC06	124		0.00	14,867.20									
730.1093	2nd Field Period Assembly-Leak Check	5	05DEC06	11DEC06	124		0.00	18,584.00									
730.1101	3rd Field Period Assembly-Position	12	05JAN07	22JAN07	112		0.00	44,601.60									



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Schedule											
									FY04	FY05	FY06	FY07	FY08	FY09	FY10					
730.1101X	*****pbr adrd Field Period Assembly-Position	12	23JAN07	07FEB07	112		0.00	44,601.60									em/sm=96; em/tb=384			
730.1102	3rd Field Period Assembly-Weld	4	08FEB07	13FEB07	112		0.00	14,867.20									em/sm=32; em/tb=128			
730.1103	3rd Field Period Assembly-Leak Check	5	14FEB07	20FEB07	112		0.00	18,584.00									em/sm=40; em/tb=160			
730.1130	Make Final Vacuum Pump Connections to VV	13	21FEB07	09MAR07	112		0.00	37,168.00									em/sm=80; em/tb=320			
730.1140	PTP Pumpdown & leak check VV (WBS 220-025)	10	12MAR07	23MAR07	112		0.00	47,012.00									support labor em/em=40; em/sm=160; em/tb=240			
730.1150	Raise lower PF-3,4,5&6 coils into final position	3	26MAR07	28MAR07	112		0.00	11,615.00									em/sm=25; em/tb=100			
730.1170	Install PF Solenoid into position (U/L 1&2 PF)	4	29MAR07	03APR07	112		0.00	13,938.00									em/sm=30; em/tb=120			
730.1175	Install Upper PF-3,4,5 & 6 coils	3	04APR07	06APR07	112		0.00	11,615.00									em/sm=25; em/tb=100			
730.1180	Install Bus connections to coil sys (WBS 431-131)	40	09APR07	04JUN07	112		0.00	0.00												
730.1210	Connect Cooling System (WBS 61)	30	26MAR07	04MAY07	132		0.00	0.00												
730.1230	Complete Bus connections (WBS 4 )	40	09APR07	04JUN07	112		0.00	37,168.00									em/sm=80; em/tb=320			
730.1249	Operational Readiness Assessment	20	07MAY07	04JUN07	112		0.00	0.00												
730.1250	Operational Readiness	0		04JUN07	112		0.00	0.00												
730.8075	Prep Cryostat for installation	10	05OCT07	18OCT07	112		0.00	66,128.00												
730.8100	Cryo stat installation & Test & Cooldown	20	19OCT07	15NOV07	112		0.00	132,256.00												
730.8200	Cold Power Test PTP	10	16NOV07	03DEC07	112		0.00	66,128.00												
<b>76 - Tooling Design &amp; Fabrication</b>																				
713.020	Lab Fab/Assy/Installation	764*	01OCT04*	28SEP07	519		0.00	29,973.45									PERRY=80;em/sm=42;em/tb=140			
713.030	Tooling,assy fixtures,misc equipt	383*	03APR06*	28SEP07	519		0.00	80,177.55									41=\$60k			
713.040	General procurements	383*	03APR06*	28SEP07	519		0.00	60,133.16									41=\$45k			
713.050	Welding tools, materials & equipt	383*	03APR06*	28SEP07	519		0.00	53,451.70									41=\$40k			
<b>77 - Measurement Systems</b>																				
780.000	No additional tools/devices needed.	1,106*	02FEB04	30MAY08	348		0.00	0.00												
<b>81 - Project Management and Control</b>																				
<b>Job: 8101 - Project Management &amp; Control-NEILSON</b>																				
<b>FY03 Actual Cost</b>																				
810.001	Apr-Sept MIE Cost PPPL	128*	01APR03A	30SEP03A		100	387,340.00	387,340.00												
810.009	PDR Support	3*	01OCT03A	31OCT03A		100	41,163.08	41,163.08									41=\$ 28.17 k R400432 (pdr support) Neumeyer PDR panel = 35 hrs			
810.010	CD-3 Readiness - Update Assy & Installation plan	65	01APR04*	01JUL04	1,346		0.00	0.00												
810.015	CD-3 Readiness - Update resource loaded schedule	65	01APR04*	01JUL04	1,346		0.00	0.00												
810.020	CD-3 Readiness - Update risk management plan	65	01APR04*	01JUL04	1,346		0.00	0.00												

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	Fiscal Year						
									FY04	FY05	FY06	FY07	FY08	FY09	FY10
810.025	CD-3 Readiness - Update Value mgt/engr doc.	65	01APR04*	01JUL04	1,346		0.00	0.00							
810.028	CD-3 Readiness - Update Project Controls doc.	65	01APR04*	01JUL04	1,346		0.00	0.00							
810.030	CD-3 Readiness - Update Acquisition Strategy	65	01APR04*	01JUL04	1,346		0.00	0.00							
810.035	CD-3 Readiness - Update Proj Exec Plan (PEP)	65	01APR04*	01JUL04	1,346		0.00	0.00							
810.040	CD-3 Readiness - Assess/Update Integr Proj Team	65	01APR04*	01JUL04	1,346		0.00	0.00							
810.002	Project Management Office PPPL FY04	256*	01OCT03A	30SEP04	1,283	LOE	228,799.40	689,154.82							
810.003	Project Management Office PPPL FY05	255*	01OCT04*	30SEP05	1,028		0.00	538,759.58							
810.004	Project Management Office PPPL FY06	254*	03OCT05*	29SEP06	519		0.00	492,727.12							
810.004X	Project Management Office PPPL FY07	65	02OCT06	04JAN07	519		0.00	140,228.10							
810.005	Project Management Office PPPL FY07	190*	05JAN07	28SEP07	519		0.00	341,782.20							
810.900	Project Management Office PPPL 1 mo SO	21	01OCT07*	29OCT07	351		0.00	42,310.60							
810.990	Project Management Office PPPL 1 mo SO	21	30OCT07*	27NOV07	351		0.00	42,310.60							
810.991	Project Management Office PPPL 1 mo SO	21	28NOV07*	31DEC07	351		0.00	42,310.60							
810.992	Project Management Office PPPL 1 mo SO	21	02JAN08*	30JAN08	351		0.00	42,310.60							
810.993	Project Management Office PPPL 1 mo SO	21	31JAN08*	28FEB08	351		0.00	42,310.60							
810.994	Project Management Office PPPL 1 mo SO	21	29FEB08*	28MAR08	351		0.00	42,310.60							
810.995	Project Management Office PPPL 1 mo SO	21	31MAR08*	28APR08	351		0.00	42,310.60							
810.996	Project Management Office PPPL 1 mo SO	21	29APR08*	27MAY08	351		0.00	42,310.60							
<b>Job: 8102 - NCSX MIE Management ORNL-LYON</b>															
<b>FY03 Actual Cost</b>															
810.101	Apr-Sept MIE Cost ORNL	129*	01APR03A	30SEP03A		100	58,600.00	58,600.00							
810.102	Project Management Office ORNL FY04	256*	01OCT03A	30SEP04	1,283	LOE	39,915.77	120,228.22							
810.103	Project Management Office ORNL FY05	255*	01OCT04*	30SEP05	1,028		0.00	85,894.36							
810.104	Project Management Office ORNL FY06	254*	03OCT05*	29SEP06	519		0.00	49,323.49							
810.104X	Project Management Office ORNL FY06	65	02OCT06	04JAN07	519		0.00	14,321.54							
810.105	Project Management Office ORNL FY07	190*	05JAN07	28SEP07	519		0.00	33,631.32							
810.901	Project Management Office ORNL 1 mo SO	21	02OCT07*	30OCT07	350		0.00	2,834.10							
810.980	Project Management Office ORNL 1 mo SO	21	31OCT07*	28NOV07	350		0.00	2,834.10							
810.981	Project Management Office ORNL 1 mo SO	21	03DEC07*	02JAN08	350		0.00	2,834.10							
810.982	Project Management Office ORNL 1 mo SO	21	03JAN08*	31JAN08	350		0.00	2,834.10							
810.983	Project Management Office ORNL 1 mo SO	21	01FEB08*	29FEB08	350		0.00	2,834.10							
810.984	Project Management Office ORNL 1 mo SO	21	03MAR08*	31MAR08	350		0.00	2,834.10							
810.985	Project Management Office ORNL 1 mo SO	21	01APR08*	29APR08	350		0.00	2,834.10							

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 ECP5 Schedule  
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10																											
810.986	Project Management Office ORNL 1 mo SO	21	30APR08*	28MAY08	350		0.00	2,834.10																																																																						
<b>82 - Project Engineering</b>																																																																														
<b>Job: 8202 - Engr Mgmt &amp; Sys Eng Support-REIERSEN</b>																																																																														
<b>FY03 Actual Cost</b>																																																																														
820.110	Apr-Sept MIE Cost PPPL	128*	01APR03A	30SEP03A		100	295,530.00	295,530.00																																																																						
820.002	LOE FY04	256*	01OCT03A	30SEP04	1,283	LOE	208,081.42	626,751.30	Reiersen =1467hr 35=8\$ k ; Dudek/Gentile=604; Such=86 41=\$30 k; Simmons=1326																																																																					
L4-200	PDR	0		30JAN04*	1,410		0.00	0.00																																																																						
L4-217	EIR	0		30JAN04*	1,410		0.00	0.00																																																																						
M-0100	CD-2 CD-3A	0		27FEB04*	1,410		0.00	0.00																																																																						
M-0115	CD-3	0		30SEP04*	1,259		0.00	0.00																																																																						
M-0120	CD-4	0		28SEP07*	0		0.00	0.00																																																																						
<b>Job: 8203 - Design Integration-REIERSEN</b>																																																																														
<b>FY03 Actual Cost</b>																																																																														
820.150	Apr-Sept MIE Cost PPPL	128*	01APR03A	30SEP03A		100	178,750.00	178,750.00																																																																						
820.200	LOE FY04	256*	01OCT03A	30SEP04	1,283	LOE	85,414.57	257,272.80	Brown=1036; Steill= 863																																																																					
<b>Job: 8204 - Systems Analysis-REIERSEN</b>																																																																														
<b>FY03 Actual Cost</b>																																																																														
820.173	Apr-Sept MIE Cost PPPL	128*	01APR03A	30SEP03A		100	44,620.00	44,620.00																																																																						
820.174	LOE FY04	172*	01OCT03A	30SEP04	1,283	LOE	74,687.91	150,254.50	Brooks=935																																																																					
1501-193	Perform seismic analyses	30	02FEB04	12MAR04	1,424		0.00	0.00																																																																						
8204.01	Assess magnetic material in test cell	56*	02FEB04*	19APR04	125		0.00	38,568.00	Jun=240 hrs																																																																					
8204.02	Model effects local high MU regions on MCWF	29	20APR04	28MAY04	125		0.00	19,284.00	jun=120 hrs																																																																					
820.003	Proj engr,Sys Integr.,Designers, Deputy PM FY05	255*	01OCT04*	30SEP05	1,028		0.00	933,340.30	EA/EM =3107hr ; EA/DM =863hr ; 35=07\$ k ; em/em=604; ee/am=259 fc/em=1061																																																																					
820.004	Proj engr,Sys Integr.,Designers, Deputy PM FY06	254*	03OCT05*	29SEP06	348		0.00	870,153.80	EA/EM =2762hr ; EA/DM =863hr ; 35=05\$ k ; em/em=604; ee/am=432 fc/em=884																																																																					
820.004X	Proj engr,Sys Integr.,Designers, Deputy PM FY07	65	02OCT06	04JAN07	348		0.00	240,404.50	EA/EM =690hr ; EA/DM =215hr ; 35=05\$ k ; em/em=6150; ee/am=108 fc/em=221																																																																					
820.004Z	Proj engr,Sys Integr.,Designers, Deputy 8mo s.o.	187	05JAN07	25SEP07	348		0.00	692,941.22	EA/EM =690hr ; EA/DM =215hr ; 35=05\$ k ; em/em=6150; ee/am=108 fc/em=221																																																																					
820.005	Proj engr,Sys Integr.,Designers, Deputy PM FY07	174*	26SEP07*	30MAY08	348		0.00	375,239.54	EA/EM =1.035hr ; em/em=449 35=03\$ k ; ee/am=224; fc/em=354																																																																					
<b>84 - Project Physics</b>																																																																														
<b>Job: 8401 - Project Physicis-ZARNSTORFF</b>																																																																														
<b>FY03 Actual Cost</b>																																																																														
840.201	Apr-Sept MIE Cost PPPL	128*	01APR03A	30SEP03A		100	210,270.00	210,270.00																																																																						

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	PCTC	Earned value cost (BCWP)	Budgeted Cost (loaded without Conting)	FY04							FY05							FY06							FY07							FY08							FY09							FY10						
									Gantt Chart							Gantt Chart							Gantt Chart							Gantt Chart							Gantt Chart							Gantt Chart													
840.202	Project Physics/Engr Analysis FY04	256*	01OCT03A	30SEP04	1,283	LOE	33,135.66	99,806.20	Zarnstorff=636 41=3\$K ;35=01\$K																																																
840.203	Project Physics/Engr Analysis FY05	255*	01OCT04*	30SEP05	1,028		0.00	95,530.00	r///rms=590;41=\$3 k;35=\$1 k																																																
<b>Job: 8402 - Project Physics MIE ORNL-LYON</b>																																																									
<b>FY03 Actual Cost</b>																																																									
840.301	Apr-Sept MIE Cost ORNL	152*	01APR03A	30SEP03A		100	40,980.00	40,980.00																																																	
840.302	Project Physics/Engr Analysis FY04	256*	01OCT03A	30SEP04	1,283	LOE	10,144.42	30,555.48	Lazarus = 178+178																																																
<b>85 - Integrated Systems Testing</b>																																																									
920.001	Procedure and Document Preparation	257	03APR06*	11APR07	129		0.00	458,003.27	em//em=1580;em//sm=1580																																																
920.005	Start-up Testing	55	05JUN07	21AUG07	112		0.00	390,743.50	em//em=610, ee//em=205, ec//em=265 em//sm=305, ee//sm=530, em//tb=265 r///m2=470																																																
920.010	Power Testing and E-Beam Mapping	41	22AUG07	18OCT07	112		0.00	308,663.69	em//em=480, ee//em=160, ec//em=208 em//sm=240, ee//sm=416, r///m2=368 em//tb=208																																																
920.020	Final ISTP	10	04DEC07	17DEC07	112		0.00	67,553.80	em//em=110, ee//sm=35, ec//em=47 em//sm=55, ee//sm=94, r///m2=47 em//tb=82																																																
730.9000	First Plasma	0		30MAY08*	0		0.00	0.00																																																	
920.030		1	02FEB04	02FEB04	0		0.00	0.00																																																	
<b>PPPL Allocations</b>																																																									
<b>Job: 8998 - Allocations</b>																																																									
<b>FY03 Actual Cost</b>																																																									
99.03	Apr-Sept MIE Cost PPPL	128*	01APR03A	30SEP03A		100	60,670.00	60,670.00																																																	
99.04	PPPL Allocations FY04	256*	01OCT03A	30SEP04	1,283	LOE	88,285.51	265,920.20	54=153.8																																																
99.05	PPPL Allocations FY05	255*	01OCT04*	30SEP05	1,028		0.00	214,990.60	54=123.7																																																
99.06	PPPL Allocations FY06	254*	03OCT05*	29SEP06	774		0.00	214,619.50	54=123.7																																																
99.07	PPPL Allocations FY07	190*	02OCT06*	29JUN07	519		0.00	170,232.95	54=92.77																																																
99.07X	PPPL Allocations FY07	65*	02JUL07*	28SEP07	519		0.00	56,885.00	54=31																																																
<b>+ Contingency</b>																																																									
		1,106	02FEB04	30MAY08	348		0.00	15,381,700.00																																																	

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