



Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Gantt Chart											
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18			
Cost Center 1805 - Facility Operations																	
Program Research Plan																	
MILEBASE01	First plasma		0	30DEC11*	0.00												
MILEBASE02	Six week run - Magnetic Configuration Studies	16JAN12	43	14MAR12	0.00												
MILEBASE03	Begin FY13 Operations		0	01MAR13*	0.00												
MILEBASE04	FY13 18 week run- Initial Heating Experiments	04MAR13*	151*	30SEP13	0.00												
MILEBASE05	Begin FY15 Operations		0	02FEB15*	0.00												
MILEBASE06	FY15 24 week run - High Beta Experiments	03FEB15	171	29SEP15	0.00												
Administration and Management																	
8190 - Administration and Management																	
1805FY08	FY10-Administration/Proj mgnt	01OCT09*	259	28SEP10	469,137.88												
1805FY090	FY11-Administration/Proj mgnt	01OCT10*	259	28SEP11	719,440.42												
1805FY100	FY12-Administration/Proj mgnt	03OCT11*	259	27SEP12	1,228,813.52												
1805FY110	FY13-Administration/Proj mgnt	01OCT12*	259	26SEP13	1,270,619.62												
1805FY120	FY14-Administration/Proj mgnt	01OCT13*	259	26SEP14	1,313,827.03												
1805FY130	FY15-Administration/Proj mgnt	01OCT14*	259	28SEP15	1,358,491.91												
Post MIE PTP & sys caretaking																	
8191 - Post PTP maintenance and sys caretaking																	
1805FY0900	Post PTP maintenance & caretaking	07JUN11*	145	26DEC11	519,177.22												
Machine Operations																	
8192 - Machine Operations																	
1805FY0901	FY12-Engr ops	16JAN12*	40	09MAR12	121,851.34												
1805FY0904	FY12-Machine Ops	16JAN12*	40	09MAR12	344,167.04												
1805FY0905	FY12-Exp Pwr (FCPC)	16JAN12*	40	09MAR12	110,153.98												
1805FY0906	FY12-Facility Power (MG/AC)	16JAN12*	40	09MAR12	14,016.76												
1805FY0907	FY12-Diagnostic ops	16JAN12*	40	09MAR12	0.00												
1805FY0908	FY12-Computer division	16JAN12*	40	09MAR12	25,206.39												

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Forecast																				
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18												
1805FY0909	FY12-Central I&C/Plasma control	16JAN12*	40	09MAR12	37,459.84				EC//EM =207hr ; EC//TB =207 ;																	
1805FY0910	FY12-Construction	16JAN12*	40	09MAR12	53,703.95				EM//EM =207hr ; EM//TB =414hr ;																	
1805FY0912	FY12-Facilities	16JAN12*	40	09MAR12	8,966.37				EM//EM =69hr ;																	
1805FY1301	FY13-Energy	04MAR13	170	25OCT13	1,000,935.00																					
1805FY1302	FY13-Central I&C (hardware)	04MAR13	170	25OCT13	621,203.06																					
1805FY1303	FY13-Construction	04MAR13	170	25OCT13	431,783.69																					
1805FY1304	FY13-CPPG	04MAR13	170	25OCT13	529,070.98																					
1805FY1305	FY13-Data Acq Sys	04MAR13	170	25OCT13	714,245.83																					
1805FY1306	FY13-Diag/Boundary Physics	04MAR13	170	25OCT13	851,986.09																					
1805FY1307	FY13-Exp Pwr (FCPC)	04MAR13	170	25OCT13	864,786.34																					
1805FY1308	FY13-Facility Power (MG/AC)	04MAR13	170	25OCT13	1,124,273.48																					
1805FY1309	FY13-Machine Ops	04MAR13	170	25OCT13	3,379,389.65																					
1805FY1310	FY13-NBI Ops	04MAR13	170	25OCT13	1,429,005.36																					
1805FY1311	FY13-Plasma Control	04MAR13	170	25OCT13	547,618.38																					
1805FY1312	FY13-RF Operations NONE	04MAR13	170	25OCT13	0.00																					
1805FY1313	FY13-Torus Systems	04MAR13	170	25OCT13	321,761.40																					
1805FY1314	FY13-Operations Contingency @10%	06FEB13*	159	16SEP13	1,328,250.00																					
1805FY1401	FY14-Energy	01OCT13*	260	29SEP14	565,500.00																					
1805FY1402	FY14-Central I&C (hardware)	01OCT13	260	29SEP14	147,311.69																					
1805FY1403	FY14-Construction	01OCT13	260	29SEP14	1,638,747.76																					
1805FY1404	FY14-CPPG	01OCT13	260	29SEP14	72,622.50																					
1805FY1405	FY14-Data Acq Sys	01OCT13	260	29SEP14	109,039.00																					
1805FY1406	FY14-Diag/Boundary Physics	01OCT13	260	29SEP14	91,844.98																					
1805FY1407	FY14-Exp Pwr (FCPC)	01OCT13	260	29SEP14	130,117.67																					
1805FY1408	FY14-Facility Power (MG/AC)	01OCT13	260	29SEP14	185,584.38																					
1805FY1409	FY14-Machine Ops	01OCT13	260	29SEP14	683,465.74																					
1805FY1410	FY14-NBI Ops	01OCT13	260	29SEP14	465,485.21																					
1805FY1411	FY14-Plasma Control	01OCT13	260	29SEP14	91,844.98																					
1805FY1412	FY14-RF Operations NONE	01OCT13	260	29SEP14	0.00																					
1805FY1413	FY14-Torus Systems	01OCT13	260	29SEP14	275,573.17																					
1805FY1501	FY15-Energy	03FEB15	171	29SEP15	1,334,580.00																					
1805FY1502	FY15Central I&C (hardware)	03FEB15	171	29SEP15	882,232.82																					
1805FY1503	FY15-Construction	03FEB15	171	29SEP15	612,970.64																					

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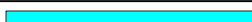


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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget													
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18				
1805FY1504	FY15-CPPG	03FEB15	171	29SEP15	751,362.32													
1805FY1505	FY15-Data Acq Sys	03FEB15	171	29SEP15	1,014,339.13													EM//EM =3,452hr ;
1805FY1506	FY15-Diag/Boundary Physics	03FEB15	171	29SEP15	1,210,026.29													EM//SM =673hr ; EM//EM =2,762hr ; EM//TB =4,505hr ;
1805FY1507	FY15-Exp Pwr (FCPC)	03FEB15	171	29SEP15	1,228,226.55													EM//SM =859hr ; EM//EM =2,071hr ; EM//TB =5,751hr ;
1805FY1508	FY15-Facility Power (MG/AC)	03FEB15	171	29SEP15	1,596,751.80													EM//SM =976hr ; EM//EM =3,279hr ; EM//TB =6,532hr ;
1805FY1509	FY15-Machine Ops	03FEB15	171	29SEP15	4,744,697.79													41=120\$k ; 31=600 ; EM//SM =1,829hr ; EM//EM =6,386hr ; EM//TB =12,238hr ;
1805FY1510	FY15-NBI Ops	03FEB15	171	29SEP15	2,020,609.46													41=330\$k ; EM//SM =1,144hr ; EM//EM =2,071hr ; EM//TB =7,658hr ;
1805FY1511	FY15-Plasma Control	03FEB15	171	29SEP15	777,715.49													EM//SM =112hr ; EM//TB =751hr ; EM//EM =3,107hr ;
1805FY1512	FY15-RF Operations	03FEB15	171	29SEP15	1,525,431.98													EM//SM =337hr ; EM//TB =2,252hr ; EM//EM =5,610hr ;
1805FY1513	FY15-Torus Systems	03FEB15	171	29SEP15	456,962.15													EM//SM =119hr ; EM//TB =796hr ; EM//EM =1,605hr ;
1805FY1514	FY15-Operations Contingency @10%	03FEB15	171	29SEP15	1,771,000.00													81=1,771\$k ;
Allocations																		
8198 - Allocations																		
1805FY090A	FY11-Allocations	01OCT10*	249	14SEP11	567,750.00													allocations=\$250k
1805FY100A	FY12-Allocations	03OCT11*	255	21SEP12	587,000.00													allocations=\$250k
1805FY110A	FY13-Allocations	01OCT12*	255	20SEP13	1,624,332.00													allocations=\$669k
1805FY120A	FY14-Allocations	01OCT13*	255	22SEP14	1,679,190.00													allocations=\$669k
1805FY130A	FY15-Allocations	01OCT14*	255	22SEP15	1,302,543.00													allocations=\$669k
Cost Center: 1808 - Research																		
Research Prep Management																		
Job: 8181 - Research Prep Management																		
1808FY0902	FY10 Research mgt & oversight	01OCT09*	250	15SEP10	263,025.36													
1808FY1002	FY11 Research mgt & oversight	01OCT10*	255	22SEP11	412,864.16													
1808FY1102	FY12 Research mgt & oversight	03OCT11*	255	21SEP12	746,900.44													ZARNSTORFF =1,768hr ; ORNLRM =884hr
1808FY1202	FY13 Research mgt & oversight	03OCT12*	255	24SEP13	770,202.68													ZARNSTORFF =1,768hr ; ORNLRM =884hr
1808FY1302	FY14 Research mgt & oversight	03OCT13*	255	24SEP14	794,256.32													ZARNSTORFF =1,768hr ; ORNLRM =884
1808FY1402	FY15 Research mgt & oversight	03OCT14*	255	24SEP15	819,052.52													ZARNSTORFF =1,768hr ; ORNLRM =884r
Diagnostic Oversight																		
Job: 8184 - Diagnostic Oversight																		
DIAGOVER	FY10 physics support of diag upgrades	01APR11*	1,149	26AUG15	5,449,843.47													PPPL RM =11880hr ; ORNLRM =52 NOVA =2900 ; JHC =1500 AUBURN =1200 ; UCLA =1200 LLNL =600 ;

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Budget														
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18						
Physics Analysis & Support																				
Job: 8185 - Physics analysis & support																				
1808FY0912	FY10 Research mgt & oversight	01OCT09*	250	15SEP10	466,734.24															
1808FY0913	FY11 Research mgt & oversight	01OCT10*	255	22SEP11	339,990.48															
1808FY0914	FY12 Research mgt & oversight	03OCT11*	255	21SEP12	614,568.20															
1808FY0915	FY13 Research mgt & oversight	03OCT12*	255	24SEP13	633,227.64															
1808FY0916	FY14 Research mgt & oversight	03OCT13*	255	24SEP14	652,468.00															
1808FY0917	FY15 Research mgt & oversight	03OCT14*	255	24SEP15	672,291.80															
1808FY11-1	Ops support, Anaysis, Theory (PPPL)	01OCT12*	261	30SEP13	6,353,851.84															
1808FY11-2	Ops support, Anaysis, Theory (ORNL)	01OCT12*	261	30SEP13	3,053,579.05															
1808FY15-1	Ops support, Anaysis, Theory (PPPL)	01OCT14*	261	30SEP15	8,491,544.88															
1808FY15-2	Ops support, Anaysis, Theory (ORNL)	01OCT14*	261	30SEP15	4,010,248.32															
Collaborations																				
Job: 8186 - Collaborators																				
1808FY11-3	Ops support, Anaysis, Theory (OTHER)	01OCT12*	261	30SEP13	4,000,000.00															
1808FY15-3	Ops support, Anaysis, Theory (OTHER)	01OCT14*	261	30SEP15	5,000,000.00															
Cost Center 9405 - Diagnostic Equipment																				
3 - Diagnostics																				
310 - Magnetics																				
3102 - In-vessel Magnetics																				
3051	In-vessel magneticsDsn/fab	02MAY11*	96	12SEP11	85,669.88															
3055	In-vessel magnetics-Fab./Install	13SEP11	17	05OCT11	36,407.35															
3058	In-vessel magnetics-Commission	06OCT11*	20	02NOV11	23,294.88															
3103 - Magnetic Instrumentation																				
2069	Magnetics system cable & raceway installation	20AUG12	100	04JAN13	159,865.74															
3061	Magnetics instrumentation -Design/Procure	24MAY11	324	17AUG12	925,980.95															
3065	Magnetics instrumentation -Fab./Install	20AUG12	100	04JAN13	215,885.67															
3068	Magnetics instrumentation -Commission	07JAN13	40	01MAR13	111,438.72															
3104 - Terminate ex-vessel magnetics sensors																				
3075	Complete Termination ex-vsl magn sensors	08OCT12	65	04JAN13	62,831.52															

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Forecast											
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18			
332 - UV Spectrometer																	
3320 - UV Spectrometer																	
3101	UV spectrometer-Design/Fab.	16AUG12	45	17OCT12	35,666.33	EM//EM =72hr ; EA//SM =144 ;											
3105	UV spectrometer-Fab./Install	18OCT12	97	01MAR13	58,958.28	EM//SM =144hr ; EE//TB =144hr ; EC//EM =72hr ; 41=4.5\$K ;											
3108	UV spectrometer-Commission	04MAR13*	40	26APR13	13,735.44	EC//EM =72hr ;											
333 - Bolometer Array																	
3330 - Bolometer Array																	
3091	Bolometer array-Design/Fab.	26JUL12	45	26SEP12	49,495.68	EM//EM =144hr ; EA//SM =144 ;											
3095	Bolometer array-Fab./Install	27SEP12	112	01MAR13	49,826.34	EE//EM =12hr ; EM//SM =96hr ; EE//TB =144hr ; 41=11\$K ;											
3098	Bolometer array-Commission	04MAR13	40	26APR13	9,156.96	EC//EM =48hr ;											
3099	Bolometer array-Fab./Install	13OCT14	81	02FEB15	104,352.00	EE//EM =24hr ; EM//SM =192hr ; EE//TB =288hr ; 41=21\$K ;											
3100	Bolometer array-Commission	03FEB15	40	30MAR15	19,581.12	EC//EM =96hr ;											
335 - Filterscopes																	
3350 - Filterscopes																	
3151	Filterscopes-Design/Fab.	19JUL12	45	19SEP12	24,747.84	EM//EM =72hr ; EA//SM =72 ;											
3155	Filterscopes-Fab./Install	20SEP12	117	01MAR13	76,703.21	41=25\$K ; EM//SM =144hr ; EE//TB =144hr ;											
3158	Filterscopes-Commission	04MAR13	40	26APR13	37,822.32	EC//EM =72hr ; EM//SM =144hr ;											
341 - Soft X-Ray Arrays																	
3410 - Soft X-Ray Arrays																	
3035	Soft X-Ray Arrays-Fab./Install	28SEP12	111	01MAR13	193,337.40	EM//EM =144hr ; ea//sm =72hr ; EM//SM =288hr ; EM//TB =144hr ; 41=58.6\$K ;											
3038	Soft X-Ray Arrays-Commission	04MAR13	40	26APR13	24,086.88	EM//SM =144hr ;											
342 - X-ray crystal spectroscopy																	
3420 - X-ray crystal spectroscopy																	
3039	X-ray crystal spectroscopy-Fab,Install	10AUG12	146	01MAR13	714,992.51	EM//EM =144hr ; ea//sm =144hr ; EM//SM =288hr ; ec//em=144 ; 41=382.1\$K ;											
3039A	X-ray crystal spectroscopy-Commission	04MAR13*	45	03MAY13	48,173.76	EM//SM =288hr											
351 - Thomson Scattering																	
3510 - Thomson Scattering																	
3011	Thomson Scattering-Design/Fab.	13MAY11*	243	17APR12	1,516,687.86	EM//EM =432hr ; EE//EM =288hr ; EA//SM =432 ; EM//SM =864hr ; EE//SM =432hr ; EM//TB =864hr ; 41=680\$K ;											
3015	Thomson Scattering-Fab./Install	02OCT12	109	01MAR13	577,615.68	EM//EM =432hr ; EE//EM =144hr ; EA//SM =432 ; EM//SM =864hr ; EE//SM =432hr ; EM//TB =864hr ; EC//EM =432hr ;											
3018	Thomson Scattering-Commission	04MAR13	85	28JUN13	126,230.40	EM//TB =432hr ; EC//EM =432hr ;											

Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Forecast											
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18			
352 - DNB																	
3520 - DNB Installation and servies																	
3081	DNB installation -Design/procure	01OCT13*	192	25JUN14	447,690.24												EA//SM =288 ; EM//SM =576hr ; EM//TB =576hr ; 41=153.6\$K ;
3085	DNB installation -Fab./Install	26JUN14	138	05JAN15	264,996.72												EA//SM =144 ; EM//SM =864hr ; EM//TB =576hr ; EC//EM =144hr ;
3088	DNB installation -Commission	06JAN15*	40	02MAR15	252,252.00												EA//SM =144 ; EM//SM =864hr ; EM//TB =144hr ; EC//EM =288hr ;
353 - MSE																	
3530 - MSE																	
3530-1	MSE-Design/Procure	02OCT13*	171	28MAY14	638,291.40												em//em=432;ea//sb=864 em//sm=576;em//tb=432; 41=169
3530-2	MSE-Fab./Install	29MAY14	120	12NOV14	520,823.17												ea//sb=864;em//sm=1440 em//tb=720;ec//em=288
3530-3	MSE-Commission	13NOV14*	73	23FEB15	291,242.88												ea//sb=288;em//sm=864 em//tb=288;ec//em=288
354 - CHERS																	
3540 - CHERS																	
3021	CHERS -Design/Procure	01OCT13*	165	19MAY14	648,989.28												EM//EM =288hr ; EA//SM =288 ; EM//SM =576hr ; EE//SM =144hr ; EM//TB =576hr ; 41=225.6\$K ;
3025	CHERS -Fab./Install	20MAY14	138	27NOV14	268,345.88												EM//EM =288hr ; EA//SM =288 ; EM//SM =576hr ; EM//TB =576hr ;
3028	CHERS -Commission	28NOV14*	40	22JAN15	29,371.68												EC//EM =144hr ;
355 - ECE																	
3550 - ECE																	
3550-01	MSE-Design/Procure	25JUN14	67	25SEP14	164,170.20												em//em=144;ee//em=144;ee//sm=144;41=47
3550-2	MSE-Fab./Install	26SEP14	65	25DEC14	176,558.70												em//em=144;ee//em=144;em//sm=288 ee//tb=144;em//tb=144;ec//em=144
3550-3	MSE-Commission	26DEC14	52	09MAR15	204,783.84												em//em=144;ee//em=144;em//sm=288;ec//em=432
356 - Interferometers																	
3562 - Interferometer																	
3041	Interferometer-Design/Procure	08OCT12	57	25DEC12	120,567.60												EM//EM =144hr ; EA//SM =144 ; 41=45
3045	Interferometer-Fab./Install	26DEC12*	48	01MAR13	158,369.52												EM//EM =144hr ; EM//SM =144hr ; EM//TB =144hr ; 41=58.6
3048	Interferometer-Commission	04MAR13	28	10APR13	51,557.76												EM//SM =144hr ; EC//EM =144hr ;
357 - Reflectometer																	
3570 - Reflectometer																	
3040	Reflectometer-Design	19JUN12	83	11OCT12	191,468.87												
3040A	Reflectometer-Fab,Install	12OCT12	101	01MAR13	659,439.36												
3040B	Reflectometer-Commission	04MAR13	65	31MAY13	122,368.32												

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10																		
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18										
361 - Filtered Cameras																								
3611 - Filtered 2-D cameras																								
3125	Filtered 2-D cameras-Fab./Install	04MAR13	65	31MAY13	161,155.68																			
3612 - Filtered 1-D camera																								
3135	Filtered 1-D camera -Fab./Install	04MAR13	65	31MAY13	64,386.84																			
364 - IR Camera																								
3640 - IR Camera																								
3141	IR-camera-Design/Fab.	02OCT12	25	05NOV12	25,588.80																			
3145	IR-camera-Fab./Install	06NOV12	68	07FEB13	46,126.92																			
3148	IR-camera-Commission	08FEB13	16	01MAR13	13,735.44																			
366 - PFC mounted Langmiur Probes																								
3660 - PFC mounted Langmiur probe																								
3111	PFC-mounted Langmiur probes-Design/Fab.	15OCT12	20	09NOV12	16,649.40																			
3115	PFC-mounted Langmiur probes-Fab./Install	12NOV12	65	08FEB13	31,714.68																			
3118	PFC-mounted Langmiur probes-Commission	11FEB13*	40	05APR13	27,463.44																			
Cost Center 9406 - Facilities Upgrades																								
1 - Stellarator Core Systems																								
NB Armor & PFC's																								
1100 - NB Armor																								
U11-100	NB Armor- Design	01OCT09*	496	25AUG11	1,578,494.47																			
U11-105	NB Armor- Procure/Fabricate	03SEP10*	385	23FEB12	1,391,690.34																			
U11-110	NB Armor- Install	27AUG12*	120	08FEB13	67,694.76																			
121 -Port Extensions & NB Port Covers																								
1211 - Port Extensions																								
U121-200	Port extensions-Design (none)	04JUL11*	65	30SEP11	0.00																			
U121-205	Port extensions-Fabricate (66 ports)	03OCT11	130	30MAR12	346,150.00																			
U121-210	Port extensions-Install	02APR12	65	29JUN12	51,796.80																			
1212 - NB Ports & Covers																								
U121-100	NB ports (3) -design	01FEB11*	40	28MAR11	40,319.20																			
U121-105	NB ports (3) -fabricate	29MAR11	129	23SEP11	221,961.60																			
U121-110	NB ports (3) -install	15MAR12	20	11APR12	35,316.00																			

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10 - FY18											
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18			
133 - External Trim Coils																	
1330 - Trim Coils																	
184-035	Bid & Award Ext Trim Coils	01AUG11*	45	30SEP11	5,279.76												
184-036	Award External Trim Coils	03OCT11	0	30SEP11	0.00												
184-037	External Trim Coil & Supports Procurement	03OCT11	88	01FEB12	50,718.50												
1303-040	Procure materials for supports	01AUG11	20	26AUG11	12,619.76												
1303-041	Fabricate Supports	29AUG11	20	23SEP11	7,314.64												
1303-042	Install supports onto coils	02FEB12	15	22FEB12	13,307.04												
184-015	Title III WBS 133 Rxt Trim Coils	03OCT11	88	01FEB12	29,730.36												
2 - Plasma Heating, Fueling & Vac Systems																	
211 - Gas Fueling Systems																	
2111 - 3 Gas Injectors																	
211-1	Design	01MAY12*	52	11JUL12	111,796.92												
211-2	Procure	12JUL12*	65	10OCT12	58,596.00												
211-3	Assy/Installation	11OCT12*	58	31DEC12	105,562.20												
220 - Torus Vacuum Pumping System																	
2202 - 2 pumps on one duct																	
U122-25	Design	27FEB12*	65	25MAY12	215,202.48												
U122-26	Procure	28MAY12*	100	12OCT12	174,246.00												
U122-27	Assy/Installation	15OCT12*	50	21DEC12	180,140.90												
231 - Glow Discharge Cleaning System																	
2310 - Glow Discharge Cleaning																	
U231-100	Design GDC system	13AUG12*	25	14SEP12	33,370.80												
U231-110	Fab/Assemble GDC system	17SEP12*	20	12OCT12	111,391.20												
U231-120	Install GDC system	15OCT12*	45	14DEC12	48,744.00												
251 - Neutral Beam #1																	
2505 - Beamline #1 Installation																	
Refurbishment																	
25-000#1	Begin NB#1 Refurb and Installation	28JUL10*	0		0.00												
25-090#1	Two HVST rebuilds	28JUL10	190	19APR11	58,363.79												
25-091#1	Source filament setup/bench test	28JUL10	190	19APR11	21,531.48												
25-092#1	high voltage power supply troubleshooting/tuning	28JUL10	190	19APR11	29,682.99												
25-093#1	modulator wiring modifications	28JUL10	190	19APR11	14,633.68												
25-100#1	6) Drafting Support	28JUL10	190	19APR11	146,478.58												
25-105#1	7) Refurbish sources	28JUL10	190	19APR11	5,226.95												

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Budget																
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18								
25-110#1	8) Fabricate and install new filaments	28JUL10	190	19APR11	8,145.14																	
25-115#1	9) Refurbish calorimeters as needed	28JUL10	190	19APR11	23,826.02																	
25-130#1	12) Dsn,Fan,Instl NBI vac sys INCL NEW TURBO PMP	28JUL10	190	19APR11	93,633.79																	
25-145#1	15)Upgrade/Calibr of telemetry, ptical links etc	28JUL10	190	19APR11	78,007.05																	
25-155#1	17) Fab/Instl Front Box Nitrogen Cryopanel.	28JUL10	190	19APR11	121,217.32																	
25-175#1	21) Sys Engr & Work Planning Procedures	28JUL10	190	19APR11	90,653.51																	
Re-Install Beamline																						
25-180#1	31)Work Planning Procedures	20APR11	340	07AUG12	77,856.42																	
25-185#1	32) EAD analysis of platform support capability	20APR11	340	07AUG12	3,892.82																	
25-190#1	33) Fabr BL alignment measur fixture,	20APR11	340	07AUG12	33,190.25																	
25-195#1	34) Fabr new bellows/electrical break	20APR11	340	07AUG12	21,547.75																	
25-200#1	35) Perform alignment measurements	20APR11	340	07AUG12	1,077.39																	
25-205#1	36) Prepare platform for base plate	20APR11	340	07AUG12	2,154.77																	
25-210#1	37) Relocate base plate to NCSX location	20APR11	340	07AUG12	8,619.10																	
25-215#1	38) Lift NB from Refurb location to NCSX locatio	20APR11	340	07AUG12	33,399.02																	
25-220#1	39) Enclose platform around base plate	20APR11	340	07AUG12	4,309.55																	
Re-Install Cables																						
25-225#1	Cabling-Design & WP Procedures	20APR11	340	07AUG12	31,142.57																	
25-230#1	Cabling-Fabr and Install new Junction Box	20APR11	340	07AUG12	21,547.75																	
25-235#1	Cabling-Hi-potting cable run and fixing problems	20APR11	340	07AUG12	10,773.88																	
25-240#1	Cabling-Install Cable Trays	20APR11	340	07AUG12	43,095.50																	
25-245#1	Cabling-Pull cables Arc Room to PVC Junction Box	20APR11	340	07AUG12	95,143.95																	
25-250#1	Cabling- M&S f/ trays, fixtures, materials	20APR11	340	07AUG12	38,796.13																	
Beamline Connections																						
25-255#1	Install weld cables Juncton Box to Ion Source.	20APR11	340	07AUG12	11,669.18																	
25-260#1	Connect BL to foreline and exhaust manifold.	20APR11	340	07AUG12	5,204.85																	
25-265#1	New PLC. Test system after installation.	20APR11	340	07AUG12	4,309.55																	
25-270#1	Connect BL to new manifold & test	20APR11	340	07AUG12	4,309.55																	
25-275#1	Connect beamline to new manifold & test.	20APR11	340	07AUG12	4,309.55																	
25-280#1	Connect beamline to new manifold and test	20APR11	340	07AUG12	2,154.77																	
25-285#1	Install Water System	20APR11	340	07AUG12	35,455.16																	
25-290#1	Fab & Install Water Cooled Aperture	20APR11	340	07AUG12	24,069.25																	
25-295#1	New PLC for water sys & test	20APR11	340	07AUG12	2,154.77																	
25-300#1	Diag Sys-Fab/install new cables	20APR11	340	07AUG12	2,154.77																	
25-310#1	Drafting Labor Support	20APR11	340	07AUG12	69,673.78																	

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Budget														
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18						
2506 - Beamline #1 Commissioning																				
Commissioning																				
25-119C#1	Begin Commissioning BL#1	01NOV12*	0		0.00															
25-120C#1	10) Maint& repair of cryogenic transfer system.	01NOV12	65	30JAN13	13,704.76															
25-125C#1	11) Fill LN2 supply tank.	01NOV12	65	30JAN13	1,619.10															
25-135C#1	13) Water system maintenance and calibration	01NOV12	65	30JAN13	12,887.50															
25-140C#1	14) Maint/calibration of auxiliary power supplie	01NOV12	65	30JAN13	7,253.30															
25-150C#1	16) New PLC ,Test & Calibrate	01NOV12	65	30JAN13	215,475.92															
25-160C#1	18) Subsystem integrated testing	01NOV12	65	30JAN13	33,805.20															
25-165C#1	19) NBI Computer Systems:	01NOV12	65	30JAN13	69,209.16															
25-170C#1	20) NBI Computer SystemsTune, debug	05NOV12	65	01FEB13	48,859.20															
25-305C#1	Neutral Beam Integrated Systems Testing	04FEB13	20	01MAR13	45,073.60															
252 - Neutral Beam #2																				
2507 - Beamline #2 Installation																				
Refurbishment																				
25-000#2	Begin NB#1 Refurb and Installation	01OCT10*	0		0.00															
25-100#2	6) Drafting Support	01OCT10*	190	23JUN11	73,840.00															
25-105#2	7) Refurbish sources	01OCT10*	190	23JUN11	5,269.80															
25-110#2	8) Fabricate and install new filaments	01OCT10*	190	23JUN11	8,205.80															
25-115#2	9) Refurbish calorimeters as needed	01OCT10*	190	23JUN11	24,015.20															
25-130#2	12) Dsn,Fan,Instl NBI vac sys INCL NEW TURBO PMP	01OCT10*	190	23JUN11	157,372.56															
25-145#2	15)Upgrade/Calibr of telemetry, ptical links etc	01OCT10*	190	23JUN11	78,570.10															
25-155#2	17) Fab/Instl Front Box Nitrogen Cryopanel.	01OCT10*	190	23JUN11	122,159.00															
25-175#2	21) Sys Engr & Work Planning Procedures	01OCT10*	190	23JUN11	45,698.40															
Re-Install Beamline																				
25-180#2	31)Work Planning Procedures	24JUN11*	380	06DEC12	78,616.77															
25-185#2	32) EAD analysis of platform support capability	24JUN11*	380	06DEC12	0.00															
25-190#2	33) Fabr BL alignment measur fixture,	24JUN11*	380	06DEC12	33,483.37															
25-195#2	34) Fabr new bellows/electrical break	24JUN11*	380	06DEC12	21,758.14															
25-200#2	35) Perform alignment measurements	24JUN11*	380	06DEC12	1,087.90															
25-205#2	36) Prepare platform for base plate	24JUN11*	380	06DEC12	2,175.82															
25-210#2	37) Relocate base plate to NCSX location	24JUN11*	380	06DEC12	8,703.26															
25-215#2	38) Lift NB from Refurb location to NCSX locatio	24JUN11*	380	06DEC12	33,725.12															
25-220#2	39) Enclose platform around base plate	24JUN11*	380	06DEC12	4,351.62															
Re-Install Cables																				
25-225#2	Cabling-Design & WP Procedures	24JUN11*	380	06DEC12	31,446.71															
25-230#2	Cabling-Fabr and Install new Junction Box	24JUN11*	380	06DEC12	21,758.14															

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10 - FY18											
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18			
25-235#2	Cabling-Hi-potting cable run and fixing problems	24JUN11*	380	06DEC12	10,879.08												
25-240#2	Cabling-Install Cable Trays	24JUN11*	380	06DEC12	43,516.28												
25-245#2	Cabling-Pull cables Arc Room to PVC Junction Box	24JUN11*	380	06DEC12	96,049.73												
25-250#2	Cabling- M&S f/ trays, fixtures, materials	24JUN11*	380	06DEC12	39,074.31												
Beamline Connections																	
25-255#2	Install weld cables Juncton Box to Ion Source.	24JUN11*	380	06DEC12	11,780.79												
25-260#2	Connect bBL to foreline and exhaust manifold.	24JUN11*	380	06DEC12	5,253.33												
25-265#2	New PLC. Test system after installation.	24JUN11*	380	06DEC12	4,351.62												
25-270#2	Connect BL to new manifold & test	24JUN11*	380	06DEC12	4,351.62												
25-275#2	Connect beamline to new manifold & test.	24JUN11*	380	06DEC12	4,351.62												
25-280#2	Connect beamline to new manifold and test	24JUN11*	380	06DEC12	2,175.82												
25-285#2	Install Water System	24JUN11*	380	06DEC12	35,793.22												
25-290#2	Fab & Install Water Cooled Aperture	24JUN11*	380	06DEC12	24,283.75												
25-295#2	New PLC for water sys & test	24JUN11*	380	06DEC12	2,175.82												
25-300#2	Diag Sys-Fab/install new cables	24JUN11*	380	06DEC12	2,175.82												
25-310#2	Drafting Labor Support	24JUN11*	380	06DEC12	70,354.08												
2508 - Beamline #2 Commissioning																	
Refurbishment																	
25-119C#2	Begin Commissioning BL#2	07DEC12*	0		0.00												
25-120C#2	10) Maint& repair of cryogenic transfer system.	07DEC12*	95	18APR13	13,704.76												
25-125C#2	11) Fill LN2 supply tank.	07DEC12*	95	18APR13	1,619.10												
25-135C#2	13) Water system maintenance and calibration	07DEC12*	95	18APR13	12,887.50												
25-140C#2	14) Maint/calibration of auxiliary power supplie	07DEC12*	95	18APR13	7,253.30												
25-150C#2	16) New PLC ,Test & Calibrate	07DEC12*	95	18APR13	215,475.92												
25-160C#2	18) Subsystem integrated testing	07DEC12*	95	18APR13	33,805.20												
25-165C#2	19) NBI Computer Systems:	07DEC12*	95	18APR13	69,209.16												
25-170C#2	20) NBI Computer SystemsTune, debug	07DEC12*	95	18APR13	48,859.20												
Beamline Connections																	
25-305C#2	Neutral Beam Integrated Systems Testing	19APR13*	20	16MAY13	45,073.60												
254 - Neutral Beam #3 & 4																	
Job: 2591 - 3rd and 4th Beamline-STEVENS																	
Refurbishment																	
NB34-001	Begin NB#1 Refurb and Installation	01OCT13*	0		0.00												
NB34-002	Procure 2 new power supplies	04FEB13*	160	13SEP13	1,951,500.00												
NB34-004	6) Drafting Support	01OCT13	130	31MAR14	326,518.40												
NB34-005	7) Refurbish sources	01OCT13	130	31MAR14	11,651.60												
NB34-007	8) Fabricate and install new filaments	01OCT13	130	31MAR14	17,975.60												

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10 - FY18															
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18							
NB34-010	9) Refurbish calorimeters as needed	01OCT13	130	31MAR14	52,930.40																
NB34-013	12) Dsn,Fan,Instl NBI vac sys INCL NEW TURBO PMP	01OCT13	130	31MAR14	204,196.48																
NB34-018	15)Upgrade/Calibr of telemetry, ptical links etc	01OCT13	130	31MAR14	171,625.40																
NB34-022	17) Fab/Instl Front Box Nitrogen Cryopanel.	01OCT13	130	31MAR14	268,671.20																
NB34-026	21) Sys Engr & Work Planning Procedures	01OCT13	130	31MAR14	202,080.00																
Re-Install Beamline																					
NB34-027	31)Work Planning Procedures	01APR14	130	29SEP14	168,400.00																
NB34-028	32) EAD analysis of platform support capability	01APR14	130	29SEP14	8,420.00																
NB34-029	33) Fabr BL alignment measur fixture,	01APR14	130	29SEP14	71,265.00																
NB34-033	34) Fabr new bellows/electrical break	01APR14	130	29SEP14	46,606.40																
NB34-035	35) Perform alignment measurements	01APR14	130	29SEP14	2,330.32																
NB34-037	36) Prepare platform for base plate	01APR14	130	29SEP14	4,660.64																
NB34-039	37) Relocate base plate to NCSX location	01APR14	130	29SEP14	18,642.56																
NB34-041	38) Lift NB from Refurb location to NCSX locatio	01APR14	130	29SEP14	72,239.92																
NB34-043	39) Enclose platform around base plate	01APR14	130	29SEP14	9,321.28																
Re-Install Cables																					
NB34-045	Cabling-Design & WP Procedures	01APR14	130	29SEP14	67,360.00																
NB34-046	Cabling-Fabr and Install new Junction Box	01APR14	130	29SEP14	46,606.40																
NB34-048	Cabling-Hi-potting cable run and fixing problems	01APR14	130	29SEP14	23,303.20																
NB34-050	Cabling-Install Cable Trays	01APR14	130	29SEP14	93,212.80																
NB34-052	Cabling-Pull cables Arc Room to PVC Junction Box	01APR14	130	29SEP14	205,397.60																
NB34-055	Cabling- M&S f/ trays, fixtures, materials	01APR14	130	29SEP14	82,212.00																
Beamline Connections																					
NB34-056	Install weld cables Junction Box to Ion Source.	01APR14	130	29SEP14	25,200.40																
NB34-059	Connect BL to foreline and exhaust manifold.	01APR14	130	29SEP14	11,218.48																
NB34-062	New PLC. Test system after installation.	01APR14	130	29SEP14	9,321.28																
NB34-064	Connect BL to new manifold & test	01APR14	130	29SEP14	9,321.28																
NB34-066	Connect beamline to new manifold & test.	01APR14	130	29SEP14	9,321.28																
NB34-068	Connect beamline to new manifold and test	01APR14	130	29SEP14	4,660.64																
NB34-070	Install Water System	01APR14	130	29SEP14	76,549.80																
NB34-073	Fab & Install Water Cooled Aperture	01APR14	130	29SEP14	51,713.40																
NB34-076	New PLC for water sys & test	01APR14	130	29SEP14	4,660.64																
NB34-078	Diag Sys-Fab/install new cables	01APR14	130	29SEP14	4,660.64																
NB34-080	Drafting Labor Support	01APR14	130	29SEP14	150,700.80																
Commissioning																					
NB34-081	Begin Commissioning BL#1	30SEP14	0		0.00																
NB34-084	10) Maint& repair of cryogenic transfer system.	30SEP14	65	29DEC14	29,201.11																

Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10 - FY18											
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18			
NB34-087	11) Fill LN2 supply tank.	30SEP14	65	29DEC14	3,400.74						41=02\$K ;						
NB34-088	13) Water system maintenance and calibration	30SEP14	65	29DEC14	27,484.55						EM//TB =80hr ; EE//SM =80hr ; 41=02\$K ;						
NB34-091	14) Maint/calibration of auxiliary power supplie	30SEP14	65	29DEC14	15,442.64						EM//TB =40hr ; EE//SM =40hr ; 41=02\$K ;						
NB34-094	16) New PLC ,Test & Calibrate	30SEP14	65	29DEC14	457,905.24						EM//TB =1,024hr ; EE//SM =1,024hr ; 41=92\$K ;						
NB34-097	18) Subsystem integrated testing	30SEP14	65	29DEC14	72,251.41						EM//TB =240hr ; EE//SM =240hr ;						
NB34-099	19) NBI Computer Systems:	30SEP14	65	29DEC14	147,526.88						EM//EM =576hr ; 41=14\$K ;						
NB34-101	20) NBI Computer SystemsTune, debug	30SEP14	65	29DEC14	104,423.93						EM//EM =480hr ;						
NB34-102	Neutral Beam Integrated Systems Testing	30DEC14	20	26JAN15	96,384.00						EM//TB =320hr ; EE//SM =320hr ;						

260 - ECH System

2600 - ECH System

U26-100	Pre-conceptual design	01JAN13*	40	25FEB13	68,572.24
U26-110	Conceptual/Preliminary Design	26FEB13	70	03JUN13	194,438.80
U26-120	Final Design/Assembly	04JUN13	150	30DEC13	472,491.80
U26-130	Installation	31DEC13	215	27OCT14	1,007,146.82
U26-140	System commissioning	28OCT14	77	11FEB15	546,136.40

EE//EM =136hr ; EC//EM =16hr ;
EA//EM =16hr ; EE//SM =96hr ;
EA//SM =96 ;
EE//EM =456hr ; EC//EM =128hr ;
EA//EM =68hr ; EE//SM =164hr ;
EA//SM =160 ;
EE//EM =788hr ; EC//EM =64hr ;
EA//EM =168hr ; EE//SM =640hr ;
EE//TB =240hr ; EA//SM =376 ;
EM//SM =240hr ; 41=03\$K ;
EE//EM =942hr ; EC//EM =96hr ;
EA//EM =40hr ; EE//SM =1,640hr ;
EE//TB =1,760hr ; EA//SM =40 ;
EM//SM =656hr ; 37=08 ;
41=90\$K ;
EE//EM =640hr ; EC//EM =232hr ;
EA//EM =00hr ; EE//SM =840hr ;
EE//TB =920hr ; EA//SM =40 ;
EM//SM =144hr ; 37=05 ;
41=30\$K ;

4 - Electrical Power Systems

411 - Auxiliary AC Power Systems

Auxiliary AC Power Systems

U411-1	411 - Auxiliary AC Power-DSN/PROCURE	01NOV11*	130	30APR12	142,201.50
U411-2	411 - Auxiliary AC Power-Installation	01MAY12	130	29OCT12	138,477.61
U411-3	411 - Auxiliary AC Power-Commissioning	30OCT12	41	25DEC12	76,962.93

41=39\$K ; EE//EM =165hr ;
EA//SM =330 ;
EE//EM =165hr ; EE//SM =264hr ;
EE//TB =594hr ;
EE//EM =112hr ; EE//SM =139hr ;
EE//TB =277hr ;

412 - Experimental AC Power Systems

Experimantal AC Power Systems

U412-1	412 - Experimental AC Power-DSN/PROCURE	01NOV11*	130	30APR12	31,009.45
U412-2	412 - Experimental AC Power-Installation	01MAY12	130	29OCT12	29,395.81
U412-3	412 - Experimental AC Power-Commissioning	30OCT12	40	24DEC12	19,054.60

41=08\$K ; EE//EM =53hr ;
EA//SM =53 ;
EE//EM =20hr ; EE//SM =86hr ;
EE//TB =106hr ;
EE//EM =33hr ; EE//SM =33hr ;
EE//TB =59hr ;

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10												FY11												FY12												FY13												FY14												FY15												FY16												FY17												FY18																																																											
422 - D-Site AC/DC Converters																																																																																																																																																																	
D-Site AC/DC Converters																																																																																																																																																																	
U422-1	422 - D-site AC/DC Converters-DSN/PROCURE	05DEC11*	125	25MAY12	9,195.13																																																																																																																																																												
U422-3	422 - D-site AC/DC Converters-Commissioning	28MAY12	70	31AUG12	60,319.05																																																																																																																																																												
431 - C-Site DC Systems																																																																																																																																																																	
C-Site DC Systems																																																																																																																																																																	
U431-1	431 - C-site DC Systems-DSN/PROCURE	30JAN12*	125	20JUL12	229,315.48																																																																																																																																																												
U431-2	431 - C-site DC Systems-Installation	23JUL12	119	03JAN13	983,498.22																																																																																																																																																												
U432-X	2 additional D-site circuits	23JUL12	119	03JAN13	419,835.85																																																																																																																																																												
432 - D-to-C Site DC Systems																																																																																																																																																																	
D to C Site DC Systems																																																																																																																																																																	
U432-1	432 - D-to-C-Site DC Systems-DSN/PROCURE	01OCT10*	131	01APR11	629,436.42																																																																																																																																																												
U432-2	432 - D-to-C-Site DC Systems-Installation	04APR11	185	16DEC11	2,599,365.60																																																																																																																																																												
U432-3	432 - D-to-C-Site DC Systems-Commissioning	19DEC11	65	16MAR12	95,647.73																																																																																																																																																												
433 - D-Site DC Systems																																																																																																																																																																	
D Site DC Systems																																																																																																																																																																	
U433-1	433 - D-site DC Systems-DSN/PROCURE	01OCT10*	131	01APR11	367,242.88																																																																																																																																																												
U433-2	433 - D-site DC Systems-Installation	04APR11	190	23DEC11	368,697.93																																																																																																																																																												
U433-2A	Additional 2 power supplies for 2 trim coils	03OCT11*	190	22JUN12	406,350.00																																																																																																																																																												
U433-3	433 - D-site DC Systems-Commissioning	25JUN12	65	21SEP12	58,844.74																																																																																																																																																												
441 - Electrical Interlocks																																																																																																																																																																	
Electrical Interlocks																																																																																																																																																																	
U441-1	441 - Electrical Interlocks-DSN/PROCURE	03OCT11*	125	23MAR12	310,845.82																																																																																																																																																												
U441-2	441 - Electrical Interlocks-Installation	26MAR12	120	07SEP12	280,727.83																																																																																																																																																												
U441-3	441 - Electrical Interlocks-Commissioning	10SEP12	72	18DEC12	58,711.00																																																																																																																																																												
442 - Kirk Key Interlocks																																																																																																																																																																	
Kirk Key Interlocks																																																																																																																																																																	
U442-1	442 - Kirk Key Interlocks-DSN/PROCURE	03OCT11*	125	23MAR12	50,617.73																																																																																																																																																												
U442-2	442 - Kirk Key Interlocks-Installation	26MAR12	119	06SEP12	31,986.04																																																																																																																																																												
U442-3	442 - Kirk Key Interlocks-Commissioning	07SEP12	76	21DEC12	22,799.87																																																																																																																																																												

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10												FY11												FY12												FY13												FY14												FY15												FY16												FY17												FY18																																																																																															
443 - Real Time Control Systems																																																																																																																																																																																																					
Real Time Control Systems																																																																																																																																																																																																					
U443-1	443 - Real Time Control-DSN/PROCURE	03OCT11*	125	23MAR12	42,063.12	EE//EM =198hr ;																																																																																																																																																																																															
444 - Instrument Systems																																																																																																																																																																																																					
Instrument Systems																																																																																																																																																																																																					
U444-1	444 - Instrumentation-DSN/PROCURE	03OCT11*	125	23MAR12	271,408.32	41=108\$sk ; EA//SM =264 ; EE//EM =330hr ;																																																																																																																																																																																															
U444-2	444 - Instrumentation-Installation	26MAR12	190	14DEC12	101,657.47	EE//SM =86hr ; EE//EM =92hr ; EE//TB =693hr ;																																																																																																																																																																																															
U444-3	444 - Instrumentation-Commissioning	17DEC12	35	01FEB13	59,059.77	EE//SM =73hr ; EE//EM =106hr ; EE//TB =231hr ;																																																																																																																																																																																															
445 - Coil protection Systems																																																																																																																																																																																																					
Coil Protection Systems																																																																																																																																																																																																					
U445-1	445 - Coil Protection-DSN/PROCURE	03OCT11*	125	23MAR12	250,923.52	41=50\$sk ; EE//EM =462hr ; EA//SM =528 ;																																																																																																																																																																																															
U445-2	445 - Coil Protection-Installation	26MAR12	156	29OCT12	139,763.04	EE//EM =125hr ; EE//SM =356hr ; EE//TB =528hr ;																																																																																																																																																																																															
U445-3	445 - Coil Protection-Commissioning	30OCT12	25	03DEC12	57,441.46	EE//SM =79hr ; EE//EM =125hr ; EE//TB =158hr ;																																																																																																																																																																																															
446 - Ground Fault Monitoring System																																																																																																																																																																																																					
Ground Fault Monitoring System																																																																																																																																																																																																					
U446-1	446 - Ground Fault Monitor-DSN/PROCURE	03OCT11*	125	23MAR12	217,168.71	41=76\$sk ; EE//EM =277hr ; EA//SM =304 ;																																																																																																																																																																																															
U446-2	446 - Ground Fault Monitor-Installation	26MAR12	159	01NOV12	119,379.23	EE//EM =165hr ; EE//SM =191hr ; EE//TB =528hr ;																																																																																																																																																																																															
U446-3	446 - Ground Fault Monitor-Commissioning	02NOV12	10	15NOV12	6,580.73	EE//EM =13hr ; EE//SM =13hr ; EE//TB =13hr ;																																																																																																																																																																																															
451 - System Design and Interfaces																																																																																																																																																																																																					
Sys design and interfaces																																																																																																																																																																																																					
U451-1	451 - System Design-	03OCT11*	335	11JAN13	344,196.55	EA//SM =799 ; EE//EM =1,056hr ;																																																																																																																																																																																															
452 - Electrical Systems Support																																																																																																																																																																																																					
Electrical Systems support																																																																																																																																																																																																					
U452-1	452 - Electrical Systems Support-DSN/PROCURE	03OCT11*	125	23MAR12	328,857.68	41=70\$sk ; EE//EM =231hr ; EA//SM =1,188 ;																																																																																																																																																																																															
U452-2	452 - Electrical Systems Support-Installation	26MAR12	156	29OCT12	364,885.90	41=120\$sk ; EE//EM =165hr ; EE//SM =198hr ; EE//TB =1,188hr ;																																																																																																																																																																																															
U452-3	452 - Electrical Systems Support-Commissioning	30OCT12	76	12FEB13	135,899.28	EE//EM =66hr ; EE//SM =132hr ; EE//TB =990hr ;																																																																																																																																																																																															
453 - System Testing (PTP's)																																																																																																																																																																																																					
Systems Testing PTP's																																																																																																																																																																																																					
U453-1	453 - System Testing-DSN/PROCURE	01OCT12*	45	30NOV12	116,583.12	41=25\$sk ; EA//SM =132 ; EE//EM =264hr ;																																																																																																																																																																																															
U453-3	453 - System Testing-Commissioning	03DEC12	43	30JAN13	98,875.73	EE//SM =66hr ; EE//EM =251hr ; EE//TB =323hr ;																																																																																																																																																																																															

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget												
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18			
460 - FCPC Mods																	
FCPC Bldg Mods																	
U460-1	46- FCPCBuilding Modifications-DSN/PROCURE	03OCT11*	65	30DEC11	39,844.58												
U460-2	46- FCPCBuilding Modifications-Installation	02JAN12	65	30MAR12	72,131.34												
5 - Central I&C Systems																	
510 - TCP/IP Infrastructure Systems																	
Job: 5101 - TCP/IP Infrastructure Systems																	
5100		02JAN12*	274	17JAN13	206,433.03												
520 - Central Instrumentation & Control Systems																	
5201 - I&C Systems																	
5200		02JAN12*	274	17JAN13	318,475.14												
530 - Data Acquisition & Facility Computing Sys																	
5301 - Data Acquisition																	
5300		05OCT12*	75	17JAN13	131,645.76												
540 - Facility Timing and synchronization System																	
Job: 5401 - Facility Timing & Synchronization																	
5400		02JAN12*	274	17JAN13	244,093.46												
550 - Real Time Plasma & Power Supply Control																	
5501 - Real Time Control System																	
5500		21MAY12*	173	16JAN13	501,701.23												
560 - Central Safety Interlock Systems																	
Job: 5601 - Central Safety Interlock Systems																	
5600		02JAN12*	274	17JAN13	222,001.80												
570 - Control Room Facility																	
Job: 5701 - Control Room Facility																	
5700		01OCT12*	68	02JAN13	301,062.36												
6 - Facility Systems																	
612 - NB Water Cooling Systems																	
NB Cooling Water																	
612	Design/Install-NB water sys	16JUL12*	127	08JAN13	364,743.08												

41=09\$k ; EE//EM =73hr ;
EA//SM =79 ;
41=04\$k ; EE//EM =46hr ;
EE//SM =59hr ; EE//TB =482hr ;

ec//em=92;ec//tb=184;em//tb=360
ea//sb=80;ee//tb=40;41=80

ec//em=904;ec//tb=288;em//tb=240
ea//sb=200;ee//tb=40;41=44

ec//em=488; 41=25

ec//em=172;ec//tb=224;em//tb=440;ea//sb=80
ee//em=120;ee//tb=440;41=45

ec//em=856;ec//tb=96;em//tb=160
ea//sb=80;ee//em=408;ee//tb=164;41=132

ec//em=548;em//tb=480;ea//sb=120;41=36

ec//tb=24;em//tb=116;ea//sb=24;41=165

41=86.51;em//em=476;em//tb=1013;ea//sb=240

Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Timeline											
						FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18			
613 - Vacuum Pumping System																	
Vacuum Pumping Cooling Water																	
613	Design/Install-Vac pmp sys water	01OCT12*	85	25JAN13	97,428.55												
615 - Diagnostic Water Cooling System																	
Diag Cooling Water																	
615	Design/Install-Diag cooling water	01OCT12*	125	22MAR13	42,640.06												
Upgrades Contingency																	
Upgrade Contingency																	
101	Contingency FY11	01OCT10*	257	26SEP11	1,861,000.00												
102	Contingency FY12	03OCT11*	257	25SEP12	3,169,000.00												
103	Contingency FY13	01OCT12*	257	24SEP13	2,181,000.00												
104	Contingency FY14	01OCT13*	257	24SEP14	2,875,000.00												
105	Contingency FY15	01OCT14*	257	24SEP15	1,093,000.00												
NON MIE Funding Profile																	
FUNDING																	
FUND10	Funding fy10	01OCT09*	250	15SEP10	2,269,000.00												
FUND11	Funding fy11	01OCT10*	250	15SEP11	13,258,000.00												
FUND12	Funding fy12	03OCT11*	250	14SEP12	19,300,000.00												
FUND13	Funding fy13	01OCT12*	250	13SEP13	45,000,000.00												
FUND14	Funding fy14	01OCT13*	250	15SEP14	24,000,000.00												
FUND15	Funding fy15	01OCT14*	250	15SEP15	45,000,000.00												