

Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10	FY11	FY12	FY13	FY14	FY15

# 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	01FEB13*	0.00
MILEBASE04	FY13 24 week run- Initial Heating Experiments	04FEB13	170	27SEP13	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	360,735.55
1805FY090	FY11-Administration/Proj mgnt	01OCT10*	259	28SEP11	373,003.76
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

NEILSON =431hr 25% ; REIERSEN =259hr 15%  
 STRYKOWSKY =690hr 40% ; HAMPTON =1040hr

NEILSON =431hr 25% ; REIERSEN =259hr 15%  
 STRYKOWSKY =690hr 40% ; HAMPTON =1040hr

NEILSON =1,553hr ; REIERSEN =1,553hr  
 STRYKOWSKY =1,553hr ; HAMPTON =1,872

NEILSON =1553hr ; REIERSEN =1553hr  
 STRYKOWSKY =1553hr ; HAMPTON =1872hr

NEILSON =1553hr ; REIERSEN =1553hr  
 STRYKOWSKY =1553hr ; HAMPTON =1872hr

## Post MIE PTP & sys caretaking

### 8191 - Post PTP maintenance and sys caretaking

1805FY0900	Post PTP maintenance & caretaking	07JUN11*	145	26DEC11	519,177.22
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EM/EM =856hr ; EM/SM =856hr  
 EM/TB =1726hr ; 41=35\$K ;

## 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

EM/EM =410hr ; EA/EM =136hr ;  
 EA/SM =68 ;  
 COE =273hr ; MACH TECH =273hr ;  
 VAC TECH =136hr ; MACH TECH =273hr ;  
 VAC TECH =546hr ; WATER TECH =273hr ;  
 LN2 =20\$K ; 41=13\$K ;  
 36=59 ;  
 EE/EM =414hr ; EE/TB =828hr ;  
 AC =69hr ; AC =69hr ;  
 =00 ;

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 (Operation, Physics, & Upgrades)

BASELINE CASE







Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget						
						FY10	FY11	FY12	FY13	FY14	FY15
<b>332 - UV Spectrometer</b>											
<b>3320 - UV Spectrometer</b>											
3101	UV spectrometer-Design/Fab.	09JUL12*	45	07SEP12	35,319.60						EM/EM =72hr ; EA/SM =144 ;
3105	UV spectrometer-Fab./Install	10SEP12	97	22JAN13	58,668.10						EM/SM =144hr ; EE/TB =144hr ; EC/EM =72hr ; 41=4.5\$K ;
3108	UV spectrometer-Commission	23JAN13*	40	19MAR13	13,735.44						EC/EM =72hr ;
<b>333 - Bolometer Array</b>											
<b>3330 - Bolometer Array</b>											
3091	Bolometer array-Design/Fab.	05JUN12*	45	06AUG12	49,495.68						EM/EM =144hr ; EA/SM =144 ;
3095	Bolometer array-Fab./Install	07AUG12	112	09JAN13	49,334.67						EE/EM =12hr ; EM/SM =96hr ; EE/TB =144hr ; 41=11\$K ;
3098	Bolometer array-Commission	10JAN13*	40	06MAR13	9,156.96						EC/EM =48hr ;
3099	Bolometer array-Fab./Install	03OCT14*	81	23JAN15	104,352.00						EE/EM =24hr ; EM/SM =192hr ; EE/TB =288hr ; 41=21\$K ;
3100	Bolometer array-Commission	26JAN15*	40	20MAR15	19,581.12						EC/EM =96hr ;
<b>335 - Filterscopes</b>											
<b>3350 - Filterscopes</b>											
3151	Filterscopes-Design/Fab.	01JUN12*	45	02AUG12	24,747.84						EM/EM =72hr ; EA/SM =72 ;
3155	Filterscopes-Fab./Install	03AUG12	117	14JAN13	76,068.65						41=25\$K ; EM/SM =144hr ; EE/TB =144hr ;
3158	Filterscopes-Commission	15JAN13*	40	11MAR13	37,822.32						EC/EM =72hr ; EM/SM =144hr ;
<b>341 - Soft X-Ray Arrays</b>											
<b>3410 - Soft X-Ray Arrays</b>											
3035	Soft X-Ray Arrays-Fab./Install	01OCT13*	144	18APR14	198,977.64						EM/EM =144hr ; ea/sm =72hr ; EM/SM =288hr ; EM/TB =144hr ; 41=58.6\$K ;
3038	Soft X-Ray Arrays-Commission	21APR14*	40	13JUN14	24,806.88						EM/SM =144hr ;
<b>342 - X-ray crystal spectroscopy</b>											
<b>3420 - X-ray crystal spectroscopy</b>											
3039	X-ray crystal spectroscopy-Design,Fab,Install	03OCT11*	261	01OCT12	697,784.08						EM/EM =144hr ; ea/sm =144hr ; EM/SM =288hr ; ec/em=144 41=382.1\$K ;
<b>351 - Thomson Scattering</b>											
<b>3510 - Thomson Scattering</b>											
3011	Thomson Scattering-Design/Fab.	01OCT10*	170	26MAY11	1,492,172.32						EM/EM =432hr ; EE/EM =288hr ; EA/SM =432 ; EM/SM =864hr ; EE/SM =432hr ; EM/TB =864hr ; 41=680\$K ;

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Budget						
						FY10	FY11	FY12	FY13	FY14	FY15	
3015	Thomson Scattering-Fab./Install	27MAY11*	228	10APR12	551,297.65							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	11APR12*	85	07AUG12	122,083.20							EM/TB =432hr ; EC/EM =432hr ;
<b>352 - DNB</b>												
<b>3520 - DNB Installation and servies</b>												
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 ;
<b>353 - MSE</b>												
<b>3530 - MSE</b>												
3530-1	MSE-Design/Procure	31JUL13*	151	26FEB14	632,927.15							em/em=432;ea/sb=864 em/sm=576;em/tb=432; 41=169
3530-2	MSE-Fab./Install	27FEB14	204	09DEC14	520,577.29							ea/sb=864;em/sm=1440 em/tb=720;ec/em=288
3530-3	MSE-Commission	10DEC14*	73	20MAR15	291,242.88							ea/sb=288;em/sm=864 em/tb=288;ec/em=288
<b>354 - CHERS</b>												
<b>3540 - CHERS</b>												
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 ;
<b>355 - ECE</b>												
<b>3550 - ECE</b>												
3550-01	MSE-Design/Procure	01OCT13*	67	01JAN14	164,170.20							em/em=144;ee/em=144;ee/sm=144;41=47
3550-2	MSE-Fab./Install	02JAN14	65	02APR14	170,821.44							em/em=144;ee/em=144;em/sm=288 ee/tb=144;em/tb=144;ec/em=144
3550-3	MSE-Commission	03APR14*	52	13JUN14	197,850.24							em/em=144;ee/em=144;em/sm=288;ec/em=432
<b>356 - Interferometers</b>												
<b>3562 - Interferometer</b>												
3041	Interferometer-Design/Procure	03OCT11*	127	27MAR12	117,220.68							EM/EM =144hr ; EA/SM =144 ; 41=45
3045	Interferometer-Fab./Install	28MAR12*	48	01JUN12	153,966.44							EM/EM =144hr ; EM/SM =144hr ; EM/TB =144hr ; 41=58.6
3048	Interferometer-Commission	04JUN12*	28	11JUL12	49,862.88							EM/SM =144hr ; EC/EM =144hr ;

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BASELINE CASE

Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Budget					
						FY10	FY11	FY12	FY13	FY14	FY15
<b>361 - Filtered Cameras</b>											
<b>3611 - Filtered 2-D cameras</b>											
3125	Filtered 2-D cameras-Fab./Install	03OCT14*	65	01JAN15	170,697.60						EM//EM =72hr ; 41=56\$K ; EA//SM =144 ; EM//SM =144hr ; EE//TB =144hr ;
<b>3612 - Filtered 1-D camera</b>											
3135	Filtered 1-D camera -Fab./Install	01OCT14*	65	30DEC14	68,338.80						41=17.5\$K ; EM//EM =36hr ; EA//SM =72 ; EM//SM =72hr ; EE//TB =72hr ;
<b>364 - IR Camera</b>											
<b>3640 - IR Camera</b>											
3141	IR-camera-Design/Fab.	02JUL12*	51	10SEP12	24,747.84						EM//EM =72hr ; EA//SM =72 ;
3145	IR-camera-Fab./Install	11SEP12	93	17JAN13	45,934.72						41=17.5\$K ; EM//SM =72hr ; EE//TB =72hr ;
3148	IR-camera-Commission	18JAN13*	16	08FEB13	13,735.44						EC//EM =72hr ;
<b>366 - PFC mounted Langmuir Probes</b>											
<b>3660 - PFC mounted Langmuir probe</b>											
3111	PFC-mounted Langmuir probes-Design/Fab.	03OCT11*	130	30MAR12	16,136.42						EM//EM =36hr ; EA//SM =36 ; 41=02.5\$K ;
3115	PFC-mounted Langmuir probes-Fab./Install	02APR12	212	22JAN13	31,095.92						EE//EM =72hr ; EM//SM =72hr ; 41=02.5\$K ;
3118	PFC-mounted Langmuir probes-Commission	23JAN13*	40	19MAR13	27,463.44						EM//SM =72hr ; 41=10\$K ;
<b>Cost Center 9406 - Facilities Upgrades</b>											
<b>1 - Stellarator Core Systems</b>											
<b>NB Armor</b>											
<b>1100 - NB Armor</b>											
U11-100	NB Armor- Design	03MAY10*	524	03MAY12	1,611,895.02						omlem analyst=1800;oml design=6500;omlem=3600
U11-105	NB Armor- Procure/Fabricate	09NOV11*	257	01NOV12	1,422,171.61						41=\$942.8k
U11-110	NB Armor- Install	03AUG12*	130	31JAN13	67,455.20						em//tb=672
<b>121 - Vacuum Vessel Assembly</b>											
<b>1211 - Port Extensions</b>											
U121-200	Port extensions-Design (none)	04JUL11*	65	30SEP11	0.00						=00 ;
U121-205	Port extensions-Fabricate ( 66 ports)	03OCT11	130	30MAR12	346,150.00						41=\$230k
U121-210	Port extensions-Install	02APR12	65	29JUN12	51,796.80						em//tb=528(2 men x 1/2 day x 66 ports)
<b>1212 - NB Ports &amp; Covers</b>											
U121-100	NB ports (3) -design	03OCT11*	40	25NOV11	41,689.60						ea//em=80;ea//sm=160

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY					
						FY10	FY11	FY12	FY13	FY14	FY15
U121-105	NB ports (3) -fabricate	28NOV11	129	24MAY12	227,556.00						
U121-110	NB ports (3) -install	25MAY12	20	21JUN12	35,316.00						
<b>132 - PF Coils</b>											
<b>1323 - PF 1-3 Coils</b>											
PF Coil Fabrication											
U141-035	Design PF1-3	03OCT11*	118	14MAR12	83,379.20						
U1352-130	Fabricate/Dlvr PF 1,2&3 upper & lower	15MAR12*	105	08AUG12	561,605.80						
<b>1324 - Central Solenoid Support Structure</b>											
CS Support Structure											
U163-034	Design CS Support Struct	15MAR12*	58	04JUN12	181,034.08						
U163-037	CS Support Structure Procurement/Fab	05JUN12*	133	06DEC12	542,424.83						
U163-038	CS Support Structure INSTALLATION	07DEC12*	40	31JAN13	0.00						
U163-015	Title III design CS sprt struc	15MAR12	230	30JAN13	43,780.06						
<b>2 - Plasma Heating, Fueling &amp; Vac Systems</b>											
<b>211 - Gas Fueling Systems</b>											
<b>2111 - 3 Gas Injectors</b>											
211-1	Design	01MAY12*	52	11JUL12	111,796.92						
211-2	Procure	12JUL12*	65	10OCT12	57,363.05						
211-3	Assy/Installation	11OCT12*	80	30JAN13	105,562.20						
<b>220 - Torus Vacuum Pumping System</b>											
<b>2202 - 2 pumps on one duct</b>											
U122-25	Design	01MAR12*	65	30MAY12	215,202.48						
U122-26	Procure	31MAY12*	100	17OCT12	170,608.53						
U122-27	Assy/Installation	18OCT12*	105	13MAR13	180,140.90						
<b>231 - Glow Discharge Cleaning System</b>											
<b>2310 - Glow Discharge Cleaning</b>											
U231-100	Design GDC system	01OCT12*	40	23NOV12	34,504.80						
U231-110	Fabricate GDC system	26NOV12*	40	18JAN13	112,834.80						
U231-120	Install & Test GDC system	21JAN13*	45	22MAR13	48,744.00						
<b>251 - Neutral Beam #1</b>											
<b>2505 - Beamline #1 Installation</b>											
Refurbishment											
25-000#1	Begin NB#1 Refurb and Installation	02AUG10*	0		0.00						
25-090#1	Two HVST rebuilds	02AUG10	190	22APR11	58,386.53						
25-091#1	Source filament setup/bench test	02AUG10	190	22APR11	21,542.74						



Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10						FY11						FY12						FY13						FY14						FY15					
						[Detailed Budget Allocation Grid]																																			
25-092#1	high voltage power supply troubleshooting/tuning	02AUG10	190	22APR11	29,698.52	ee/em=80;ee/sm=80																																			
25-093#1	modulator wiring modifications	02AUG10	190	22APR11	14,641.33	ee/tb=160																																			
25-100#1	6) Drafting Support	02AUG10	190	22APR11	146,555.27	EA/SB =1,040hr ;																																			
25-105#1	7) Refurbish sources	02AUG10	190	22APR11	5,229.69	EM/TB =20hr ; EE/SM =20hr ;																																			
25-110#1	8) Fabricate and install new filaments	02AUG10	190	22APR11	8,149.02	41=02\$k ; EM/TB =20hr ; EE/SM =20hr ;																																			
25-115#1	9) Refurbish calorimeters as needed	02AUG10	190	22APR11	23,838.09	41=02\$k ; EM/TB =80hr ; EE/SM =80hr ;																																			
25-130#1	12) Dsn,Fan,Instl NBI vac sys INCL NEW TURBO PMP	02AUG10	190	22APR11	93,673.02	EM/TB =56hr ; EE/SM =56hr ; 41=50\$k ; EM/EM =32hr ;																																			
25-145#1	15)Upgrade/Calibr of telemetry, ptical links etc	02AUG10	190	22APR11	78,042.98	EM/TB =130hr ; EE/SM =130hr ; EM/EM =40hr ; 41=25\$k ;																																			
25-155#1	17) Fab/Instl Front Box Nitrogen Cryopanel.	02AUG10	190	22APR11	121,277.42	EM/TB =340hr ; EE/SM =340hr ; EM/EM =40hr ; 41=17\$k ;																																			
25-175#1	21) Sys Engr & Work Planning Procedures	02AUG10	190	22APR11	90,700.95	EM/EM =480hr ;																																			
Re-Install Beamline																																									
25-180#1	31)Work Planning Procedures	25APR11	320	13JUL12	77,824.50	EM/EM =400hr ;																																			
25-185#1	32) EAD analysis of platform support capability	25APR11	320	13JUL12	3,891.23	EM/EM =20hr ;																																			
25-190#1	33) Fabr BL alignment measur fixture,	25APR11	320	13JUL12	33,177.90	EM/TB =50hr ; EE/SM =50hr ; EM/EM =40hr ; 41=08\$k ;																																			
25-195#1	34) Fabr new bellows/electrical break	25APR11	320	13JUL12	21,538.92	EM/TB =80hr ; EE/SM =80hr ;																																			
25-200#1	35) Perform alignment measurements	25APR11	320	13JUL12	1,076.95	EM/TB =04hr ; EE/SM =04hr ;																																			
25-205#1	36) Prepare platform for base plate	25APR11	320	13JUL12	2,153.89	EM/TB =08hr ; EE/SM =08hr ;																																			
25-210#1	37) Relocate base plate to NCSX location	25APR11	320	13JUL12	8,615.57	EM/TB =32hr ; EE/SM =32hr ;																																			
25-215#1	38) Lift NB from Refurb location to NCSX locatio	25APR11	320	13JUL12	33,385.31	EE/SM =124hr ; EM/TB =124hr ;																																			
25-220#1	39) Enclose platform around base plate	25APR11	320	13JUL12	4,307.79	EM/TB =16hr ; EE/SM =16hr ;																																			
Re-Install Cables																																									
25-225#1	Cabling-Design & WP Procedures	25APR11	320	13JUL12	31,129.80	EM/EM =160hr ;																																			
25-230#1	Cabling-Fabr and Install new Junction Box	25APR11	320	13JUL12	21,538.92	EM/TB =80hr ; EE/SM =80hr ;																																			
25-235#1	Cabling-Hi-potting cable run and fixing problems	25APR11	320	13JUL12	10,769.46	EM/TB =40hr ; EE/SM =40hr ;																																			
25-240#1	Cabling-Install Cable Trays	25APR11	320	13JUL12	43,077.83	EM/TB =160hr ; EE/SM =160hr ;																																			
25-245#1	Cabling-Pull cables Arc Room to PVC Junction Box	25APR11	320	13JUL12	95,105.87	EM/TB =320hr ; EE/SM =320hr ; 41=06\$k ;																																			
25-250#1	Cabling- M&S f/ trays, fixtures, materials	25APR11	320	13JUL12	38,784.28	41=26\$k ;																																			
Beamline Connections																																									
25-255#1	Install weld cables Junction Box to Ion Source.	25APR11	320	13JUL12	11,664.48	41=01\$k ; EM/TB =40hr ; EE/SM =40hr ;																																			
25-260#1	Connect BL to foreline and exhaust manifold.	25APR11	320	13JUL12	5,202.81	41=01\$k ; EM/TB =16hr ; EE/SM =16hr ;																																			
25-265#1	New PLC. Test system after installation.	25APR11	320	13JUL12	4,307.79	EM/TB =16hr ; EE/SM =16hr ;																																			
25-270#1	Connect BL to new manifold & test	25APR11	320	13JUL12	4,307.79	EM/TB =16hr ; EE/SM =16hr ;																																			
25-275#1	Connect beamline to new manifold & test.	25APR11	320	13JUL12	4,307.79	EM/TB =16hr ; EE/SM =16hr ;																																			
25-280#1	Connect beamline to new manifold and test	25APR11	320	13JUL12	2,153.89	EM/TB =08hr ; EE/SM =08hr ;																																			

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25-285#1	Install Water System	25APR11	320	13JUL12	35,440.95																																				
25-290#1	Fab & Install Water Cooled Aperture	25APR11	320	13JUL12	24,060.21																																				
25-295#1	New PLC for water sys & test	25APR11	320	13JUL12	2,153.89																																				
25-300#1	Diag Sys-Fab/install new cables	25APR11	320	13JUL12	2,153.89																																				
25-310#1	Drafting Labor Support	25APR11	320	13JUL12	69,645.23																																				
<b>2506 - Beamline #1 Commissioning</b>																																									
Commissioning																																									
25-119C#1	Begin Commissioning BL#1	01OCT12*	0		0.00																																				
25-120C#1	10) Maint& repair of cryogenic transfer system.	01OCT12	65	28DEC12	13,704.76																																				
25-125C#1	11) Fill LN2 supply tank.	01OCT12	65	28DEC12	1,619.10																																				
25-135C#1	13) Water system maintenance and calibration	01OCT12	65	28DEC12	12,887.50																																				
25-140C#1	14) Maint/calibration of auxiliary power supplie	01OCT12	65	28DEC12	7,253.30																																				
25-150C#1	16) New PLC ,Test & Calibrate	01OCT12	65	28DEC12	215,475.92																																				
25-160C#1	18) Subsystem integrated testing	01OCT12	65	28DEC12	33,805.20																																				
25-165C#1	19) NBI Computer Systems:	01OCT12	65	28DEC12	69,209.16																																				
25-170C#1	20) NBI Computer SystemsTune, debug	01OCT12	65	28DEC12	48,859.20																																				
25-305C#1	Neutral Beam Integrated Systems Testing	31DEC12	20	25JAN13	45,073.60																																				
<b>252 - Neutral Beam #2</b>																																									
<b>2507 - Beamline #2 Installation</b>																																									
Refurbishment																																									
25-000#2	Begin NB#1 Refurb and Installation	02AUG10	0		0.00																																				
25-100#2	6) Drafting Support	02AUG10*	190	22APR11	73,277.63																																				
25-105#2	7) Refurbish sources	02AUG10*	190	22APR11	5,229.69																																				
25-110#2	8) Fabricate and install new filaments	02AUG10*	190	22APR11	8,149.02																																				
25-115#2	9) Refurbish calorimeters as needed	02AUG10*	190	22APR11	23,838.09																																				
25-130#2	12) Dsn,Fan,Instl NBI vac sys INCL NEW TURBO PMP	02AUG10*	190	22APR11	156,438.54																																				
25-145#2	15)Upgrade/Calibr of telemetry, ptical links etc	02AUG10*	190	22APR11	78,042.98																																				
25-155#2	17) Fab/Instl Front Box Nitrogen Cryopanel.	02AUG10*	190	22APR11	121,277.42																																				
25-175#2	21) Sys Engr & Work Planning Procedures	02AUG10*	190	22APR11	45,350.48																																				
Re-Install Beamline																																									
25-180#2	31)Work Planning Procedures	25APR11*	350	24AUG12	77,904.34																																				
25-185#2	32) EAD analysis of platform support capability	25APR11*	350	24AUG12	0.00																																				
25-190#2	33) Fabr BL alignment measur fixture,	25APR11*	350	24AUG12	33,208.81																																				

Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY					
						FY10	FY11	FY12	FY13	FY14	FY15
25-195#2	34) Fabr new bellows/electrical break	25APR11*	350	24AUG12	21,561.02						
25-200#2	35) Perform alignment measurements	25APR11*	350	24AUG12	1,078.05						
25-205#2	36) Prepare platform for base plate	25APR11*	350	24AUG12	2,156.10						
25-210#2	37) Relocate base plate to NCSX location	25APR11*	350	24AUG12	8,624.41						
25-215#2	38) Lift NB from Refurb location to NCSX locatio	25APR11*	350	24AUG12	33,419.58						
25-220#2	39) Enclose platform around base plate	25APR11*	350	24AUG12	4,312.20						
<b>Re-Install Cables</b>											
25-225#2	Cabling-Design & WP Procedures	25APR11*	350	24AUG12	31,161.74						
25-230#2	Cabling-Fabr and Install new Junction Box	25APR11*	350	24AUG12	21,561.02						
25-235#2	Cabling-Hi-potting cable run and fixing problems	25APR11*	350	24AUG12	10,780.51						
25-240#2	Cabling-Install Cable Trays	25APR11*	350	24AUG12	43,122.03						
25-245#2	Cabling-Pull cables Arc Room to PVC Junction Box	25APR11*	350	24AUG12	95,201.13						
25-250#2	Cabling- M&S f/ trays, fixtures, materials	25APR11*	350	24AUG12	38,813.91						
<b>Beamline Connections</b>											
25-255#2	Install weld cables Juncton Box to Ion Source.	25APR11*	350	24AUG12	11,676.22						
25-260#2	Connect bBL to foreline and exhaust manifold.	25APR11*	350	24AUG12	5,207.91						
25-265#2	New PLC. Test system after installation.	25APR11*	350	24AUG12	4,312.20						
25-270#2	Connect BL to new manifold & test	25APR11*	350	24AUG12	4,312.20						
25-275#2	Connect beamline to new manifold & test.	25APR11*	350	24AUG12	4,312.20						
25-280#2	Connect beamline to new manifold and test	25APR11*	350	24AUG12	2,156.10						
25-285#2	Install Water System	25APR11*	350	24AUG12	35,476.50						
25-290#2	Fab & Install Water Cooled Aperture	25APR11*	350	24AUG12	24,082.83						
25-295#2	New PLC for water sys & test	25APR11*	350	24AUG12	2,156.10						
25-300#2	Diag Sys-Fab/install new cables	25APR11*	350	24AUG12	2,156.10						
25-310#2	Drafting Labor Support	25APR11*	350	24AUG12	69,716.64						
<b>2508 - Beamline #2 Commissioning</b>											
<b>Refurbishment</b>											
25-119C#2	Begin Commissioning BL#2	01OCT12*	0		0.00						
25-120C#2	10) Maint& repair of cryogenic transfer system.	01OCT12*	65	28DEC12	13,704.76						
25-125C#2	11) Fill LN2 supply tank.	01OCT12*	65	28DEC12	1,619.10						
25-135C#2	13) Water system maintenance and calibration	01OCT12*	65	28DEC12	12,887.50						
25-140C#2	14) Maint/calibration of auxiliary power supplie	01OCT12*	65	28DEC12	7,253.30						
25-150C#2	16) New PLC ,Test & Calibrate	01OCT12*	65	28DEC12	215,475.92						
25-160C#2	18) Subsystem integrated testing	01OCT12*	65	28DEC12	33,805.20						

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Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10						FY11						FY12						FY13						FY14						FY15					
25-165C#2	19) NBI Computer Systems:	01OCT12*	65	28DEC12	69,209.16																			EM/EM =288hr ; 41=07\$K ;																	
25-170C#2	20) NBI Computer Systems Tune, debug	01OCT12*	65	28DEC12	48,859.20																			EM/EM =240hr ;																	
Beamline Connections																																									
25-305C#2	Neutral Beam Integrated Systems Testing	31DEC12*	20	25JAN13	45,073.60																			EM/TB =160hr ; EE/SM =160hr ;																	
<b>254 - Neutral Beam #3 &amp; 4</b>																																									
<b>Job: 2591 - 3rd and 4th Beamline-STEVENSON</b>																																									
Refurbishment																																									
NB34-001	Begin NB#1 Refurb and Installation	01OCT13*	0		0.00																			=00 ;																	
NB34-002	Procure 2 new power supplies	01OCT13	160	12MAY14	2,000,400.00																			41=250\$K ; 48=1,350 ;																	
NB34-004	6) Drafting Support	01OCT13	130	31MAR14	326,518.40																			EA/SB =2,080hr ;																	
NB34-005	7) Refurbish sources	01OCT13	130	31MAR14	11,651.60																			EM/TB =40hr ; EE/SM =40hr ;																	
NB34-007	8) Fabricate and install new filaments	01OCT13	130	31MAR14	17,975.60																			41=04\$K ; EM/TB =40hr ; EE/SM =40hr ;																	
NB34-010	9) Refurbish calorimeters as needed	01OCT13	130	31MAR14	52,930.40																			41=04\$K ; EM/TB =160hr ; EE/SM =160hr ;																	
NB34-013	12) Dsn,Fan,Instl NBI vac sys INCL NEW TURBO PMP	01OCT13	130	31MAR14	204,196.48																			EM/TB =112hr ; EE/SM =112hr ; 41=100\$K ; EM/EM =64hr ;																	
NB34-018	15)Upgrade/Calibr of telemetry, ptical links etc	01OCT13	130	31MAR14	171,625.40																			EM/TB =260hr ; EE/SM =260hr ; EM/EM =80hr ; 41=50\$K ;																	
NB34-022	17) Fab/Instl Front Box Nitrogen Cryopanel.	01OCT13	130	31MAR14	268,671.20																			EM/TB =680hr ; EE/SM =680hr ; EM/EM =80hr ; 41=34\$K ;																	
NB34-026	21) Sys Engr & Work Planning Procedures	01OCT13	130	31MAR14	202,080.00																			EM/EM =960hr ;																	
Re-Install Beamline																																									
NB34-027	31)Work Planning Procedures	01APR14	130	29SEP14	168,400.00																			EM/EM =800hr ;																	
NB34-028	32) EAD analysis of platform support capability	01APR14	130	29SEP14	8,420.00																			EM/EM =40hr ;																	
NB34-029	33) Fabr BL alignment measur fixture,	01APR14	130	29SEP14	71,265.00																			EM/TB =100hr ; EE/SM =100hr ; EM/EM =80hr ; 41=16\$K ;																	
NB34-033	34) Fabr new bellows/electrical break	01APR14	130	29SEP14	46,606.40																			EM/TB =160hr ; EE/SM =160hr ;																	
NB34-035	35) Perform alignment measurements	01APR14	130	29SEP14	2,330.32																			EM/TB =08hr ; EE/SM =08hr ;																	
NB34-037	36) Prepare platform for base plate	01APR14	130	29SEP14	4,660.64																			EM/TB =16hr ; EE/SM =16hr ;																	
NB34-039	37) Relocate base plate to NCSX location	01APR14	130	29SEP14	18,642.56																			EM/TB =64hr ; EE/SM =64hr ;																	
NB34-041	38) Lift NB from Refurb location to NCSX locatio	01APR14	130	29SEP14	72,239.92																			EE/SM =248hr ; EM/TB =248hr ;																	
NB34-043	39) Enclose platform around base plate	01APR14	130	29SEP14	9,321.28																			EM/TB =32hr ; EE/SM =32hr ;																	
Re-Install Cables																																									
NB34-045	Cabling-Design & WP Procedures	01APR14	130	29SEP14	67,360.00																			EM/EM =320hr ;																	
NB34-046	Cabling-Fabr and Install new Junction Box	01APR14	130	29SEP14	46,606.40																			EM/TB =160hr ; EE/SM =160hr ;																	
NB34-048	Cabling-Hi-potting cable run and fixing problems	01APR14	130	29SEP14	23,303.20																			EM/TB =80hr ; EE/SM =80hr ;																	
NB34-050	Cabling-Install Cable Trays	01APR14	130	29SEP14	93,212.80																			EM/TB =320hr ; EE/SM =320hr ;																	
NB34-052	Cabling-Pull cables Arc Room to PVC Junction Box	01APR14	130	29SEP14	205,397.60																			EM/TB =640hr ; EE/SM =640hr ; 41=12\$K ;																	
NB34-055	Cabling- M&S f/ trays, fixtures, materials	01APR14	130	29SEP14	82,212.00																			41=52\$K ;																	

Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	Budget					
						FY10	FY11	FY12	FY13	FY14	FY15
<b>Beamline Connections</b>											
NB34-056	Install weld cables Juncton Box to Ion Source.	01APR14	130	29SEP14	25,200.40			41=01\$K ; EM/TB =80hr ; EE//SM =80hr ;			
NB34-059	Connect BL to foreline and exhaust manifold.	01APR14	130	29SEP14	11,218.48			41=01\$K ; EM/TB =32hr ; EE//SM =32hr ;			
NB34-062	New PLC. Test system after installation.	01APR14	130	29SEP14	9,321.28			EM/TB =32hr ; EE//SM =32hr ;			
NB34-064	Connect BL to new manifold & test	01APR14	130	29SEP14	9,321.28			EM/TB =32hr ; EE//SM =32hr ;			
NB34-066	Connect beamline to new manifold & test.	01APR14	130	29SEP14	9,321.28			EM/TB =32hr ; EE//SM =32hr ;			
NB34-068	Connect beamline to new manifold and test	01APR14	130	29SEP14	4,660.64			EM/TB =16hr ; EE//SM =16hr ;			
NB34-070	Install Water System	01APR14	130	29SEP14	76,549.80			EM/TB =240hr ; EE//SM =240hr ; 41=04\$K ;			
NB34-073	Fab & Install Water Cooled Aperture	01APR14	130	29SEP14	51,713.40			EM/TB =120hr ; EE//SM =120hr ; 41=11\$K ;			
NB34-076	New PLC for water sys & test	01APR14	130	29SEP14	4,660.64			EM/TB =16hr ; EE//SM =16hr ;			
NB34-078	Diag Sys-Fab/install new cables	01APR14	130	29SEP14	4,660.64			EM/TB =16hr ; EE//SM =16hr ;			
NB34-080	Drafting Labor Support	01APR14	130	29SEP14	150,700.80			EA//SB =960hr ;			
<b>Commissioning</b>											
NB34-081	Begin Commissioning BL#1	30SEP14	0		0.00			EM//TB =00hr ; EE//SM =00hr ; 41=00\$K ;			
NB34-084	10) Maint& repair of cryogenic transfer system.	30SEP14	65	29DEC14	29,201.11			EM//TB =80hr ; EE//SM =80hr ; 41=03\$K ;			
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 ;			
<b>260 - ECH System</b>											
<b>2600 - ECH System</b>											
U26-100	Pre-conceptual design	01OCT13*	63	26DEC13	70,903.84			EE//EM =136hr ; EC//EM =16hr ; EA//EM =16hr ; EE//SM =96hr ; EA//SM =96 ;			
U26-110	Conceptual/Preliminary Design	27DEC13	43	25FEB14	201,050.76			EE//EM =456hr ; EC//EM =128hr ; EA//EM =68hr ; EE//SM =164hr ; EA//SM =160 ;			
U26-120	Final Design/Assembly	26FEB14	117	07AUG14	481,348.84			EE//EM =788hr ; EC//EM =64hr ; EA//EM =168hr ; EE//SM =640hr ; EE//TB =240hr ; EA//SM =376 ; EM//SM =240hr ; 41=03\$K ;			



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						FY10	FY11	FY12	FY13	FY14	FY15
<b>432 - D-to-C Site DC Systems</b>											
<b>D to C Site DC Systems</b>											
U432-1	432 - D-to-C-Site DC Systems-DSN/PROCURE	01OCT10*	131	01APR11	629,436.42			EE//EM =297hr ; 41=324\$k ; EA//SM =653 ;			
U432-2	432 - D-to-C-Site DC Systems-Installation	04APR11	190	23DEC11	2,044,327.36			EE//EM =304hr ; EE//SM =422hr ; EE//TB =561hr ; 41=1,255\$k ;			
U432-3	432 - D-to-C-Site DC Systems-Commissioning	26DEC11	65	23MAR12	95,647.73			EE//EM =158hr ; EE//SM =211hr ; EE//TB =264hr ;			
<b>433 - D-Site DC Systems</b>											
<b>D Site DC Systems</b>											
U433-1	433 - D-site DC Systems-DSN/PROCURE	01OCT10*	131	01APR11	367,242.88			41=157\$k ; EE//EM =271hr ; EA//SM =574 ;			
U433-2	433 - D-site DC Systems-Installation	04APR11	190	23DEC11	487,072.67			EE//EM =158hr ; EE//SM =231hr ; 41=245\$k ; EE//TB =561hr ;			
U433-3	433 - D-site DC Systems-Commissioning	26DEC11	65	23MAR12	58,844.74			EE//EM =99hr ; EE//SM =112hr ; EE//TB =191hr ;			
<b>441 - Electrical Interlocks</b>											
<b>Electrical Interlocks</b>											
U441-1	441 - Electrical Interlocks-DSN/PROCURE	03OCT11*	125	23MAR12	310,845.82			41=49\$k ; EE//EM =647hr ; EA//SM =680 ;			
U441-2	441 - Electrical Interlocks-Installation	26MAR12	120	07SEP12	280,727.83			EE//EM =350hr ; EE//SM =462hr ; EE//TB =1,320hr ;			
U441-3	441 - Electrical Interlocks-Commissioning	10SEP12	72	18DEC12	58,711.00			EE//EM =99hr ; EE//SM =99hr ; EE//TB =198hr ;			
<b>442 - Kirk Key Interlocks</b>											
<b>Kirk Key Interlocks</b>											
U442-1	442 - Kirk Key Interlocks-DSN/PROCURE	03OCT11*	125	23MAR12	50,617.73			41=10\$k ; EE//EM =99hr ; EA//SM =99 ;			
U442-2	442 - Kirk Key Interlocks-Installation	26MAR12	119	06SEP12	31,986.04			EE//EM =20hr ; EE//SM =33hr ; EE//TB =231hr ;			
U442-3	442 - Kirk Key Interlocks-Commissioning	07SEP12	76	21DEC12	22,799.87			EE//EM =33hr ; EE//SM =33hr ; EE//TB =99hr ;			
<b>443 - Real Time Control Systems</b>											
<b>Real Time Control Systems</b>											
U443-1	443 - Real Time Control-DSN/PROCURE	03OCT11*	125	23MAR12	42,063.12			EE//EM =198hr ;			
<b>444 - Instrument Systems</b>											
<b>Instrument Systems</b>											
U444-1	444 - Instrumentation-DSN/PROCURE	03OCT11*	125	23MAR12	271,408.32			41=108\$k ; EA//SM =264 ; EE//EM =330hr ;			

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						FY10	FY11	FY12	FY13	FY14	FY15	
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	77	02APR13	59,059.77							EE//SM =73hr ; EE//EM =106hr ; EE//TB =231hr ;
<b>445 - Coil protection Systems</b>												
<b>Coil Protection Systems</b>												
U445-1	445 - Coil Protection-DSN/PROCURE	03OCT11*	125	23MAR12	250,923.52							41=50\$k ; EE//EM =462hr ; EA//SM =528 ;
U445-2	445 - Coil Protection-Installation	26MAR12	190	14DEC12	140,495.10							EE//EM =125hr ; EE//SM =356hr ; EE//TB =528hr ;
U445-3	445 - Coil Protection-Commissioning	17DEC12	77	02APR13	57,441.46							EE//SM =79hr ; EE//EM =125hr ; EE//TB =158hr ;
<b>446 - Ground Fault Monitoring System</b>												
<b>Ground Fault Monitoring System</b>												
U446-1	446 - Ground Fault Monitor-DSN/PROCURE	03OCT11*	125	23MAR12	217,168.71							41=76\$k ; EE//EM =277hr ; EA//SM =304 ;
U446-2	446 - Ground Fault Monitor-Installation	26MAR12	190	14DEC12	119,938.44							EE//EM =165hr ; EE//SM =191hr ; EE//TB =528hr ;
U446-3	446 - Ground Fault Monitor-Commissioning	17DEC12	77	02APR13	6,580.73							EE//EM =13hr ; EE//SM =13hr ; EE//TB =13hr ;
<b>451 - System Design and Interfaces</b>												
<b>Sys design and interfaces</b>												
U451-1	451 - System Design-DSN/PROCURE	03OCT11*	387	26MAR13	345,408.32							EA//SM =799 ; EE//EM =1,056hr ;
<b>452 - Electrical Systems Support</b>												
<b>Electrical Systems support</b>												
U452-1	452 - Electrical Systems Support-DSN/PROCURE	03OCT11*	125	23MAR12	328,857.68							41=70\$k ; EE//EM =231hr ; EA//SM =1,188 ;
U452-2	452 - Electrical Systems Support-Installation	26MAR12	190	14DEC12	366,535.80							41=120\$k ; EE//EM =165hr ; EE//SM =198hr ; EE//TB =1,188hr ;
U452-3	452 - Electrical Systems Support-Commissioning	17DEC12	76	01APR13	135,899.28							EE//EM =66hr ; EE//SM =132hr ; EE//TB =990hr ;
<b>453 - System Testing (PTP's)</b>												
<b>Systems Testing PTP's</b>												
U453-1	453 - System Testing-DSN/PROCURE	01OCT12*	45	30NOV12	116,583.12							41=25\$k ; EA//SM =132 ; EE//EM =264hr ;
U453-3	453 - System Testing-Commissioning	03DEC12	70	08MAR13	98,875.73							EE//SM =66hr ; EE//EM =251hr ; EE//TB =323hr ;

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						FY10	FY11	FY12	FY13	FY14	FY15
<b>460 - FCPC Mods</b>											
<b>FCPC Bldg Mods</b>											
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						
<b>5 - Central I&amp;C Systems</b>											
<b>510 - TCP/IP Infrastructure Systems</b>											
<b>Job: 5101 - TCP/IP Infrastructure Systems</b>											
5100		02JAN12*	327	02APR13	207,104.99						
<b>520 - Central Instrumentation &amp; Control Systems</b>											
<b>5201 - I&amp;C Systems</b>											
5200		02JAN12*	327	02APR13	319,640.29						
<b>530 - Data Acquisition &amp; Facility Computing Sys</b>											
<b>5301 - Data Acquisition</b>											
5300		02JAN12*	327	02APR13	129,269.52						
<b>540 - Facility Timing and synchronization System</b>											
<b>Job: 5401 - Facility Timing &amp; Synchronization</b>											
5400		02JAN12*	327	02APR13	244,968.28						
<b>550 - Real Time Plasma &amp; Power Supply Control</b>											
<b>5501 - Real Time Control System</b>											
5500		02JAN12*	327	02APR13	500,995.28						
<b>560 - Central Safety Interlock Systems</b>											
<b>Job: 5601 - Central Safety Interlock Systems</b>											
5600		02JAN12*	327	02APR13	222,805.23						
<b>570 - Control Room Facility</b>											
<b>Job: 5701 - Control Room Facility</b>											
5700		02JAN12*	327	02APR13	296,508.01						

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=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

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						FY10	FY11	FY12	FY13	FY14	FY15
<b>6 - Facility Systems</b>											
<b>612 - NB Water Cooling Systems</b>											
<b>NB Cooling Water</b>											
612	Design/Install-NB water sys	05APR12*	192	28DEC12	362,240.83						41=86.51;em/em=476;em/tb=1013;ea/sb=240
<b>613 - Vacuum Pumping System</b>											
<b>Vacuum Pumping Cooling Water</b>											
613	Design/Install-Vac pmp sys water	01OCT12*	85	25JAN13	97,428.55						41=2.97;em/em=168;em/tb=207;ea/sb=248
<b>614 - Bakeout Water System</b>											
<b>Bakeout Cooling Water</b>											
614	Design/Install-Bakeout water	01OCT12*	125	22MAR13	63,286.67	41=2.28;em/em=112;em/tb=125;ea/sb=160					
<b>615 - Diagnostic Water Cooling System</b>											
<b>Diag Cooling Water</b>											
615	Design/Install-Diag cooling water	01OCT12*	125	22MAR13	42,640.06	41=\$2.11k;em/em=80;em/tb=108;ea/sm=80					
<b>621 - LN2-LHe Supply System</b>											
<b>LN2-LHe supply system</b>											
F631-001	LN2-LHe Preliminary Design	02JUL12*	25	03AUG12	17,523.21						EM/EM =89hr ;
F631-010	LN2-LHe Final Design	06AUG12	24	06SEP12	23,466.97						EM/EM =89hr ; EA/DM =56hr ;
F631-020	LN2-LHe Procurement	07SEP12	35	25OCT12	69,238.89						41=45\$K ;
F631-025	LN2-LHe Fab/Assy/Installation	26OCT12	36	14DEC12	96,055.94						EM/EM =89hr ; EM/SM =130hr ; EM/TB =554hr ;
<b>622 - LN2 Coil Cooling Supply</b>											
<b>LN2 Coil Cooling system</b>											
F632-001	LN2 Coil Cooling Supply-Preliminary Design	02JUL12*	19	26JUL12	17,523.21						EM/EM =89hr ;
F632-010	LN2 Coil Cooling Supply-Final Design	27JUL12	23	28AUG12	30,016.41						EM/EM =89hr ; EA/DM =120hr ;
F632-020	LN2 Coil Cooling Supply-Procurement	29AUG12	32	11OCT12	130,021.86						41=86\$K ;
F632-025	LN2 Coil Cooling Supply-Fab/Assy/Installation	12OCT12	47	17DEC12	134,807.57						EM/EM =89hr ; EM/SM =70hr ; EM/TB =1,035hr ;
<b>623 - GN2 Cryostat Cooling System</b>											
<b>GN2 Cryostat Cooling System</b>											
F633-001	GN2 Cryostat Cooling-Preliminary Design	02JUL12*	26	06AUG12	17,523.21						EM/EM =89hr ;
F633-010	GN2 Cryostat Cooling-Final Design	07AUG12	24	07SEP12	25,852.01						EM/EM =89hr ; EA/DM =80hr ;
F633-020	GN2 Cryostat Cooling-Procurement	10SEP12	60	30NOV12	122,543.36						41=80\$K ;
F633-025	GN2 Cryostat Cooling-Fab/Assy/Installation	03DEC12	41	28JAN13	220,978.62						EM/EM =89hr ; EM/TB =2,000hr ;

Activity ID	Activity Description	Forecast Start	Forecast Duration (work days)	Forecast Finish	Budget	FY10	FY11	FY12	FY13	FY14	FY15
<b>631 - Air GN2 Vent</b>											
<b>Job: 6301 - Utility Systems</b>											
641	Design/Install-Air GN2 Vent	02JUL12*	125	21DEC12	94,435.36						
<b>640 Bakeout System</b>											
<b>Job: 6401 - PFC/VV Heating &amp; Cooling</b>											
640	Design/Install-Bakeout system	02APR12*	255	22MAR13	918,654.61						
<b>Upgrades Contingency</b>											
<b>Upgrade Contingency</b>											
<b>Upgrade Contingency</b>											
101	Contingency FY11	01OCT10*	257	26SEP11	2,249,000.00						
102	Contingency FY12	03OCT11*	257	25SEP12	4,411,000.00						
103	Contingency FY13	01OCT12*	257	24SEP13	1,653,000.00						
104	Contingency FY14	01OCT13*	257	24SEP14	2,622,000.00						
105	Contingency FY15	01OCT14*	257	24SEP15	1,008,000.00						
<b>NON MIE Funding Profile</b>											
<b>Upgrade Contingency</b>											
<b>Upgrade Contingency</b>											
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	45,000,000.00						
FUND15	Funding fy15	01OCT14*	250	15SEP15	45,000,000.00						
Row	Group Name					FY10	FY11	FY12	FY13	FY14	FY15
1	PPPL					1477684	11464642	22700786	37055709	20589976	37639104
2	ORNL					777299	1557627	1238679	4594781	789674	4612884
3	NOVA						105692	105287	105692	105692	35636
4	JHC						48969	48782	48969	48969	16511
5	AUBURN						40800	40644	40800	40800	13756
6	UCLA										
7	LLNL						16246	16184	16246	16246	5478
8	COLLAB								5000000		5000000
9	=====										
10	TOTAL					2254982	13233976	24150362	46862198	21591357	47323369
12	funding					2269000	13258000	19300000	45000000	45000000	45000000
						FY10	FY11	FY12	FY13	FY14	FY15

Run Date 26JUL07 15:04

 Forecast  
 Progress Bar  
 Critical Activity

ETCU NCSX Reserach Program (Operation, Physics, & Upgrades) Sheet 19 of 19

BASELINE CASE