

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08							FY09							FY10							FY11																											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J						
cc 9450 - NCSX Fabrication (MIE)																																																					
18 - Field Period Assembly																																																					
Job:1810-Field Period Assy -Station 1,2,3 VIOLA																																																					
Station 2 MC Sub Assy A1B1C1																																																					
A-B Modular Coil Assembly																																																					
S21-5.00Z		03DEC07*	-111	1																																																	
2-1-4.01	04DEC07*	05DEC07	-111	1																																																	
2-1-4.02	14DEC07*	17DEC07	-117	1																																																	
2-1-6.01	02JAN08*	08JAN08	-121	1																																																	
2-1-6.02	09JAN08	09JAN08	-121	1																																																	
2-1-6.03	10JAN08	10JAN08	-121	1																																																	
2-1-6.05	11JAN08	11JAN08	-121	1																																																	
2-1-6.051	14JAN08	14JAN08	-121	1																																																	
2-1-6.06	15JAN08	15JAN08	-121	1																																																	
2-1-6.07	16JAN08	16JAN08	-121	1																																																	
2-1-6.08	17JAN08	17JAN08	-121	1																																																	
2-1-6.09	18JAN08	18JAN08	-121	1																																																	
2-1-6.1	21JAN08	22JAN08	-121	1																																																	
2-1-6.11	22JAN08	22JAN08	-121	1																																																	
2-1-6.12	23JAN08	23JAN08	-121	1																																																	
2-1-6.13	23JAN08	23JAN08	-121	1																																																	
2-1-6.14	24JAN08	24JAN08	-121	1																																																	
2-1-6.15	25JAN08	25JAN08	-121	1																																																	
2-1-6.151	28JAN08	28JAN08	-121	1																																																	
2-1-6.16	29JAN08	29JAN08	-121	1																																																	
2-1-6.17	30JAN08	05FEB08	-121	1																																																	
2-1-6.18	30JAN08	30JAN08	-121	1																																																	
2-1-6.19	31JAN08	31JAN08	-121	1																																																	
2-1-6.2	01FEB08	01FEB08	-121	1																																																	
2-1-6.21	04FEB08	12FEB08	-121	1																																																	
2-1-6.22	04FEB08	04FEB08	-121	1																																																	
2-1-6.23	05FEB08	05FEB08	-121	1																																																	
2-1-6.231	06FEB08	06FEB08	-121	1																																																	
2-1-6.24	07FEB08	07FEB08	-121	1																																																	
2-1-6.25	08FEB08	08FEB08	-121	1																																																	
2-1-6.26	11FEB08	11FEB08	-121	1																																																	
2-1-6.27	12FEB08	12FEB08	-121	1																																																	
2-1-6.28	13FEB08	21FEB08	-121	1																																																	
2-1-6.29	22FEB08	26FEB08	-121	1																																																	
2-1-6.3	27FEB08	03MAR08	-121	1																																																	
2-1-6.31	04MAR08	05MAR08	-121	1																																																	
2-1-6.32	06MAR08	07MAR08	-121	1																																																	
2-1-6.33	10MAR08	10MAR08	-121	1																																																	
2-1-6.34	11MAR08	11MAR08	-121	1																																																	

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
2-2-7.42	21JUL08	21JUL08	-120	1	Fill all loose bushings with stycast 1																																															
Stycast shim gaps and final measurements																																																				
2-2-10.01	22JUL08	22JUL08	-120	1	Inject stycast to fill shim gaps 1																																															
2-2-11.01	23JUL08	24JUL08	-120	2	Make final metrology measurement of all fiducia 2																																															
2-2-11.02	25JUL08	25JUL08	-120	1	Using tension tester measure bolt length on all 1																																															
2-2-11.021	28JUL08	28JUL08	-120	2	Perform Megger test on each coil 1																																															
2-2-11.03	29JUL08	28JUL08	-120	1	Mark part for identification 0																																															
2-2-11.04	29JUL08	29JUL08	-120	2	Install lift support beams 1																																															
2-2-11.05	30JUL08	30JUL08	-120	1	Remove from stand and measure weight of complet 1																																															
2-2-11.06	31JUL08	31JUL08	-120	1	Move A2B2C2 MCHP to holding area. 1																																															

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					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
Station 2 MC Sub Assy A3B3C3																																																				
A-B Modular Coil Assembly																																																				
2-1-11.07	03DEC07	14DEC07	68	1																																																
2-3-4.02	08APR08*	09APR08	-6	1	Perform metrology set-up and checks 2																																															
2-3-6.01	10APR08	16APR08	-6	1	Follow the steps defined in Section 2 of the Me 5																																															
2-3-6.02	17APR08	17APR08	-6	1	Using the Type-A (B-flange) inboard shim templa 1																																															
2-3-6.03	18APR08	18APR08	-6	1	Place an initial set of alumina shims (4-8) on 1																																															
2-3-6.05	21APR08	21APR08	-6	1	Lower the mating ?B= coil into position. 1																																															
2-3-6.051	22APR08	22APR08	-6	1	Perform an alignment to the ?B= coil tooling ba 1																																															
2-3-6.06	23APR08	23APR08	-6	1	Install the jack screws and dial indicators for 1																																															
2-3-6.07	24APR08	24APR08	-6	1	Position coil 1																																															
2-3-6.08	25APR08	25APR08	-6	1	Instl remaining alumina shims & wiggle test 1																																															
2-3-6.09	28APR08	28APR08	-6	1	Torque to 50% 1																																															
2-3-6.1	29APR08	30APR08	-6	1	After tightening, measure the position of all m 2																																															
2-3-6.11	30APR08	30APR08	-6	1	Measure the shim puck height (at a number of po 1																																															
2-3-6.12	01MAY08	01MAY08	-6	1	Unfasten bolts and raise the "B" coil in height 1																																															
2-3-6.13	01MAY08	01MAY08	-6	1	"Lightly" tack weld the nose flex shims to the 1																																															
2-3-6.14	02MAY08	02MAY08	-6	1	Unfasten all bolts and remove the "B" coil and 1																																															
2-3-6.15	05MAY08	05MAY08	-6	1	Recheck the part alignment of the "A" coil to m 1																																															
2-3-6.151	06MAY08	06MAY08	-6	1	Weld all Type-A flex shims to the plasma side, 1																																															
2-3-6.16	07MAY08	07MAY08	-6	1	After welding the "A" coil nose shims recheck a 1																																															
2-3-6.17	08MAY08	14MAY08	-6	1	Back office assess weld 5																																															
2-3-6.18	08MAY08	08MAY08	-6	1	measure the "B" fiducials 1																																															
2-3-6.19	09MAY08	09MAY08	-6	1	weld type-B flex shims 1																																															
2-3-6.2	12MAY08	12MAY08	-6	1	After welding the "B" coil nose shims recheck 1																																															
2-3-6.21	13MAY08	15MAY08	-6	1	Back office assess weld 3																																															
2-3-6.22	13MAY08	13MAY08	-6	1	Remove alumina shims as necessary except for th 1																																															
2-3-6.23	14MAY08	14MAY08	-6	1	Lower the mating B coil into position. 1																																															
2-3-6.231	15MAY08	15MAY08	-6	1	Perform an alignment to the B coil tooling balls 1																																															
2-3-6.24	16MAY08	16MAY08	-6	1	Position B coil 1																																															
2-3-6.25	19MAY08	19MAY08	-6	1	Instl alumia shims & wiggle test 1																																															
2-3-6.26	20MAY08	20MAY08	-6	1	Torque to 50% 1																																															
2-3-6.27	21MAY08	21MAY08	-6	1	After tightening, measure position all monuments 1																																															
2-3-6.28	22MAY08	02JUN08	-6	1	Unfasten the bolts, lift B coil remv fuji paper 7																																															
2-3-6.29	03JUN08	05JUN08	-6	1	If revised set shims is required, install new sh 3																																															
2-3-6.3	06JUN08	11JUN08	-6	1	With successful Fuji load pattern,unfasten bolts 4																																															
2-3-6.31	12JUN08	13JUN08	-6	1	If above step does not fall within .007" re-torq 2																																															
2-3-6.32	16JUN08	17JUN08	-6	1	One hole at a time, remove the supernut. Using 2																																															
2-3-6.33	18JUN08	18JUN08	-6	1	After super bolt tightening, measure the positi 1																																															
2-3-6.34	19JUN08	19JUN08	-6	1	Tighten all bolts to final torque 1																																															
2-3-6.35	20JUN08	20JUN08	-6	1	Measure position of all monuments 1																																															
2-3-6.36	23JUN08	24JUN08	-6	1	Weld A/B nose 2																																															
2-3-6.37	25JUN08	25JUN08	-6	1	Measure position of all monumnets 1																																															
2-3-6.38	26JUN08	07JUL08	-6	1	Review results with back office. Instl wing sprt 7																																															
2-3-6.39	08JUL08	07JUL08	-6	1	id monuments that moved <.005" 0																																															
2-3-6.4	08JUL08	08JUL08	-6	1	Fill all loose bushings with Stycast 1																																															

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					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
					2-3-6.41	08JUL08	08JUL08	-6	1	scan B flange of B coil 1																																										
2-3-6.42	09JUL08	10JUL08	-6	1	Define B/C flange shim thickness 2																																															
2-3-6.43	11JUL08	14JUL08	-6	1	Compress alumina shims for B/C interface 2																																															
AB-C Modular Coil Assembly																																																				
2-3-7.01	15JUL08	16JUL08	-6	2	Bolt the "A" coil to its fixture and lift the (2																																															
2-3-7.02	17JUL08	16JUL08	26	1	Select a subset of monuments identified in step 0																																															
2-3-7.03	17JUL08	17JUL08	26	1	Align to the set of monuments selected in 7.02. 1																																															
2-3-7.04	18JUL08	18JUL08	26	1	Establish a set of global monuments, on the fix 1																																															
2-3-7.05	21JUL08	21JUL08	26	1	Using the Type-B (B-flange) inboard shim templa 1																																															
2-3-7.06	22JUL08	21JUL08	26	1	Place an initial set of alumina shims (4-8) on 0																																															
2-3-7.08	22JUL08	22JUL08	26	1	Lower the mating ?C= coil into position. 1																																															
2-3-7.081	23JUL08	23JUL08	26	1	Perform an alignment to the C coil tooling ba 1																																															
2-3-7.09	24JUL08	24JUL08	26	1	Install the jack screws and dial indicators for 1																																															
2-3-7.1	25JUL08	25JUL08	26	1	Using three selected monuments on the C coil, 1																																															
2-3-7.11	28JUL08	28JUL08	26	1	Instl remaining alumina coated shims&wiggle test 1																																															
2-3-7.12	29JUL08	29JUL08	26	2	Torque to 50% 1																																															
2-3-7.13	30JUL08	30JUL08	26	1	After tightening, measure the position 1																																															
2-3-7.14	31JUL08	31JUL08	26	1	Measure the shim puck height 1																																															
2-3-7.15	01AUG08	01AUG08	26	1	Unfasten bolts and raise the "C" coil in height 1																																															
2-3-7.16	01AUG08	01AUG08	26	1	"Lightly" tack weld the nose flex shims to the 1																																															
2-3-7.17	01AUG08	01AUG08	26	1	Unfasten all bolts and remove the "C" coil and 1																																															
2-3-7.18	04AUG08	04AUG08	26	2	Recheck the part alignment of the "A / B" coil 1																																															
2-3-7.19	05AUG08	05AUG08	26	1	After welding the "B" coil nose shims recheck a 1																																															
2-3-7.2	06AUG08	08AUG08	26	1	Time needs to be allocated for a back office as 3																																															
2-3-7.21	06AUG08	06AUG08	26	1	On the separate fixture measure the "C" fiducia 1																																															
2-3-7.22	07AUG08	07AUG08	26	1	Weld type-C flex shims 1																																															
2-3-7.23	08AUG08	08AUG08	26	1	After welding the "C" coil nose shims recheck t 1																																															
2-3-7.24	11AUG08	13AUG08	26	1	Time needs to be allocated for a back office as 3																																															
2-3-7.25	11AUG08	08AUG08	26	1	Remove alumina shims as necessary except for th 0																																															
2-3-7.251	11AUG08	08AUG08	26	1	Placew unfilled shim bags in wing areas 0																																															
2-3-7.26	11AUG08	11AUG08	26	1	Lower the mating C coil into position. 1																																															
2-3-7.261	12AUG08	12AUG08	26	1	Perform an alignment to C coil tooling balls 1																																															
2-3-7.27	13AUG08	13AUG08	26	1	Position coil in x,y,z directions 1																																															
2-3-7.28	14AUG08	15AUG08	26	1	Raise C"coil install shims & fuji paper 2																																															
2-3-7.29	18AUG08	18AUG08	26	1	Torque to 50% 1																																															
2-3-7.3	19AUG08	20AUG08	26	1	After tightening, measure the position 2																																															
2-3-7.31	21AUG08	25AUG08	26	2	Unfasten the bolts, lift C coil remove fuji 3																																															
2-3-7.32	26AUG08	27AUG08	26	2	If a revised set of shims is required, install 2																																															
2-3-7.33	28AUG08	28AUG08	26	2	With successful Fuji load pattern unfasten bolts 1																																															
2-3-7.34	29AUG08	29AUG08	26	1	If above steps not within .015" retorque 1																																															
2-3-7.35	02SEP08	02SEP08	26	2	remove the supernut instl bushing 1																																															
2-3-7.36	03SEP08	03SEP08	26	1	After super bolt tightening remeasure 1																																															
2-3-7.37	04SEP08	04SEP08	26	1	Tighten all bolts to their final torque. 1																																															
2-3-7.38	05SEP08	05SEP08	26	1	Measure all monuments 1																																															
2-3-7.39	08SEP08	08SEP08	26	2	Weld B/C nose 1																																															
2-3-7.4	09SEP08	09SEP08	26	1	Measure position all monuments 1																																															

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					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J													
Station 2 MC Sub Assy A4B4C4																																																												
A-B Modular Coil Assembly																																																												
2-2-11.07	03DEC07	07DEC07	100	2																																																								
2-4-4.02	13MAY08*	13MAY08	-4	2	Perform metrology set-up and checks 1																																																							
2-4-6.01	14MAY08	16MAY08	-4	2	Follow the steps defined in Section 2 of the Me 3																																																							
2-4-6.02	19MAY08	19MAY08	-4	1	Using the Type-A (B-flange) inboard shim templa 1																																																							
2-4-6.03	20MAY08	20MAY08	-4	1	Place an initial set of alumina shims (4-8) on 1																																																							
2-4-6.05	21MAY08	21MAY08	-4	1	Lower the mating ?B= coil into position. 1																																																							
2-4-6.051	22MAY08	22MAY08	-4	1	Perform an alignment to the ?B= coil tooling ba 1																																																							
2-4-6.06	23MAY08	23MAY08	-4	1	Install the jack screws and dial indicators for 1																																																							
2-4-6.07	27MAY08	27MAY08	-4	1	Position coil 1																																																							
2-4-6.08	28MAY08	28MAY08	-4	1	Instl remaining alumina shims & wiggle test 1																																																							
2-4-6.09	29MAY08	29MAY08	-4	1	Torque to 50% 1																																																							
2-4-6.1	30MAY08	30MAY08	-4	2	After tightening, measure the position of all m 1																																																							
2-4-6.11	30MAY08	30MAY08	-4	1	Measure the shim puck height (at a number of po 1																																																							
2-4-6.12	02JUN08	02JUN08	-4	1	Unfasten bolts and raise the "B" coil in height 1																																																							
2-4-6.13	02JUN08	02JUN08	-4	1	"Lightly" tack weld the nose flex shims to the 1																																																							
2-4-6.14	03JUN08	03JUN08	-4	1	Unfasten all bolts and remove the "B" coil and 1																																																							
2-4-6.15	04JUN08	04JUN08	-4	1	Recheck the part alignment of the "A" coil to m 1																																																							
2-4-6.151	05JUN08	05JUN08	-4	1	Weld all Type-A flex shims to the plasma side, 1																																																							
2-4-6.16	06JUN08	06JUN08	-4	1	After welding the "A" coil nose shims recheck a 1																																																							
2-4-6.17	09JUN08	13JUN08	-4	1	Back office assess weld 5																																																							
2-4-6.18	09JUN08	09JUN08	-4	1	measure the "B" fiducials 1																																																							
2-4-6.19	10JUN08	10JUN08	-4	1	weld type-B flex shims 1																																																							
2-4-6.2	11JUN08	11JUN08	-4	1	After welding the "B" coil nose shims recheck 1																																																							
2-4-6.21	12JUN08	16JUN08	-4	1	Back office assess weld 3																																																							
2-4-6.22	12JUN08	12JUN08	-4	1	Remove alumina shims as necessary except for th 1																																																							
2-4-6.23	13JUN08	13JUN08	-4	1	Lower the mating B coil into position. 1																																																							
2-4-6.231	16JUN08	16JUN08	-4	1	Perform an alignment to the B coil tooling balls 1																																																							
2-4-6.24	17JUN08	17JUN08	-4	1	Position B coil 1																																																							
2-4-6.25	18JUN08	18JUN08	-4	1	Instl alumia shims & wiggle test 1																																																							
2-4-6.26	19JUN08	19JUN08	-4	1	Torque to 50% 1																																																							
2-4-6.27	20JUN08	20JUN08	-4	1	After tightening, measure position all monuments 1																																																							
2-4-6.28	23JUN08	25JUN08	-4	2	Unfasten the bolts, lift B coil remv fuji paper 3																																																							
2-4-6.29	26JUN08	27JUN08	-4	2	If revised set shims is required, install new sh 2																																																							
2-4-6.3	30JUN08	01JUL08	-4	2	With successful Fuji load pattern,unfasten bolts 2																																																							
2-4-6.31	02JUL08	02JUL08	-4	2	If above step does not fall within .007" re-torq 1																																																							
2-4-6.32	03JUL08	03JUL08	-4	2	One hole at a time, remove the supernut. Using 1																																																							
2-4-6.33	07JUL08	07JUL08	-4	1	After super bolt tightening, measure the positi 1																																																							
2-4-6.34	08JUL08	08JUL08	-4	1	Tighten all bolts to final torque 1																																																							
2-4-6.35	09JUL08	09JUL08	-4	1	Measure position of all monuments 1																																																							
2-4-6.36	10JUL08	10JUL08	-4	2	Weld A/B nose 1																																																							
2-4-6.37	11JUL08	11JUL08	-4	1	Measure position of all monumnets 1																																																							
2-4-6.38	14JUL08	22JUL08	-4	1	Review results with back office. Instl wing sprt 7																																																							
2-4-6.39	23JUL08	22JUL08	-4	1	id monuments that moved <.005" 0																																																							
2-4-6.4	23JUL08	23JUL08	-4	1	Fill all loose bushings with Stycast 1																																																							

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
2-4-6.41	23JUL08	23JUL08	-4	1	scan B flange of B coil 1																																															
2-4-6.42	24JUL08	24JUL08	-4	2	Define B/C flange shim thickness 1																																															
2-4-6.43	25JUL08	25JUL08	-4	2	Compress alumina shims for B/C interface 1																																															
AB-C Modular Coil Assembly																																																				
2-4-7.01	01AUG08	04AUG08	-8	2	Bolt the "A" coil to its fixture and lift the (2																																															
2-4-7.02	05AUG08	04AUG08	27	1	Select a subset of monuments identified in step 0																																															
2-4-7.03	05AUG08	05AUG08	27	1	Align to the set of monuments selected in 7.02. 1																																															
2-4-7.04	06AUG08	06AUG08	27	1	Establish a set of global monuments, on the fix 1																																															
2-4-7.05	07AUG08	07AUG08	27	1	Using the Type-B (B-flange) inboard shim templa 1																																															
2-4-7.06	08AUG08	07AUG08	27	1	Place an initial set of alumina shims (4-8) on 0																																															
2-4-7.08	08AUG08	08AUG08	27	1	Lower the mating ?C- coil into position. 1																																															
2-4-7.081	11AUG08	11AUG08	27	1	Perform an alignment to the C coil tooling ba 1																																															
2-4-7.09	12AUG08	12AUG08	27	1	Install the jack screws and dial indicators for 1																																															
2-4-7.1	13AUG08	13AUG08	27	1	Using three selected monuments on the C coil, 1																																															
2-4-7.11	14AUG08	14AUG08	27	1	Instl remaining alumina coated shims&wigggle test 1																																															
2-4-7.12	15AUG08	15AUG08	27	2	Torque to 50% 1																																															
2-4-7.13	18AUG08	18AUG08	27	1	After tightening, measure the position 1																																															
2-4-7.14	19AUG08	19AUG08	27	1	Measure the shim puck height 1																																															
2-4-7.15	20AUG08	20AUG08	27	1	Unfasten bolts and raise the "C" coil in height 1																																															
2-4-7.16	20AUG08	20AUG08	27	1	"Lightly" tack weld the nose flex shims to the 1																																															
2-4-7.17	20AUG08	20AUG08	27	1	Unfasten all bolts and remove the "C" coil and 1																																															
2-4-7.18	21AUG08	21AUG08	27	2	Recheck the part alignment of the "A / B" coil 1																																															
2-4-7.19	22AUG08	22AUG08	27	1	After welding the "B" coil nose shims recheck a 1																																															
2-4-7.2	25AUG08	26AUG08	30	2	Time needs to be allocated for a back office as 2																																															
2-4-7.21	25AUG08	25AUG08	27	1	On the separate fixture measure the "C" fiducia 1																																															
2-4-7.22	26AUG08	26AUG08	27	1	Weld type-C flex shims 1																																															
2-4-7.23	27AUG08	27AUG08	27	1	After welding the "C" coil nose shims recheck t 1																																															
2-4-7.24	28AUG08	28AUG08	29	2	Time needs to be allocated for a back office as 1																																															
2-4-7.25	28AUG08	27AUG08	27	1	Remove alumina shims as necessary except for th 0																																															
2-4-7.251	28AUG08	27AUG08	27	1	Placew unfilled shim bags in wing areas 0																																															
2-4-7.26	28AUG08	28AUG08	27	1	Lower the mating C coil into position. 1																																															
2-4-7.261	29AUG08	29AUG08	27	1	Perform an alignment to C coil tooling balls 1																																															
2-4-7.27	02SEP08	02SEP08	27	1	Position coil in x,y,z directions 1																																															
2-4-7.28	03SEP08	04SEP08	27	1	Raise C"coil install shims & fuji paper 2																																															
2-4-7.29	05SEP08	05SEP08	27	1	Torque to 50% 1																																															
2-4-7.3	08SEP08	08SEP08	27	2	After tightening, measure the position 1																																															
2-4-7.31	09SEP08	11SEP08	27	2	Unfasten the bolts, lift C coil remove fuji 3																																															
2-4-7.32	12SEP08	15SEP08	27	2	If a revised set of shims is required, install 2																																															
2-4-7.33	16SEP08	16SEP08	27	2	With successful Fuji load pattern unfasten bolts 1																																															
2-4-7.34	17SEP08	17SEP08	27	1	If above steps not within .015" retorque 1																																															
2-4-7.35	18SEP08	18SEP08	27	2	remove the supernut instl bushing 1																																															
2-4-7.36	19SEP08	19SEP08	27	1	After super bolt tightening remeasure 1																																															
2-4-7.37	22SEP08	22SEP08	27	1	Tighten all bolts to their final torque. 1																																															
2-4-7.38	23SEP08	23SEP08	27	1	Measure all monuments 1																																															
2-4-7.39	24SEP08	24SEP08	27	2	Weld B/C nose 1																																															
2-4-7.4	25SEP08	25SEP08	27	1	Measure position all monuments 1																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
Station 2 MC Sub Assy A5B5C5																																																				
A-B Modular Coil Assembly																																																				
2-5-4.02	17JUL08*	18JUL08	-6	1	Perform metrology set-up and checks 2																																															
2-5-6.01	21JUL08	25JUL08	-6	1	Follow the steps defined in Section 2 of the Me 5																																															
2-5-6.02	28JUL08	28JUL08	-6	1	Using the Type-A (B-flange) inboard shim templa 1																																															
2-5-6.03	29JUL08	29JUL08	-6	1	Place an initial set of alumina shims (4-8) on 1																																															
2-5-6.05	30JUL08	30JUL08	-6	1	Lower the mating ?B± coil into position. 1																																															
2-5-6.051	31JUL08	31JUL08	-6	1	Perform an alignment to the ?B± coil tooling ba 1																																															
2-5-6.06	01AUG08	01AUG08	-6	1	Install the jack screws and dial indicators for 1																																															
2-5-6.07	04AUG08	04AUG08	-6	1	Position coil 1																																															
2-5-6.08	05AUG08	05AUG08	-6	1	Instl remaining alumina shims & wiggle test 1																																															
2-5-6.09	06AUG08	06AUG08	-6	1	Torque to 50% 1																																															
2-5-6.1	07AUG08	08AUG08	-6	1	After tightening, measure the position of all m 2																																															
2-5-6.11	08AUG08	08AUG08	-6	1	Measure the shim puck height (at a number of po 1																																															
2-5-6.12	11AUG08	11AUG08	-6	1	Unfasten bolts and raise the "B" coil in height 1																																															
2-5-6.13	11AUG08	11AUG08	-6	1	"Lightly" tack weld the nose flex shims to the 1																																															
2-5-6.14	12AUG08	12AUG08	-6	1	Unfasten all bolts and remove the "B" coil and 1																																															
2-5-6.15	13AUG08	13AUG08	-6	1	Recheck the part alignment of the "A" coil to m 1																																															
2-5-6.151	14AUG08	14AUG08	-6	1	Weld all Type-A flex shims to the plasma side, 1																																															
2-5-6.16	15AUG08	15AUG08	-6	1	After welding the "A" coil nose shims recheck a 1																																															
2-5-6.17	18AUG08	22AUG08	-6	1	Back office assess weld 5																																															
2-5-6.18	18AUG08	18AUG08	-6	1	measure the "B" fiducials 1																																															
2-5-6.19	19AUG08	19AUG08	-6	1	weld type-B flex shims 1																																															
2-5-6.2	20AUG08	20AUG08	-6	1	After welding the "B" coil nose shims recheck 1																																															
2-5-6.21	21AUG08	25AUG08	-6	1	Back office assess weld 3																																															
2-5-6.22	21AUG08	21AUG08	-6	1	Remove alumina shims as necessary except for th 1																																															
2-5-6.23	22AUG08	22AUG08	-6	1	Lower the mating B coil into position. 1																																															
2-5-6.231	25AUG08	25AUG08	-6	1	Perform an alignment to the B coil tooling balls 1																																															
2-5-6.24	26AUG08	26AUG08	-6	1	Position B coil 1																																															
2-5-6.25	27AUG08	27AUG08	-6	1	Instl alumina shims & wiggle test 1																																															
2-5-6.26	28AUG08	28AUG08	-6	1	Torque to 50% 1																																															
2-5-6.27	29AUG08	29AUG08	-6	1	After tightening, measure position all monuments 1																																															
2-5-6.28	02SEP08	10SEP08	-6	1	Unfasten the bolts, lift B coil remv fuji paper 7																																															
2-5-6.29	11SEP08	15SEP08	-6	1	If revised set shims is required, install new sh 3																																															
2-5-6.3	16SEP08	19SEP08	-6	1	With successful Fuji load pattern,unfasten bolts 4																																															
2-5-6.31	22SEP08	23SEP08	-6	1	If above step does not fall within .007" re-torq 2																																															
2-5-6.32	24SEP08	25SEP08	-6	1	One hole at a time, remove the supernut. Using 2																																															
2-5-6.33	26SEP08	26SEP08	-6	1	After super bolt tightening, measure the positi 1																																															
2-5-6.34	29SEP08	29SEP08	-6	1	Tighten all bolts to final torque 1																																															
2-5-6.35	30SEP08	30SEP08	-6	1	Measure position of all monuments 1																																															
2-5-6.36	01OCT08	02OCT08	-6	1	Weld A/B nose 2																																															
2-5-6.37	03OCT08	03OCT08	-6	1	Measure position of all monumnets 1																																															
2-5-6.38	06OCT08	14OCT08	-6	1	Review results with back office. Instl wing sprt 7																																															
2-5-6.39	15OCT08	14OCT08	-6	1	id monuments that moved <.005" 0																																															
2-5-6.4	15OCT08	15OCT08	-6	1	Fill all loose bushings with Stycast 1																																															
2-5-6.41	15OCT08	15OCT08	-6	1	scan B flange of B coil 1																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11												
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J						
2-5-7.42	23JAN09	23JAN09	-6	1	Fill all loose bushings with stycast																																																1
Stycast shim gaps and final measurements																																																					
2-5-10.01	26JAN09	26JAN09	-6	1	Inject stycast to fill shim gaps																																																1
2-5-11.01	27JAN09	29JAN09	-6	1	Make final metrology measurement of all fiducia																																																3
2-5-11.02	30JAN09	30JAN09	-6	1	Using tension tester measure bolt length on all																																																1
2-5-11.021	02FEB09	03FEB09	-6	1	Perform Megger test on each coil																																																2
2-5-11.03	04FEB09	03FEB09	-6	1	Mark part for identification																																																0
2-5-11.04	04FEB09	05FEB09	-6	1	Install lift support beams																																																2
2-5-11.05	06FEB09	06FEB09	-6	1	Remove from stand and measure weight of complet																																																1
2-5-11.06	09FEB09	09FEB09	-6	1	Move A5B5C5 MCHP to holding area.																																																1

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
2-6-6.42	04NOV08	05NOV08	-8	1	Define B/C flange shim thickness 2																																															
2-6-6.43	06NOV08	07NOV08	-8	1	Compress alumina shims for B/C interface 2																																															
AB-C Modular Coil Assembly																																																				
2-6-7.01	10NOV08	12NOV08	-8	1	Bolt the "A" coil to its fixture and lift the 3																																															
2-6-7.02	13NOV08	12NOV08	-8	1	Select a subset of monuments identified in step 0																																															
2-6-7.03	13NOV08	13NOV08	-8	1	Align to the set of monuments selected in 7.02. 1																																															
2-6-7.04	14NOV08	14NOV08	-8	1	Establish a set of global monuments, on the fix 1																																															
2-6-7.05	17NOV08	17NOV08	-8	1	Using the Type-B (B-flange) inboard shim templa 1																																															
2-6-7.06	18NOV08	17NOV08	-8	1	Place an initial set of alumina shims (4-8) on 0																																															
2-6-7.08	18NOV08	18NOV08	-8	1	Lower the mating ?C- coil into position. 1																																															
2-6-7.081	19NOV08	19NOV08	-8	1	Perform an alignment to the C coil tooling ba 1																																															
2-6-7.09	20NOV08	20NOV08	-8	1	Install the jack screws and dial indicators for 1																																															
2-6-7.1	21NOV08	21NOV08	-8	1	Using three selected monuments on the C coil. 1																																															
2-6-7.11	24NOV08	24NOV08	-8	1	Instl remaining alumina coated shims&wigggle test 1																																															
2-6-7.12	25NOV08	26NOV08	-8	1	Torque to 50% 2																																															
2-6-7.13	01DEC08	01DEC08	-8	1	After tightening, measure the position 1																																															
2-6-7.14	02DEC08	02DEC08	-8	1	Measure the shim puck height 1																																															
2-6-7.15	03DEC08	03DEC08	-8	1	Unfasten bolts and raise the "C" coil in height 1																																															
2-6-7.16	03DEC08	03DEC08	-8	1	"Lightly" tack weld the nose flex shims to the 1																																															
2-6-7.17	03DEC08	03DEC08	-8	1	Unfasten all bolts and remove the "C" coil and 1																																															
2-6-7.18	04DEC08	05DEC08	-8	1	Recheck the part alignment of the "A / B" coil 2																																															
2-6-7.19	08DEC08	08DEC08	-8	1	After welding the "B" coil nose shims recheck a 1																																															
2-6-7.2	09DEC08	11DEC08	-8	1	Time needs to be allocated for a back office as 3																																															
2-6-7.21	09DEC08	09DEC08	-8	1	On the separate fixture measure the "C" fiducial 1																																															
2-6-7.22	10DEC08	10DEC08	-8	1	Weld type-C flex shims 1																																															
2-6-7.23	11DEC08	11DEC08	-8	1	After welding the "C" coil nose shims recheck t 1																																															
2-6-7.24	12DEC08	16DEC08	-8	1	Time needs to be allocated for a back office as 3																																															
2-6-7.25	12DEC08	11DEC08	-8	1	Remove alumina shims as necessary except for th 0																																															
2-6-7.251	12DEC08	11DEC08	-8	1	Placew unfilled shim bags in wing areas 0																																															
2-6-7.26	12DEC08	12DEC08	-8	1	Lower the mating C coil into position. 1																																															
2-6-7.261	15DEC08	15DEC08	-8	1	Perform an alignment to C coil tooling balls 1																																															
2-6-7.27	16DEC08	16DEC08	-8	1	Position coil in x,y,z directions 1																																															
2-6-7.28	17DEC08	18DEC08	-8	1	Raise C"coil install shims & fuji paper 2																																															
2-6-7.29	19DEC08	19DEC08	-8	1	Torque to 50% 1																																															
2-6-7.3	22DEC08	23DEC08	-8	1	After tightening, measure the position 2																																															
2-6-7.31	02JAN09	12JAN09	-8	1	Unfasten the bolts, lift C coil remove fuji 7																																															
2-6-7.32	13JAN09	15JAN09	-8	1	If a revised set of shims is required, install 3																																															
2-6-7.33	16JAN09	19JAN09	-8	1	With successful Fuji load pattern unfasten bolts 2																																															
2-6-7.34	20JAN09	20JAN09	-8	1	If above steps not within .015" retorqu 1																																															
2-6-7.35	21JAN09	22JAN09	-8	1	remove the supernut instl bushing 2																																															
2-6-7.36	23JAN09	23JAN09	-8	1	After super bolt tightening remeasure 1																																															
2-6-7.37	26JAN09	26JAN09	-8	1	Tighten all bolts to their final torque. 1																																															
2-6-7.38	27JAN09	27JAN09	-8	1	Measure all monuments 1																																															
2-6-7.39	28JAN09	29JAN09	-8	1	Weld B/C nose 2																																															
2-6-7.4	30JAN09	30JAN09	-8	1	Measure position all monuments 1																																															
2-6-7.41	02FEB09	10FEB09	-8	1	Back office results & instl wing sprts if reqd 7																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
Station 3 Setup/Preparations/General																																																				
R1810-3102	19FEB08	19MAY08	-121	1	Misc M&S 65																																															
R1810-3105	19FEB08	19MAY08	-121	1	Procure wire rope slings 65																																															
R1810-3104	01SEP07A	28SEP07A		1																																																
R1810-3106	15MAY08	19MAY08	-121	1	Load test 3 legged actuator system 3																																															
R1810-3108	10APR08*	07MAY08	-121	1	Procure ,Fabricate 3 legged actuator lift fixtur 20																																															
R1810-3112	08MAY08	19MAY08	-121	1	Load Test 3 legged actuator lift fixtur 8																																															
R1810-3150	30APR08*	05MAY08	-121	1	Fab New legs 4																																															
R1810-3103	06MAY08	09MAY08	-121	1	Install station 3 platforms (8 required) 4																																															
R1810-3107	12MAY08	15MAY08	-121	1	Test out station 3 equipment and procedures 4																																															
R1810-3109	16MAY08	19MAY08	-121	1	Begin assy of first field period assy 2																																															
R1810-2109	20MAY08		-121	1	Begin Station 3 0																																															
3-1-1.01	20MAY08	29MAY08	-121	1	Work with back office to transfer CAD models th 7																																															
3-1-1.02	30MAY08	03JUN08	-121	1	Install Station 3 site monuments as needed to p 3																																															
3-1-1.03	04JUN08	10JUN08	-121	1	Install floor mounted tracks and the VV base su 5																																															
3-1-1.04	11JUN08	13JUN08	-121	1	Install MCHP left support stand 3																																															
3-1-1.05	16JUN08	18JUN08	-121	1	Install MCHP right support stand 3																																															
3-1-1.06	19JUN08	23JUN08	-121	1	Install the MCHP right support stand; verify th 3																																															
3-1-1.07	24JUN08	26JUN08	-121	1	Reconfirm Leica position used for measuring eac 3																																															
DOE-1Z		14MAY08	-121	1	Notify DOE of scheduled station 3 lifts 0																																															
DOE-2Z	15MAY08	26JUN08	-121	1	DOE review lift procedures 30																																															
DOE-3Z		26JUN08	-121	1	DOE approval of scheduled station 3 lifts 0																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
3-1-6.03	25NOV08	25NOV08	-121	1	Turn each lasers on & measure each laser source 1																																															
3-1-6.04	26NOV08	08DEC08	-121	1	Print path on milar paper 7																																															
3-1-6.05	09DEC08	09DEC08	-121	1	Disengage the right MCHP & move to far right 1																																															
3-1-6.06	10DEC08	11DEC08	-121	1	Remove the left MCHP test laser path 2																																															
3-1-6.07	12DEC08	12DEC08	-121	1	Place left MCHP in temp location 1																																															
Install Vacuum Vessel																																																				
3-1-7.02	15DEC08	16DEC08	-121	1	Install VV NBI port support stand. 2																																															
3-1-7.03	17DEC08	19DEC08	-121	1	Install VVSA to base support and make connection 3																																															
3-1-7.04	22DEC08	23DEC08	-121	1	take tooling ball readings and secure VVSA 2																																															
3-1-7.05	02JAN09	12JAN09	-121	1	Scan VV surface and compare data 7																																															
Install RIGHT MCHP over VV																																																				
3-1-8.01	13JAN09	13JAN09	-121	1	Install any bumper protection components on the 1																																															
3-1-8.03	14JAN09	14JAN09	-121	1	Install MCHP lift fixture, disengage leveler 1																																															
3-1-8.04	15JAN09	14JAN09	-121	1	Re-install the right adjustor bar. 0																																															
3-1-8.05	15JAN09	19JAN09	-121	1	Move right MCHP over the VV 3																																															
3-1-8.06	20JAN09	21JAN09	-121	1	Position right MCHP over right support 2																																															
3-1-8.07	22JAN09	22JAN09	-121	1	Bring AirLoc Wedgemount leveler up to take load 1																																															
3-1-8.08	23JAN09	23JAN09	-121	1	Measure the target monuments on right MCHP with 1																																															
3-1-8.09	26JAN09	26JAN09	-121	1	move MCHP to right 1/2" 1																																															
Install LEFT MCHP over VV																																																				
3-1-9.02	27JAN09	29JAN09	-121	1	Move left MCHP over VV to within 1/2" 3																																															
3-1-9.03	30JAN09	30JAN09	-121	1	Using adjustor bar move right MCHP back 1																																															
3-1-9.05	02FEB09	02FEB09	-121	1	Position left MCHP over left support 1																																															
3-1-9.06	03FEB09	03FEB09	-121	1	Bring AirLoc Wedgemount leveler up to take load 1																																															
3-1-9.061	04FEB09	04FEB09	-121	1	Measure the target monuments on right MCHP 1																																															
3-1-9.07	05FEB09	05FEB09	-121	1	Remove laser screens to provide more flr space 1																																															
3-1-9.08	06FEB09	09FEB09	-121	1	Install temporary scaffolding to install flange 2																																															
3-1-9.09	10FEB09	11FEB09	-121	1	Install bolts and all outboard alumina shims. 2																																															
3-1-9.1	12FEB09	12FEB09	-121	1	Tighten flange fasteners to 50% 1																																															
3-1-9.11	13FEB09	16FEB09	-121	1	Make a hand "wiggle" test (rotate on bolt) 2																																															
3-1-9.12	17FEB09	18FEB09	-121	1	Perform metrology measurements of all alignment 2																																															
3-1-9.13	19FEB09	20FEB09	-121	1	Perform position adjustments on left side MCHP 2																																															
3-1-9.14	23FEB09	23FEB09	-121	1	Remove SISCO actuator from left MCHP. 1																																															
3-1-9.15	24FEB09	26FEB09	-121	1	Machine and install bushings 3																																															
3-1-9.16	27FEB09	27FEB09	-121	1	Tighten nuts 100%. Re-verify adequate MCHP ali 1																																															
Weld inboard shims & fill bushing gaps																																																				
3-1-10.01	02MAR09	10MAR09	-121	1	Weld inboard shims solenoid side 7																																															
3-1-10.02	11MAR09	12MAR09	-121	1	Measure the positions of all monuments 2																																															
3-1-10.03	13MAR09	17MAR09	-121	1	Fill all lose bushings with Stycast 2850FT 3																																															
3-1-10.04	18MAR09	20MAR09	-121	1	Measure the monuments on all coils. 3																																															
VVSA attachment to MC's																																																				
3-1-11.01	23MAR09	24MAR09	-121	1	Attach permanent VV supports to Type A MC 2																																															
3-1-11.02	25MAR09	25MAR09	-121	1	Attach temp VV supports to Type B MC 1																																															
3-1-11.03	26MAR09	26MAR09	-121	1	Disconnect base support and transfer load to VV 1																																															
3-1-11.04	27MAR09	27MAR09	-121	1	Install VV lateral supports and align VVSA 1																																															
3-1-11.05	30MAR09	30MAR09	-121	1	Prepare VVSA for transport. Install blocking 1																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08					FY09					FY10					FY11																
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	
Transfer to Station 5																																				
3-1-12.01	31MAR09	02APR09	-121	1																																
3-1-12.02	03APR09	07APR09	-121	1																																
S31-10.02M		07APR09	-121	1																																
					Instl rigging to MCWF transfer to support frame 3																															
					Transfer to Station 5 located in NCSX TC 3																															
					Complete 1st MC-VV Assy (Sta 3) ▾ 0																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
Station 3-Assemble Mod Coils and VV's																																																				
Pre-assemble LEFT MCHP																																																				
3-2-2.01	07OCT08	08OCT08	26	2	Position left MCHP over left support 2																																															
3-2-2.02	09OCT08	10OCT08	26	2	Secure left MCHP to vertical support posts 2																																															
3-2-2.03	13OCT08	14OCT08	26	2	Measure all chosen monuments 2																																															
3-2-2.04	15OCT08	15OCT08	26	2	Measure the Type-A and Type-C end flanges while 1																																															
3-2-2.05	16OCT08	17OCT08	26	2	Allow time for the back office to review the me 2																																															
3-2-2.06	20OCT08	20OCT08	26	2	Mark nose shim locations & pucks 1																																															
Pre-assemble RIGHT MCHP																																																				
3-2-3.01	21OCT08	21OCT08	26	2	Move the right support cart in the far right lo 1																																															
3-2-3.02	22OCT08	22OCT08	26	2	Position right MCHP over right support 1																																															
3-2-3.03	23OCT08	23OCT08	26	2	Secure right MCHP to support base 1																																															
3-2-3.04	24OCT08	24OCT08	26	2	Measure the target monuments on right MCHP with 1																																															
3-2-3.05	27OCT08	27OCT08	26	2	Measure the Type-A and Type-C end flanges while 1																																															
3-2-3.06	28OCT08	29OCT08	26	2	Allow time for the back office to review the me 2																																															
3-2-3.07	30OCT08	30OCT08	26	2	Mark nose shim locations 1																																															
3-2-3.08	31OCT08	31OCT08	26	2	Define all outboard shim thicknesses 1																																															
3-2-3.09	03NOV08	04NOV08	26	2	fab shims, compress alumina shims and sort 2																																															
Pre-assemble LEFT and RIGHT MCHP																																																				
3-2-4.01	05NOV08	05NOV08	26	2	Place alumina shims (4-8) on left side type A 1																																															
3-2-4.02	06NOV08	06NOV08	26	2	Temp lift right MCHP and move support cart 1																																															
3-2-4.03	07NOV08	07NOV08	26	2	Position right MCHP over right support 1																																															
3-2-4.04	10NOV08	10NOV08	26	2	Bring Air Loc wedgemeount leveler to take load 1																																															
3-2-4.05	11NOV08	11NOV08	26	2	Measure the target monuments on left MCHP with 1																																															
3-2-4.06	12NOV08	12NOV08	26	2	Install temporary scaffolding to install flange 1																																															
3-2-4.07	13NOV08	13NOV08	26	2	Instl remaining alumina shims; instl nuts/studs 1																																															
3-2-4.08	14NOV08	14NOV08	26	2	Make a hand "wiggle" test (rotate on bolt) on a 1																																															
3-2-4.09	17NOV08	17NOV08	26	2	Tighten flange fasteners to 50% 1																																															
3-2-4.10	18NOV08	18NOV08	26	2	measure the position of all monuments 1																																															
3-2-4.11	19NOV08	19NOV08	26	2	Measure the shim puck height (at a number of po 1																																															
3-2-4.12	20NOV08	20NOV08	26	2	Unfasten all bolts, & roll right MCHP to right 1																																															
3-2-4.13	21NOV08	24NOV08	26	2	Recheck alignment & weld plasma side shims 2																																															
3-2-4.14	25NOV08	25NOV08	26	2	After welding the left MCHP nose shims recheck 1																																															
3-2-4.15	26NOV08	01DEC08	26	2	Time for back office assessment 2																																															
3-2-4.16	02DEC08	02DEC08	26	2	Measure right MCHP fiducials establish ref 1																																															
3-2-4.17	03DEC08	04DEC08	26	2	Weld right MCHP flex shims 2																																															
3-2-4.18	05DEC08	05DEC08	26	2	After welding the right MCHP nose shims recheck 1																																															
3-2-4.19	08DEC08	09DEC08	26	2	Time for back office assessment 2																																															
RE-assemble LEFT and RIGHT MCHP																																																				
3-2-5.01	10DEC08	10DEC08	26	2	Lift right MCHP and move support cart 1																																															
3-2-5.02	11DEC08	11DEC08	26	2	Position right MCHP over right support 1																																															
3-2-5.03	12DEC08	12DEC08	26	2	Bring Air Loc wedgemeount leveler to take load 1																																															
3-2-5.04	15DEC08	15DEC08	26	2	Measure the target monuments on left MCHP with 1																																															
3-2-5.05	16DEC08	16DEC08	26	2	Bond all inboard shim pucks to the right MCHP T 1																																															
Install Laser Screens																																																				
3-2-6.02	08APR09	09APR09	-45	2	Place all laser screens 2																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11												
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J						
3-2-6.03	10APR09	10APR09	-45	2	Turn each lasers on & measure each laser source																																																1
3-2-6.04	13APR09	14APR09	-45	2	Print path on milar paper																																																2
3-2-6.05	15APR09	15APR09	-45	2	Disengage the right MCHP & move to far right																																																1
3-2-6.06	16APR09	16APR09	-45	2	Remove the left MCHP test laser path																																																1
3-2-6.07	17APR09	17APR09	-45	2	Place left MCHP in temp location																																																1
Install Vacuum Vessel																																																					
3-2-7.02	20APR09	20APR09	-45	2	Install VV NBI port support stand.																																																1
3-2-7.03	21APR09	21APR09	-45	2	Install VVSA to base support and make connection																																																1
3-2-7.04	22APR09	22APR09	-45	2	take tooling ball readings and secure VVSA																																																1
3-2-7.05	23APR09	24APR09	-45	2	Scan VV surface and compare data																																																2
Install RIGHT MCHP over VV																																																					
3-2-8.01	27APR09	27APR09	-45	2	Install any bumper protection components on the																																																1
3-2-8.03	28APR09	28APR09	-45	2	Install MCHP lift fixture, disengage leveler																																																1
3-2-8.04	29APR09	28APR09	-45	2	Re-install the right adjustor bar.																																																0
3-2-8.05	29APR09	29APR09	-45	2	Move right MCHP over the VV																																																1
3-2-8.06	30APR09	30APR09	-45	2	Position right MCHP over right support																																																1
3-2-8.07	01MAY09	01MAY09	-45	2	Bring AirLoc Wedgemount leveler up to take load																																																1
3-2-8.08	04MAY09	04MAY09	-45	2	Measure the target monuments on right MCHP with																																																1
3-2-8.09	05MAY09	05MAY09	-45	2	move MCHP to right 1/2"																																																1
Install LEFT MCHP over VV																																																					
3-2-9.02	06MAY09	06MAY09	-45	2	Move left MCHP over VV to within 1/2"																																																1
3-2-9.03	07MAY09	07MAY09	-45	2	Using adjustor bar move right MCHP back																																																1
3-2-9.05	08MAY09	08MAY09	-45	2	Position left MCHP over left support																																																1
3-2-9.06	11MAY09	11MAY09	-45	2	Bring AirLoc Wedgemount leveler up to take load																																																1
3-2-9.061	12MAY09	12MAY09	-45	2	Measure the target monuments on right MCHP																																																1
3-2-9.07	13MAY09	13MAY09	-45	2	Remove laser screens to provide more flr space																																																1
3-2-9.08	14MAY09	14MAY09	-45	2	Install temporary scaffolding to install flange																																																1
3-2-9.09	15MAY09	15MAY09	-45	2	Install bolts and all outboard alumina shims.																																																1
3-2-9.1	18MAY09	18MAY09	-45	2	Tighten flange fasteners to 50%																																																1
3-2-9.11	19MAY09	19MAY09	-45	2	Make a hand "wiggle" test (rotate on bolt)																																																1
3-2-9.12	20MAY09	20MAY09	-45	2	Perform metrology measurements of all alignment																																																1
3-2-9.13	21MAY09	21MAY09	-45	2	Perform position adjustments on left side MCHP																																																1
3-2-9.14	22MAY09	22MAY09	-45	2	Remove SISCO actuator from left MCHP.																																																1
3-2-9.15	26MAY09	26MAY09	-45	2	Machine and install bushings																																																1
3-2-9.16	27MAY09	27MAY09	-45	2	Tighten nuts 100%. Re-verify adequate MCHP ali																																																1
Weld inboard shims & fill bushing gaps																																																					
3-2-10.01	28MAY09	29MAY09	-45	2	Weld inboard shims solenoid side																																																2
3-2-10.02	01JUN09	01JUN09	-45	2	Measure the positions of all monuments																																																1
3-2-10.03	02JUN09	02JUN09	-45	2	Fill all lose bushings with Stycast 2850FT																																																1
3-2-10.04	03JUN09	03JUN09	-45	2	Measure the monuments on all coils.																																																1
VVSA attachment to MC's																																																					
3-2-11.01	04JUN09	04JUN09	-45	2	Attach permanent VV supports to Type A MC																																																1
3-2-11.02	05JUN09	05JUN09	-45	2	Attach temp VV supports to Type B MC																																																1
3-2-11.03	08JUN09	08JUN09	-45	2	Disconnect base support and transfer load to VV																																																1
3-2-11.04	09JUN09	09JUN09	-45	2	Install VV lateral supports and align VVSA																																																1
3-2-11.05	10JUN09	10JUN09	-45	2	Prepare VVSA for transport. Install blocking																																																1

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
Transfer to Station 5																																																				
3-2-12.01	11JUN09	11JUN09	-45	2	Instl rigging to MCWF transfer to support frame 1																																															
3-2-12.02	12JUN09	12JUN09	-45	2	Transfer to Station 5 located in NCSX TC 1																																															
S32-10.02M		12JUN09	-45	2	Complete 2nd MC-VV Assy (Sta 3) ▾ 0																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08														FY09														FY10														FY11													
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J													
Station 3-Assemble Mod Coils and VVs																																																												
Pre-assemble LEFT MCHP																																																												
3-3-2.01	10FEB09	11FEB09	-6	2	Position left MCHP over left support 2																																																							
3-3-2.02	12FEB09	13FEB09	-6	2	Secure left MCHP to vertical support posts 2																																																							
3-3-2.03	16FEB09	17FEB09	-6	2	Measure all chosen monuments 2																																																							
3-3-2.04	18FEB09	18FEB09	-6	2	Measure the Type-A and Type-C end flanges while 1																																																							
3-3-2.05	19FEB09	20FEB09	-6	2	Allow time for the back office to review the me 2																																																							
3-3-2.06	23FEB09	23FEB09	-6	2	Mark nose shim locations & pucks 1																																																							
Pre-assemble RIGHT MCHP																																																												
3-3-3.01	24FEB09	24FEB09	-6	2	Move the right support cart in the far right lo 1																																																							
3-3-3.02	27FEB09	27FEB09	-8	2	Position right MCHP over right support 1																																																							
3-3-3.03	02MAR09	02MAR09	-8	2	Secure right MCHP to support base 1																																																							
3-3-3.04	03MAR09	03MAR09	-8	2	Measure the target monuments on right MCHP with 1																																																							
3-3-3.05	04MAR09	04MAR09	-8	2	Measure the Type-A and Type-C end flanges while 1																																																							
3-3-3.06	05MAR09	06MAR09	-8	2	Allow time for the back office to review the me 2																																																							
3-3-3.07	09MAR09	09MAR09	-8	2	Mark nose shim locations 1																																																							
3-3-3.08	10MAR09	10MAR09	-8	2	Define all outboard shim thicknesses 1																																																							
3-3-3.09	11MAR09	12MAR09	-8	2	fab shims, compress alumina shims and sort 2																																																							
Pre-assemble LEFT and RIGHT MCHP																																																												
3-3-4.01	13MAR09	13MAR09	-8	2	Place alumina shims (4-8) onleft side type A 1																																																							
3-3-4.02	16MAR09	16MAR09	-8	2	Temp lift right MCHP and move support cart 1																																																							
3-3-4.03	17MAR09	17MAR09	-8	2	Position right MCHP over right support 1																																																							
3-3-4.04	18MAR09	18MAR09	-8	2	Bring Air Loc wedgemeount leveler to take load 1																																																							
3-3-4.05	19MAR09	19MAR09	-8	2	Measure the target monuments on left MCHP with 1																																																							
3-3-4.06	20MAR09	20MAR09	-8	2	Install temporary scaffolding to install flange 1																																																							
3-3-4.07	23MAR09	23MAR09	-8	2	Instl remaining alumina shims; instl nuts/studs 1																																																							
3-3-4.08	24MAR09	24MAR09	-8	2	Make a hand "wiggle" test (rotate on bolt) on a 1																																																							
3-3-4.09	25MAR09	25MAR09	-8	2	Tighten flange fasteners to 50% 1																																																							
3-3-4.10	26MAR09	26MAR09	-8	2	measure the position of all monuments 1																																																							
3-3-4.11	27MAR09	27MAR09	-8	2	Measure the shim puck height (at a number of po 1																																																							
3-3-4.12	30MAR09	30MAR09	-8	2	Unfasten all bolts, & roll right MCHP to right 1																																																							
3-3-4.13	31MAR09	01APR09	-8	2	Recheck alignment & weld plasma side shims 2																																																							
3-3-4.14	02APR09	02APR09	-8	2	After welding the left MCHP nose shims recheck 1																																																							
3-3-4.15	03APR09	06APR09	-8	2	Time for back office assessment 2																																																							
3-3-4.16	07APR09	07APR09	-8	2	Measure right MCHP fiducials establish ref 1																																																							
3-3-4.17	08APR09	09APR09	-8	2	Weld right MCHP flex shims 2																																																							
3-3-4.18	10APR09	10APR09	-8	2	After welding the right MCHP nose shims recheck 1																																																							
3-3-4.19	13APR09	14APR09	-8	2	Time for back office assessment 2																																																							
RE-assemble LEFT and RIGHT MCHP																																																												
3-3-5.01	15APR09	15APR09	-8	2	Lift right MCHP and move support cart 1																																																							
3-3-5.02	16APR09	16APR09	-8	2	Position right MCHP over right support 1																																																							
3-3-5.03	17APR09	17APR09	-8	2	Bring Air Loc wedgemeount leveler to take load 1																																																							
3-3-5.04	20APR09	20APR09	-8	2	Measure the target monuments on left MCHP with 1																																																							
3-3-5.05	21APR09	21APR09	-8	2	Bond all inboard shim pucks to the right MCHP T 1																																																							
Install Laser Screens																																																												
3-3-6.02	15JUN09	16JUN09	-45	2	Place all laser screens 2																																																							

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11																																																											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J																																																					
3-3-6.03	17JUN09	17JUN09	-45	2	Turn each lasers on & measure each laser source																																																1																																															
3-3-6.04	18JUN09	19JUN09	-45	2	Print path on milar paper																																																2																																															
3-3-6.05	22JUN09	22JUN09	-45	2	Disengage the right MCHP & move to far right																																																1																																															
3-3-6.06	23JUN09	23JUN09	-45	2	Remove the left MCHP test laser path																																																1																																															
3-3-6.07	24JUN09	24JUN09	-45	2	Place left MCHP in temp location																																																1																																															
Install Vacuum Vessel																																																																																																				
3-3-7.02	25JUN09	25JUN09	-45	2	Install VV NBI port support stand																																																1																																															
3-3-7.03	26JUN09	26JUN09	-45	2	Install VVSA to base support and make connection																																																1																																															
3-3-7.04	29JUN09	29JUN09	-45	2	take tooling ball readings and secure VVSA																																																1																																															
3-3-7.05	30JUN09	01JUL09	-45	2	Scan VV surface and compare data																																																2																																															
Install RIGHT MCHP over VV																																																																																																				
3-3-8.01	02JUL09	02JUL09	-45	2	Install any bumper protection components on the																																																1																																															
3-3-8.03	06JUL09	06JUL09	-45	2	Install MCHP lift fixture, disengage leveler																																																1																																															
3-3-8.04	07JUL09	06JUL09	-45	2	Re-install the right adjustor bar																																																0																																															
3-3-8.05	07JUL09	07JUL09	-45	2	Move right MCHP over the VV																																																1																																															
3-3-8.06	08JUL09	08JUL09	-45	2	Position right MCHP over right support																																																1																																															
3-3-8.07	09JUL09	09JUL09	-45	2	Bring AirLoc Wedgemount leveler up to take load																																																1																																															
3-3-8.08	10JUL09	10JUL09	-45	2	Measure the target monuments on right MCHP with																																																1																																															
3-3-8.09	13JUL09	13JUL09	-45	2	move MCHP to right 1/2"																																																1																																															
Install LEFT MCHP over VV																																																																																																				
3-3-9.02	14JUL09	14JUL09	-45	2	Move left MCHP over VV to within 1/2"																																																1																																															
3-3-9.03	15JUL09	15JUL09	-45	2	Using adjustor bar move right MCHP back																																																1																																															
3-3-9.05	16JUL09	16JUL09	-45	2	Position left MCHP over left support																																																1																																															
3-3-9.06	17JUL09	17JUL09	-45	2	Bring AirLoc Wedgemount leveler up to take load																																																1																																															
3-3-9.061	20JUL09	20JUL09	-45	2	Measure the target monuments on right MCHP																																																1																																															
3-3-9.07	21JUL09	21JUL09	-45	2	Remove laser screens to provide more flr space																																																1																																															
3-3-9.08	22JUL09	22JUL09	-45	2	Install temporary scaffolding to install flange																																																1																																															
3-3-9.09	23JUL09	23JUL09	-45	2	Install bolts and all outboard alumina shims																																																1																																															
3-3-9.1	24JUL09	24JUL09	-45	2	Tighten flange fasteners to 50%																																																1																																															
3-3-9.11	27JUL09	27JUL09	-45	2	Make a hand "wiggle" test (rotate on bolt)																																																1																																															
3-3-9.12	28JUL09	28JUL09	-45	2	Perform metrology measurements of all alignment																																																1																																															
3-3-9.13	29JUL09	29JUL09	-45	2	Perform position adjustments on left side MCHP																																																1																																															
3-3-9.14	30JUL09	30JUL09	-45	2	Remove SISSCO actuator from left MCHP																																																1																																															
3-3-9.15	31JUL09	31JUL09	-45	2	Machine and install bushings																																																1																																															
3-3-9.16	03AUG09	03AUG09	-45	2	Tighten nuts 100%. Re-verify adequate MCHP ali																																																1																																															
Weld inboard shims & fill bushing gaps																																																																																																				
3-3-10.01	04AUG09	05AUG09	-45	2	Weld inboard shims solenoid side																																																2																																															
3-3-10.02	06AUG09	06AUG09	-45	2	Measure the positions of all monuments																																																1																																															
3-3-10.03	07AUG09	07AUG09	-45	2	Fill all lose bushings with Stycast 2850FT																																																1																																															
3-3-10.04	10AUG09	10AUG09	-45	2	Measure the monuments on all coils.																																																1																																															
VVSA attachment to MC's																																																																																																				
3-3-11.01	11AUG09	11AUG09	-45	2	Attach permanent VV supports to Type A MC																																																1																																															
3-3-11.02	12AUG09	12AUG09	-45	2	Attach temp VV supports to Type B MC																																																1																																															
3-3-11.03	13AUG09	13AUG09	-45	2	Disconnect base support and transfer load to VV																																																1																																															
3-3-11.04	14AUG09	14AUG09	-45	2	Install VV lateral supports and align VVSA																																																1																																															
3-3-11.05	17AUG09	17AUG09	-45	2	Prepare VVSA for transport. Install blocking																																																1																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
Transfer to Station 5																																																				
3-3-12.01	18AUG09	18AUG09	-45	2													Instl rigging to MCWF transfer to support frame																																			
3-3-12.02	19AUG09	19AUG09	-45	2													Transfer to Station 5 located in NCSX TC																																			
S33-10.02M		19AUG09	-45	2													Complete 3rd MC-VV Assy (Sta 3)																																			






































Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
Station 5- Final FP Assy -FP#1 (in NCS																																																				
Component Prep																																																				
R1810-5109		07APR09	-121	1	Begin Station 5 Operations ▼ 0																																															
5-1-1.01	08APR09	09APR09	-121	1	The short dome port (the one on the top of the 2																																															
5-1-1.02	10APR09	09APR09	-121	1	Install heat tape and theomocouples on all port 0																																															
5-1-1.03	10APR09	09APR09	-121	1	Install insulation system around all ports. 0																																															
Pre-Installation setup																																																				
5-1-2.01	10APR09	13APR09	-121	1	Install period support fixture 2																																															
5-1-2.02	14APR09	14APR09	-121	1	Temporarily position/support lower trim coils t 1																																															
5-1-2.03	15APR09	16APR09	-121	1	Install FPA on support stand. Use leveler pad 2																																															
5-1-2.04	17APR09	22APR09	-121	1	Install external working platforms 4																																															
5-1-2.05	23APR09	27APR09	-121	1	Install internal VV working platforms 3																																															
VV Port Installation																																																				
5-1-3.01	28APR09	29APR09	-121	1	Install the domes (left and right side), insert 2																																															
5-1-3.02	04MAY09	15JUN09	-121	1	Install small dome ports and remaining circular 30																																															
5-1-3.03	11MAY09	22JUN09	-121	1	Leak check each port immediately after it is we 30																																															
Install Port Boots																																																				
5-1-4.01	02JUN09	23JUN09	-121	1	Install boots on all ports except for port 4's 16																																															
Install Trim Coils																																																				
5-1-5.01	24JUN09	05AUG09	-121	1	Install six upper and six lower trim coils as s 30																																															
5-1-5.02	06AUG09	13AUG09	-121	1	A metrology effort is needed here to measure th 6																																															
Install Lead & Coolant Connections																																																				
5-1-6.01	06AUG09	13AUG09	-121	2	Install MC lead connections on each of the MC's 6																																															
5-1-6.02	14AUG09	21AUG09	-121	2	Install MC coolant lines on each MC and positio 6																																															
5-1-6.03	24AUG09	25AUG09	-121	2	Platforms may need to be altered or moved for t 2																																															
TF Installation and fit-up check																																																				
5-1-7.01	26AUG09	26AUG09	-121	2	Rotate two individual TF coils over the MC on t 1																																															
5-1-7.02	27AUG09	27AUG09	-121	2	Attach the temporary support at the end of the 1																																															
5-1-7.03	28AUG09	27AUG09	-121	2	Lower leveler pad to disengage base of MC on th 0																																															
5-1-7.04	28AUG09	28AUG09	-121	2	Install TF support brackets (top & bottom) to t 1																																															
5-1-7.05	31AUG09	31AUG09	-121	2	Slide the first TF assembly against the TF supp 1																																															
5-1-7.06	01SEP09	01SEP09	-121	2	Install TF support brackets (top & bottom) to t 1																																															
5-1-7.07	02SEP09	02SEP09	-121	2	Slide the second TF assembly against the suppor 1																																															
5-1-7.08	03SEP09	03SEP09	-121	2	Install machine support plates (inboard and out 1																																															
5-1-7.09	04SEP09	03SEP09	-121	2	Reinstall leveler pad to engage base of MC on t 0																																															
5-1-7.1	04SEP09	04SEP09	-121	2	Installed one side of the TF support brackets o 1																																															
5-1-8.01	08SEP09	14SEP09	-121	2	The TF installation on the left side will follo 5																																															
5-1-9.01	15SEP09	17SEP09	-121	2	Perform a fit-up check of the four TF coils to 3																																															
Ports, boots, coolant leads & diagnostics																																																				
5-1-10.01	18SEP09	18SEP09	-121	2	Tack weld the left and right port 4's. Use a lo 1																																															
5-1-10.02	21SEP09	22SEP09	-121	2	Install boots on both port 4's. 2																																															
5-1-11.01	23SEP09	28SEP09	-121	2	Install the PF coil support structure that surr 4																																															
5-1-12.01	29SEP09	29SEP09	-121	2	Install the MC coolant manifold outside of the 1																																															
5-1-12.02	30SEP09	13OCT09	-121	2	Connect all MC coolant lines to the manifold (4 10																																															
5-1-13.01	14OCT09	16OCT09	-121	2	Install Rogowski coils on the end of the VV, le 3																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
Station 5- Final FP Assy -FP#2 (in NCS)																																																				
Component Prep																																																				
5-2-1.01	15JUN09	16JUN09	-41	1	The short dome port (the one on the top of the																																															
5-2-1.02	17JUN09	16JUN09	-41	1	Install heat tape and thermocouples on all port																																															
5-2-1.03	17JUN09	16JUN09	-41	1	Install insulation system around all ports.																																															
Pre-Installation setup																																																				
5-2-2.01	17JUN09	18JUN09	-41	1	Install period support fixture																																															
5-2-2.02	19JUN09	19JUN09	-41	1	Temporarily position/support lower trim coils t																																															
5-2-2.03	22JUN09	23JUN09	-41	1	Install FPA on support stand. Use leveler pad																																															
5-2-2.04	24JUN09	29JUN09	-41	1	Install external working platforms																																															
5-2-2.05	30JUN09	02JUL09	-41	1	Install internal VV working platforms																																															
VV Port Installation																																																				
5-2-3.01	06JUL09	07JUL09	-41	1	Install the domes (left and right side), insert																																															
5-2-3.02	10JUL09	20AUG09	-41	1	Install small dome ports and remaining circular																																															
5-2-3.03	17JUL09	27AUG09	-41	1	Leak check each port immediately after it is we																																															
Install Port Boots																																																				
5-2-4.01	07AUG09	28AUG09	-41	1	Install boots on all ports except for port 4's																																															
Install Trim Coils																																																				
5-2-5.01	31AUG09	12OCT09	-41	1	Install six upper and six lower trim coils as s																																															
5-2-5.02	13OCT09	20OCT09	-41	1	A metrology effort is needed here to measure th																																															
Install Lead & Coolant Connections																																																				
5-2-6.01	13OCT09	20OCT09	-41	2	Install MC lead connections on each of the MC's																																															
5-2-6.02	21OCT09	28OCT09	-41	2	Install MC coolant lines on each MC and positio																																															
5-2-6.03	29OCT09	30OCT09	-41	2	Platforms may need to be altered or moved for t																																															
TF Installation and fit-up check																																																				
5-2-7.01	02NOV09	02NOV09	-41	2	Rotate two individual TF coils over the MC on t																																															
5-2-7.02	03NOV09	03NOV09	-41	2	Attach the temporary support at the end of the																																															
5-2-7.03	04NOV09	03NOV09	-41	2	Lower leveler pad to disengage base of MC on th																																															
5-2-7.04	04NOV09	04NOV09	-41	2	Install TF support brackets (top & bottom) to t																																															
5-2-7.05	05NOV09	05NOV09	-41	2	Slide the first TF assembly against the TF supp																																															
5-2-7.06	06NOV09	06NOV09	-41	2	Install TF support brackets (top & bottom) to t																																															
5-2-7.07	09NOV09	09NOV09	-41	2	Slide the second TF assembly against the suppor																																															
5-2-7.08	10NOV09	10NOV09	-41	2	Install machine support plates (inboard and out																																															
5-2-7.09	11NOV09	10NOV09	-41	2	Reinstall leveler pad to engage base of MC on t																																															
5-2-7.1	11NOV09	11NOV09	-41	2	Installed one side of the TF support brackets o																																															
5-2-8.01	12NOV09	18NOV09	-41	2	The TF installation on the left side will follo																																															
5-2-9.01	19NOV09	23NOV09	-41	2	Perform a fit-up check of the four TF coils to																																															
Ports, boots, coolant leads & diagnostics																																																				
5-2-10.01	24NOV09	24NOV09	-41	2	Tack weld the left and right port 4's. Use a lo																																															
5-2-10.02	25NOV09	30NOV09	-41	2	Install boots on both port 4's.																																															
5-2-11.01	01DEC09	04DEC09	-41	2	Install the PF coil support structure that surr																																															
5-2-12.01	07DEC09	07DEC09	-41	2	Install the MC coolant manifold outside of the																																															
5-2-12.02	08DEC09	21DEC09	-41	2	Connect all MC coolant lines to the manifold (4																																															
5-2-13.01	22DEC09	05JAN10	-41	2	Install Rogowski coils on the end of the VV, le																																															
Final Measurements and testing																																																				
5-2-14.01	06JAN10	07JAN10	-41	2	Obtain a set of Period 1 alignment fiducial pos																																															

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08														FY09														FY10														FY11													
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J													
5-2-14.02	08JAN10	08JAN10	-41	2	Using the laser tracker, align to tooling balls 1																																																							
5-2-14.03	11JAN10	12JAN10	-41	2	Bring VV into alignment 2																																																							
5-2-14.04	13JAN10	13JAN10	-41	2	Install or identify three primary fiducials tha 1																																																							
5-2-14.05	14JAN10	18JAN10	-41	2	Make a final measurement of all fiducials, the 3																																																							
5-2-14.07	19JAN10	20JAN10	-41	2	Check Assembly (bolts, etc) 2																																																							
5-2-14.08	21JAN10	25JAN10	-41	2	Check Diagnostics (Loops, thermocouples) 3																																																							
5-2-14.09	26JAN10	27JAN10	-41	2	Check manifolds (pressure, flow, etc.) 2																																																							
5-2-14.1	28JAN10	01FEB10	-41	2	Check 6 modcoils (voltage etc) 3																																																							
5-2-14.11	02FEB10	03FEB10	-41	2	Check trim coils (voltage etc) 2																																																							
5-2-14.12	04FEB10	08FEB10	-41	2	Check TF coils (voltage etc) 3																																																							
Transfer to Station 6																																																												
5-2-15.01	09FEB10	10FEB10	-41	2	Install crane rigging to completed Period assem 2																																																							
5-2-15.02	11FEB10	11FEB10	-41	2	Remove platforms 1																																																							
5-2-15.03	12FEB10	12FEB10	-41	2	Transfer completed Period to Station 6 located 1																																																							
S52-14.03M		12FEB10	-41	2	Complete 2nd Field Period Assy. (Sta.5) ▼ 0																																																							

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08														FY09														FY10														FY11																																
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S																														
Station 5- Final FP Assy -FP#3 (in NCS)																																																																															
Component Prep																																																																															
5-3-1.01	30NOV09	30NOV09	-114	2																																									The short dome port (the one on the top of the																				1														
5-3-1.02	01DEC09	30NOV09	-114	2																																									Install heat tape and theomocouples on all port																				0														
5-3-1.03	01DEC09	30NOV09	-114	2																																									Install insulation system around all ports.																				0														
Pre-Installation setup																																																																															
5-3-2.01	01DEC09	01DEC09	-114	2																																									Install period support fixture																				1														
5-3-2.02	02DEC09	02DEC09	-114	2																																									Temporarily position/support lower trim coils t																				1														
5-3-2.03	03DEC09	03DEC09	-114	2																																									Install FPA on support stand. Use leveler pad																				1														
5-3-2.04	04DEC09	04DEC09	-114	2																																									Install external working platforms																				1														
5-3-2.05	07DEC09	08DEC09	-114	2																																									Install internal VV working platforms																				2														
VV Port Installation																																																																															
5-3-3.01	09DEC09	09DEC09	-114	2																																									Install the domes (left and right side), insert																				1														
5-3-3.02	14DEC09	03FEB10	-114	1																																									Install small dome ports and remaining circular																				30														
5-3-3.03	21DEC09	10FEB10	-114	1																																									Leak check each port immediately after it is we																				30														
Install Port Boots																																																																															
5-3-4.01	21JAN10	11FEB10	-114	1																																									Install boots on all ports except for port 4's																				16														
Install Trim Coils																																																																															
5-3-5.01	12FEB10	04MAR10	-114	2																																									Install six upper and six lower trim coils as s																				15														
5-3-5.02	05MAR10	09MAR10	-114	2																																									A metrology effort is needed here to measure th																				3														
Install Lead & Coolant Connections																																																																															
5-3-6.01	05MAR10	12MAR10	-114	2																																									Install MC lead connections on each of the MC's																				6														
5-3-6.02	15MAR10	22MAR10	-114	2																																									Install MC coolant lines on each MC and positio																				6														
5-3-6.03	23MAR10	24MAR10	-114	2																																									Platforms may need to be altered or moved for t																				2														
TF Installation and fit-up check																																																																															
5-3-7.01	25MAR10	25MAR10	-114	2																																									Rotate two individual TF coils over the MC on t																				1														
5-3-7.02	26MAR10	26MAR10	-114	2																																									Attach the temporary support at the end of the																				1														
5-3-7.03	29MAR10	26MAR10	-114	2																																									Lower leveler pad to disengage base of MC on th																				0														
5-3-7.04	29MAR10	29MAR10	-114	2																																									Install TF support brackets (top & bottom) to t																				1														
5-3-7.05	30MAR10	30MAR10	-114	2																																									Slide the first TF assembly against the TF supp																				1														
5-3-7.06	31MAR10	31MAR10	-114	2																																									Install TF support brackets (top & bottom) to t																				1														
5-3-7.07	01APR10	01APR10	-114	2																																									Slide the second TF assembly against the suppor																				1														
5-3-7.08	02APR10	02APR10	-114	2																																									Install machine support plates (inboard and out																				1														
5-3-7.09	05APR10	02APR10	-114	2																																									Reinstall leveler pad to engage base of MC on t																				0														
5-3-7.1	05APR10	05APR10	-114	2																																									Installed one side of the TF support brackets o																				1														
5-3-8.01	06APR10	12APR10	-114	2																																									The TF installation on the left side will follo																				5														
5-3-9.01	13APR10	15APR10	-114	2																																									Perform a fit-up check of the four TF coils to																				3														
Ports, boots, coolant leads & diagnostics																																																																															
5-3-10.01	16APR10	16APR10	-114	2																																									Tack weld the left and right port 4's. Use a lo																				1														
5-3-10.02	19APR10	20APR10	-114	2																																									Install boots on both port 4's.																				2														
5-3-11.01	21APR10	26APR10	-114	2																																									Install the PF coil support structure that surr																				4														
5-3-12.01	27APR10	27APR10	-114	2																																									Install the MC coolant manifold outside of the																				1														
5-3-12.02	28APR10	11MAY10	-114	2																																									Connect all MC coolant lines to the manifold (4																				10														
5-3-13.01	12MAY10	14MAY10	-114	2																																									Install Rogowski coils on the end of the VV, le																				3														
Final Measurements and testing																																																																															
5-3-14.01	17MAY10	18MAY10	-114	2																																									Obtain a set of Period 1 alignment fiducial pos																				2														

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11																																																												
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S																																																				
5-3-14.02	19MAY10	19MAY10	-114	2	Using the laser tracker, align to tooling balls																																																1																																																
5-3-14.03	20MAY10	21MAY10	-114	2	Bring VV into alignment																																																2																																																
5-3-14.04	24MAY10	24MAY10	-114	2	Install or identify three primary fiducials tha																																																1																																																
5-3-14.05	25MAY10	27MAY10	-114	2	Make a final measurement of all fiducials, the																																																3																																																
5-3-14.07	28MAY10	01JUN10	-114	2	Check Assembly (bolts, etc)																																																2																																																
5-3-14.08	02JUN10	04JUN10	-114	2	Check Diagnostics (Loops, thermocouples)																																																3																																																
5-3-14.09	07JUN10	08JUN10	-114	2	Check manifolds (pressure, flow, etc.)																																																2																																																
5-3-14.1	09JUN10	11JUN10	-114	2	Check 6 modcoils (voltage etc)																																																3																																																
5-3-14.11	14JUN10	15JUN10	-114	2	Check trim coils (voltage etc)																																																2																																																
5-3-14.12	16JUN10	18JUN10	-114	2	Check TF coils (voltage etc)																																																3																																																
Transfer to Station 6																																																																																																					
5-3-15.01	21JUN10	22JUN10	-114	2	Install crane rigging to completed Period assem																																																2																																																
5-3-15.02	23JUN10	23JUN10	-114	2	Remove platforms																																																1																																																
5-3-15.03	24JUN10	24JUN10	-114	2	Transfer completed Period to Station 6 located																																																1																																																
R1810-5333		24JUN10	-114	2	Last field period assembled																																																0																																																

Activity ID	Forecast Start	Forecast Finish	Total Float work days	Shifts Planned	FY08												FY09												FY10												FY11											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J					
75 - Test Cell and Basement Assembly Operations																																																				
Job: 7503 - Machine Assembly (station 6)-PERRY																																																				
Pre-installation setup and test																																																				
7501-10	04DEC08	23JAN09	13	1	Fabricate/Assemble assembly structure  30																																															
7501-10.1	04DEC08	09JAN09	23	1	Fab struct to go between assy sleds&FPA's  20																																															
7501-10.2	12NOV08*	04DEC08	12	1	Assemble 3 FPA support stands  15																																															
7501-10.3	05DEC08	18DEC08	12	1	Assemble 3 VV spool piece support stands  10																																															
7501-10.4	19DEC08	12JAN09	12	1	Assemble machine base structure  10																																															
7501-10.4M		12JAN09	12	1	Complete Base Support Structure Assembly  0																																															
7501-10.5	13JAN09	26JAN09	12	1	Assemble 3 FPA installation carts  10																																															
7501-10.6	20NOV08*	13JAN09	70	1	Fab 3 laser support poles  30																																															
7501-10.7	14JAN09	29JAN09	70	1	Fab 3 concrete blocks for testing assy struct  12																																															
7503-010	26JAN09*		3	1	Begin Assembly Activities  0																																															
7503-020	26JAN09	06FEB09	3	1	Install Permanent support base and columns  10																																															
7503-015	09FEB09	27FEB09	3	1	Install Temp Assembly Structure  15																																															
7503-060	02MAR09	02MAR09	3	1	Install Lower PF 4,5&6 into prelim position  1																																															
7503-070	03MAR09	16MAR09	3	1	Install 3 Spool Pieces on fixt & test movement  10																																															
7501-10.9	17MAR09	13APR09	3	1	Install test cell metrology site monuments & chk  20																																															
7501-10.10	14APR09	04MAY09	3	1	Test TC floor deflections with concrete block  15																																															
7501-10.8	05MAY09	02JUN09	3	2	Exercise assy struc with concrete blocks & metro  20																																															
Field Period 1 Installation & assy test																																																				
7503-080A	30NOV09	06JAN10	-121	1	FPA-1 Installation and assembly test  20																																															
7503-080		06JAN10	-121	1	FPA-1 Installed on sleds  0																																															
7501-11	07JAN10	03MAR10	-121	1	Exercise assy struc w/FPA-1 before start of assy  40																																															
Spool Piece Installlation test & machining																																																				
7503-415.7	04MAR10	29MAR10	-121	1	Measure vsl gaps to determ spool piece dimension  18																																															
7503-415.0	30MAR10	26APR10	-121	1	Spool piece installation test  20																																															
7503-416.1	27APR10	08JUN10	-121	1	Machine Flange A & B of Spool Piece 1  30																																															
7503-416.2	09JUN10	21JUL10	-121	1	Machine Flange A & B of Spool Piece 2  30																																															
7503-416.3	22JUL10	01SEP10	-121	1	Machine Flange A & B of Spool Piece 3  30																																															
Field Period 2 Installation & assy test																																																				
7503-110A	04MAR10	31MAR10	-54	1	FPA-2 Installation and assembly test  20																																															
7503-110		31MAR10	-54	1	FPA-2 Installed on sleds  0																																															
Field Period 3 Installation & assy test																																																				
7503-150A	25JUN10	09JUL10	-114	2	FPA-3 Installation and assembly test  10																																															
7503-150		09JUL10	-114	2	FPA-3 Installed on sleds  0																																															
3 field period Pre- assembly																																																				
7503-120	12JUL10	14JUL10	-114	2	Test movement of FPA's incl position checks.  3																																															
7503-400	15JUL10	19JUL10	-114	2	Install inboard and outboard shims  3																																															
7503-402	20JUL10	22JUL10	-114	2	Move all FPA's together, chk fitup,tack shims  3																																															
7503-404	23JUL10	27JUL10	-114	2	Weld inboard shims on mating flanges  3																																															
7503-406	28JUL10	30JUL10	-114	2	Install TF coils at ends of each FPA  3																																															
7503-410	02AUG10	02AUG10	-114	2	Install spacer supports and spacers  1																																															
7503-412	03AUG10	05AUG10	-114	2	Move FPA's & spacers together/chk fitup  3																																															
7503-412M		05AUG10	-114	1	Move FPA's & spacers together/chk fitup complete  0																																															

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					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J							
7503-458M		22APR11	-121	2																																																	Complete Power System Pre-ops Tests	0
7503-460	25APR11	29APR11	-87	2																																																	Instl transition box,cabling,&connect to pwr sup	5
7503-462	25APR11	29APR11	-113	2																																																	LN2 connections from coils to manifolds	5
7503-464	25APR11	29APR11	-121	2																																																	Connect coil & VV instrumentation	5
7503-466	02MAY11	04MAY11	-121	2																																																	Connect 150C bakeout	3
7503-470	12MAY11	25MAY11	-121	2																																																	Install cryostat cooling syst & instrumentation	10
7503-471	26MAY11	02JUN11	-121	2																																																	Install cryostat upper section, VB & port boots	5
7503-472	03JUN11	14JUN11	-121	2																																																	Install midplane cryostat sections & port boots	8
7503-473	15JUN11	17JUN11	-121	2																																																	Install cryostat circulation duct	3
730.8200	20JUN11	22JUN11	-121	2																																																	PTP and Cool down	3
730.8200M		22JUN11	-121	2																																																	Cooldown of Machine	0