WBS Number: 142
WBS Title: Windings and Assembly
Job Number: 1421
Job Title: Design of Modular Coil Interfaces
Job Manager: David Williamson

Task ID	Comments	41MS	48MS	37STK	35TRVL	31OT	EMSM	EMTB	EASB	EEEM	EESM	EESB	EETB	ECEM	ECSB	ECTB	RM2	RM3	Basis of Estimate
Outboard Interface Design																			
IH4-020	Prepare outboard shim dwgs and release							0											see Table V - Basis of Estimate
INTRF-045	FDR outboard shims							0											see Table V - Basis of Estimate
	Resolve CHITs and issue shim drawing							0											see Table V - Basis of Estimate
Bolted Joint Tests																			
	Tension Tests of Bolted Joint																		
1421-3067	Procure 2 studs f/joint test.Use existing part							48											see Table V - Basis of Estimate
1421-3075	Setup test fixture &perform JHA & pre-job brief							16											see Table V - Basis of Estimate
1421-3077	Meas joint deflect vs preload & loss of preload							24											see Table V - Basis of Estimate
1421-3079	Measure joint deflec & preload v. temp @80K							24											see Table V - Basis of Estimate
1421-3084	Measure joint deflection&preload v. cooldown cyc							24											see Table V - Basis of Estimate
1421-3087	Perform pullout tests for tapped holes							24											see Table V - Basis of Estimate
1421-3081	Meas joint deflect & preload v. time (days) at R							160											see Table V - Basis of Estimate
1421-3090	Document&conduct review of test results							0											see Table V - Basis of Estimate
	Bolt Shear Test at 77k																		
1421-3112B	Procure/fab parts for test&initial assembly							0											see Table V - Basis of Estimate
1421-3115B	Assemble & test							100											see Table V - Basis of Estimate
1421-3119B	Document test results							0											see Table V - Basis of Estimate
Inboard Interface Design																			
IH1-001	Coil to coil analysis							0											see Table V - Basis of Estimate
1421-3125	Determine geometry&location of high COF shims&pl							0											see Table V - Basis of Estimate
1421-3127	Structural analyses to performance rqmts for bol							0											see Table V - Basis of Estimate
1421-3132	PDR to review requirements, design,&development							0											see Table V - Basis of Estimate
	Conduct MC interface FDR																		see Table V - Basis of Estimate
AB/BC/AA welded joints																			
	Prepare winding form mods for weld clamping bolts							0											see Table V - Basis of Estimate
INTRF-050	Complete Shim fabrication drawings (ORNL)							0											see Table V - Basis of Estimate
	Release information for procurement of shim materia							0											see Table V - Basis of Estimate
INTRF-055	FDR AB/BC/AA inboard shims							0											see Table V - Basis of Estimate
CC bolted joint																			
IH1-000	ESTABLISH CONCEPT							0											see Table V - Basis of Estimate
IH1-0000	PEER REVIEW OF JOINT CONCEPT							0											see Table V - Basis of Estimate
	Add bolt holes to C winding form for CC interface							0											see Table V - Basis of Estimate
	Bolt Reach and Access study (mockup							0											see Table V - Basis of Estimate
	Prepare CC shim drawings and release							0											see Table V - Basis of Estimate
	FDR CC inboard shims							0											see Table V - Basis of Estimate
Welded Joint Tests																			
	Procedure																		
INTRF-035	PPPL Determine shim material							0											see Table V - Basis of Estimate
INTRF-001	PPPL buy SS plate for weld trials							0											see Table V - Basis of Estimate
INTRF-005	Weld distortion trials at PPPL on SS plate							0											see Table V - Basis of Estimate
INTRF-025	ORNL build pywood mockup of flange							0											see Table V - Basis of Estimate
INTRF-030	ORNL verify weld access, develop alternate welding method							0											see Table V - Basis of Estimate
INTRF-010	Develop Weld Geometry Procedure							0											see Table V - Basis of Estimate
	Test																		
INTRF-015	Weld trials on two MCWF's at PPPL							600											see Table V - Basis of Estimate
INTRF-020	Document results and update weld procedure							0											see Table V - Basis of Estimate
Overall interface																			
INTRF-040	Analysis of tensil loads (ORNL)							0											see Table V - Basis of Estimate
1421-3134	Develop specs & dwgs for station 2 &3 assy							0											see Table V - Basis of Estimate
1421-3136	Conduct MC interface FDR incl job 1416							0											see Table V - Basis of Estimate
1421-3138	Resolve issues, release assembly spec&drawings							0											see Table V - Basis of Estimate
FY07 Rebaseline exercise																			
ECP53RBX05	FY07 Rebaseline Exercise							0											see Table V - Basis of Estimate
Travel																			
	Trips for ORNL personnel to PPPL																		
	Trips for PPPL personnel to UT MDL																		
	TOTAL							1020											