NCSX June 2007 ETC
TABLE I - DESIGN LABOR

WBS Number: 142
WBS Title: Windings and Assembly
Job Number: 1416
Job Title: Design of Modular Coil Interfaces
Job Manager:David Williamson

Description:
Title I and II Engineering for design of the modular coil interfaces. Title III for these components is included in Job 1802.

Task ID	Description	Comments	FY07$K 41MS	48MS	37STK	35TRVL	31OT	ORNL EM	EMEM	EMTB	EAEM	EASB	Basis of Estimate
Clamp Hardware Modifications								50					**Added 40 ORNL hours based on experience to date.**
1416-204.1	Modify Type-B clamps for stud attaqchments												
Blanket Thermal Insulation								60					**Added 40 ORNL hours based on experience to date.**
1416-304	Revise assembly drawings							30			10		**Added 20 ORNL hours based on experience to date.**
1416-305	Review and approve insulation concept							40			8		**Added 40 ORNL hours based on experience to date.**
1416-33198	Report results												
FY07 Rebaseline													
ecp53rbx04								8					
Top Level Assembly Drawings													
1416-501	Complete models/drawings of coolant line routing							0					**Complete**
1416-502	Check layout of flux loop terminations and revise							0					**Complete**
1416-503	Complete models/drawings of power cable connections							120					**Work remaining - modify leads per analysis**
1416-504	Complete models/drawings of protective covers							120					**Work remaining - assume covers are different for reach coil**
1416-505	Drawing callouts for interface hdw (prelim model)							0					**Task deleted**
1416-507	Update, review, %& approve coil assembly spec							80					
1416-508	Complete drawing rev to leades, terminals asm (ECN)							80					**Work remaining - drawing in checking cycle**
1416-506	Check and promote top-level models/drawings							80					**Added 20 ORNL hours based on experience to date.**
Analysis and coseout documentation													
1416-601	Prepare EM and structural analysis of loads		$60k					80			192		**ORNL Contract w/ Myatt**
1416-602	Design memo for KF structueal analysis							96					**Added 16 ORNL hours based on experience to date.**
1416-603	Update, review and approve FEMEC							60					
1416-604	Finalize drdaft documents - materials, eddy currents, etc.							40					
1416-605	Prepare Type ABC coselout FDR							72					**Added 32 ORNL hours based on experience to date.**
1416-606	Resolve FDR comments							72					**Added 32 ORNL hours based on experience to date.**
Type C Design Closeout													
1403-47C	Perform cool-down/warmup analysis										40		
	TOTALS		**$60k**					**1088**	**0**	**0**	**250**	**0**	