

NCSX ECP39 Estimate to Complete Detail

Sum of Budget Remaining						org	resource	RES																												
						ORNL			PPPL										Non Labor (\$k)																	
						Labor (hours)			Non Labor (\$k)				Labor (hours)																							
WBS/JOB	ACT	TITLE	ES	EF	OD	ORNLAM	ORNL	ORNLRM	Materials	Travel	B//CB	EA//EM	EA//SM	EC//EM	EC//SM	EE//AM	EE//EM	EE//SM	EE//TB	EM//EM	EM//SM	EM//TB	FC//AM	FC//EM	R//RM	R//RM	SH//TB	Allocations	Materials	MCWF	other	Travel	VVSA			
12	1203	1203-241	Check FMECA Analyses	9/1/2005	11/1/2005	44		32				16																								
		1203-271	Develop Assy Rqmnts spec & process	10/3/2005	12/8/2005	47		180																												
		1203-800	Issue VV FP leak check assy dwg	9/22/2005	12/15/2005	59		32																												
		1203-801	Issue VV FP final assy dwg	10/3/2005	12/15/2005	52		40																												
		1203-802	Issue spacer machining dwgs	10/3/2005	12/15/2005	52		40																												
		1203-803	Issue VV final assy dwg	10/3/2005	12/15/2005	52		40																												
		1203-804	Issue VV assy specification	10/3/2005	12/15/2005	52		40																												
		1203-805	Redo CC heating/cooling tube dwgs& analysis	9/22/2005	11/1/2005	29		60																												
		1203-806	Establish interface reqmnts	10/3/2005	12/15/2005	52		40																												
		1203-810	resolve design pockets for soft x ray arrays	11/1/2005	12/15/2005	31		40																												
		1203-815	Cleanup interfaces cleanup interfaces with other	11/1/2005	12/15/2005	31		20																												
		1203-820	BOM for all VV parts	11/1/2005	12/15/2005	31		30																												
		1203-825	develop acquisition plan for all vv components	11/1/2005	12/15/2005	31		20																												
		1203-830	conduct mini fdr/procurement reviews	11/1/2005	12/15/2005	31		40																												
		1203-901	**WBS 12 FINAL FDR **	(blank)	12/15/2005	0																														
		122-011	Final design WBS 122 Thermal insulation	6/1/2004	11/21/2005	373		130												5														\$ -		
		122-012	Heater Tape Design	5/2/2005	11/15/2005	140		75																												
		125-011	Final design WBS 125 local I&C	3/1/2005	11/15/2005	184		18																												
	1204	122-030	SPEA VV Thermal Insulation WBS 122	10/1/2007	11/28/2007	43																													\$ -	
		122-031	Title III engr WBS 122	10/1/2007	4/14/2008	132		124													22														\$ -	
		122-036.9	Award VV Insulation WBS 122	(blank)	11/28/2007	0																													\$ -	
		122-037	VV Insulation Procurement WBS 122	12/3/2007	4/14/2008	89																												\$ 45.0		
		123-030	Issue RFQ & Select Vendor VV H/C Tubing WBS 123	11/2/2005	12/1/2005	20																													\$ -	
		123-031	Title III engr WBS 122	11/2/2005	9/19/2006	220		48													8														\$ -	
		123-036.9	Award H/C Tubing WBS 123	(blank)	12/1/2005	0																													\$ -	
		123-037	Fabricate and Deliver H/C Tubing WBS 123	12/2/2005	1/6/2006	20																													\$ 45.0	
		123-040	Issue RFQ & Select Vendor insul boots WBS 122	10/2/2006	12/5/2006	45																													\$ -	
		123-045	Award Insulation Boots&Pyrogel WBS 122	(blank)	12/5/2006	0																													\$ -	
		123-050	Fabricate& Deliver Insul Boots &Pyrogel WBS 122	12/6/2006	6/14/2007	130																													\$ 55.0	
		123-130	Issue RFQ &Select Vendor VV H/C Manifold WBS 123	11/2/2005	1/6/2006	40																													\$ -	
		123-136.9	Award H/C Manifolds WBS 123	(blank)	1/6/2006	0																													\$ -	
		123-137	Fabricate and Deliver H/C ManifoldsWBS 123	1/9/2006	4/7/2006	65																													\$ 25.0	
		124-030L	SPEA VV Lateral Supports WBS 124	10/17/2005	12/16/2005	43																													\$ -	
		124-031	Title III engr WBS 124	10/3/2005	3/6/2006	103		60																											\$ -	
		124-036.9L	Award VV Lateral Supports WBS 124	(blank)	10/2/2006	0																														\$ -
		124-037	PPPL Fab VV Vert. Supports WBS 124	10/17/2005	1/18/2006	60																														
		124-037L	VV Lateral Supports Fab by PPPL WBS 124	10/3/2006	1/4/2007	60																														
		124-110	SPEA VV NB port cover	8/2/2006	9/29/2006	43																														\$ -
		124-120	Award VV NB port cover	(blank)	9/29/2006	0																														\$ -
		124-130	VV NB port cover Fabrication	10/2/2006	1/10/2007	65																													\$ 53.9	
		125-015	Title III design Local I&C WBS 125	12/16/2005	3/20/2006	61		18																												
		125-037	Procurement Local I&C WBS 125	12/16/2005	3/17/2006	60																														
	1250	121-034.1	VVSA Title III engr	10/3/2005	11/22/2006	288		500		\$ 8.0																									\$ 2.4	
		121-035	VVSA Contract oversight FY05 & FY06	3/1/2005	1/31/2006	231																													\$ 8.2	
		121-035.2	ORNL design support during MTM Contract	10/3/2005	1/31/2006	79		107		\$ 4.0																										
		121-036	Ship vac equipt from PPPL to MTM for vac testing	10/25/2005	11/14/2005	15																													\$ 2.0	
		121-038	assist MTM testing of VVSA	11/15/2005	2/8/2006	54																														
		121-038.1	All Vacuum Vessel Sections (3) Delivered	(blank)	3/21/2006	0																													\$ -	
		121-140	S005243 #9-Second VVSA fabricated	(blank)	10/28/2005	0																													\$ -	
		121-145	S005243 #10-Third VVSA fabricated	(blank)	11/18/2005	0																													\$ -	
		121-150	S005243 #11-Receipt/Acceptance of 1st VVSA	(blank)	12/23/2005	0																													\$ -	
		121-155</																																		

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						Labor (hours)			Non Labor (\$k)				Labor (hours)																						
WBS/JOB	ACT	TITLE	ES	EF	OD	ORNLAM	ORNL	ORNLRM	Materials	Travel	B//CB	EA//EM	EA//SM	EC//EM	EC//SM	EE//AM	EE//EM	EE//SM	EE//TB	EM//EM	EM//SM	EM//TB	FC//AM	FC//EM	R//RM	R//RM	SH//TB	Allocations	Materials	MCWF	other	Travel	VVSA		
14	1416	1416B-169	Side A Coil Assy-Magnetic Loops	2/3/2006	2/9/2006	5		20																											
		1416B-173	Side A Coil Assy-Chill Plates and Tubing	2/7/2006	4/10/2006	45		360																											
		1416B-177	Side A Coil Assy-Check and Promote	4/11/2006	4/24/2006	10		40																											
		1416B-181	Side B Coil Assy-Cladding Asm	12/14/2005	2/8/2006	35																													
		1416B-185	Side B Coil Assy-Cond Layers, Geom Files	1/30/2006	2/3/2006	5		40																											
		1416B-189	Side B Coil Assy-Magnetic Loops	2/3/2006	2/9/2006	5		20																											
		1416B-193	Side B Coil Assy-Chill Plates and Tubing	2/7/2006	4/10/2006	45																													
		1416B-197	Side B Coil Assy-Check and Promote	4/11/2006	4/24/2006	10		40																											
		1416B-201	Coil Post VPI mods-Studs Removed	1/31/2006	2/6/2006	5		20																											
		1416B-205	Coil Post VPI mods-Clamp Arrangement	2/3/2006	2/9/2006	5		40																											
		1416B-209	Coil Post VPI mods-Check and Promote	2/10/2006	2/16/2006	5		20																											
		1416B-213	Clamp Assy-Clamp Hardware	1/25/2006	1/25/2006	1		4																											
		1416B-217	Clamp Assy-Check and Promote	1/26/2006	1/26/2006	1		4																											
		1416B-221	I&C-Strain Gages and T/C	3/3/2006	3/9/2006	5		20																											
		1416B-225	I&C-Rogowski Coils	3/8/2006	3/14/2006	5		40																											
		1416B-229	I&C-Check and Promote	3/15/2006	3/21/2006	5		20																											
		1416B-233	Coil-to-Coil -Current Feed Insul, Covers	2/23/2006	3/1/2006	5		20																											
		1416B-237	Coil-to-Coil -Windings Insul Blanket	2/20/2006	2/24/2006	5		20																											
		1416B-241	Coil-to-Coil -Bushing Installation	2/28/2006	3/6/2006	5		20																											
		1416B-245	Coil-to-Coil -Check and Promote	3/7/2006	3/13/2006	5		20																											
		1416B-249	-Type-B Coil Asm Specification	4/11/2006	4/17/2006	5		40																											
		1416B-253	-Review and Approve Type-B Spec	4/18/2006	4/24/2006	5		20																											
		1416B-257	-Update Coil Fab Procedures	4/25/2006	5/1/2006	5		20																											
		1416B-261	-Prepare and Conduct FDR	5/2/2006	5/8/2006	5		40																											
		1416B-262	TYPE B FDR	(blank)	5/8/2006	0																													
		1416B-265	-Resolve FDR Comments	5/9/2006	5/22/2006	10		40																											
		1403-11.1	Compl assembly / interface drawings for ICDs	11/1/2004	10/31/2005	251		40																											
		1403-16	Assembly bolts, nuts,washers	10/1/2004	6/30/2006	437		35																											
		1403-17	Assembly shims	10/1/2004	6/30/2006	437		51																											
		1403-18	Eccentric ball assembly	11/8/2004	6/30/2006	411		118																											
		1403-19	Top assembly dwgs for mod coil shell	10/1/2004	6/30/2006	437		121																											
		1403-19A	Bladder Details	7/1/2005	6/30/2006	251		122																											
		1403-20	3 coil assembly specification	8/1/2006	9/25/2006	40		160																											
		1421-100	Submet Requisition for - Assy bolts,nuts,washers	7/24/2006	8/4/2006	10		16																											
		1421-105	Procurement lead time for-Assy bolts,washer	8/7/2006	9/29/2006	40																													
		1421-110	Deliver - Assy bolts,nuts,washers	10/2/2006	1/3/2007	60																													
		1421-200	Submet Requisition for - Assembly shims	7/24/2006	8/4/2006	10		16																											
		1421-205	Procurement lead time for - Assembly shims	8/7/2006	9/29/2006	40																													
		1421-210	Deliver - Assembly shims	10/2/2006	1/3/2007	60																													
		1421-400	Submet Requisition for - Bladders	7/24/2006	8/4/2006	10		16																											
		1421-405	Procurement lead time for - Bladders	8/7/2006	9/29/2006	40																													
		1421-410	Deliver - Bladders	10/2/2006	1/3/2007	60																													
		171-040	Winding Oversight (LOE)	10/3/2005	10/17/2007	511						3,728																							
		171-041	Tech Supervision	10/3/2005	10/17/2007	511																													
		174-037	Modular Coil local I&C -Install (from wbs 143)	2/3/2006	6/20/2007	348																													
		P1-000	ECP36 holes for cooling lines included in above	11/3/2005	11/3/2005	1																													
		P1-001	Rec C1,Prep& Instl Cladding->@125% 1 shift	10/3/2005	11/9/2005	28																													
		P1-011	Wind coil C1->@150%	11/10/2005	2/2/2006	53																													
		P1-011J	Complete Winding First Modular Coil	(blank)	2/2/2006	0																													
		P1-020	Instl Chill Plates,Tubing, Bag C1->@150%	2/3/2006	2/28/2006	18																													
		P1-021C	Final Clamps & Warm Test (Station1) C1	3/17/2006	3/29/2006	9																													
		P1-021V	VPI (Station 5) C1	3/1/2006	3/16/2006	12																													
		P1-031	Receive B1, Prep& Instl Cladding	7/20/2006	8/3/2006	11																													

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WBS	JOB	ACT	TITLE	ES	EF	OD	ORNLAM	ORNLEM	ORNLRM	Materials	Travel	B//CB	EA//EM	EA//SM	EC//EM	EC//SM	EE//AM	EE//EM	EE//SM	EE//TB	EM//EM	EM//SM	EM//TB	FC//AM	FC//EM	R//RM	R//RM	SH//TB	Allocations	Materials	MCWF	other	Travel	VVSA																	
82	8203	8203FY07	Design Integration FY07	10/2/2006	10/1/2007	252							518	345																																					
	8204	8204FY06	Systems Analysis FY06	10/3/2005	9/29/2006	250							1,295																																						
	8205	METFY06R	Metrology for FP & machine assy FY06	10/3/2005	9/29/2006	250							415														707																								
		METFY07R	Metrology for FP & machine assy FY07	10/3/2006	10/1/2007	251							417																																						
		METFY08R	Metrology for FP & machine assy FY08	10/3/2007	9/29/2008	250							415																																						
85	8501	730.9000	First Plasma	(blank)	2/10/2009	0																																													
		920.000	Startup Personnel	11/3/2008	2/10/2009	72																																													
		920.001	Procedure and Document Preparation	12/13/2007	12/9/2008	250									432			432	-	864	1,066	979	432				490																								
		920.005	Punch list,Cmpl't PTP's,Reconfig, Rm temp Hi-pot	11/3/2008	12/23/2008	37															1,516	1,516																													
		920.010	Field Coil Testsing,FCPC test & E-Beam Mapping	12/24/2008	1/27/2009	25																																													
		920.020	Final ISTEP	1/28/2009	2/5/2009	7																																													
		920.021	Operations Approval	2/6/2009	2/10/2009	3																																													
		M-0120	CD-4 First Plasma	(blank)	7/31/2009	0																																													
AA	8998	99.06	PPPL Allocations FY06	10/3/2005	9/29/2006	250																														\$ 187.9															
		99.07	PPPL Allocations FY07	10/2/2006	10/1/2007	252																														\$ 187.9															
		99.08	PPPL Allocations FY08	10/1/2007	9/29/2008	252																														\$ 92.8															
CC	CCC	1361RISK	JOB 1361 RISK	10/2/2006	1/31/2008	330																	5,349																												
		1411RISK	JOB 1411 RISK	7/3/2006	9/29/2006	63																																													
		1451RISK	JOB 1451 RISK	3/3/2006	10/25/2007	416																																													
		99.105	Contingency FY05	10/3/2005	9/30/2005	0																																													
		99.106D	Contingency FY06	10/3/2005	9/29/2006	250																																													
		99.107	Contingency FY07	10/2/2006	9/28/2007	251																																													
		99.108	Contingency FY08	10/1/2007	9/30/2008	253																																													
		99.109	Contingency FY09	10/1/2008	2/27/2009	108																																													
Grand Total							271	16,096	1,610	\$ 109.8	\$ 154.0	1,768	20,150	8,718	6,131	1,800	777	5,754	6,085	5,563	15,928	16,665	119,699	4,810	1,061	1,992	4,721	3,900	\$ 468.6	\$ 5,875.1	\$ 5,506.4	\$ 7,640.6	\$ 74.2	\$ 2,430.6																	