

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10		
1 LCLS PROJECT - PED & CONSTRUCTION															
1.01 LCLS PROJECT MGMT, PLANNING & ADMN (TEC)															
1.01.03 Technical Integration															
1.01.03.05 Global Controls															
MS4_CT0004	COMP: Controls LOE FY08	0		11/03/08A	PM509_0315, PM509_0320, XE201_0310, XE201_0410	MS4_CT0005									
MS4_CT0005	COMP: Controls LOE FY09	0		09/30/09	LN20511010, MS4_CT0004, PM509_0405, PM509_0500,	PM_LOE									
1.01.03.05.09 Power Supply Controls															
PM509_0300	Start: Global Controls PS LOE FY08	0	02/01/08A		PMSTART	LN201_0800, LN2020000, PM509_0315, PM509_0320									
PM509_0500	Start: Global Controls PS Discrete Effort	0	02/01/08A		PMSTART	MS4_CT0005									
PM509_0510	LINAC Drawings	0	02/01/08A	04/21/08A	PMSTART	PM509_0515, PM509_0520									
PM509_0315	Power Conversion Project Coordinator (10% time)	0*	02/01/08A	09/30/08A	PM509_0300	MS4_CT0004									
PM509_0320	Misc. Power Supplies Support FY08	0*	02/01/08A	09/30/08A	PM509_0300	MS4_CT0004, PM509_0400									
PM509_0515	Undulator Drawings	0	03/03/08A	10/09/08A	PM509_0510	PM509_0520									
PM509_0400	Start: Global Controls PS LOE FY09	0	10/01/08A		PM509_0320	PM509_0405									
PM509_0405	Controls Power Supplies Management FY09	87	10/01/08A	07/31/09	PM509_0400	MS4_CT0005									
PM509_0520	COMP: Drawings	0		10/09/08A	PM509_0510, PM509_0515	PM_LOE									
1.01.03.05.12 Global Controls Management															
1.01.03.05.12.01 Global Controls Management LOE															
PM512_0395	Start: Management LOE FY09	0	10/01/08A		MS_260	PM512_0400, PM512_0405, PM512_0407, PM512_0410,									
PM512_0400	Controls Cost Account Manager - FY09	130	10/01/08A	09/30/09	PM512_0395	MS4_CT0005*									
PM512_0405	Controls Deputy Cost Account Manger - FY09	130	10/01/08A	09/30/09	PM512_0395	MS4_CT0005*									
PM512_0407	Controls Physicist - FY09	130	10/01/08A	09/30/09	PM512_0395	MS4_CT0005*									
PM512_0410	Controls Technical Coordinator - FY09	130	10/01/08A	09/30/09	PM512_0395	MS4_CT0005*									
PM512_0415	Controls E-Beam Diagnostics Tech Lead - FY09	130	10/01/08A	09/30/09	PM512_0395	MS4_CT0005*									
PM512_0500	Start: Management LOE FY10	0	10/02/09		MS_265*	PM512_0505*, PM512_0510*, PM512_0515*, PM512_0520*,									
PM512_0505	Controls Cost Account Manager - FY10	213	10/02/09	07/30/10	PM512_0500*	MS1_PM040									
PM512_0510	Controls Deputy Cost Account Manger - FY10	213	10/02/09	07/30/10	PM512_0500*	MS1_PM040									
PM512_0515	Controls Physicist - FY10	213	10/02/09	07/30/10	PM512_0500*	MS1_PM040									

Start Date 07/19/06
 Finish Date 07/30/10
 Data Date 04/01/09
 Run Date 04/29/09 15:23

 Early Bar
 Progress Bar
 Critical Activity

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10						
1.01.03.05.12.01 Global Controls Management LOE																			
PM512_0520	Controls Technical Coordinator - FY10	213	10/02/09	07/30/10	PM512_0500*	MS1_PM040													
PM512_0525	Controls E-Beam Diagnostics Tech Lead - FY10	213	10/02/09	07/30/10	PM512_0500*	MS1_PM040													
1.03 LINAC SYSTEM																			
1.03.02 Linac Controls & Power Conversion Subsystem																			
1.03.02.01 Personnel Protection System (PPS)																			
LN201_0800	Start: Personnel Protection System (PPS)	0	02/01/08A		PM509_0300	LN201_0815													
LN201_0825	LTU Mechanical Design	0	02/01/08A	05/30/08A	PMSTART		■												
LN201_0835	PPS Hardware Procurement	0	02/01/08A	07/30/08A	PMSTART	LN201_0840, LN201_0845, LN201_0870, LN201_0875,	■												
LN201_0830	LTU Mechanical Fab	0	02/01/08A	09/30/08A	PMSTART		■												
LN201_0820	LTU Controls Software	0	02/01/08A	10/10/08A	PMSTART	LN201_0950	■												
LN201_0935	Plant Labor (Crafts)	0	02/01/08A	10/15/08A	PMSTART	LN201_0940	■												
LN201_0827	LTU Design Support	0	02/01/08A	12/05/08A	LN201_0815	LN201_0955	■												
LN201_0815	LTU Rack and Wiring Bid	0	02/11/08A	04/30/08A	LN201_0800, PMSTART	LN201_0827, LN201_0950	■												
LN201_0920	RCV: 6 PLC Control Package	0	04/14/08A	05/16/08A	LN201_0835	LN201_0945, LN201_0950	■												
LN201_0840	RCV: 1000 4PR16AS cable	0	04/30/08A	04/30/08A	LN201_0835	LN201_0945, LN201_0950													
LN201_0845	RCV: 2000 36PR16AS cable	0	04/30/08A	04/30/08A	LN201_0835	LN201_0945, LN201_0950													
LN201_0885	RCV: 6 Search Buttons	0	04/30/08A	04/30/08A	LN201_0835	LN201_0945, LN201_0950													
LN201_0900	RCV: 10 Speakers	0	04/30/08A	04/30/08A	LN201_0835	LN201_0945, LN201_0950													
LN201_0930	RCV: 3 Battery Recharger	0	04/30/08A	04/30/08A	LN201_0835	LN201_0945, LN201_0950													
LN201_0950	LTU Build and Test Equipment Racks	0	05/01/08A	10/24/08A	LN201_0815, LN201_0820, LN201_0835, LN201_0840,	LN201_0955	■												
LN201_0870	RCV: 2 Camera	0	05/16/08A	05/16/08A	LN201_0835	LN201_0945, LN201_0950													
LN201_0875	RCV: 2 Annunciator	0	05/16/08A	07/31/08A	LN201_0835	LN201_0945, LN201_0950	■												
LN201_0895	RCV: 2 Audio Annunciator	0	05/16/08A	10/17/08A	LN201_0835	LN201_0945, LN201_0950	■												
LN201_0945	LTU Control Hardware	0	05/19/08A	10/13/08A	LN201_0835, LN201_0840, LN201_0845, LN201_0870,	LN201_0950	■												
LN201_0955	AVAIL: LTU PPS	0		12/05/08A	LN201_0827, LN201_0940, LN201_0950	LNMS4_015				◆									
LN201_0905	RCV: 6 Door Hardware	0		09/02/08A	LN201_0835	LN201_0945, LN201_0950													
LN201_0940	Radiation Safety Review	0		09/22/08A	LN201_0935	LN201_0955													
1.03.02.02 Beam Containment System (BCS)																			
LN2020000	Start: Beam Containment System (BCS)	0	02/01/08A		PM509_0300	LN202_0015													
LN202_0000	Start: LCLS BCS Phase 4	0	02/01/08A		PMSTART	LN202_0005, LN202_0035, LN202_0090, LN202_0125													

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1.03.02.02 Beam Containment System (BCS)																											
LN202_0005	Start: Design BCS Electronics	0	02/01/08A		LN202_0000	LN202_0010, LN202_0015																					
LN202_0035	Start: Documentation Phase	0	02/01/08A		LN202_0000	LN202_0040, LN202_0045, LN202_0050, LN202_0055,																					
LN202_0125	Start: Procurement Phase	0	02/01/08A		LN202_0000	LN202_0135, LN202_0160, LN202_0205																					
LN202_0205	Start: Fabrication and Assembly Phase	0	02/01/08A		LN202_0125	LN202_0220, LN202_0225, LN202_0240, LN202_0245,																					
LN202_0135	Place VME hardware order with A. Alarcon / B. Fu	0	02/01/08A	02/04/08A	LN202_0125	LN202_0136																					
LN202_0040	Generate BCS long-haul cable package	0	02/01/08A	02/12/08A	LN202_0035	LN202_0085																					
LN202_0136	RCV: VME Electronic H/W	0	02/01/08A	03/17/08A	LN202_0135	LN202_0200																					
LN202_0220	PIC tester chassis (qty=6)	0	02/01/08A	05/23/08A	LN202_0205	LN202_0305																					
LN202_0050	Generate BCS material list	0	02/04/08A	02/05/08A	LN202_0035	LN202_0065																					
LN202_0045	Generate preliminary BCS schematic	0	02/04/08A	04/09/08A	LN202_0035	LN202_0055																					
LN202_0015	Current Monitor Chassis	0	02/05/08A	07/31/08A	LN2020000, LN202_0005	LN202_0020																					
LN202_0010	Toroid Comparator Chassis - Design	0	02/05/08A	10/20/08A	LN202_0005	LN202_0020, LN202_0030																					
LN202_0225	PIC crate (qty=6)	0	03/03/08A	03/31/08A	LN202_0205	LN202_0310																					
LN202_0255	LION cables (qty=14)	0	03/03/08A	03/31/08A	LN202_0205	LN202_0280																					
LN202_0075	Add all jobs to downtime schedule	0	03/19/08A	10/03/08A	LN202_0070	LN202_0080																					
LN202_0080	Review documentation	0	03/19/08A	12/04/08A	LN202_0075	LN202_0085, LN202_0295																					
LN202_0295	Start: Hardware Testing Phase	0	03/31/08A		LN202_0080	LN202_0305, LN202_0310, LN202_0325, LN202_0330																					
LN202_0280	Terminal cabinets (qty=3)	0	03/31/08A	03/31/08A	LN202_0205, LN202_0255	LN202_0285																					
LN202_0310	PIC crate (qty=6)	0	03/31/08A	03/31/08A	LN202_0225, LN202_0295	LN202_0335																					
LN202_0605	Building 911	0	03/31/08A	04/02/08A	LN202_0602	LN202_0608																					
LN202_0620	Building 911	0	03/31/08A	04/02/08A	LN202_0617	LN202_0623																					
LN202_0305	PIC tester chassis (qty=6)	0	03/31/08A	05/23/08A	LN202_0220, LN202_0295	LN202_0335																					
LN202_0060	Generate BCS cable install job orders (non-long-	0	03/31/08A	07/31/08A	LN202_0055	LN202_0065																					
LN202_0055	Generate BCS cable code sheets (non-long-haul)	0	03/31/08A	10/03/08A	LN202_0035, LN202_0045	LN202_0060																					
LN202_0065	Generate BCS fabrication job orders	0	03/31/08A	12/04/08A	LN202_0050, LN202_0060	LN202_0070																					
LN202_0240	24V power distribution panel (qty=3)	0	04/01/08A	04/01/08A	LN202_0205	LN202_0500																					
LN202_0285	VME breakout terminal box panel (qty=3)	0	04/02/08A	04/02/08A	LN202_0205, LN202_0280	LN202_0500																					
LN202_0575	Building 911	0	04/21/08A	04/21/08A	LN202_0572	LN202_0578																					
LN202_0635	Building 911	0	04/21/08A	04/21/08A	LN202_0632	LN202_0638																					

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1.03.02.02 Beam Containment System (BCS)																	
LN202_0090	Start: Software Planning Phase	0	04/30/08A		LN202_0000	LN202_0095	◆										
LN202_0095	Identify BCS EPICS database I/O	0	04/30/08A	09/30/08A	LN202_0090	LN202_0100	■										
LN202_0070	Generate BCS cross-connect sheets	0	04/30/08A	12/04/08A	LN202_0035, LN202_0065	LN202_0075	■										
LN202_0190	RQRD: B913 (single bay rack) from M. DiSalvo	0	05/01/08A		PMSTART	LN202_0200	◆										
LN202_0195	RQRD: B921 (double bay rack) from M. DiSalvo	0	05/01/08A		PMSTART	LN202_0200	◆										
LN202_0578	Bldg 913-Install cross-connect infrastr in racks	0	05/16/08A	05/16/08A	LN202_0575	LN202_0581											
LN202_0250	Current monitor chassis (qty=2)	0	05/16/08A	07/31/08A	LN202_0030, LN202_0205, LN202_0245		■										
LN202_0245	Toroid comparator chassis (qty=2)	0	05/16/08A	08/29/08A	LN202_0030, LN202_0205	LN202_0250	■										
LN202_0638	Building 913 Install BCS cross-connects	0	05/21/08A	05/21/08A	LN202_0635	LN202_0641											
LN202_0626	Building 921-Install intrarack cables	0	05/23/08A	07/31/08A	LN202_0623	LN202_0629	■										
LN202_0623	Building 913-Install BCS intrarack cables	0	05/28/08A	05/30/08A	LN202_0620	LN202_0626											
LN202_0581	Bldg 921-Install cross-connect infrastr. in rack	0	06/30/08A	06/30/08A	LN202_0578	LN202_0584, LN202_0611											
LN202_0584	COMP: Cross-Connect Installation	0		06/30/08A	LN202_0581	LN202_0644	◆										
LN202_0325	Toroid comparator chassis (qty=1) Fab	0	07/01/08A	10/20/08A	LN202_0295	LN202_0335	■										
LN202_0590	Building 911- Install BCS Long Haul Cables	0	07/03/08A	07/31/08A	LN202_0587	LN202_0593	■										
LN202_0530	Mount LION cables	0	07/15/08A	08/15/08A	LN202_0527	LN202_0533	■										
LN202_0100	Identify modifications to existing EPICS panels	0	07/29/08A	07/31/08A	LN202_0095	LN202_0105											
LN202_0105	Generate plan for integrating modifications of E	0	07/31/08A	08/05/08A	LN202_0100	LN202_0110											
LN202_0115	Submit BCS database info to A. Alarcon	0	07/31/08A	08/15/08A	LN202_0110	LN202_0120											
LN202_0641	Building 921-Install BCS cross-connects	0	07/31/08A	11/07/08A	LN202_0120, LN202_0638	LN202_0629, LN202_0642	■										
LN202_0593	Building 913-Install BCS Intrarack Cables	0	08/01/08A	08/29/08A	LN202_0590	LN202_0596	■										
LN202_0025	BCS Chassis FDR	0	08/15/08A	08/15/08A	LN202_0020	LN202_0030											
LN202_0120	COMP: Database	0		08/15/08A	LN202_0115	LN202_0641, LN202_1000	◆										
LN202_0160	Place order for CEF Parts	0	08/18/08A	08/22/08A	LN202_0085, LN202_0125	LN202_0162, LN202_0165											
LN202_0165	RQRD BCS cables and connectors from M. DiSalvo	0	08/25/08A		LN202_0160	LN202_0200	◆										
LN202_0566	Flow meter in B921 (qty=2)	0	08/29/08A	08/29/08A	LN202_0557, LN202_0563	LN202_0569											
LN202_0569	COMP: Flow Switch System Installation	0		08/29/08A	LN202_0566	LN202_0608, LN202_0644	◆										
LN202_0110	Identify and layout new EPICS panels to be built	0	09/02/08A	09/30/08A	LN202_0105	LN202_0115	■										
LN202_0162	RCV: CEF Parts	0	09/02/08A	10/20/08A	LN202_0160	LN202_0200	■										

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.03.02.02 Beam Containment System (BCS)																	
LN202_0608	Building 913 - Install BCS longhaul cables	0	09/17/08A	10/03/08A	LN202_0569, LN202_0605	LN202_0611											
LN202_0611	Building 921-Install BCS longhaul cables	0	09/23/08A	09/29/08A	LN202_0581, LN202_0608	LN202_0614											
LN202_0506	Bulding 911 Install PIC gas lines	0	09/29/08A	11/17/08A	LN202_0503	LN202_0524											
LN202_0509	Building 913 Install LION gas lines	0	09/29/08A	11/17/08A	LN202_0503	LN202_0524											
LN202_0512	Building 913 Install PIC gas lines	0	09/29/08A	11/17/08A	LN202_0503	LN202_0515, LN202_0518, LN202_0524											
LN202_0515	Building 913 Install pressure switches (2), valv	0	09/29/08A	11/17/08A	LN202_0503, LN202_0512	LN202_0524											
LN202_0518	Building 921 Install PIC gas lines	0	09/29/08A	11/17/08A	LN202_0503, LN202_0512	LN202_0521, LN202_0524											
LN202_0533	Leak check Lion gas line	0	09/29/08A	11/17/08A	LN202_0527, LN202_0530	LN202_0536											
LN202_0536	Connect LION cables to gas	0	09/29/08A	11/17/08A	LN202_0527, LN202_0533	LN202_0539											
LN202_0545	Mount PICs (qty=24)	0	09/29/08A	11/17/08A	LN202_0542	LN202_0548											
LN202_0548	Leak check PIC gas line	0	09/29/08A	11/17/08A	LN202_0542, LN202_0545	LN202_0551, LN203_0760											
LN202_0551	Connect PICs to gas	0	09/29/08A	11/17/08A	LN202_0542, LN202_0548	LN202_0554											
LN202_0614	COMP: BCS Racks Installation	0		09/29/08A	LN202_0611	LN202_0644											
LN202_0650	Start: Preliminary System Checkout Phase	0	09/30/08A		LN202_0335, LN202_0599	LN202_0653											
LN202_0596	Building 921-Install BCS Intrarack Cables	0	09/30/08A	11/14/08A	LN202_0593	LN202_0599											
LN202_0539	COMP: LTU Lion Cables Installation	0		09/30/08A	LN202_0536	LN202_0644											
LN202_0653	Checkout BCS cables	0	10/01/08A	12/05/08A	LN202_0650	LN202_0656											
LN202_0659	Checkout BCS beamline devices	0	10/13/08A	10/13/08A	LN202_0656	LN202_0662											
LN202_0662	Checkout BCS electronics	0	10/14/08A	12/05/08A	LN202_0659	LN202_0665											
LN202_0673	Certify BCS Zone 1	0	10/20/08A	10/23/08A	LN202_0670	LN202_0676											
LN202_0676	Certify BCS Zone 2	0	10/20/08A	10/23/08A	LN202_0673	LN202_0679											
LN202_0030	COMP: Final design	0		10/20/08A	LN202_0010, LN202_0025	LN202_0245, LN202_0250											
LN202_0200	COMP: Hardware procurement	0	10/21/08A		LN202_0136, LN202_0162, LN202_0165, LN202_0190,	LN202_1000											
LN202_0679	Certify BCS Zone 3	0	10/24/08A	11/04/08A	LN202_0676	LN202_0682											
LN202_0682	Certify BCS Zone LCLS	0	10/30/08A	12/10/08A	LN202_0679	LN202_0685											
LN202_0685	Certify BCS Global	0	10/31/08A	12/10/08A	LN202_0682	LN202_0688											
LN202_0330	Current monitor chassis (qty=2) Fab	0	11/03/08A	11/14/08A	LN202_0295	LN202_0335											
LN202_0629	COMP: BCS Cross Connect Installation	0		11/07/08A	LN202_0626, LN202_0641	LN202_0644											
LN202_0642	COMP: BCS Electronics in Racks Installation	0		11/07/08A	LN202_0641	LN202_0644											

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1.03.02.02 Beam Containment System (BCS)																	
LN202_0656	Checkout BCS cross connects	0	11/10/08A	12/05/08A	LN202_0653	LN202_0659											
LN202_0560	Flow switches in B921 (qty=2)	0	11/14/08A	11/14/08A	LN202_0557	LN202_0563											
LN202_0599	COMP: BCS Cables (LH) Installation	0		11/14/08A	LN202_0596	LN202_0644, LN202_0650											
LN202_0335	COMP: In-shop hardware testing	0	11/17/08A		LN202_0305, LN202_0310, LN202_0325, LN202_0330	LN202_0500, LN202_0650											
LN202_0563	Venturis in B921 (qty=4)	0	11/17/08A	11/17/08A	LN202_0557, LN202_0560	LN202_0566											
LN202_0524	COMP: Gas Sys for PICs/LIONS Installation	0		11/17/08A	LN202_0506, LN202_0509, LN202_0512, LN202_0515,	LN202_0644											
LN202_0554	COMP: PICs Installation	0		11/17/08A	LN202_0551	LN202_0644											
LN202_0644	COMP: Installation Phase	0		11/17/08A	LN202_0524, LN202_0539, LN202_0554, LN202_0569,	LN202_0668											
LN202_0670	Start: Certification Phase	0	11/18/08A		LN202_0668	LN202_0673											
LN202_0085	COMP: Documentation	0		12/04/08A	LN202_0040, LN202_0080	LN202_0160, LN202_1000											
LN202_0668	COMP: Preliminary BCS checkout	0		12/05/08A	LN202_0644, LN202_0665	LN202_0670											
LN202_0688	BCS certification complete	0		12/10/08A	LN202_0685	LN202_1000											
LN202_1000	AVAIL: LTU BCS	0		12/10/08A	LN202_0085, LN202_0120, LN202_0200, LN202_0688	MS3_LN015											
LN202_0020	BCS Chassis PDR	0		07/31/08A	LN202_0010, LN202_0015	LN202_0025											
LN202_0521	Building 921 Install valves (2) & gas panel	0		10/17/08A	LN202_0503, LN202_0518	LN202_0524											
LN202_0665	Checkout BCS EPICS panels	0		12/05/08A	LN202_0662	LN202_0668											
1.03.02.03 Machine Protection System (MPS)																	
LN203_0400	Start: MPS Controls (LTU)	0	02/01/08A		PMSTART	LN203_0401, LN203_0406, LN203_0415, LN203_0494,											
LN203_0415	Start: Preliminary PIC System Documentation	0	02/01/08A		LN203_0400	LN203_0420, LN203_0454											
LN203_0454	Start: Temperature System	0	02/01/08A		LN203_0415	LN203_0455											
LN203_0494	Start: Link Node I/O	0	02/01/08A		LN203_0400	LN203_0495											
LN203_0570	Start: Software Planning Phase	0	02/01/08A		LN203_0400	LN203_0575											
LN203_0455	Generate Preliminary Temperature System Document	0	02/01/08A	02/01/08A	LN203_0454	LN203_0470											
LN203_0465	Generate Temperature System cable code sheets	0	02/01/08A	02/01/08A	PMSTART	LN203_0470											
LN203_0575	Identify PIC System DB I/O	0	02/01/08A	02/01/08A	LN203_0570	LN203_0580											
LN203_0420	Generate PIC System material List	0	02/01/08A	02/04/08A	LN203_0415	LN203_0425, LN203_0452											
LN203_0495	Generate Preliminary Link Node I/O Status Docum	0	02/01/08A	02/05/08A	LN203_0494	LN203_0500											
LN203_0401	Define System Requirements	0	02/01/08A	02/21/08A	LN203_0400	LN203_0402											
LN203_0470	Generate Temperature System X-connects sheets	0	02/04/08A	02/04/08A	LN203_0455, LN203_0465	LN203_0475											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.03.02.03 Machine Protection System (MPS)																		
LN203_0475	Generate Temperature System cable install Job Or	0	02/05/08A	02/05/08A	LN203_0470	LN203_0480												
LN203_0425	Generate PIC System cable code sheets	0	02/05/08A	02/06/08A	LN203_0420	LN203_0430, LN203_0452												
LN203_0580	Submit PIC System Data Base info to Software Dep	0	02/05/08A	02/06/08A	LN203_0575	LN203_0585												
LN203_0500	Generate Link Node I/O Status material List	0	02/06/08A	02/06/08A	LN203_0495	LN203_0505												
LN203_0480	Generate Temperature System Fabrication Job Orde	0	02/06/08A	02/07/08A	LN203_0475	LN203_0485												
LN203_0430	Generate PIC System X-connects sheets	0	02/07/08A	02/07/08A	LN203_0425	LN203_0435, LN203_0452												
LN203_0585	Identify Temp System DB I/O	0	02/07/08A	02/08/08A	LN203_0580	LN203_0590												
LN203_0505	Generate Link Node I/O Status cable code sheets	0	02/07/08A	02/11/08A	LN203_0500	LN203_0510												
LN203_0435	Generate PIC System cable install Job Orders	0	02/08/08A	02/08/08A	LN203_0430	LN203_0440, LN203_0452												
LN203_0485	Generate Temperature System Schematic	0	02/08/08A	02/12/08A	LN203_0480	LN203_0490												
LN203_0440	Generate PIC System Fabrication Job Orders	0	02/11/08A	02/12/08A	LN203_0435	LN203_0445, LN203_0452												
LN203_0590	Submit Temp System Data Base info to Software De	0	02/11/08A	02/13/08A	LN203_0585	LN203_0595												
LN203_0510	Generate Link Node I/O Status X-connects sheets	0	02/12/08A	02/14/08A	LN203_0505	LN203_0515												
LN203_0445	Generate PIC System Schematic	0	02/13/08A	02/15/08A	LN203_0440	LN203_0450, LN203_0452												
LN203_0595	Identify I/O status DB	0	02/14/08A	02/19/08A	LN203_0590	LN203_0600												
LN203_0515	Generate Link Node I/O Status cable install Job	0	02/15/08A	02/15/08A	LN203_0510	LN203_0520												
LN203_0520	Generate Link Node I/O Status Fabrication Job Or	0	02/19/08A	02/19/08A	LN203_0515	LN203_0525												
LN203_0525	Generate Link Node I/O Status Schematic	0	02/20/08A	02/22/08A	LN203_0520	LN203_0530												
LN203_0402	Preliminary System Design review1	0	02/22/08A	02/22/08A	LN203_0401	LN203_0403												
LN203_0600	Submit Link Node I/O Data Base info to Software	0	03/03/08A	03/04/08A	LN203_0595	LN203_0605												
LN203_0406	Design System Electronics - PIC Module	0	03/03/08A	07/31/08A	LN203_0400	LN203_0852												
LN203_0635	Procure:Temperature System VME VSAM	0	03/10/08A	03/31/08A	LN203_0610	LN203_0636, LN203_0640												
LN203_0645	Start: Fabrication and Assembly & Test Phase	0	03/17/08A		LN203_0400	LN203_0650, LN203_0655												
LN203_0620	Procure: PIC System Cables and Connectors	0	03/17/08A	03/31/08A	LN203_0610	LN203_0621, LN203_0625												
LN203_0625	Procure: Temperature System Cables and Connector	0	03/17/08A	03/31/08A	LN203_0620	LN203_0626, LN203_0630												
LN203_0630	Purchase LinkNode System Cables and Connectors	0	03/17/08A	03/31/08A	LN203_0625	LN203_0632												
LN203_0650	Fabricate PIC System Electronics	0	03/17/08A	07/15/08A	LN203_0645	LN203_0655												
LN203_0450	Review PIC System Documentation (preliminary)	0	03/24/08A	03/25/08A	LN203_0445	LN203_0452												
LN203_0530	Review Link Node System Documentation (prelimina	0	03/24/08A	03/25/08A	LN203_0525	LN203_0532												

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.03.02.03 Machine Protection System (MPS)																	
LN203_0621	RCV: Cables and Connectors	0	03/31/08A	03/31/08A	LN203_0620	LN203_0640											
LN203_0632	RCV: LinkNode System Cables and Connectors	0	03/31/08A	03/31/08A	LN203_0630	LN203_0640											
LN203_0490	Review Temperature System Documentation (prelimi	0	03/31/08A	04/02/08A	LN203_0485	LN203_0492											
LN203_0555	Review all MPS Documentation	0	03/31/08A	07/08/08A	LN203_0550	LN203_0560											
LN203_0545	Temperature System Checkout Procedures	0	04/01/08A	04/03/08A	LN203_0534	LN203_0550											
LN203_0534	Start: MPS Checkout	0	04/01/08A	04/30/08A	LN203_0400	LN203_0535, LN203_0545											
LN203_0626	RCV: Temperature System Cables and Connector	0	04/01/08A	05/01/08A	LN203_0625	LN203_0640											
LN203_0670	Bench Test PIC System Electronics	0	04/01/08A	07/31/08A	LN203_0660	LN203_0675											
LN203_0452	COMP: Pic System	0		04/01/08A	LN203_0420, LN203_0425, LN203_0430, LN203_0435,	LN203_0852											
LN203_0560	Add all jobs to Downtime Schedule	0	04/22/08A	07/30/08A	LN203_0555	LN203_0565											
LN203_0610	Start: Procurement Phase	0	05/01/08A		LN203_0400	LN203_0620, LN203_0635											
LN203_0403	Preliminary System Design review2	0	05/01/08A	05/15/08A	LN203_0402	LN203_0404											
LN203_0710	LTU,BTHW,BTH(B911,912,913)	0	05/29/08A	11/14/08A	LN203_0705	LN203_0725											
LN203_0655	Fabricate PIC System Ion Chambers (14ea)	0	05/30/08A	05/30/08A	LN203_0645, LN203_0650	LN203_0660											
LN203_0660	System Hardware Fabrication Complete	0		05/30/08A	LN203_0655	LN203_0670											
LN203_0705	Start: Checkout System Cross-Connects	0	07/01/08A		LN203_0400	LN203_0710, LN203_0715, LN203_0720											
LN203_0550	Link Node Checkout Procedures	0	07/01/08A	07/08/08A	LN203_0545	LN203_0555											
LN203_0535	Generate MPS Checkout Procedures	0	07/01/08A	07/16/08A	LN203_0534	LN203_0540											
LN203_0532	COMP: Link Node I/O	0	07/01/08A	07/31/08A	LN203_0530	LN203_0852											
LN203_0715	Undulator Hall	0	07/01/08A	11/14/08A	LN203_0705	LN203_0725											
LN203_0605	Data Base Complete	0		07/01/08A	LN203_0600	LN203_0852											
LN203_0540	PIC System Checkout Procedures	0	07/17/08A	07/17/08A	LN203_0535	LN203_0567											
LN203_0636	RCV: Temperature System VME VSAM	0	07/30/08A	07/30/08A	LN203_0635	LN203_0640											
LN203_0640	COMP: Hardware Purchases	0		07/30/08A	LN203_0621, LN203_0626, LN203_0632, LN203_0635,	LN203_0852											
LN203_0825	Start: User Interface	0	08/06/08A	08/06/08A	LN203_0400, LN203_0567	LN203_0830											
LN203_0830	Fault Devices	0	08/07/08A	08/20/08A	LN203_0825	LN203_0835											
LN203_0835	Interlock Hardware Testing	0	08/21/08A	08/25/08A	LN203_0830, LN203_0845	LN203_0837											
LN203_0837	COMP: MPS User Interface	0		08/25/08A	LN203_0835	LN203_0852											
LN203_0680	Start: System Cables Checkout	0	08/29/08A		LN203_0400, LN203_0675	LN203_0685, LN203_0690, LN203_0695											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.03.02.03 Machine Protection System (MPS)																	
LN203_0685	LTU,BTHW,BTH(B911,912,913)	0	08/29/08A	11/14/08A	LN203_0680	LN203_0700, LN203_0730											
LN203_0770	Start: Link Node Input and Output Cards	0	09/02/08A		LN203_0400, LN203_0730	LN203_0775		◆									
LN203_0775	Link Node: Input Card Hardware	0	09/02/08A	09/02/08A	LN203_0770	LN203_0780											
LN203_0404	Final System Design review	0*	09/02/08A	09/30/08A	LN203_0403	LN203_0405		■									
LN203_0780	Link Node: Ouput Card Hardware	0	09/03/08A	09/03/08A	LN203_0775	LN203_0785											
LN203_0785	Link Node FPGA Firmware	0	09/04/08A	12/05/08A	LN203_0780	LN203_0790, LN203_0800			■								
LN203_0405	Final Design Accepted	0	09/15/08A	09/15/08A	LN203_0404	LNMS4_015											
LN203_0800	Start: Link Processor	0	09/18/08A		LN203_0400, LN203_0785	LN203_0805		◆									
LN203_0790	Link Node: Link Processor Interface	0	09/18/08A	09/24/08A	LN203_0785	LN203_0795											
LN203_0805	Link Processor: EPICS Interface	0	09/18/08A	09/30/08A	LN203_0800	LN203_0810, LN203_0822		■									
LN203_0810	Link Processor: Timing Interface	0	09/18/08A	09/30/08A	LN203_0805	LN203_0815, LN203_0822											
LN203_0815	Link Processor: Link Node Interface	0	09/18/08A	09/30/08A	LN203_0810	LN203_0820, LN203_0822		■									
LN203_0820	Link Processor: Machine Protection Logic	0	09/18/08A	02/13/09A	LN203_0815	LN203_0822			■								
LN203_0795	Link Node: Output Card Hardware	0	09/25/08A	09/30/08A	LN203_0790	LN203_0852											
LN203_0675	In-Shop Hardware Testing Complete	0		09/30/08A	LN203_0670	LN203_0680, LN203_0852		◆									
LN203_0730	Start: Checkout System Electronics	0	10/01/08A		LN203_0400, LN203_0685	LN203_0740, LN203_0745, LN203_0770		◆									
LN203_0755	Checkout PIC Gas System	0	10/01/08A		LN203_0400	LN203_0760		◆									
LN203_0720	E-Dump & Bldg.921	0	10/01/08A	11/14/08A	LN203_0705	LN203_0690, LN203_0695, LN203_0725		■									
LN203_0760	Leak check PIC gas System	0	10/01/08A	11/17/08A	LN202_0548, LN203_0755	LN203_0765		■									
LN203_0745	E-Dump & Bldg.921	0	10/01/08A	12/05/08A	LN203_0730, LN203_0740	LN203_0750		■									
LN203_0735	LTU,BTHW,BTH(B911,912,913)	0	10/01/08A	01/23/09A	PMSTART	LN203_0750			■								
LN203_0740	Undulator Hall	0	10/01/08A	01/23/09A	LN203_0730	LN203_0745, LN203_0750			■								
LN203_0492	COMP: Temperature System	0		10/01/08A	LN203_0490	LN203_0852		◆									
LN203_0565	All Documentation Complete	0		10/01/08A	LN203_0560	LN203_0567		◆									
LN203_0690	Undulator Hall	0	10/20/08A	11/14/08A	LN203_0680, LN203_0720	LN203_0700		■									
LN203_0765	Adjust PIC Gas Flow checkout Pressure Switch	0	10/20/08A	11/17/08A	LN203_0760	LN203_0767		■									
LN203_0695	E-Dump & Bldg.921	0	10/20/08A	11/26/08A	LN203_0680, LN203_0720, LN203_0750	LN203_0700		■									
LN203_0725	System cross-connect checkout complete	0		11/14/08A	LN203_0710, LN203_0715, LN203_0720	LN203_0567, LN203_0852		◆									
LN203_0767	COMP: PIC Gas System C/O	0		11/17/08A	LN203_0765	LN203_0852		◆									

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.03.02.03 Machine Protection System (MPS)																		
LN203_0700	System cables checkout complete	0		11/26/08A	LN203_0685, LN203_0690, LN203_0695	LN203_0567, LN203_0852												
LN203_0840	Start: Certification Phase	0	12/08/08A		LN203_0400, LN203_0822	LN203_0845												
LN203_0845	Certify MPS	3	01/02/09A	04/03/09	LN203_0840	LN203_0835, LN203_0850*												
LN203_0750	System Electronics Checkout Complete	0		01/23/09A	LN203_0735, LN203_0740, LN203_0745	LN203_0567, LN203_0695, LN203_0852												
LN203_0822	COMP: Link Processor	0		02/13/09A	LN203_0805, LN203_0810, LN203_0815, LN203_0820	LN203_0840, LN203_0850, LN203_0852												
LN203_0567	COMP: MPS Checkout	0		03/02/09A	LN203_0540, LN203_0565, LN203_0700, LN203_0725,	LN203_0825, LN203_0852												
LN203_0850	MPS Certification Complete	0		04/03/09	LN203_0822, LN203_0845*	LN203_0852*												
LN203_0852	AVAIL: LTU MPS Ready for Commissioning	0		04/03/09	LN203_0406, LN203_0452, LN203_0492, LN203_0532,	LNMS4_015												
1.03.02.04 Linac Power Conversion Subsystem																		
1.03.02.04.01 Beamline Power Supplies - (Dipole Type)																		
LN3241_000	START: Beamline Power Supplies (Dipole Type)	0	02/01/08A		PMSTART	LN3241_005												
LN3241_010	RCV:B280 Intmtd P/S 45V, 330A, 15kW I/A/W	0	02/01/08A	03/31/08A	LN3241_005	LN3241_045												
LN3241_005	Procure: Dipole Type Power Supplies	0	02/01/08A	04/30/08A	LN3241_000	LN3241_010, LN3241_015, LN3241_020, LN3241_025,												
LN3241_045	Bench test and perform safety inspection of PS	0	03/17/08A	06/30/08A	LN3241_010, LN3241_015, LN3241_020, LN3241_025,	LN3241_050												
LN3241_015	RCV:B280 Intmtd P/S 50V, 200A, 10kW I/A/W	0	03/31/08A	03/31/08A	LN3241_005	LN3241_045												
LN3241_040	RCV:B280 Intmtd P/S 45V, 330A, 15kW I/A/W	0	03/31/08A	03/31/08A	LN3241_005	LN3241_045												
LN3241_020	RCV:B280 Intmtd P/S 60V, 165A, 10kW I/A/W	0	04/14/08A	04/14/08A	LN3241_005	LN3241_045												
LN3241_025	RCV:B280 Intmtd P/S 80V, 125A, 10kW I/A/W	0	04/14/08A	04/14/08A	LN3241_005	LN3241_045												
LN3241_050	Pre-install Qual Test	0	04/28/08A	06/16/08A	LN3241_045	LN3241_055												
LN3241_030	RCV:B280 Intmtd P/S 100V, 150A, 15kW I/A/W	0	05/07/08A	05/07/08A	LN3241_005	LN3241_045												
LN3241_035	RCV:B280 Intmtd P/S 160V, 93A, 15kW I/A/W	0	05/07/08A	05/07/08A	LN3241_005	LN3241_045												
LN3241_055	Integrate cables	0	07/25/08A	07/31/08A	LN3241_050	LN3241_060												
LN3241_060	AVAIL: Intermediate P/S (dipole type)	0		07/31/08A	LN3241_055	LNMS4_015												
1.03.02.04.03 Beamline Power Supplies - (Trim Type)																		
LN3243_000	START: Beamline Power Supplies Trim Type)	0	02/01/08A		PMSTART	LN3243_005												
LN3243_005	Procure: Dipole Type H/W & Power supplies	0	02/01/08A	03/31/08A	LN3243_000	LN3243_010, LN3243_015, LN3243_020, LN3243_025,												
LN3243_070	Bench test and perform safety inspection of PS	0	03/24/08A	03/31/08A	LN3243_010, LN3243_015, LN3243_020, LN3243_025,	LN3243_075												
LN3243_010	RCV:B280: AB1756-L61 ControlLogix CPU Series B	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070												
LN3243_015	RCV:B280: AB2711P-T6C20D PanelView Plus 600	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070												
LN3243_020	RCV:B280: AB1492-ACABLE005Y Analog Intrfc Cable	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070												

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.03.02.04.03 Beamline Power Supplies - (Trim Type)																	
LN3243_025	RCV:B280: AB1492-CABLE005Y Dgtl Infrfc Cable	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070											
LN3243_030	RCV:B280: AB1756-A7 7-Slot Chassis	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070											
LN3243_035	RCV:B280: AB1756-PA72 Power Supply	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070											
LN3243_040	RCV:B280: AB1784-CF64 Compact Flash Memory Modle	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070											
LN3243_045	RCV:B280: AB1756-EN2T Ethernet Module	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070											
LN3243_050	RCV:B280: AB1756-IB16I 16 Ch. Isltd Dgtl Input	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070											
LN3243_055	RCV:B280: AB1756-OX8I N.O./N.C. ISOLTD RELY OM	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070											
LN3243_060	RCV:B280: AB1756-OF6VI 6 Chnl Isltd Anlg Vltg OM	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070											
LN3243_065	RCV:B280: AB1756-IF6I 6 Ch. Isltd Anlg IM	0	03/31/08A	03/31/08A	LN3243_005	LN3243_070											
LN3243_075	Pre-install Qual Test	0	04/01/08A	06/16/08A	LN3243_070	LN3243_080											
LN3243_080	Integrate cables	0	07/25/08A	07/31/08A	LN3243_075	LN3243_085											
LN3243_085	AVAIL: Trim Type P/S	0	07/31/08A	07/31/08A	LN3243_080	LNMS4_015											
1.03.02.04.04 Controls & Power Supply																	
LN20404000	Start: Controls & Power Supply	0	02/01/08A		PMSTART	LN20404640											
LN20404510	Prep Cable Plant Bid Package	0	02/01/08A	02/07/08A	PMSTART	LN20404515											
LN20404610	Prep Bid Package	0	02/01/08A	02/07/08A	PMSTART	LN20404615											
LN20404640	LTU Controls & Power Supply Stores Purchase	0	02/01/08A	02/29/08A	LN20404000, PMSTART	LNMS4_015											
LN20404800	Prepare Requisition for Undulator Cable Plant	0	02/01/08A	05/01/08A	PMSTART	LN20404810											
LN20404690	CF Engineering for Linac Power Supplies System	0	02/01/08A	12/02/08A	PMSTART	LN20404695											
LN20404520	RCV: Cable Plant from Vendor (Outstanding POs)	0	02/01/08A	01/16/09A	LN20404515	LN20404530											
LN20404615	Vendor Fab Racks	0	02/08/08A	05/22/08A	LN20404610	LN20404620											
LN20404515	Vendor Fab Cable Plant	0	02/08/08A	09/30/08A	LN20404510	LN20404520											
LN20404700	Procure Racks and AC Internal Distribution	0	03/03/08A	05/30/08A	LN20404695	LN20404750											
LN20404710	Procure Long Haul Connectors, Cbl & Fiber	0	03/03/08A	08/28/08A	LN20404695	LN20404760											
LN20404750	RCV: Racks and AC Internal Distribution	0	03/24/08A	05/29/08A	LN20404700	LN20404720											
LN20404760	RCV: Long Haul Connectors, Cbl & Fiber	0	03/24/08A	08/29/08A	LN20404710	LN20404720											
LN20404740	Support CF UIR AC Installation	0	03/24/08A	09/30/08A	LN20404730	LNMS4_015											
LN20404720	Integrate Rack Hardware	0	03/24/08A	12/15/08A	LN20404750, LN20404760	LN20404730											
LN20404730	Terminate Rack Hardware	0	03/24/08A	12/15/08A	LN20404720	LN20404740											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.03.02.04.04 Controls & Power Supply																	
LN20404805	AWARD: Undulator Cable Plant Contract	0	03/31/08A	03/31/08A	PMSTART	LN20404810											
LN20404695	Prepare procurement documentation	0	03/31/08A	05/29/08A	LN20404690	LN20404700, LN20404710	■										
LN20404810	Procure: Undulator Cable Plant	0	03/31/08A	08/29/08A	LN20404800, LN20404805	LN20404820	■										
LN20404820	RCV: Undulator Cable Plant	0	03/31/08A	08/29/08A	LN20404810	LN20404830	■										
LN20404620	RCV: Cable Plant from Vendor (Outstanding PRs)	0	03/31/08A	01/16/09A	LN20404615	LN20404630	■										
LN20404630	AVAIL: Racks for LTU Installation	0		07/31/08A	LN20404620, LN20404830	LNMS4_015				◆							
LN20404830	COMP: Undulator Cable Plant Ready for Installati	0		08/29/08A	LN20404820	LN20404630				◆							
LN20404530	AVAIL: Cable Plant Ready for Installation	0		10/30/08A	LN20404520	LNMS4_015				◆							
1.03.02.05 Controls - LLRF																	
1.03.02.05.04 Beam Phase Measurement 2X																	
LN2050400	Start: Beam Phase Measurement 2x	0	02/01/08A		PMSTART	LN20504040											
LN20504035	Software Development: Beam Phase Measurement 2x	0	02/01/08A	08/15/08A	PMSTART	LN20504040	■										
LN20504040	Integrate & Test: Beam Phase Measurement 2x	0	04/21/08A	08/15/08A	LN2050400, LN20504035, PMSTART	LN20504045	■										
LN20504045	AVAIL: Beam Phase Measurement 2x	0		08/15/08A	LN20504040	LNMS4_015				◆							
1.03.02.05.06 Sector 24 T-Cav																	
LN2050600	Start: Sector 24 T-Cav	0	02/01/08A		PMSTART	LN20506025											
LN20506025	Software Development: Sector 24 T-Cav Hdwr	0	02/01/08A	04/30/08A	LN2050600, PMSTART	LN20506030	■										
LN20506040	AVAIL: Sector 24 T-Cav	0		04/15/08A	LN20506030	LNMS4_015				◆							
LN20506030	Integrate & Test: Sector 24 T-Cav Hdwr	0	04/23/08A	04/30/08A	LN20506025	LN20506040	■										
1.03.02.05.07 Sector 29/30 Controls (PACs & PADs)																	
LN2050700	Start: Sector 29/30 Controls (PACs & PADs)	0	02/01/08A		PMSTART	LN20507025											
LN20507020	RCV: Sector 29/30 Control (Packs & Pads) H/W	0	02/01/08A	02/29/08A	PMSTART	LN20507030	■										
LN20507025	Software Development: Sector 29/30 Control	0	04/01/08A	04/15/08A	LN2050700, PMSTART	LN20507035	■										
LN20507030	Fabricate: Sector 29/30 Control	0	04/01/08A	04/15/08A	LN20507020	LN20507035	■										
LN20507035	Integrate & Test Sector 29/30 Control	0	04/01/08A	04/15/08A	LN20507025, LN20507030	LN20507040	■										
LN20507040	AVAIL: Sector 29/30 RF Control	0		04/15/08A	LN20507035	LNMS4_015				◆							
1.03.02.05.10 RF Stability/Feedback																	
LN20510001	START: RF Stability / Feedback	0	02/01/08A		PMSTART	LN20510005, LN20510020											
LN20510005	Design: RF Stability / Feedback	0	02/01/08A	02/13/09A	LN20510001	LN20510010	■										
LN20510020	Software Development: RF Stability / Feedback	0	02/01/08A	02/13/09A	LN20510001	LN20510015, LN20510025	■										

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.03.02.05.10 RF Stability/Feedback																		
LN20510015	COMP: RF Stability / Feedback Design	0		02/13/09A	LN20510010, LN20510020	LN20510025												
LN20510025	AVAIL: RF Stability / Feedback	0		02/13/09A	LN20510015, LN20510020, LN20511010	LNMS4_015												
LN20510010	FDR: RF Stability / Feedback	0		10/31/08A	LN20510005	LN20510015												
1.03.02.05.11 System Documentation																		
LN20511001	START: System Documentation	0	02/01/08A		PMSTART	LN20511005												
LN20511005	System Documentation	0	02/01/08A	12/12/08A	LN20511001	LN20511010												
LN20511010	COMP: System Documentation - LLRF	0		12/12/08A	LN20511005	LN20510025, MS4_CT0005												
1.03.02.06 Controls - E-Beam Diagnostic																		
1.03.02.06.01 Controls - Wire Scanners																		
LN601_0000	Start: Controls - Wire Scanners	0	02/01/08A		PMSTART	LN601_0302												
LN601_0345	Procure Wire Scanner Materials	0	02/01/08A	02/29/08A	PMSTART	LN601_0315, LN601_0325, LN601_0335												
LN601_0365	RCV: Misc. Hardware	0	02/01/08A	05/28/08A	PMSTART	LN601_0380												
LN601_0302	LTU Rack Layout and Wiring	0	02/01/08A	06/16/08A	LN601_0000, PMSTART	LN601_0385												
LN601_0380	LTU Hardware Fab	0	02/01/08A	06/30/08A	LN601_0315, LN601_0325, LN601_0335, LN601_0365	LN601_0385												
LN601_0305	LTU Control Software	0	02/01/08A	10/14/08A	PMSTART	LN601_0315, LN601_0385												
LN601_0325	RCV: 1 Charge Integ ADC	0	03/31/08A	03/31/08A	LN601_0345	LN601_0380												
LN601_0315	RCV: 5 PMTs	0	06/24/08A	06/24/08A	LN601_0305, LN601_0345	LN601_0380												
LN601_0385	LTU integration and Test	0	09/02/08A	10/27/08A	LN601_0302, LN601_0305, LN601_0380	LN601_0390												
LN601_0390	AVAIL: LTU Wire Scanners	0		10/27/08A	LN601_0385	LNMS4_015												
LN601_0335	RCV: PMT VME HV cards	0		10/17/08A	LN601_0345	LN601_0380												
1.03.02.06.02 Controls - BPMs																		
LN602_0000	Start: Controls - BPMs	0	02/01/08A		PMSTART	LN602_0430												
LN602_0700	RCV: AFE PCB	0	02/01/08A	02/01/08A	PMSTART	LN602_0740												
LN602_0710	RCV: AFE Parts	0	02/01/08A	02/01/08A	PMSTART	LN602_0740												
LN602_0725	RCV: PAD PCB	0	02/01/08A	02/01/08A	PMSTART	LN602_0775												
LN602_0815	Procure Long Haul Cables - Mario's Budget	0	02/01/08A	02/07/08A	PMSTART	LN602_0820												
LN602_0845	Procure: VME Crates and CPU	0	02/01/08A	02/07/08A	PMSTART	LN602_0850												
LN602_0740	Vendor Fab AFE and PAD PCBs	0	02/01/08A	02/15/08A	LN602_0700, LN602_0710	LN602_0750, LN602_0760												
LN602_0470	Software Development	0	02/01/08A	04/16/08A	PMSTART	LN602_0775												
LN602_0840	RCV: BPM Racks (Mario's Budget)	0	02/01/08A	05/30/08A	PMSTART	LN602_0855												

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.03.02.06.02 Controls - BPMs																	
LN602_0430	LCLS BPM Engineering Liason	22*	02/01/08A	04/30/09	LN602_0000, PMSTART	PM_LOE											
LN602_0435	LCLS BPM Coordinator	22*	02/01/08A	04/30/09	PMSTART	PM_LOE											
LN602_0750	Assemble BPM Chassis	0	02/04/08A	06/20/08A	LN602_0740	LN602_0775											
LN602_0760	Test Modules	0	02/04/08A	06/20/08A	LN602_0740	LN602_0765											
LN602_0820	RCV: Long Haul Cables - Mario's Budget	0	02/08/08A	04/15/08A	LN602_0815	LN602_0825											
LN602_0850	RCV: VME Crates and CPUs	0	03/03/08A	04/30/08A	LN602_0845	LN602_0860											
LN602_0440	Electronics Design Summary	0	03/03/08A	07/31/08A	PMSTART	PM_LOE											
LN602_0810	Cables/Trays/Racks - 4 Summary	0	03/03/08A	08/29/08A	PMSTART	PM_LOE											
LN602_0780	Network/IOC - 4 Summary	0	03/03/08A	09/30/08A	PMSTART	PM_LOE											
LN602_0765	Install Modules	0	03/04/08A	06/20/08A	LN602_0760	LN602_0770											
LN602_0855	Load Racks	0	03/14/08A	05/30/08A	LN602_0795, LN602_0840	LN602_0865											
LN602_0785	Procure: Network Hardware	0	03/20/08A	03/28/08A	PMSTART	LN602_0790											
LN602_0860	Install Trays/Cables DB - Ponce	0	04/07/08A	08/29/08A	LN602_0850	LN602_0830, LNMS4_015											
LN602_0790	RCV: Network Hardware	0	04/30/08A	05/23/08A	LN602_0785	LN602_0795, LN602_0800											
LN602_0825	Construct Cables	0	05/01/08A	09/30/08A	LN602_0820	LN602_0830, LN602_0870											
LN602_0865	Install Racks DB - Ponce	0	06/02/08A	07/31/08A	LN602_0855	LN602_0870											
LN602_0800	Install Cables	0	06/02/08A	10/15/08A	LN602_0790	LN602_0805, LN602_0830											
LN602_0770	Install Software	0	07/01/08A	10/10/08A	LN602_0765	LN602_0775											
LN602_0415	AVAIL: FY09 Funding	0	10/02/08A		MS_260	PM_LOE											
LN602_0775	AVAIL: LTU Controls BPMs	0		10/10/08A	LN602_0470, LN602_0725, LN602_0750, LN602_0770	LNMS4_015											
LN602_0830	COMP: LTU BPM LH Cables	0		10/15/08A	LN602_0800, LN602_0825, LN602_0860	LN602_0870, LNMS4_015											
LN602_0870	COMP: LTU BPM Racks/Trays/Cabls	0		10/15/08A	LN602_0825, LN602_0830, LN602_0865	LNMS4_015											
LN602_0805	AVAIL: LTU BPM Network IOC	0		10/29/08A	LN602_0800	LNMS4_015											
LN602_0795	Load Racks	0		05/30/08A	LN602_0790	LN602_0855											
1.03.02.06.03 Controls - Toroids																	
LN603_0000	Start: Controls - Torroids	0	02/01/08A		PMSTART	LN603_0335											
LN603_0310	LTU Control Software	0	02/01/08A	05/30/08A	PMSTART	LN603_0360											
LN603_0335	Procure: 5 I/O	0	02/01/08A	06/24/08A	LN603_0000, PMSTART	LN603_0340											
LN603_0355	LTU Hardware Fab	0	06/26/08A	08/26/08A	LN603_0340	LN603_0360											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.03.02.06.03 Controls - Toroids																	
LN603_0360	LTU Integration and Test	0	09/02/08A	11/14/08A	LN603_0310, LN603_0355	LN603_0365											
LN603_0365	AVAIL: LTU Toroids	0		11/14/08A	LN603_0360	LNMS4_015											
LN603_0340	RCV: 5 I/O	0		06/25/08A	LN603_0335	LN603_0355											
1.03.02.06.04 Controls - Stoppers																	
LN604_200	Start: Controls - Stoppers	0	02/01/08A		PMSTART	LN604_305											
LN604_300	REQD: Detaild Device Desc/Cnt LTU	0	02/01/08A		PMSTART	LN604_305, LN604_310, LN604_335, LN604_345											
LN604_310	LTU Control Software	0	03/03/08A	07/31/08A	LN604_300	LN604_350											
LN604_305	LTU Rack Layout and Wiring	0	03/03/08A	08/29/08A	LN604_200, LN604_300	LN604_335, LN604_350											
LN604_345	LTU Hardware Fab	0	05/30/08A	07/31/08A	LN604_300, LN604_340	LN604_350											
LN604_340	RCV: LTU Interrack Cables	0	08/01/08A	08/15/08A	LN604_335	LN604_345											
LN604_350	LTU Integration and Test	0	09/02/08A	10/31/08A	LN604_305, LN604_310, LN604_345	LN604_355											
LN604_355	AVAIL: LTU Control Stoppers	0		10/31/08A	LN604_350	LNMS4_015											
LN604_335	Procure LTU Interrack Cables	0		07/31/08A	LN604_300, LN604_305	LN604_340											
1.03.02.06.05 Controls - Profile Monitors																	
LN605_0000	Start: Controls - Profile Monitors	0	02/01/08A		PMSTART	LN605_0475											
LN605_0422	RCV: 2 PMC Interfaced Cables	0	02/01/08A	02/01/08A	PMSTART	LN605_0475											
LN605_0430	RCV: 4 Interrack Cables	0	02/01/08A	02/01/08A	PMSTART	LN605_0475											
LN605_0410	LTU Control Software	0	02/01/08A	06/16/08A	PMSTART	LN605_0480											
LN605_0475	LTU Hardware Fab	0	02/04/08A	05/15/08A	LN605_0000, LN605_0422, LN605_0430, LN605_0434	LN605_0480											
LN605_0434	RCV: VME Crate	0	03/03/08A	03/03/08A	PMSTART	LN605_0475											
LN605_0480	LTU Integration and Test	0	07/01/08A	12/05/08A	LN605_0410, LN605_0475	LN605_0485, LN609_0330											
LN605_0485	AVAIL: LTU Profile Monitors	0		12/05/08A	LN605_0480	LNMS4_015											
1.03.02.06.09 Controls - Single Beam Dump																	
LN609_0000	Start: Controls - Single Beam Dump	0	02/01/08A		PMSTART	LN609_0325											
LN609_0325	LTU Hardware Fab	0	02/01/08A	02/29/08A	LN609_0000, PMSTART	LN609_0330											
LN609_0310	LTU Control Software	0	02/01/08A	04/30/08A	PMSTART	LN609_0330											
LN609_0330	LTU Integration and Test	0	07/01/08A	11/14/08A	LN605_0480, LN609_0310, LN609_0325	LN609_0335											
LN609_0335	AVAIL: LTU Tune-up Dump	0		11/14/08A	LN609_0330	LNMS4_015											
1.03.02.06.12 Controls - Movable Collimator																	
LN612_0000	Start: Controls - Movable Collimator	0	02/01/08A		PMSTART	LN612_0340											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.03.02.06.12 Controls - Movable Collimator																	
LN612_0300	REQD: Detaild Device Desc/Cnt LTU	0	02/01/08A		MS_255	LN612_0310, LN612_0365, LN612_0375, LN612_0385											
LN612_0365	Procure: 2 Motorola 6100	0	02/01/08A	02/29/08A	LN612_0300	LN612_0370											
LN612_0375	Procure: 2 IOC Crate - 7 Slots	0	02/01/08A	02/29/08A	LN612_0300	LN612_0380											
LN612_0385	LTU Hardware Fab	0	02/01/08A	06/30/08A	LN612_0300, LN612_0340, LN612_0370, LN612_0380	LN612_0390											
LN612_0310	LTU Control Software	0	02/01/08A	10/14/08A	LN612_0300	LN612_0340, LN612_0390											
LN612_0370	RCV: 2 Motorola 6100	0	02/29/08A	02/29/08A	LN612_0365	LN612_0385											
LN612_0340	RCV: 16 Motor Contrlr/Drives/Pwr Supplies	0	02/29/08A	03/31/08A	LN612_0000, LN612_0310	LN612_0385											
LN612_0380	RCV: 2 IOC Crates - 7 Slots	0	03/31/08A	03/31/08A	LN612_0375	LN612_0385											
LN612_0390	LTU HW/SW Integration and Test	0	09/02/08A	10/27/08A	LN612_0310, LN612_0385	LN612_0395											
LN612_0395	AVAIL: LTU Movable Collimator	0		10/27/08A	LN612_0390	LNMS4_015											
1.03.02.08 Controls - Timing																	
LN208_0000	Start: Controls Timing	0	02/01/08A		PMSTART	LN208_0120, LN208_0230											
LN208_0212	AWARD: LTU Timing Hardware	0	02/01/08A	02/01/08A	PMSTART	LN208_0215											
LN208_0115	Procure: BSY Timing Hardware	0	02/01/08A	03/31/08A	PMSTART	LN208_0120, LN208_0125											
LN208_0215	Procure: LTU Timing Hardware	0	02/01/08A	03/31/08A	LN208_0212	LN208_0220, LN208_0225											
LN208_0315	Procure: E-DumpTiming Hardware	0	02/01/08A	03/31/08A	PMSTART	LN208_0320											
LN208_0230	Electrical Interconnect & Coordination Dwgs- LTU	0	02/01/08A	10/15/08A	LN208_0000	LN208_0235											
LN208_0330	Electrical Interconnect & Coordination Drawings	0	03/31/08A	05/30/08A	LN208_0320	LN208_0335											
LN208_0120	RCV: BSY Timing Hardware	0	04/01/08A	06/30/08A	LN208_0000, LN208_0115	LN208_0125, LN208_0130											
LN208_0320	RCV: E-Dump Timing Hardware	0	04/01/08A	02/09/09A	LN208_0315	LN208_0325, LN208_0330											
LN208_0130	Electrical Interconnect & Coordination Dwgs -BSY	0	04/14/08A	10/15/08A	LN208_0120, LN208_0125	LN208_0135											
LN208_0220	RCV: LTU Timing Hardware	0	04/30/08A	06/30/08A	LN208_0215	LN208_0225											
LN208_0125	Database Development and S/W Testing	0	07/01/08A	07/31/08A	LN208_0115, LN208_0120	LN208_0130											
LN208_0225	Database Development and S/W Testing-LTU	0	08/01/08A	10/31/08A	LN208_0215, LN208_0220	LN208_0335											
LN208_0325	Database Development and S/W Testing-E-dump	0	08/01/08A	10/31/08A	LN208_0320	LN208_0335											
LN208_0135	AVAIL: BSY Timing System Ready for Installation	0		08/29/08A	LN208_0130	S8X3_BL100											
LN208_0235	AVAIL: LTU Timing System Ready for Installation	0		08/29/08A	LN208_0230	S8X3_BL100											
LN208_0335	AVAIL: E-Dump Timing System Ready for Install	0		09/30/08A	LN208_0225, LN208_0325, LN208_0330	S8X5_BD040											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.03.02.09 Controls - Vacuum																		
1.03.02.09.01 Controls - Vacuum Instrumentation & Interlocks																		
LN209_0000	Start: Controls - Vac Instrumentation & Interlock	0	02/01/08A		PMSTART	LN209_0305												
LN209_0305	LTU Control Vacuum H/W in House FAB	0	02/04/08A	02/04/08A	LN209_0000, PMSTART	LN209_0310, LN209_0350												
LN209_0310	Procure LTU Vacuum Controls H/W	0	02/04/08A	05/30/08A	LN209_0305	LN209_0315, LN209_0325, LN209_0327, LN209_0345,												
LN209_0325	RCV: 14 LTU Ion Pump Power Supplies	0	02/29/08A	03/03/08A	LN209_0310	LN209_0350												
LN209_0327	RCV: 6 LTU Vacuum Valve Controllers	0	02/29/08A	03/03/08A	LN209_0310	LN209_0350												
LN209_0345	RCV: 3 LTU Vacuum Control I/O (PLC)	0	02/29/08A	03/03/08A	LN209_0310	LN209_0350												
LN209_0315	RCV: 9 LTU Ion Gauge Controllers	0	03/31/08A	03/31/08A	LN209_0310	LN209_0350												
LN209_0300	LTU Control Vacuum Software	0	03/31/08A	06/30/08A	PMSTART	LN209_0350, LN209_0355												
LN209_0347	RCV: IOC, Crate, Terminal Server	0	05/29/08A	05/29/08A	LN209_0310	LN209_0350												
LN209_0348	RCV: LTU Vac Instrumentation & Interlocks Misc	0	06/02/08A	08/29/08A	LN209_0310	LN209_0350												
LN209_0350	LTU Vacuum Integration and Test	0	09/02/08A	12/12/08A	LN209_0300, LN209_0305, LN209_0315, LN209_0325,	LN209_0355												
LN209_0355	AVAIL: LTU Vac Controls Rdy for Comm.	0		12/12/08A	LN209_0300, LN209_0350	LNMS4_015												
1.03.02.10 Software & Controls Infrastructure																		
1.03.02.10.04 Data Communications																		
LN02105000	Start: Data Communications Networking	0	02/01/08A	02/01/08A	PMSTART	LN02105005												
LN02105005	RQRD: Finalized Rack Profiles	0		02/01/08A	LN02105000	LN02105010, LN02105020, LN02105040												
LN02105020	Procure: Fabricated Fiber	0	02/04/08A	02/29/08A	LN02105005	LN02105025												
LN02105010	Procure: Switches/Digis/Wireless	0	02/04/08A	05/30/08A	LN02105005	LN02105015												
LN02105040	Procure: Patch Panels/Cables	0	02/04/08A	05/30/08A	LN02105005	LN02105045												
LN02105045	RCV: Patch Panels/Cables	0	02/04/08A	09/30/08A	LN02105040	LN02105050, LN02105055												
LN02105025	RCV: Fabricated Fiber	0	03/03/08A	05/29/08A	LN02105020	LN02105030												
LN02105060	ED&I Support	0	03/19/08A	01/30/09A	LN02105050	LNMS4_015												
LN02105015	RCV: Switches/Digis/Wireless	43	03/31/08A	05/29/09	LN02105010	LN02105055*, LNMS4_015												
LN02105030	Fiber Pull	0	06/02/08A	08/29/08A	LN02105025	LN02105035												
LN02105035	Fiber Termination	0	06/09/08A	10/31/08A	LN02105030	LNMS4_015												
LN02105050	Cat 6 Installation (Through E-Dump)	0	06/26/08A	10/31/08A	LN02105045	LN02105055, LN02105060												
LN02105055	Network Servers	23	04/29/09	05/29/09	LN02105015*, LN02105045, LN02105050	LNMS4_015												
1.03.02.10.05 Computers																		
LN02100499	START: VME Crates	0	02/01/08A		PMSTART	LN02100508												

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.03.02.10.05 Computers																		
LN02100508	AWARD: VME Crates	0	02/01/08A	02/01/08A	LN02100499	LN02100502												
LN02100502	Procure: VME Crates FY08	0	02/01/08A	03/31/08A	LN02100508	LN02100506, LN02100540	■											
LN02100506	RCV: VME Crates FY08	0	02/25/08A	04/30/08A	LN02100502	LNMS4_015	■											
LN02100530	Procure: VME Crates FY09	0	04/01/08A	09/30/08A	LN02100540	LN02100532	■											
LN02100540	AWARD: VME Crates FY09	0	04/01/08A	09/30/08A	LN02100502	LN02100530	■											
LN02100532	RCV: VME Crates FY09	0	04/21/08A	11/26/08A	LN02100530	LNMS4_015	■											
1.04 UNDULATOR SYSTEM																		
MS3_CT085	Undulator Controls Ready for Commissioning	0		12/19/08A	UN2006B060, UN21002040, UN21202075, UN21203040,	MS3_UN025				◆								
1.04.02 Controls																		
MSUN_CT001	START: Undulator Controls	0	02/01/08A		MS_260, PMSTART	UN21301005, UN21301010, UN21401005, UN21401010												
1.04.02.08 Undulator Magnet Power Supplies																		
1.04.02.08.01 Software																		
UN801BB001	START: Software	0	03/03/08A		UNREBA	UN801BB00, UN801BB005	◆											
UN801BB00	Software	0	03/03/08A	10/30/08A	UN801BB001	UN801BB010	■											
UN801BB005	DBs and Displays	0	03/04/08A	10/30/08A	UN801BB001	UN801BB010	■											
UN801BB010	AVAIL: Power Supplies SW	0		10/30/08A	UN801BB00, UN801BB005	UN_LOE				◆								
1.04.02.08.02 Beamline Power Supplies (Trim Type)																		
1.04.02.08.02.03 PLC Power Supply Protection System																		
UN8020300	Start: PLC Power Supply Protection System	0	02/01/08A		UNREBA	UN8203C005												
UN8203D00	START: PLC Software	0	02/01/08A		UNREBA	UN8203D005, UN8203D020												
UN8203C005	Develop Ladder Logic	0	03/03/08A	03/31/08A	UN8020300, UNREBA	UN8203C010, UN8203C025	■											
UN8203C015	Debug Ladder Logic and displays	0	03/03/08A	03/31/08A	UN8203C010	UN8203C025	■											
UN8203D005	Develop Ladder Logic	0	03/03/08A	03/31/08A	UN8203D001	UN8203D010, UN8203D025	■											
UN8203D015	Debug Ladder Logic and displays	0	03/03/08A	03/31/08A	UN8203D010	UN8203D025	■											
UN8203C010	Develop Touch Panel Displays	0	03/10/08A	03/31/08A	UN8203C005	UN8203C015, UN8203C025	■											
UN8203D010	Develop Touch Panel Displays	0	03/10/08A	03/31/08A	UN8203D005	UN8203D015, UN8203D025	■											
UN8203C110	Fabricate PLC Chassis Interface Assembly	0	03/11/08A	03/14/08A	UN8203C105	UN8203C115	■											
UN8203C020	Documentation	0	03/24/08A	03/31/08A	UNREBA	UN8203C030	■											
UN8203C105	Design PLC Chassis Rack Interface	0	03/24/08A	03/31/08A	UNREBA	UN8203C110	■											
UN8203D020	Documentation	0	03/24/08A	03/31/08A	UN8203D001	UN8203D030	■											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.04.02.08.02.03 PLC Power Supply Protection System																	
UN8203C120	Bench-test and assembly	0	03/31/08A	03/31/08A	UN8203C115	UN8203C125											
UN8203C025	Pre-install Qual Test and Integration	0	04/01/08A	06/30/08A	UN8203C005, UN8203C010, UN8203C015	UN8203C030	■										
UN8203C125	Pre-intall Qual Test	0	04/01/08A	06/30/08A	UN8203C120	UN8203C130	■										
UN8203D025	Pre-install Qual Test and Integration	0	04/01/08A	06/30/08A	UN8203D005, UN8203D010, UN8203D015	UN8203D030, UN8203D035	■										
UN8203C030	AVAIL: PLC Software	0		06/30/08A	UN8203C020, UN8203C025	UN8203C130	◆										
UN8203C130	AVAIL: PLC Hardware	0		06/30/08A	UN8203C030, UN8203C125	UN8203D035	◆										
UN8203D030	AVAIL: PLC Software	0		06/30/08A	UN8203D020, UN8203D025	UN8203D035	◆										
UN8203C115	Integrate cables	0	07/01/08A	07/31/08A	UN8203C110	UN8203C120	■										
UN8203D035	AVAIL: PLC_2	0		07/31/08A	UN8203C130, UN8203D025, UN8203D030	MS3_CT085	◆										
1.04.02.08.03 Rack Assembly																	
UN2803C030	START: Rack_2 Assembly	0	03/03/08A		UNREBA	UN2803C035	◆										
UN2803C035	REQD: Double-bay Rack	0	03/03/08A		UN2803C030	UN2803C045	◆										
UN2803D001	START: Rack_4 Assembly - (B3.1-02) Accessories	0	03/03/08A		UNREBA	UN2803D005, UN2803D035	◆										
UN2803D035	REQD: Double-bay Rack	0	03/03/08A		UN2803D001	UN2803D040	◆										
UN2803D045	REQD: Intermediate Power Supply Controllers	0	03/03/08A		UN2803D040	UN2803D050	◆										
UN2803	Rack Assembly	0	03/03/08A	07/31/08A	UNREBA	UN2803D065	■										
UN2803D040	REQD: Intermediate Power Supplies	0		03/03/08A	UN2803D035	UN2803D045	◆										
UN2803C045	Integrate Cables	0	03/10/08A	03/14/08A	UN2803C035	UN2803C050											
UN2803D005	Procure: Hardware	0	03/10/08A	03/21/08A	UN2803D001	UN2803D010, UN2803D015, UN2803D020											
UN2803D030	START: Rack Assembly	0	03/31/08A		UN2803D025	UN2803D050	◆										
UN2803D010	RCV: Circuit Breaker, 100A 480V, 3-pole,25kAIC -	0	03/31/08A	03/31/08A	UN2803D005	UN2803D025											
UN2803D015	RCV: Panel	0	03/31/08A	03/31/08A	UN2803D005	UN2803D025											
UN2803D020	RCV: Cables	0	03/31/08A	03/31/08A	UN2803D005	UN2803D025											
UN2803D050	Assembly	0	03/31/08A	03/31/08A	UN2803D030, UN2803D045	UN2803D060											
UN2803D025	AVAIL: Rack_4 Accessories	0		03/31/08A	UN2803D010, UN2803D015, UN2803D020	UN2803D030	◆										
UN2803D060	Pre-install Qual Test	0	05/28/08A	06/30/08A	UN2803D050	UN2803D055	■										
UN2803C055	AVAIL: Rack_2 Assembly	0		06/30/08A	UN2803C050	MS3_CT085	◆										
UN2803D055	Integrate Cables	0	07/01/08A	07/31/08A	UN2803D060	UN2803D065	■										
UN2803D065	AVAIL: Rack_4 Assembly	0		07/31/08A	UN2803, UN2803D055	MS3_CT085	◆										

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.04.02.08.03 Rack Assembly																		
UN2803C050	Pre-install Qual Test	0		06/30/08A	UN2803C045	UN2803C055	■											
1.04.02.08.04 System Checkout																		
UN2804B005	Intra-rack cable connections	0	07/01/08A	07/31/08A	UN2804B001	UN2804B010	■											
UN2804	System Checkout	0	07/01/08A	12/05/08A	UNREBA	UN2804B001, UN2804B015	■											
UN2804B001	START: System checkout	0	08/01/08A		UN2804	UN2804B005	◆											
UN2804B010	Integration Testing	0	10/24/08A	12/04/08A	UN2804B005	UN2804B015	■											
UN2804B015	COMP: MPS Checkout	0		12/05/08A	UN2804, UN2804B010	MS3_CT085												
1.04.02.10 Undulator Control Module																		
1.04.02.10.02 UCM EPICS Development																		
UN21002040	AVAIL: UCM EPICS Software	0		05/01/08A	UN21002035	MS3_CT085	◆											
UN21002035	Integrate UCM Software with SLAC	0	06/02/08A	06/30/08A	UNREBA	UN21002040	■											
1.04.02.10.03 Procure UCMI Prototype																		
UN21003001	Vendor search for UCMI assy vendor	0	03/03/08A	03/31/08A	UNREBA	UN21003005	■											
UN21003005	Prepare requisition for UCMI Prototype	0	03/03/08A	03/31/08A	UN21003001	UN21004005	■											
UN21003017	Prototype Vendor Fabrication UCMI	0	03/03/08A	03/31/08A	UNREBA	UN21003020	■											
UN21003020	RCV First article UCMI	0	03/31/08A	03/31/08A	UN21003017	UN21004001	■											
1.04.02.10.04 UCMI Proto H/W Assembly																		
UN21004001	Assemble first prototype	0	02/01/08A	02/29/08A	UN21003020	UN21004005	■											
UN21004005	AVAIL: UCMI Prototype Hardware	0		03/31/08A	UN21003005, UN21004001	UN21005001	◆											
1.04.02.10.05 UCMI Prototype Testing																		
UN21005015	Integrated testing	0	03/31/08A	04/30/08A	UN21005010	UN21005020	■											
UN21005010	Software integration	0	03/31/08A	05/07/08A	UN21005005	UN21005015	■											
UN21005001	Assemble prototype rack	0	03/31/08A	05/28/08A	UN21004005	UN21005005	■											
UN21005005	Installation in LTT	0	03/31/08A	05/28/08A	UN21005001	UN21005010	■											
UN21005020	COMP: UCM Design	0		04/30/08A	UN21005015	UN21009020, UN210_0010	◆											
1.04.02.10.07 Procure UCMI First Article																		
UN21007001	Prepare bid package for UCM Interface	0	02/01/08A	03/31/08A	UNREBA	UN21007005	■											
UN21007010	Vendor prep proposals UCMI	0	02/12/08A	02/29/08A	UN21007005	UN21007015	■											
UN21007015	RCV Vendor proposals UCMI	0		02/29/08A	UN21007010	UN21007020	◆											
UN21007005	Release RFP for UCMI	0		03/31/08A	UN21007001	UN21007010	◆											
UN21007020	Evaluate vendor proposals UCMI	0	04/01/08A	04/02/08A	UN21007015	UN21007025	■											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.04.02.10.07 Procure UCMI First Article																		
UN21007025	AWARD Contract for 1st prot. UCMI	0	04/03/08A	04/03/08A	UN21007020	UN21007030												
UN21007030	Protype vendor fabrication UCMI	0	04/04/08A	04/30/08A	UN21007025	UN21007035	■											
UN21007035	RCV First article UCMI	0	04/30/08A	04/30/08A	UN21007030	UN21008001, UN21008005												
1.04.02.10.08 UCM First Article Testing and QA																		
UN21008005	Write QA Procedure for UCMI	0	03/28/08A	03/31/08A	UN21007035	UN21008010												
UN21008001	Validation of UCMI First Article	0	04/17/08A	04/30/08A	UN21007035	UN21008010												
UN21008010	COMP: First Article Testing & QA	0		04/30/08A	UN21008001, UN21008005	UN21009001	◆											
1.04.02.10.09 Procure Production UCMI																		
UN21009001	Prepare req for production UCMI	0	03/31/08A	03/31/08A	UN21008010	UN21009005												
UN21009005	AWARD req for production UCMI	0	03/31/08A	03/31/08A	UN21009001	UN21009010												
UN21009010	Await delivery production UCMI	0	04/28/08A	05/30/08A	UN21009005, UNBCR_O804	UN21009015	■											
UN21009020	Production UCMI unit tests	0	05/01/08A	05/21/08A	UN21005020, UN21009015, UNBCR_O804	UN21009025	■											
UN21009015	RCV production UCMI	0	05/27/08A	06/20/08A	UN21009010	UN21009020, UN210_0010	■											
UN21009025	AVAIL: Production UCMI Units	0		06/20/08A	UN21009020, UN210_0010	UN21201100	◆											
1.04.02.10.10 Procure Production Blade IOC																		
UN21010015	RCV production IOC	0	02/01/08A	02/01/08A	UNREBA	UN21010020, UN210_0020												
UN21010020	Production IOC units tested	0	03/24/08A	05/28/08A	UN21010015	UN21010025	■											
UN21010025	AVAIL: Production IOC Units	0		05/23/08A	UN21010020, UN210_0020	UN21201100	◆											
1.04.02.10.14 UCM Interlock and Power Supply																		
UN21014011	RCV: Prototype Components	0	03/31/08A	03/31/08A	UNREBA	UN21014016, UN21014021, UN210_0030, UN210_0040												
UN21014016	UCM-IC Testing	0	05/01/08A	05/30/08A	UN21014011, UNBCR_O804	UN21014026	■											
UN21014021	UCM-IC Prototype Fabrication	0	05/01/08A	05/30/08A	UN21014011, UNBCR_O804	UN21014026	■											
UN21014026	Prepare Bid Package for UCM-IC	0	05/01/08A	05/30/08A	UN21014016, UN21014021, UNBCR_O804	UN21014027	■											
UN21014041	RCV: Production UCM-IC	0	05/01/08A	05/30/08A	UN21014027, UNBCR_O804	UN21014046	■											
UN21014046	Prepare UCM-IC for Shipment to SLAC	0	05/01/08A	05/30/08A	UN21014041, UNBCR_O804	UN21014051	■											
UN21014051	Ship UCM-IC Units to SLAC	0	05/01/08A	05/30/08A	UN21014046, UNBCR_O804	UN2003B055	■											
UN21014027	Vendor Fab UCM-IC	0	05/30/08A	06/30/08A	UN21014026, UN210_0050	UN21014041, UN210_0060	■											
1.04.02.12 Rack and Cable																		
1.04.02.12.01 Undulator Racks																		
UN21201015	Motor power supply design	0	02/25/08A	03/31/08A	UNREBA	UN21201020	■											
UN21201020	AC Interrupt chassis design	0	02/25/08A	03/31/08A	UN21201015	UN21201025	■											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.04.02.12.01 Undulator Racks																		
UN21201001	Undulator rack design	0	02/26/08A	04/30/08A	UNREBA	UN21201030	■											
UN21201025	Cable tray layout/routing	0	02/27/08A	05/09/08A	UN21201020	UN21201030	■											
UN21201030	Tray loading and design	0	05/12/08A	05/23/08A	UN21201001, UN21201025	UN21201060												
UN21201055	Prepare req for production SBR	0	05/12/08A	06/05/08A	UNREBA	UN21201060	■											
UN21201110	COMP: UCMI Ready for Integration	0		05/20/08A	UN21201105	S8X4_UN140, S8X4_UN145	◆											
UN21201100	Assemble production components	0	05/28/08A	06/30/08A	UN21009025, UN21010025, UN21201070	UN21201105	■											
UN21201060	AWARD req for production SBR	0	06/06/08A	06/06/08A	UN21201030, UN21201055	UN21201065												
UN21201065	Await delivery production SBR	0	06/09/08A	06/27/08A	UN21201060	UN21201070	■											
UN21201070	RCV Production Service Building Racks	0	06/30/08A	06/30/08A	UN21201065	UN21201100												
UN21201105	Ship loaded racks to SLAC	0	06/30/08A	06/30/08A	UN21201100	UN21201110, UN21202074, UN21203039												
1.04.02.12.02 Intra-Undulator Cabling																		
UN21202050	Await delivery production Cables	0	04/01/08A	04/30/08A	UNREBA	UN21202060	■											
UN21202060	RCV production Cables	0	04/30/08A	04/30/08A	UN21202050	UN21202070												
UN21202072	Package Cables for Delivery to SLAC	0	05/01/08A	06/09/08A	UN21202070	UN21202074	■											
UN21202070	Production cables accepted	0	05/01/08A	06/30/08A	UN21202060	UN21202072, UN21202075	■											
UN21202074	SHIP: Cables To SLAC (intra-undulator cabling)	0		06/17/08A	UN21201105, UN21202072	UN21202075	◆											
UN21202075	COMP: UndControls Cables Ready for Install	0		06/17/08A	UN21202070, UN21202074	MS3_CT085	◆											
1.04.02.12.03 Electronics Interface Assembly																		
UN21203015	Prepare req for production EIA	0	02/01/08A	02/01/08A	UNREBA	UN21203020												
UN21203020	AWARD req for production EIA	0	03/31/08A	03/31/08A	UN21203015	UN21203025												
UN21203025	Await delivery production EIA	0	05/01/08A	06/13/08A	UN21203020	UN21203030	■											
UN21203030	RCV production EIA	0	06/13/08A	06/13/08A	UN21203025	UN21203035												
UN21203035	Production EIA units accepted	0	06/16/08A	06/16/08A	UN21203030	UN21203037, UN21203040												
UN21203037	Package EIA Units for Deliver to SLAC	0	06/16/08A	06/30/08A	UN21203035	UN21203039												
UN21203039	SHIP: EIA to SLAC (electronics interface assy)	0		06/30/08A	UN21201105, UN21203037	UN21203040	◆											
UN21203040	COMP: Und Controls EIA Ready for Commissioning	0		06/30/08A	UN21203035, UN21203039	MS3_CT085	◆											
1.04.02.13 BPM																		
1.04.02.13.01 APS Testing																		
UN21301001	Algorithm Development	0	02/01/08A	02/06/08A	UNREBA	MS3_CT085, UN21301005												
UN21301005	BPM Test support	0	03/24/08A	03/27/08A	MSUN_CT001, UN21301001	MS3_CT085, UN21301010												

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.04.02.13.01 APS Testing																		
UN21301010	EPICS support	0	03/28/08A	03/31/08A	MSUN_CT001, UN21301005	MS3_CT085												
1.04.02.14 Long Term Test Prep																		
UN21401001	Hardware Layout Support	0	02/01/08A	02/11/08A	UNREBA	MS3_CT085, UN21401005												
UN21401005	Software Support - Vendor CAM test	0	02/12/08A	02/20/08A	MSUN_CT001, UN21401001	MS3_CT085, UN21401010												
UN21401010	Hardware Support - Vendor CAM test	0	02/21/08A	02/29/08A	MSUN_CT001, UN21401005	MS3_CT085												
1.04.02.17 Undulator Conrois - Management																		
UN21701005	Technical Management - TEC	0*	02/01/08A	02/02/09A	UNREBA	UN_LOE	■	■	■									
1.04.02.20 Undulator MPS																		
1.04.02.20.02 Undulator MPS - IMUX																		
UN2002B001	START: MPS Link Node	0	02/01/08A		UNREBA	UN2002B005, UN2002B030	▶											
UN2002B060	RCV: 2 Link Nodes	0	02/01/08A	02/01/08A	UN2002B035	UN2002B045												
UN2002B005	Software design	0	02/01/08A	05/29/08A	UN2002B001	UN2002B010, UN2002B030	■											
UN2002B010	Prototype testing	0	02/01/08A	08/29/08A	UN2002B005	UN2002B015	■											
UN2002	MPS Link Node	0	02/01/08A	10/09/08A	UNREBA	UN2002B050	■											
UN2002B035	Procure: MPS Link Node Production Hardware	0	03/24/08A	07/15/08A	UN2002B025	UN2002B040, UN2002B060	■											
UN2002B040	RCV: MPS Link Node Hardware	0	03/31/08A	10/10/08A	UN2002B035	UN2002B045	■											
UN2002B045	Assemble & Pre-install MPS Link Node Prod Units	0	03/31/08A	10/10/08A	UN2002B040, UN2002B060	UN2002B050	■											
UN2002B030	Integrate MPS Link Node software with SLAC	0	07/01/08A	12/05/08A	UN2002B001, UN2002B005	UN2002B050	■											
UN2002B015	Prepare for FDR	8	09/30/08A	04/10/09	UN2002B010	UN2002B020*					■							
UN2002B050	Integrate & Test MPS Link Node Hardware	0	10/10/08A	10/31/08A	UN2002, UN2002B030, UN2002B045	UN2002B055					■							
UN2002B055	COMP: MPS Link Node Ready for Commissioning	0		12/19/08A	UN2002B050	UN2006B060					◆							
UN2002B020	Conduct FDR	14	04/13/09	04/30/09	UN2002B015*	UN2002B025*, UN2004B020*						■						
UN2002B025	FDR COMPLETE	0		04/30/09	UN2002B020*	UN2002B035							■					
1.04.02.20.03 Undulator MPS - TIU																		
UN2003B001	START: MPS-TIU	0	02/01/08A		UNREBA	UN2003B005	▶											
UN2003	MPS TIU	0	02/01/08A	08/29/08A	UNREBA	UN2003B055	■											
UN2003B005	Software design	0	03/17/08A	05/30/08A	UN2003B001	UN2003B010	■											
UN2003B010	Prototype testing	0	03/24/08A	08/29/08A	UN2003B005	UN2003B015	■											
UN2003B035	Procure: MPS TIU Production Hardware	0	05/01/08A	05/28/08A	UN2003B025	UN2003B040	■											
UN2003B030	Integrate MPS TIU software with SLAC	0	05/01/08A	05/29/08A	UN2003B020	UN2003B050	■											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.04.02.20.03 Undulator MPS - TIU																	
UN2003B040	RCV: MPS TIU Hardware	0	05/29/08A	05/29/08A	UN2003B035	UN2003B045											
UN2003B045	Assemble & Pre-install MPS TIU Production Units	0	05/29/08A	05/29/08A	UN2003B040	UN2003B050											
UN2003B050	Integrate & Test MPS TIU Hardware	0	06/02/08A	06/13/08A	UN2003B030, UN2003B045	UN2003B055											
UN2003B020	Conduct FDR	0	08/25/08A	08/26/08A	UN2003B015	UN2003B025, UN2003B030											
UN2003B015	Prepare for FDR	0	08/25/08A	08/29/08A	UN2003B010	UN2003B020											
UN2003B025	FDR COMPLETE	0		08/26/08A	UN2003B020	UN2003B035											
UN2003B055	COMP: MPS TIU Ready for Commissioning	0		08/29/08A	UN2003, UN2003B050, UN21014051, UN210_0080	UN2006B060											
1.04.02.20.04 Undulator MPS - PLIC																	
UN2004B001	START: MPS PLIC	0	02/01/08A		UNREBA	UN2004B005											
UN2004	MPS BLM	22	02/01/08A	04/30/09	UNREBA	UN2004B050											
UN2004B010	BLM Prototype testing	0	03/31/08A	08/29/08A	UN2004B005	UN2004B015, UN2004B030											
UN2004B005	BLM Software design	0	03/31/08A	01/16/09A	UN2004B001	UN2004B010, UN2004B045											
UN2004B030	Procure: MPS BLM Production Hardware	0	06/02/08A	09/04/08A	UN2004B010	UN2004B035											
UN2004B035	RCV: MPS BLM Hardware	0	06/16/08A	11/17/08A	UN2004B030	UN2004B040											
UN2004B040	Assemble & Pre-install MPS BLM Production Units	0	07/31/08A	01/30/09A	UN2004B035	UN2004B045											
UN2004B015	Prepare for FDR	8	10/01/08A	04/10/09	UN2004B010	UN2004B020, UN2005B015											
UN2004B045	Integrate & Test MPS BLM Hardware	0	11/26/08A	03/13/09A	UN2004B005, UN2004B040	UN2004B050											
UN2004B050	COMP: MPS BLM Ready for Commissioning	0		03/31/09	UN2004, UN2004B045	UN2006B060											
UN2004B020	Conduct FDR	14	04/13/09	04/30/09	UN2002B020*, UN2004B015	UN2004B025*											
UN2004B025	FDR COMPLETE	0		04/30/09	UN2004B020*	UN2005B025											
1.04.02.20.05 Undulator MPS - Toroids																	
UN2005B001	START: MPS TOROIDS	0	02/01/08A		UNREBA	UN2005B005											
UN2005	MPS TOROIDS	0	02/01/08A	11/14/08A	UNREBA	UN2005B055											
UN2005B005	Software design	0	04/01/08A	05/29/08A	UN2005B001	UN2005B010											
UN2005B010	Prototype testing	0	04/22/08A	05/29/08A	UN2005B005	UN2005B015											
UN2005B045	Assemble & Pre-install MPS TOROIDS Production Un	0	05/01/08A	08/12/08A	UN2005B040	UN2005B050											
UN2005B030	Integrate MPS TOROIDS software with SLAC	0	05/15/08A	05/29/08A	UN2005B020	UN2005B050											
UN2005B035	Procure: MPS TOROIDS Production Hardware	0	05/15/08A	05/29/08A	UN2005B025	UN2005B040											
UN2005B040	RCV: MPS TOROIDS Hardware	0	05/15/08A	09/12/08A	UN2005B035	UN2005B045, UN2005B050											
UN2005B015	Prepare for FDR	0	09/01/08A	09/15/08A	UN2004B015, UN2005B010	UN2005B020											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.04.02.20.05 Undulator MPS - Toroids																	
UN2005B050	Integrate & Test MPS TOROIDS Hardware	0	09/12/08A	11/14/08A	UN2005B030, UN2005B040, UN2005B045	UN2005B055											
UN2005B020	Conduct FDR	0	09/29/08A	09/29/08A	UN2005B015	UN2005B025, UN2005B030											
UN2005B025	FDR COMPLETE	0		09/30/08A	UN2004B025, UN2005B020	UN2005B035											
UN2005B055	COMP: MPS TOROIDS Ready for Commissioning	0		11/14/08A	UN2005, UN2005B050	UN2006B060											
1.04.02.20.06 Undulator MPS - Fault Devices																	
UN2006B001	Software design	0	08/01/08A	08/21/08A	UNREBA	UN2006B005											
UN2006	MPS Fault Devices	0	08/01/08A	12/16/08A	UNREBA	UN2006B060											
UN2006B005	Prototype testing	0	08/22/08A	09/05/08A	UN2006B001	UN2006B010											
UN2006B020	FDR COMPLETE	0		09/16/08A	UN2006B015	UN2006B025											
UN2006B040	RCV: MPS Fault Devices Hardware	0	11/03/08A	11/04/08A	UN2006B030	UN2006B045											
UN2006B045	Assemble & Pre-install MPS Fault Devices Product	0	11/03/08A	11/14/08A	UN2006B040	UN2006B050											
UN2006B050	Integrate & Test MPS Fault Devices Hardware	0	11/10/08A	11/21/08A	UN2006B045	UN2006B055											
UN2006B055	COMP: MPS Fault Devices Ready for Commissioning	0		11/24/08A	UN2006B050	UN2006B060											
UN2006B060	COMP: MPS Ready for Commissioning	0		11/24/08A	UN2002B055, UN2003B055, UN2004B050, UN2005B055, UN2006,	MS3_CT085											
UN2006B030	Procure: MPS Fault Devices Production Hardware	0	12/01/08A	12/16/08A	UN2006B025	UN2006B040											
UN2006B010	Prepare for FDR	0		09/12/08A	UN2006B005	UN2006B015											
UN2006B015	Conduct FDR	0		09/16/08A	UN2006B010	UN2006B020											
UN2006B025	Integrate MPS Fault Devices software with SLAC	0		11/26/08A	UN2006B020	UN2006B030											
1.04.02.21 Undulator Controls - Timing																	
UN210000	Start: Undulator Controls - Timing	0	02/01/08A		UNREBA	UN221B0105											
UN221B0001	START: UNDULATOR TIMING	0	02/01/08A		UNREBA	UN221B0100											
UN221B0100	RQRD: Detailed Requirements for E-DumpTiming	0	02/01/08A		UN221B0001	UN221B0105, UN221B0110, UN221B0125											
UN221B0105	Undulator Timing System Design	0	02/01/08A	06/30/08A	UN210000, UN221B0100	UN221B0130											
UN221B0110	Undulator Synchronizer H/W Design	0	02/01/08A	08/29/08A	UN221B0100	UN221B0115, UN221B0120, UN221B0125											
UN221B0130	Electrical Interconnect & Coordination Drawings	0	03/31/08A	10/15/08A	UN221B0105, UN221B0120, UN221B0125	UN221B0135											
UN221B0115	Procure: UndulatorTiming Hardware	0	04/01/08A	06/13/08A	UN221B0110	UN221B0120, UN221B0125											
UN221B0120	RCV: Undulator Timing Hardware	0	04/18/08A	11/26/08A	UN221B0110, UN221B0115	UN221B0125, UN221B0130, UN221B0135											
UN221B0125	Database Development and S/W Testing	0	08/01/08A	11/26/08A	UN221B0100, UN221B0110, UN221B0115, UN221B0120	UN221B0130											
UN221B0135	COMP: Und Timing System Ready for Commissioning	0		10/31/08A	UN221B0120, UN221B0130	MS3_CT085											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.04.02.22 Undulator Controls - BPM																	
UN2200000	Start: Undulator Controls - BPM	0	02/01/08A		UNREBA	UN222B0045											
UN222B0070	RQRD: Racks	0	02/01/08A	02/15/08A	UN222B0051, UN222B0052	UN222B0075											
UN222B0050	RCV: VME ADC	0	02/01/08A	02/29/08A	UN222B0045	UN222B0060											
UN222B0005	Algorithm Development	0	02/04/08A	04/30/08A	UNREBA	UN222B0030											
UN222B0055	RCV: 4 VME Crates & CPUs (BF)	0	03/03/08A	04/30/08A	UN222B0045	UN222B0060											
UN222B0045	Procure: BPMs Hardware	0	03/03/08A	05/29/08A	UN2200000, UNREBA	UN222B0050, UN222B0051, UN222B0052, UN222B0055, UN222B0075											
UN222B0065	Fabricate Undulator BPM Hardware	0	03/03/08A	11/14/08A		UN222B0075											
UN222B0075	Assemble & Pre-install Production Units	0	03/03/08A	11/14/08A	UN222B0065, UN222B0070	UN222B0060, UN222B0080											
UN222B0059	RCV: LO Sync (Timing) Distrib Cables (MO)	0	03/20/08A	06/30/08A	UN222B0045	UN222B0060											
UN222B0030	Software Development	0	05/01/08A	12/05/08A	UN222B0005	UN222B0035, UN222B0085											
UN222B0051	RCV: 4 Transition Panels	0	05/30/08A	05/30/08A	UN222B0045	UN222B0060, UN222B0070											
UN222B0056	RCV: Bracket for Tunnel - 33	0	05/30/08A	05/30/08A	UN222B0045	UN222B0060											
UN222B0052	RCV: 99 Jumpers PADs to Transition panel (MO)	0	07/01/08A	09/30/08A	UN222B0045	UN222B0070											
UN222B0080	Integration & Test	0	10/01/08A	11/26/08A	UN222B0035, UN222B0060, UN222B0075	UN222B0085											
UN222B0060	AVAIL: BPM Hardware	0		11/14/08A	UN222B0045, UN222B0050, UN222B0051, UN222B0055,	UN222B0080											
UN222B0035	AVAIL: Undulator BPM SW	0		12/05/08A	UN222B0030	UN222B0080											
UN222B0085	COMP: UN Controls BPMs Ready for Commissioning	0		12/05/08A	UN222B0030, UN222B0080	MS3_CT085											
1.04.02.23 Undulator Controls - Vacuum																	
UN223B0001	START: Undulator Vacuum	0	02/01/08A		UNREBA	UN223B0012, UN223B0025, UN223B0065											
UN223B0025	Procure: Vacuum Hardware	0	02/01/08A	05/30/08A	UN223B0001	UN223B0030, UN223B0035, UN223B0040, UN223B0045,											
UN223B0010	UN Control Vacuum Software	0	02/01/08A	06/30/08A	UN223B0005	UN223B0015											
UN223B0012	UN Control Vacuum H/W	0	02/01/08A	07/31/08A	UN223B0001, UN223B0005	UN223B0060											
UN223B0005	RQRD: SW Requirements	0		02/01/08A	UNREBA	UN223B0010, UN223B0012											
UN223B0040	RCV: 2 Valve Controllers	0	02/29/08A	03/03/08A	UN223B0025	UN223B0060											
UN223B0045	RCV: 2 PLC Interfaces	0	02/29/08A	03/03/08A	UN223B0025	UN223B0060											
UN223B0030	RCV: 17 Ion Pump Controllers	0	03/31/08A	03/31/08A	UN223B0025	UN223B0060											
UN223B0065	RQRD: Racks for Vacuum Assembly	0	05/15/08A		UN223B0001, UN223B0060	UN223B0070											
UN223B0070	Assemble & Pre-install Production Units	0	05/15/08A	08/29/08A	UN223B0065	UN223B0075											
UN223B0035	RCV: Vacuum Gauge Controllers	0	06/02/08A	06/02/08A	UN223B0025	UN223B0060											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.04.02.23 Undulator Controls - Vacuum																		
UN223B0057	RCV: UN Vacuum Controls Misc	0	06/02/08A	10/31/08A	UN223B0025	UN223B0060												
UN223B0015	COMP: Undulator Timing SW	0		08/29/08A	UN223B0010	UN223B0075												
UN223B0075	Integration & Test	0	09/16/08A	12/12/08A	UN223B0015, UN223B0060, UN223B0070	UN223B0080												
UN223B0060	AVAIL: Vacuum Hardware	0		10/31/08A	UN223B0012, UN223B0025, UN223B0030, UN223B0035,	UN223B0065, UN223B0075												
UN223B0080	COMP: UN Vacuum Controls Ready for Commissioning	0		12/12/08A	UN223B0075	MS3_CT085												
1.04.02.24 Undulator Controls - ADS System																		
UN224000	Start: Undulator Controls - ADS System	0	02/01/08A		UNREBA	UN224B0005												
UN224	ADS System	0	02/01/08A	12/12/08A	UNREBA	UN224B0010												
UN224B0005	Software Integration	0	04/02/08A	12/12/08A	UN224000, UN224B0001	UN224B0010												
UN224B0010	COMP: ADS System for Commissioning	0		12/12/08A	UN224, UN224B0005	MS3_CT085												
UN224B0001	RQRD: ADS Hardware from Franz P and Georg	0		10/15/08A	UNREBA	UN224B0005												
1.04.05 Diagnostics																		
1.04.05.05 RFBPM																		
1.04.05.05.03 X-Band BPM Production																		
UN505_3075	Prepare Bid of RF Cabling	0	02/29/08A	04/02/08A	PMSTART	UN505_3080												
UN505_3080	AWARD: RF Cabling (40)	0	02/29/08A	04/09/08A	UN505_3075	UN505_3085, UN505_3095												
UN505_3085	RF Cabling (40) Award Effort	0	02/29/08A	04/09/08A	UN505_3080	UN505_3095												
UN505_3095	RCV: RF Cabling (36)	0	04/30/08A	04/30/08A	UN505_3080, UN505_3085	UN505_3196												
UN505_3105	RFI: RF Cabling	0		04/30/08A	UN505_3196	S8X4_UN140, S8X4_UN145												
1.05 X-RAY TRANSPORT & DIAGNOSTICS SYSTEMS																		
1.05.02 Controls																		
1.05.02.01 Controls																		
XT12280050	Rack/Component Assembly - FEE Total Energy Monit	0	02/01/08A	02/08/08A	XT12280030	XT12280060												
XT12220030	Detailed Hardware Layout - FEE/EBD Vacuum	0	02/01/08A	02/29/08A	XT_RB	XT12220050, XT12220055												
XT12250060	Unit Testing - FEE Attenuator	0	02/01/08A	02/29/08A	XT_RB	XT12250070, XT12260070, XT1425205												
XT12260060	Unit Testing - FEE Gas Detector	0	02/01/08A	02/29/08A	XT12260010	XT12250070, XT12260070, XT1536200												
XT12270050	Rack/Component Assembly - FEE Direct Imager	0	02/01/08A	02/29/08A	XT12270030	XT12270060, XT122B0050, XT122C0050, XT122D0050												
XT12100110	Misc Controls Equipment Procurements (Liens)	0	02/01/08A	03/31/08A	XT_RB	XT1113010												
XT12250050	Controls Development - FEE Attenuator	0	02/01/08A	04/30/08A	XT_RB	XT12250070												
XT12270010	SLAC Development - FEE Direct Imager	0	02/01/08A	04/30/08A	XT_RB	XT12270060												
XT12270030	Detailed Hardware Layout - FEE Direct Imager	0	02/01/08A	04/30/08A	XT_RB	XT12270050, XT12270055												

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.05.02.01 Controls																	
XT12280030	Detailed Hardware Layout - FEE Total Energy Moni	0	02/01/08A	04/30/08A	XT_RB	XT12280050, XT12280055	■										
XT122A0030	Detailed Hardware Layout - FEE Soft X-Ray Imager	0	02/01/08A	04/30/08A	XT_RB	XT122A0080	■										
XT122D0020	Hardware Specification - FEE Pop-Ins	0	02/01/08A	04/30/08A	XT_RB	XT122D0010, XT122D0030, XT122D0040	■										
XT122A0060	Unit Testing - FEE Soft X-Ray Imager	0	02/01/08A	05/30/08A	XT_RB	XT12290070, XT122A0070, XT1546200	■										
XT12220050	Rack/Component Assembly - FEE/EBD Vacuum	0	02/01/08A	06/09/08A	XT12220030	XT12220060	■										
XT12270055	Cabling/Network - FEE Direct Imager	0	02/01/08A	06/13/08A	XT12270030	XT12270060, XT122B0050, XT122C0050, XT122D0050	■										
XT12280055	Cabling/Network - FEE Total Energy Monit	0	02/01/08A	06/13/08A	XT12280030	XT12280060	■										
XT12220055	Cabling/Network - FEE/EBD Vacuum	0	02/01/08A	06/30/08A	XT12220030	XT12220060	■										
XT12290030	Detailed Hardware Layout - FEE K-Measurement	0	02/01/08A	06/30/08A	XT_RB	XT12290080	■										
XT12100060	Design/Layout Management (100hrs/mo) - EA	0*	02/01/08A	07/31/08A	XT_RB	XT12100064	■										
XT12260010	SLAC Development - FEE Gas Detector	0	02/01/08A	08/29/08A	XT_RB	XT12260060	■										
XT12100050	Design/Layout Management (120hrs/mo) - SAL	0	02/01/08A	09/30/08A	XT_RB	XT12100055	■										
XT12100080	Design/Layout Engrng/Management - BA	0	02/01/08A	10/01/08A	XT_RB	XT1113010	■										
XT12100090	Design/Layout Support	0	02/01/08A	10/01/08A	XT_RB	XT1113010	■										
XT122B0030	Detailed Hardware Layout - FEE SOMS	0	02/01/08A	10/14/08A	XT_RB	XT122B0050	■										
XT122C0030	Detailed Hardware Layout - FEE HOMS	0	02/01/08A	10/14/08A	XT_RB	XT122C0050	■										
XT12100020	EPICS Development	0	02/01/08A	10/29/08A	XT_RB	XT122C0090	■										
XT12290010	SLAC Development - FEE K-Measurement	0	02/01/08A	10/29/08A	XT_RB	XT12290060	■										
XT122D0030	Detailed Hardware Layout - FEE Pop-Ins	0	02/01/08A	01/30/09A	XT122D0020	XT122D0050	■										
XT12270060	Unit Testing - FEE Direct Imager	0	03/03/08A	03/31/08A	XT12270010, XT12270050, XT12270055	XT12270070, XT1531200	■										
XT12280060	Unit Testing - FEE Total Energy Monitor	0	03/03/08A	03/31/08A	XT12280050, XT12280055	XT12280070, XT1542200	■										
XT12290060	Unit Testing - FEE K-Measurement	0	03/03/08A	04/30/08A	XT12290010	XT12100085, XT12290070, XT1546360	■										
XT12100100	Misc Controls Equipment Procurements	0	03/03/08A	03/31/09A	XT_RB	XT1113010	■										
XT12240070	Integrate/Test @ LLNL - FEE Fixed Mask/Slit	0	03/18/08A	12/19/08A	XT1423155	XT12240080, XT1422180, XT1423180	■										
XT122D0010	SLAC Development - FEE Pop-Ins	0	04/01/08A	04/30/08A	XT122D0020	XT122D0060	■										
XT12250070	Integrate/Test @ LLNL - FEE Attenuator	0	04/01/08A	12/19/08A	XT12250050, XT12250060, XT12260060, XT1425200	XT1425225	■										
XT122A0070	Integrate/Test @ LLNL - FEE Soft X-Ray Imager	0	05/01/08A	05/29/08A	XT122A0060	XT1546210	■										
XT12310010	Procure: NEH Racks (by SLAC)	0	05/01/08A	05/30/08A	PMSTART	XT12320050, XT12340050	■										
XT12230070	Integrate/Test @ LLNL - FEE Fast Valve	0	05/01/08A	06/30/08A	XT1421145	XT12230080, XT1421170	■										

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.05.02.01 Controls																	
XT12340020	Hardware Specification - NEH Pop-Ins	0	05/30/08A	06/30/08A	MS_260, XT_RB	XT12340030											
XT12430020	Hardware Specification - TUN Pop-Ins	0	05/30/08A	06/30/08A	MS_260, XT_RB	XT12430030											
XT12260070	Integrate/Test @ LLNL - FEE Gas Detector	0	05/30/08A	09/10/08A	XT12250060, XT12260060, XT1536195	XT12320030, XT1536210											
XT12520020	Hardware Specification - FEH Vacuum	0	05/30/08A	01/15/09A	MS_260, XT_RB	XT12520030											
XT12320030	Detailed Hardware Layout - NEH Vacuum	10	06/02/08A	04/14/09	XT12260070, XT_RB	XT12320040, XT12320050											
XT12220070	Integrate/Test @ LLNL - FEE/EBD Vacuum	0	06/16/08A	11/26/08A	XT12220060	XT12220080, XT1320220											
XT12220060	Unit Testing - FEE/EBD Vacuum	0	06/23/08A	06/27/08A	XT12220050, XT12220055	XT12220070, XT1320200											
XT12340030	Detailed Hardware Layout - NEH Pop-Ins	5	06/30/08A	04/07/09	XT12340020	XT12340040, XT12340050											
XT12430030	Detailed Hardware Layout - TUN Pop-Ins	10	06/30/08A	04/14/09	XT12420050, XT12430020	XT12430040, XT12430050											
XT12230080	Ship to SLAC - FEE Fast Valve Controls	0	07/02/08A	07/09/08A	XT12230070, XT1421160	XT12230090											
XT12280070	Integrate/Test @ LLNL - FEE Total Energy Monitor	0	07/28/08A	03/31/09A	XT12280060, XT1542195	XT12280080, XT1542230											
XT12340040	Procure: NEH Pop-Ins Components	0	07/28/08A	03/31/09A	XT12340030	XT12340050											
XT12270070	Integrate/Test @ LLNL - FEE Direct Imager	0	08/01/08A	01/26/09A	XT12270060, XT1531199	XT12270080, XT1531230											
XT12100064	Design/Layout Management (100hrs/mo) - EA	0	08/29/08A	01/30/09A	XT12100060	XT12100065											
XT122A0080	Ship to SLAC - FEE Soft X-Ray Imager Controls	0	10/01/08A	10/15/08A	MS_260, XT122A0030, XT1546220	XT122A0090											
XT122B0050	Rack/Component Assembly - FEE SOMS	0	10/01/08A	03/09/09A	MS_260, XT12270050, XT12270055, XT122B0030	XT122B0060											
XT12100055	Design/Layout Management (120hrs/mo) - SAL	0	10/01/08A	03/30/09A	XT12100050	XT_LOE											
XT12100070	Controls Consultant - Kirby	22	10/01/08A	04/30/09	XT_6503												
XT122C0050	Rack/Component Assembly - FEE HOMS	0	10/15/08A	12/19/08A	MS_260, XT12270050, XT12270055, XT122C0030	XT122C0060											
XT122A0090	AVAIL: FEE Soft X-Ray Imager Controls RFI	0		10/15/08A	XT122A0080	S8X6_FE076											
XT122C0060	Unit Testing - FEE HOMS	0	11/26/08A	03/02/09A	XT122C0050	XT122C0070											
XT122D0050	Rack/Component Assembly - FEE Pop-Ins	0	11/26/08A	03/02/09A	MS_260, XT12270050, XT12270055, XT122D0030, XT122D0040	XT122D0060											
XT122B0060	Unit Testing - FEE SOMS	0	11/26/08A	03/09/09A	XT122B0050	XT122B0070											
XT12230090	AVAIL: Fast Valve Controls RFI	0		11/26/08A	XT12230080	S8X5_BD060, S8X5_BD070											
XT12320040	Procure: NEH Vacuum Components	0	12/01/08A	12/19/08A	MS_260, XT12320030	XT12320050											
XT122D0060	Unit Testing - FEE Pop-Ins	0	12/19/08A	03/02/09A	XT122D0010, XT122D0050	XT122D0070, XT1545200											
XT12290070	Integrate/Test @ LLNL - FEE K-Measurement	0	12/19/08A	03/06/09A	XT12290060, XT122A0060, XT1546125, XT1546360	XT1546230											
XT12220080	Ship to SLAC - FEE/EBD Vacuum Controls	0	01/27/09A	02/13/09A	MS_260, XT12220070	XT12220090											
XT12240080	Ship to SLAC - FEE Fixed Mask/Slit Controls	0	01/27/09A	02/13/09A	MS_260, XT12240070, XT1422170, XT1423170	XT12240090											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10			
1.05.02.01 Controls																
XT12250080	Ship to SLAC - FEE Attenuator Controls	0	01/27/09A	02/13/09A	XT1425220	XT12250090										
XT12260080	Ship to SLAC - FEE Gas Detector Controls	0	01/27/09A	02/13/09A	XT1536220	XT12260090										
XT12270080	Ship to SLAC - FEE Direct Imager Controls	0	01/27/09A	02/13/09A	XT12270070, XT1531220	XT12270090										
XT12280080	Ship to SLAC - FEE Total Energy Monitor Controls	0	01/27/09A	02/13/09A	MS_260, XT12280070, XT1542220	XT12280090										
XT12290080	Ship to SLAC - FEE K-Measurement Controls	0	01/27/09A	02/13/09A	XT12290030, XT1546220	XT12290090										
XT122D0080	Ship to SLAC - FEE Pop-Ins Controls	0	01/27/09A	03/13/09A	MS_260, XT1545210	XT122D0090										
XT122B0065	Start: Integrate/Test - FEE SOMS	0	01/30/09A		XT122B0070	MS3_XT120, XT122B0080										
XT122C0065	Start: Integrate/Test - FEE HOMS	0	01/30/09A		XT122C0070	MS3_XT120, XT122C0080										
XT122B0070	Integrate/Test @ LLNL - FEE SOMS	0	01/30/09A	03/27/09A	XT122B0060, XT14271200	XT122B0065, XT122B0080, XT14271220										
XT122C0070	Integrate/Test @ LLNL - FEE HOMS	0	01/30/09A	03/27/09A	XT122C0060, XT14272195, XT14272200	XT122C0065, XT122C0080, XT14272220										
XT12320045	Start: Rack/Component Assembly - NEH Vacuum	0	02/02/09A		XT12320050	MS3_XE150, XT12320060										
XT12100065	Design/Layout Management (50hrs/mo) - EA	22	02/02/09A	04/30/09	XT12100064	XT_LOE										
XT12320050	Rack/Component Assembly - NEH Vacuum	0	02/03/09A	03/06/09A	XT12310010, XT12320030, XT12320040	XT12320045, XT12320060										
XT12320060	Unit Testing - NEH Vacuum	0	02/10/09A	03/06/09A	XT12320045, XT12320050	XT12320070, XT1331170										
XT12430040	Procure: TUN Pop-Ins Components	0	02/13/09A	05/26/09A	MS_260, XT12430030	XT12430050										
XT12220090	AVAIL: FEE Vacuum Controls RFI	0		02/13/09A	XT12220080	S8X6_FE072										
XT12240090	AVAIL: FEE Fixed Mask/Slit Controls RFI	0		02/13/09A	XT12240080	S8X6_FE072										
XT12250090	AVAIL: FEE Attenuator Controls RFI	0		02/13/09A	XT12250080	S8X6_FE072										
XT12260090	AVAIL: FEE Gas Detector Controls RFI	0		02/13/09A	XT12260080	S8X6_FE072										
XT12270090	AVAIL: FEE Direct Imager Controls RFI	0		02/13/09A	XT12270080	S8X6_FE074										
XT12280090	AVAIL: FEE Total Energy Monitor Controls RFI	0		02/13/09A	XT12280080	S8X6_FE074										
XT12290090	AVAIL: FEE K-Measurement Controls RFI	0		02/13/09A	XT12290080	S8X6_FE076										
XT122D0065	Start: Integrate/Test - FEE Pop-Ins	0	02/27/09A		XT122D0070	MS3_XE150, MS3_XT130, XT1545220										
XT122D0070	Integrate/Test @ LLNL - FEE Pop-Ins	0	02/27/09A	03/02/09A	XT122D0060, XT1545199	XT122D0065, XT1545220										
XT122B0080	Ship to SLAC - FEE SOMS Controls	0	02/27/09A	03/06/09A	MS_260, XT122B0065, XT122B0070, XT14271210	XT122B0090										
XT122C0080	Ship to SLAC - FEE HOMS Controls	0	02/27/09A	03/06/09A	MS_260, XT122C0065, XT122C0070, XT14272210	XT122C0090										
XT12340060	Unit Testing - NEH Pop-Ins	0	02/27/09A	03/06/09A	XT12340045, XT12340050	XT12340070										
XT12340070	Integrate/Test @ LLNL - NEH Pop-Ins	0	02/27/09A	03/20/09A	XT12340060, XT1545199	XT12340080										
XT12340050	Rack/Component Assembly - NEH Pop-Ins	0	02/27/09A	03/31/09A	XT12310010, XT12340030, XT12340040	XT12340045, XT12340060										

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.05.02.01 Controls																	
XT12100085	Design/Support K-Mono	22	03/02/09A	04/30/09	XT12290060												
XT12100095	Design Adj Bridge - Total Energy Measurement	22	03/02/09A	04/30/09		XT12520100, XT1542204											
XT12100075	Commissioning Management	86	03/02/09A	07/30/09													
XT122B0090	AVAIL: FEE SOMS Controls RFI	0		03/06/09A	XT122B0080	S8X6_FE076											
XT122C0090	AVAIL: FEE HOMS Controls RFI	0		03/06/09A	XT12100020, XT122C0080	S8X6_FE078											
XT122D0090	AVAIL: FEE Pop-Ins Controls RFI	0		03/13/09A	XT122D0080	S8X6_FE076											
XT12430070	Integrate/Test @ LLNL - TUN Pop-Ins	0	03/16/09A	03/20/09A	XT12430060, XT1545199	XT12430080											
XT12520100	Fab/Deliver Adj Bridge - Total Energy Measuremnt	22	03/18/09A	04/30/09	XT12100095	XT1542206*											
XT12430080	Ship to SLAC - TUN Pop-Ins Controls	0	03/23/09A	03/27/09A	XT12430070, XT1545210	XT12430090											
XT12340045	Start: Rack/Component Assembly - NEH Pop-Ins	0	03/27/09A		XT12340050	MS3_XE150, XT12340060											
XT12430090	AVAIL: TUN Pop-Ins Controls RFI	0		03/30/09A	XT12430080	S8X8_XT090											
XT122D0040	Procure: FEE Pop-Ins Components	0		11/26/08A	XT122D0020	XT122D0050											
XT12340080	Ship to SLAC - NEH Pop-Ins Controls	5	04/01/09	04/07/09	XT12340070, XT1545210	XT12340090*											
XT12520030	Detailed Hardware Layout - FEH Vacuum	20	04/01/09	04/28/09	MS_260, XT12520020	XT12520040*, XT12520050											
XT12420040	Procure: TUN Vacuum Components	30	04/01/09	05/12/09	MS_260	XT12420050*											
XT12340090	AVAIL: NEH Pop-Ins Controls RFI	0		04/07/09	XT12340080*	S8X7_NH120											
XT12430045	Start: Rack/Component Assembly - TUN Pop-Ins	0	04/22/09		XT12430050*	MS3_XE150, XT12430060											
XT12430050	Rack/Component Assembly - TUN Pop-Ins	5	04/22/09	04/28/09	XT12430030, XT12430040	XT12430045*, XT12430060*											
XT12430060	Unit Testing - TUN Pop-Ins	5	04/29/09	05/05/09	XT12430045, XT12430050*	XT12430070											
XT1542206	Test @ LLNL Adj Bridge - Total Energy Measuremnt	10	05/01/09	05/14/09	XT12520100*, XT1542204	XT1542208*											
XT12520040	Procure: FEH Vacuum Components	30	05/13/09	06/23/09	XT12520030*	XT12520050*											
XT1542208	AVAIL: Adj Bridge - Total Energy Measurement	0		05/14/09	XT1542206*	S8X6_FE100											
XT12420045	Start: Rack/Component Assembly - TUN Vacuum	0	05/27/09		XT12420050*	MS3_XE150, XT12420060											
XT12420050	Rack/Component Assembly - TUN Vacuum	10	05/27/09	06/09/09	XT12420040*	XT12420045*, XT12420060*, XT12430030											
XT12420060	Unit Testing - TUN Vacuum	10	06/10/09	06/23/09	XT12420045, XT12420050*	XT12420070*											
XT12320070	Integrate/Test @ LLNL - NEH Vacuum	1	06/15/09	06/15/09	XT12320060, XT1331165*	XT12320080*, XT1331200*											
XT12320080	Ship to SLAC - NEH Vacuum Controls	1	06/16/09	06/16/09	MS_260, XT12320070*, XT1331190	XT12320090*											
XT12320090	AVAIL: NEH Vacuum Controls RFI	0		06/16/09	XT12320080*	S8X7_NH120											
XT12520045	Start: Rack/Component Assembly - FEH Vacuum	0	06/24/09		XT12520050*	MS3_XE150, XT12520060											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10						
1.05.02.01 Controls																			
XT12420070	Integrate/Test @ LLNL - TUN Vacuum	15	06/24/09	07/15/09	XT12420060*, XT1340165	XT12420080*, XT1340200*													
XT12520050	Rack/Component Assembly - FEH Vacuum	20	06/24/09	07/22/09	XT12520030, XT12520040*	XT12520045*, XT12520060*													
XT12420080	Ship to SLAC - TUN Vacuum Controls	5	07/16/09	07/22/09	XT12420070*, XT1340190	XT12420090*													
XT12420090	AVAIL: TUN Vacuum Controls RFI	0		07/22/09	XT12420080*	S8X8_XT090													
XT12520060	Unit Testing - FEH Vacuum	10	07/23/09	08/05/09	XT12520045, XT12520050*	XT12520070*													
XT12520070	Integrate/Test @ LLNL - FEH Vacuum	10	08/06/09	08/19/09	XT12520060*, XT1351165	XT12520080*, XT1351200*													
XT12520080	Ship to SLAC - FEH Vacuum Controls	5	08/20/09	08/26/09	XT12520070*, XT1351190	XT12520090*													
XT12520090	AVAIL: FEH Vacuum Controls RFI	0		08/26/09	XT12520080*	S8X9_FH100													
1.05.05 Diagnostics Subsystem																			
1.05.05.04 Commissioning Diagnostics																			
1.05.05.04.02 Total Energy Measurement																			
XT1542204	Fab/Deliver Adj Bridge - Total Energy Measuremnt	0	03/02/09A	03/13/09A	XT12100095, XT1542202	XT1542206													
1.06 X-RAY END STATION SYSTEMS																			
1.06.02 XES Controls																			
1.06.02.01 Controls Management																			
XE201_0111	Management - FY08	0	02/01/08A	09/30/08A	XE_RB	XE201_0121													
XE201_0310	Travel - FY08	0	02/01/08A	09/30/08A	XE_RB	MS4_CT0004, XE201_0315													
XE201_0410	Misc. Test Equipment - FY08	0	02/01/08A	09/30/08A	XE_RB	MS4_CT0004, XE201_0415													
XE201_0121	Management - FY09	130*	10/01/08A	09/30/09	XE201_0111	XE201_0131*													
XE201_0315	Travel - FY09	130*	10/01/08A	09/30/09	XE201_0310	XE201_0320*													
XE201_0415	Misc. Test Equipment - FY09	130*	10/01/08A	09/30/09	XE201_0410	XE_LOE													
XE201_0131	Management - FY10	214	10/01/09	07/30/10	XE201_0121*	XE_LOE*													
XE201_0320	Travel - FY10	214	10/01/09	07/30/10	XE201_0315*	XE_LOE*													
1.06.02.07 AMOS Experiment Controls X1																			
1.06.02.07.01 AMOS Requirements, Design, Setup																			
XE1270010	Prepare Requirements	0	02/01/08A	03/03/08A	XE_RB	XE1270100													
XE1270020	Prepare AMOS - Controls ICD	0	02/01/08A	03/03/08A	XE_RB	XE1270100													
XE1270030	Prepare Requirements	0	02/01/08A	03/03/08A	XE_RB	XE1270100													
XE1270040	Prepare Final Device List for Phase 1	0	02/01/08A	03/03/08A	XE_RB	XE1270100													
XE1270050	Prepare Final Device List for Phase 2	0	02/01/08A	03/03/08A	XE_RB	XE1270100													
XE1270100	Preliminary Design for AMOS	0	02/01/08A	04/17/08A	XE1270010, XE1270020, XE1270030, XE1270040, XE1270050	XE1270110													

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.07.01 AMOS Requirements, Design, Setup																	
XE1270125	Post PDR Design Effort	0	04/26/08A	06/10/08A	XE1270110	XE12070100, XE12070105, XE12070110, XE12070115,											
XE1270110	Preliminary Design Review (PDR)	0		04/25/08A	XE1270100	XE1270125, XE12708010, XE12709010, XE221_0105,											
1.06.02.07.07 Development Hardware & Software																	
XE1270230	Procure Hrdwr for Develop Test Setup - FY08	0	02/01/08A	09/10/08A	XE_RB	XE1270210											
XE1270240	Develop Software for Test Setup - FY08 M&S	0	02/01/08A	09/10/08A	XE_RB	XE1270210											
XE1270260	Develop Test Setup - FY08 L	0	02/01/08A	09/10/08A	XE_RB	XE1270210											
XE1270210	COMP: Develop Test Setup	0		09/10/08A	XE1270230, XE1270240, XE1270260	XE12708020											
1.06.02.07.08 Beam Viewing System for Phase 1																	
XE12708010	Design Phase 1 Beam Viewing System	0	06/11/08A	12/05/08A	XE1270110, XE1270125	XE12708020											
XE12708020	Final Design Review Phase 1 Beam Viewing System	0	12/05/08A	12/05/08A	XE1270210, XE12708010	XE12708030											
XE12708040	Procure Phase 1 Beam Viewing System	0	12/05/08A	01/15/09A	XE12708030	XE12708080											
XE12708050	Dev Software Phase 1 Beam Viewing System	37	12/05/08A	05/21/09	XE12708030	XE12708090*, XE1720518											
XE12708060	Prepare Docs Phase 1 Beam Viewing System	37	12/05/08A	05/21/09	XE12708030	XE12708090*											
XE12708030	COMP: FDR for Phase 1 Beam Viewing System	0		12/05/08A	XE12708020	XE12708040, XE12708050, XE12708060											
XE12708080	Fab/Delvr Phase 1 Beam Viewing System	17	01/02/09A	04/23/09	XE12708040	XE12708100*											
XE12708100	AVAIL: Phase 1 Beam Viewing System Hrdwr	0		04/23/09	XE12708080*	MS3_XE065, XE1740518											
XE12708090	AVAIL: Phase 1 Beam Viewing System Software	0		05/21/09	XE12708050*, XE12708060*	MS3_XE065, XE1740518											
1.06.02.07.09 Beam Viewing System for Phase 2																	
XE12709010	Design Phase 2 Beam Viewing System	0	10/02/08A	03/05/09A	MS_260, XE1270110	XE12709020											
XE12709030	COMP: FDR for Phase 2 Beam Viewing System	0		03/12/09A	XE12709020	XE12709040, XE12709050, XE12709060											
XE12709040	Procure Phase 2 Beam Viewing System	17	03/13/09A	04/23/09	XE12709030	XE12709080*											
XE12709050	Dev Software Phase 2 Beam Viewing System	67	03/13/09A	07/02/09	XE12709030	XE12709090*											
XE12709060	Prepare Docs Phase 2 Beam Viewing System	67	03/13/09A	07/02/09	XE12709030	XE12709090*											
XE12709020	Final Design Review Phase 2 Beam Viewing System	0		03/12/09A	XE12709010	XE12709030											
XE12709080	Fab/Delvr Phase 2 Beam Viewing System	60	04/24/09	07/17/09	XE12709040*	XE12709100*											
XE12709090	AVAIL: Phase 2 Beam Viewing System Software	0		07/02/09	XE12709050*, XE12709060*	XE1741058											
XE12709100	AVAIL: Phase 2 Beam Viewing System Hrdwr	0		07/17/09	XE12709080*	XE1741058*											
1.06.02.07.12 Differential Pumping																	
XE12712010	Design Differential Pumping	0	06/11/08A	01/02/09A	XE1270125	XE12712020											
XE12712020	Final Design Review Differential Pumping	0	12/02/08A	12/05/08A	XE12712010	XE12712030											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10			
1.06.02.07.12 Differential Pumping																
XE12712040	Procure Differential Pumping	0	12/05/08A	12/15/08A	XE12712030	XE12712080										
XE12712050	Dev Software Differential Pumping	28	12/05/08A	05/08/09	XE12712030	XE12712090*, XE1720518										
XE12712060	Prepare Docs Differential Pumping	28	12/05/08A	05/08/09	XE12712030	XE12712090*										
XE12712030	COMP: FDR for Differential Pumping	0		12/05/08A	XE12712020	XE12712040, XE12712050, XE12712060										
XE12712080	Fab/Delvr Differential Pumping	38	03/02/09A	05/22/09	XE12712040	XE12712100*										
XE12712090	AVAIL: Differential Pumping Software	0		05/08/09	XE12712050*, XE12712060*	XE1740518										
XE12712100	AVAIL: Differential Pumping Hrdwr	0		05/22/09	XE12712080*	XE1740518										
1.06.02.07.14 Temperature Monitoring																
XE12714010	Design Temperature Monitoring	0	06/11/08A	12/05/08A	XE1270125	XE12714020										
XE12714040	Procure Temperature Monitoring	0	12/05/08A	01/27/09A	XE12714030	XE12714080										
XE12714050	Dev Software Temperature Monitoring	25	12/05/08A	05/05/09	MS_260, XE12714030	XE12714090*, XE1720518										
XE12714060	Prepare Docs Temperature Monitoring	25	12/05/08A	05/05/09	MS_260, XE12714030	XE12714090*										
XE12714030	COMP: FDR for Temperature Monitoring	0		12/05/08A	XE12714020	XE12714040, XE12714050, XE12714060										
XE12714080	Fab/Delvr Temperature Monitoring	35	01/27/09A	05/19/09	XE12714040	XE12714100*										
XE12714020	Final Design Review Temperature Monitori	0		12/05/08A	XE12714010	XE12714030										
XE12714090	AVAIL: Temperature Monitoring Software	0		05/05/09	XE12714050*, XE12714060*	XE1740518										
XE12714100	AVAIL: Temperature Monitoring Hrdwr	0		05/19/09	XE12714080*	XE1740518										
1.06.02.07.15 Gas Storage & Delivery System																
XE12715010	Design Gas Stor/Delrvy System	0	06/11/08A	12/05/08A	XE1270125	XE12715020										
XE12715020	Final Design Review Gas Stor/Delrvy Syst	0	12/05/08A	12/05/08A	XE12715010	XE12715030										
XE12715040	Procure Gas Stor/Delrvy System	0	12/05/08A	01/26/09A	XE12715030	XE12715080										
XE12715050	Dev Software Gas Stor/Delrvy System	24	12/05/08A	05/04/09	MS_260, XE12715030	XE12715090*, XE1720518										
XE12715060	Prepare Docs Gas Stor/Delrvy System	24	12/05/08A	05/04/09	MS_260, XE12715030	XE12715090*										
XE12715030	COMP: FDR for Gas Stor/Delrvy System	0		12/05/08A	XE12715020	XE12715040, XE12715050, XE12715060										
XE12715080	Fab/Delvr Gas Stor/Delrvy System	34	01/27/09A	05/18/09	XE12715040	XE12715100*										
XE12715090	AVAIL: Gas Stor/Delrvy System Software	0		05/04/09	XE12715050*, XE12715060*	XE1740518										
XE12715100	AVAIL: Gas Stor/Delrvy System Hrdwr	0		05/18/09	XE12715080*	XE1740518										
1.06.02.07.16 High Field Physics Chamber																
XE12716011	Design Vacuum & Motion	0	06/11/08A	12/05/08A	XE1270125	XE12716021										
XE12716012	Design Gas Jet System	0	06/11/08A	12/05/08A	XE1270125	XE12716022										

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.07.16 High Field Physics Chamber																	
XE12716013	Design Electr. Spectrometers (5)	0	06/11/08A	12/05/08A	XE1270125	XE12716023											
XE12716014	Design Ion Spectrometers (TOF)	0	06/11/08A	12/05/08A	XE1270125	XE12716024											
XE12716015	Design Ion Spectrometers (Img/Mom)	0	10/02/08A	03/05/09A	MS_260	XE12716025											
XE12716017	Design X-Ray Emission Spectr.	0	10/02/08A	03/05/09A	MS_260	XE12716027											
XE12716023	Final Design Review Electr. Spectrometer	0	12/04/08A	12/05/08A	XE12716013	XE12716033											
XE12716024	Final Design Review Ion Spectrometers (TOF)	0	12/04/08A	12/05/08A	XE12716014	XE12716034											
XE12716021	Final Design Review Vacuum & Motion	0	12/05/08A	12/05/08A	XE12716011	XE12716031											
XE12716053	Dev Software Electr. Spectrometers (5)	25	12/05/08A	05/05/09	MS_260, XE12716033	XE12716093*, XE1720518											
XE12716054	Dev Software Ion Spectrometers (TOF)	25	12/05/08A	05/05/09	MS_260, XE12716034	XE12716094*, XE1720518											
XE12716063	Prepare Docs Electr. Spectrometers (5)	25	12/05/08A	05/05/09	MS_260, XE12716033	XE12716093*											
XE12716064	Prepare Docs Ion Spectrometers (TOF)	25	12/05/08A	05/05/09	MS_260, XE12716034	XE12716094*											
XE12716051	Dev Software Vacuum & Motion	26	12/05/08A	05/06/09	XE12716031	XE12716091*, XE1720518											
XE12716061	Prepare Docs Vacuum & Motion	26	12/05/08A	05/06/09	XE12716031	XE12716091*											
XE12716052	Dev Software Gas Jet System	28	12/05/08A	05/08/09	XE12716032	XE12716092*, XE1720518											
XE12716062	Prepare Docs Gas Jet System	28	12/05/08A	05/08/09	XE12716032	XE12716092*											
XE12716081	Fab/Delvr Vacuum & Motion	13	12/09/08A	04/17/09	XE12716041	XE12716101*											
XE12716082	Fab/Delvr Gas Jet System	13	12/09/08A	04/17/09	XE12716042	XE12716102*											
XE12716083	Fab/Delvr Electr. Spectrometers (5)	13	12/09/08A	04/17/09	XE12716043	XE12716103*											
XE12716084	Fab/Delvr Ion Spectrometers (TOF)	13	12/09/08A	04/17/09	XE12716044	XE12716104*											
XE12716022	Final Design Review Gas Jet System	0		12/05/08A	XE12716012	XE12716032											
XE12716025	Final Design Review Ion Spectrometers (Img/Mom)	2	04/01/09	04/02/09	XE12716015	XE12716035											
XE12716027	Final Design Review X-Ray Emission Spect	2	04/01/09	04/02/09	XE12716017	XE12716037											
XE12716055	Dev Software Ion Spectrometers (Img/Mom)	80	04/01/09	07/22/09	XE12716035	XE12716095*											
XE12716057	Dev Software X-Ray Emission Spectr.	80	04/01/09	07/22/09	XE12716037	XE12716097*											
XE12716065	Prepare Docs Ion Spectrometers (Img/Mom)	80	04/01/09	07/22/09	XE12716035	XE12716095*											
XE12716067	Prepare Docs X-Ray Emission Spectr.	80	04/01/09	07/22/09	XE12716037	XE12716097*											
XE12716085	Fab/Delvr Ion Spectrometers (Img/Mom)	60	04/13/09	07/06/09	XE12716045*	XE12716105*											
XE12716087	Fab/Delvr X-Ray Emission Spectr.	60	04/13/09	07/06/09	XE12716047*	XE12716107*											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.07.16.01 Vacuum & Motion																	
XE12716041	Procure Vacuum & Motion	0	12/05/08A	01/28/09A	XE12716031	XE12716081											
XE12716031	COMP: FDR for HF Physics Vacuum & Motion	0		12/05/08A	XE12716021	XE12716041, XE12716051, XE12716061											
XE12716101	AVAIL: HF Physics Vacuum & Motion Hrdwr	0		04/17/09	XE12716081*	MS3_XE065, XE1720518											
XE12716091	AVAIL: HF Physics Vacuum & Motion Software	0		05/06/09	XE12716051*, XE12716061*	MS3_XE065, XE1720518											
1.06.02.07.16.02 Gas Jet System																	
XE12716032	COMP: FDR for Gas Jet System	0		12/05/08A	XE12716022	XE12716042, XE12716052, XE12716062											
XE12716042	Procure Gas Jet System	0	12/09/08A	01/30/09A	XE12716032	XE12716082											
XE12716102	AVAIL: Gas Jet System Hrdwr	0		04/17/09	XE12716082*	XE1723518											
XE12716092	AVAIL: Gas Jet System Software	0		05/08/09	XE12716052*, XE12716062*	XE1723518*											
1.06.02.07.16.03 Electron Spectrometers (5)																	
XE12716043	Procure Electr. Spectrometers (5)	0	12/05/08A	01/27/09A	XE12716033	XE12716083											
XE12716033	COMP: FDR for Electr. Spectrometers (5)	0		12/05/08A	XE12716023	XE12716043, XE12716053, XE12716063											
XE12716103	AVAIL: Electr. Spectrometers (5) Hrdwr	0		04/17/09	XE12716083*	MS3_XE065, XE1722270											
XE12716093	AVAIL: Electr. Spectrometers (5) Softwar	0		05/05/09	XE12716053*, XE12716063*	MS3_XE065, XE1722270*											
1.06.02.07.16.04 Ion Spectrometers (TOF)																	
XE12716044	Procure Ion Spectrometers (TOF)	0	12/05/08A	01/27/09A	XE12716034	XE12716084											
XE12716034	COMP: FDR for Ion Spectrometers (TOF)	0		12/05/08A	XE12716024	XE12716044, XE12716054, XE12716064											
XE12716104	AVAIL: Ion Spectrometers (TOF) Hrdwr	0		04/17/09	XE12716084*	XE1722270											
XE12716094	AVAIL: Ion Spectrometers (TOF) Software	0		05/05/09	XE12716054*, XE12716064*	XE1722270*											
1.06.02.07.16.05 Ion Spectrometers (Imaging/Momentum)																	
XE12716035	COMP: FDR for Ion Spectrometers (Img/Mom)	0		01/28/09A	XE12716025	XE12716045, XE12716055, XE12716065											
XE12716045	Procure Ion Spectrometers (Img/Mom)	8	03/02/09A	04/10/09	XE12716035	XE12716085*											
XE12716105	AVAIL: Ion Spectrometers (Img/Mom) Hrdwr	0		07/06/09	XE12716085*	XE1722120											
XE12716095	AVAIL: Ion Spectrometers (Img/Mom) Softw	0		07/22/09	XE12716055*, XE12716065*	XE1722120*											
1.06.02.07.16.07 X-Ray Emission Spectrometers																	
XE12716037	COMP: FDR for X-Ray Emission Spectr.	0		01/28/09A	XE12716027	XE12716047, XE12716057, XE12716067											
XE12716047	Procure X-Ray Emission Spectr.	8	03/02/09A	04/10/09	XE12716037	XE12716087*											
XE12716107	AVAIL: X-Ray Emission Spectr. Hrdwr	0		07/06/09	XE12716087*	XE1721130											
XE12716097	AVAIL: X-Ray Emission Spectr. Software	0		07/22/09	XE12716057*, XE12716067*	XE1721130*											
1.06.02.07.17 Diagnostics Chamber																	
XE12717011	Design Vacuum & Motion	0	06/11/08A	12/04/08A	XE1270125	XE12717021											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.07.17 Diagnostics Chamber																	
XE12717012	Design Gas Jet System	0	06/11/08A	01/12/09A	XE1270125	XE12717022											
XE12717013	Design Mag Bottle Elect Spectrometer	0	06/11/08A	01/12/09A	XE1270125	XE12717023											
XE12717014	Design X-Ray Emission Spectrometer	0	10/02/08A	03/05/09A	MS_260	XE12717024											
XE12717021	Final Design Review Vacuum & Motion	0	12/01/08A	12/05/08A	XE12717011	XE12717031											
XE12717051	Dev Software Vacuum & Motion	37	01/02/09A	05/21/09	XE12717031	XE12717091*, XE1720518											
XE12717061	Prepare Docs Vacuum & Motion	37	01/02/09A	05/21/09	XE12717031	XE12717091*											
XE12717022	Final Design Review Gas Jet System	0	01/13/09A	01/13/09A	XE12717012	XE12717032											
XE12717023	Final Design Review Mag Bottle Elect Spectromet	0	01/13/09A	01/13/09A	XE12717013	XE12717033											
XE12717052	Dev Software Gas Jet System	46	01/15/09A	06/03/09	XE12717032	XE12717092*, XE1720518*											
XE12717053	Dev Software Mag Bottle Elect Spectrometer	46	01/15/09A	06/03/09	MS_260, XE12717033	XE12717093*, XE1720518*											
XE12717062	Prepare Docs Gas Jet System	46	01/15/09A	06/03/09	XE12717032	XE12717092*											
XE12717063	Prepare Docs Mag Bottle Elect Spectrometer	46	01/15/09A	06/03/09	MS_260, XE12717033	XE12717093*											
XE12717024	Final Design Review X-Ray Emission Spectrometer	0	01/28/09A	01/28/09A	XE12717014	XE12717034											
XE12717081	Fab/Delvr Vacuum & Motion	37	01/28/09A	05/21/09	XE12717041	XE12717101*											
XE12717054	Dev Software X-Ray Emission Spectrometer	58	03/02/09A	06/19/09	MS_260, XE12717034	XE12717094*											
XE12717064	Prepare Docs X-Ray Emission Spectrometer	58	03/02/09A	06/19/09	MS_260, XE12717034	XE12717094*											
XE12717084	Fab/Delvr X-Ray Emission Spectrometer	53	03/23/09A	06/12/09	XE12717044	XE12717104*											
XE12717082	Fab/Delvr Gas Jet System	56	03/26/09A	06/17/09	XE12717042	XE12717102*											
XE12717083	Fab/Delvr Mag Bottle Elect Spectrometer	56	03/26/09A	06/17/09	XE12717043	XE12717103*											
1.06.02.07.17.01 Vacuum & Motion																	
XE12717031	COMP: FDR for Diagnostics Vacuum & Motion	0		12/05/08A	XE12717021	XE12717041, XE12717051, XE12717061											
XE12717041	Procure Vacuum & Motion	0	01/02/09A	03/12/09A	XE12717031	XE12717081											
XE12717091	AVAIL: Diagnostics Vacuum & Motion Software	0		05/21/09	XE12717051*, XE12717061*	MS3_XT075, XE1730498*											
XE12717101	AVAIL: Diagnostics Vacuum & Motion Hrdwr	0		05/21/09	XE12717081*	MS3_XE065, MS3_XT075, XE1730498*, XE1740518											
1.06.02.07.17.02 Gas Jet System																	
XE12717032	COMP: FDR for Gas Jet System	0		01/14/09A	XE12717022	XE12717042, XE12717052, XE12717062											
XE12717042	Procure Gas Jet System	0	01/15/09A	03/25/09A	XE12717032	XE12717082											
XE12717092	AVAIL: Gas Jet System Software	0		06/03/09	XE12717052*, XE12717062*	XE1740518											
XE12717102	AVAIL: Gas Jet System Hrdwr	0		06/17/09	XE12717082*	XE1740518											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.06.02.07.17.03 Mag Bottle Electr Spectr																		
XE12717033	COMP: FDR for Mag Bottle Elect Spectrometer	0		01/14/09A	XE12717023	XE12717043, XE12717053, XE12717063					◆							
XE12717043	Procure Mag Bottle Elect Spectrometer	0	01/15/09A	03/25/09A	XE12717033	XE12717083					■							
XE12717093	AVAIL: Mag Bottle Elect Spectrometer Software	0		06/03/09	XE12717053*, XE12717063*	XE1740518					◆							
XE12717103	AVAIL: Mag Bottle Elect Spectrometer Hrdwr	0		06/17/09	XE12717083*	XE1740518					◆							
1.06.02.07.17.04 X-Ray Emission Spectr.																		
XE12717044	Procure X-Ray Emission Spectrometer	0	01/30/09A	03/20/09A	XE12717034	XE12717084					■							
XE12717034	COMP: FDR for X-Ray Emission Spectrometer	0		01/30/09A	XE12717024	XE12717044, XE12717054, XE12717064					◆							
XE12717104	AVAIL: X-Ray Emission Spectr. Hrdwr	0		06/12/09	XE12717084*	XE1721130					◆							
XE12717094	AVAIL: X-Ray Emission Spectr. Software	0		06/19/09	XE12717054*, XE12717064*	XE1721130					◆							
1.06.02.07.18 Total Power Measurement																		
XE12718010	Design Total Pwr Measurement	0	10/02/08A	03/05/09A	MS_260	XE12718020					■							
XE12718030	COMP: FDR for Total Pwr Measurement	0		03/06/09A	XE12718020	XE12718040, XE12718050, XE12718060					◆							
XE12718040	Procure Total Pwr Measurement	13	03/09/09A	04/17/09	XE12718030	XE12718070*					■							
XE12718050	Dev Software Total Pwr Measurement	63	03/09/09A	06/26/09	XE12718030	XE12718090*					■							
XE12718060	Prepare Docs Total Pwr Measurement	63	03/09/09A	06/26/09	XE12718030	XE12718090*					■							
XE12718020	Final Design Review Total Pwr Measurement	0		03/06/09A	XE12718010	XE12718030												
XE12718070	COMP: AWARD: Total Pwr Measurement	0		04/17/09	XE12718040*	XE12718080*					◆							
XE12718080	Fab/Delivr Total Pwr Measurement	60	04/20/09	07/13/09	XE12718070*	XE12718100*					■							
XE12718090	AVAIL: Total Pwr Measurement Software	0		06/26/09	XE12718050*, XE12718060*	XE1740518					◆							
XE12718100	AVAIL: Total Pwr Measurement Hrdwr	0		07/13/09	XE12718080*	XE1740518*					◆							
1.06.02.08 AMOS Particle Imaging Controls																		
1.06.02.08.01 AMOS Particle Imaging Controls																		
XE62810105	Develop AMOS Controls ICDs	0	08/01/08A	09/02/08A	XE_RB	XE62810125					■							
XE62810107	RQRD: AMOS Experiment 2 Requirements	0	08/15/08A		XE1714005	XE62810110					◆							
XE62810123	RQRD: AMOS Experiment 2 Device List/Use Cases	0	08/15/08A		XE1714005	XE62810125					◆							
XE62810137	RQRD: AMOS Experiment 2 Final Device List	0	08/15/08A		XE1714005	XE62810130					◆							
XE62810110	Controls AMOS Conceptual Design	0	08/15/08A	08/28/08A	XE62810107	XE62810115												
XE62810115	Conceptual Design Review (CDR)	0	08/28/08A	09/02/08A	XE62810110	XE62810120												
XE62810125	Controls AMOS Preliminary Design	0	09/02/08A	09/15/08A	XE62810105, XE62810120, XE62810123	XE62810130					■							
XE62810120	COMP: Conceptual Design Review (CDR)	0		09/02/08A	XE62810115	XE62810125					◆							

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.06.02.08.01 AMOS Particle Imaging Controls																		
XE62810130	Preliminary Design Review (PDR)	0	09/16/08A	09/24/08A	XE62810125, XE62810137	XE62810135, XE62810155												
XE62810155	Controls AMOS Prototype Development	0	09/26/08A	09/29/08A	MS_260, XE62810130, XE62810135	XE62810160												
XE62810135	COMP: Preliminary Design Review (PDR)	0		10/01/08A	XE62810130	XE62810155			◆									
XE62810160	COMP: AMOS Prototype	0		10/02/08A	XE62810155	PM_LOE			◆									
1.06.02.08.02 AMOS Particle Imaging Software																		
XE62820105	X2 Particle Imaging Software	0	09/29/08A	09/30/08A	XE62820100	XE62820110												
XE62820100	Start: X2 Particle Imaging	0	10/01/08A	10/01/08A	MS_260	XE62820105												
XE62820110	COMP: X2 Particle Imaging Software	0		10/01/08A	XE62820105	PM_LOE			◆									
1.06.02.10 Global Controls System																		
1.06.02.10.01 Network																		
XE221_0162	Purchase: Network Fibers (FEE/NEH)	0	02/01/08A	05/28/08A	XE_RB	XE221_0170	■											
XE221_0170	RCV: Network Fibers (FEE/NEH)	0	03/14/08A	08/01/08A	XE221_0162	XE221_0182	■											
XE221_0105	Develop Controls Network ICDs	0	03/18/08A	08/01/08A	XE1270110	XE221_0115	■											
XE221_0110	Controls Network Conceptual Design	0	03/18/08A	08/04/08A	XE1270110	XE221_0115	■											
XE221_0182	AVAIL: Network Fibers - NEH	0		05/28/08A	XE221_0170	S8X7_NH061			◆									
XE221_0120	COMP: Conceptual Design Review (CDR) - Network	0		08/18/08A	XE221_0115	XE221_0125			◆									
XE221_0125	Controls Network Preliminary Design	0	08/19/08A	09/18/08A	XE221_0120	XE221_0130			■									
XE221_0130	Preliminary Design Review (PDR)	0	09/19/08A	09/25/08A	XE221_0125	XE221_0135												
XE221_0135	COMP: Preliminary Design Review (PDR) - Network	0		09/25/08A	XE221_0130	MS3_XE050, XE221_0140, XE221_0160, XE221_0161, XE221_0165			◆									
XE221_0160	Purchase: 6509 Switches/Routers - NEH	0	09/26/08A	09/30/08A	XE221_0135	XE221_0165												
XE221_0191	Purchase: 6509 Switches/Routers (2) - NEH	0	09/26/08A	01/02/09A	XE221_0135	XE221_0167				■								
XE221_0165	RCV: 6509 Switches/Routers - NEH	0	09/26/08A	01/05/09A	XE221_0160	XE221_0180, XE221_0184				■								
XE221_0140	Controls Network Final Design	0	09/26/08A	01/30/09A	XE221_0135	XE221_0145, XE221_0163				■								
XE221_0163	Purchase: Network Fibers (FEH)	0	02/12/09A	02/12/09A	MS_260, XE221_0140	XE221_0175, XE221_192												
XE221_0167	RCV: 6509 Switches/Routers (2) - NEH	0	02/12/09A	03/02/09A	XE221_0191	XE_30				■								
XE221_0184	AVAIL: Network Switches - NEH	0		02/12/09A	XE221_0165	MS3_XE060, S8X7_NH080				◆								
XE221_0145	Final Design Review (FDR)	0	03/02/09A	03/06/09A	XE221_0140	XE221_0150												
XE221_192	Purchase: Network Fibers (2) (FEH)	38	03/02/09A	05/22/09	XE221_0163	XE221_0161, XE221_193				■	■							
XE221_0161	Purchase: 6509 Switches/Routers - FEH	97	03/02/09A	08/14/09	MS_260, XE221_0135, XE221_192	XE221_0166*				■	■							
XE221_0150	COMP: Final Design Review (FDR) - Network	0		03/06/09A	XE221_0145	MS3_XE050, XE221_0155, XE221_0180				◆								

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.01 Network																	
XE221_0180	Controls Network Hardware Development	5	03/09/09A	04/07/09	XE221_0150, XE221_0165												
XE221_0115	Conceptual Design Review (CDR)	0		08/18/08A	XE221_0105, XE221_0110	XE221_0120											
XE221_0175	RCV: Network Fibers (FEH)	1	04/01/09	04/01/09	MS_260, XE221_0163	XE221_0183											
XE221_193	RCV: Network Fibers (2)(FEH)	1	04/01/09	04/01/09	XE221_192	XE_30											
XE221_0155	Controls Network Software Development	40	04/01/09	05/26/09	XE221_0150	XE221_0183											
XE221_0166	RCV: 6509 Switches/Routers - FEH	1	08/17/09	08/17/09	XE221_0161*	XE221_0183*											
XE221_0183	AVAIL: Controls Network - FEH	0		08/17/09	XE221_0155, XE221_0166*, XE221_0175	MS3_XE050, S8X9_FH080											
1.06.02.10.02 Machine Protection System																	
XE222_0105	Develop Controls MPS ICDs	0	02/01/08A	04/04/08A	XE_RB	XE222_0130											
XE222_0125	Controls MPS Preliminary Design	0	02/01/08A	04/04/08A	XE_RB	XE222_0130											
XE222_0130	Preliminary Design Review (PDR)	0	04/07/08A	04/18/08A	XE222_0105, XE222_0125	XE222_0135											
XE222_0135	COMP: Preliminary Design Review (PDR) - MPS	0		04/18/08A	XE222_0130	MS3_XE060, XE222_0140											
XE222_0140	Controls MPS Final Design	0	04/21/08A	09/11/08A	XE222_0135	XE222_0145											
XE222_0145	Final Design Review (FDR)	0	09/12/08A	09/25/08A	XE222_0140	XE222_0150											
XE222_0150	COMP: Final Design Review (FDR) - MPS	0		09/25/08A	XE222_0145	MS3_XE060, XE222_0155, XE222_0160											
XE222_0160	Purchase: 4 Input Nodes	0	09/26/08A	10/23/08A	XE222_0150	XE222_0165											
XE222_0155	Controls MPS Software Development	0	10/01/08A	01/05/09A	XE222_0150	XE222_0172											
XE222_0165	RCV: 4 Input Nodes	0	01/05/09A	01/05/09A	XE222_0160	XE222_0170											
XE222_0170	Hardware Network Development	0	01/06/09A	03/02/09A	XE222_0165	XE222_0172											
XE222_0172	AVAIL: Controls MPS	0		03/02/09A	XE222_0155, XE222_0170	MS3_XE060, S8X7_NH080											
1.06.02.10.03 Personnel Protection System																	
XE223_0105	Develop Controls PPS ICDs	0	02/01/08A	04/29/08A	XE_RB	XE223_0130											
XE223_0125	Controls PPS Preliminary Design	0	02/01/08A	04/29/08A	XE_RB	XE223_0130											
XE223_0130	Preliminary Design Review (PDR)	0	04/29/08A	04/29/08A	XE223_0105, XE223_0125	XE223_0135											
XE223_0135	COMP: Preliminary Design Review (PDR) - PPS	0		04/29/08A	XE223_0130	XE223_0140, XE223_0155, XE223_0160, XE223_0170,											
XE223_0160	Purchase: Near Hall Other cable	0	04/30/08A	11/13/08A	XE223_0135	XE223_0165											
XE223_0170	Purchase: 12 Near Hall 36PR16AS cable	0	04/30/08A	11/13/08A	XE223_0135	XE223_0175											
XE223_0180	Purchase: Near Hall Misc. hardware	0	04/30/08A	11/13/08A	XE223_0135	XE223_0185											
XE223_0195	Purchase: Near Hall PLC Control Package	0	04/30/08A	11/13/08A	XE223_0135	XE223_0200											
XE223_0140	Controls PPS Final Design	0	04/30/08A	11/14/08A	XE223_0135	XE223_0145											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.03 Personnel Protection System																	
XE223_0255	Purchase: Far Hall BSOIC	0	04/30/08A	01/20/09A	XE223_0135	XE223_0260											
XE223_0155	Controls PPS Software Development	17	04/30/08A	04/23/09	XE223_0135	XE223_0267*, XE223_0268											
XE223_0145	Final Design Review (FDR)	0	11/17/08A	12/16/08A	XE223_0140	XE223_0150											
XE223_0150	COMP: Final Design Review (FDR) - PPS	0		12/16/08A	XE223_0145	XE223_0205, XE223_0265, XE223_0266											
XE223_0205	Purchase: Near Hall BSOIC	0	12/17/08A	01/20/09A	XE223_0150	XE223_0210, XE223_0215											
XE223_0215	Purchase: Far Hall Other cable	0	01/21/09A	01/21/09A	XE223_0135, XE223_0205	XE223_0220, XE223_0225											
XE223_0225	Purchase: Far Hall 36PR16AS cable	0	01/21/09A	01/21/09A	XE223_0135, XE223_0215	XE223_0230, XE223_0235											
XE223_0235	Purchase: Far Hall Misc. hardware	0	01/21/09A	01/21/09A	XE223_0135, XE223_0225	XE223_0240, XE223_0245											
XE223_0245	Purchase: Far Hall PLC Control Package	0	01/21/09A	01/21/09A	XE223_0135, XE223_0235	XE223_0165, XE223_0250											
XE223_0250	RCV: Far Hall PLC Control Package	0	01/21/09A	01/21/09A	XE223_0245	XE223_0266											
XE223_0260	RCV: Far Hall BSOIC	0	01/21/09A	01/21/09A	XE223_0255	XE223_0266											
XE223_0265	PPS Hardware Development (NEH)	8	02/02/09A	04/10/09	XE223_0150, XE223_0165, XE223_0175, XE223_0185,	XE223_0267											
XE223_0165	RCV: Near Hall Other cable	0	02/25/09A	02/25/09A	XE223_0160, XE223_0245	XE223_0175, XE223_0265											
XE223_0175	RCV: 12 Near Hall 36PR16AS cable	0	02/25/09A	02/25/09A	XE223_0165, XE223_0170	S8Z1_PB060, XE223_0185, XE223_0265											
XE223_0185	RCV: Near Hall Misc. hardware	0	02/25/09A	02/25/09A	XE223_0175, XE223_0180	XE223_0200, XE223_0265											
XE223_0200	RCV: Near Hall PLC Control Package	0	02/25/09A	02/25/09A	XE223_0185, XE223_0195	XE223_0265											
XE223_0210	RCV: Near Hall BSOIC	0	02/25/09A	02/25/09A	XE223_0205	XE223_0265											
XE223_0220	RCV: Far Hall Other cable	1	04/01/09	04/01/09	XE223_0215	XE223_0266*											
XE223_0230	RCV: Far Hall 36PR16AS cable	1	04/01/09	04/01/09	XE223_0225	XE223_0266*											
XE223_0240	RCV: Far Hall Misc. hardware	1	04/01/09	04/01/09	XE223_0235	XE223_0266*											
XE223_0266	PPS Hardware Development (FEH)	140	04/02/09	10/15/09	XE223_0150, XE223_0220*, XE223_0230*, XE223_0240*,	XE223_0268*											
XE223_0267	AVAIL: Controls PPS (NEH)	0		04/23/09	XE223_0155*, XE223_0265	MS3_UN025, S8Z1_PB090											
XE223_0268	AVAIL: Controls PPS (FEH)	0		10/15/09	XE223_0155, XE223_0266*	MS3_UN025, S8Z1_PB120											
1.06.02.10.04 Laser Safety System (LSS)																	
XE224_0105	Develop Controls LSS ICDs	0	02/01/08A	03/03/08A	XE_RB	XE224_0115											
XE224_0110	Controls LLS Conceptual Design	0	02/01/08A	03/03/08A	XE_RB	XE224_0115											
XE224_0115	Conceptual Design Review (CDR)	0	03/04/08A	03/24/08A	XE224_0105, XE224_0110	XE224_0120											
XE224_0120	COMP: Conceptual Design Review (CDR)	0		03/24/08A	XE224_0115	XE224_0125											
XE224_0125	Controls Laser LSS Preliminary Design	0	03/25/08A	05/21/08A	XE224_0120	XE224_0130											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.04 Laser Safety System (LSS)																	
XE224_0135	COMP: Preliminary Design Review (PDR)	0		05/28/08A	XE224_0130	XE224_0140											
XE224_0140	Controls LSS Final Design	0	06/02/08A	08/29/08A	XE224_0135	XE224_0145											
XE224_0145	Final Design Review (FDR)	0	09/02/08A	11/03/08A	XE224_0140	XE224_0150											
XE224_0150	COMP: Final Design Review (FDR)	0		11/03/08A	XE224_0145	XE224_0155, XE224_0160, XE224_0170, XE224_0180,											
XE224_0155	Controls LSS Software Development	0	11/04/08A	12/03/08A	XE224_0150	XE224_0232											
XE224_0160	Purchase: Crate/CPU/EVR	0	11/04/08A	12/10/08A	XE224_0150	XE224_0165											
XE224_0170	Purchase: 4PR16AS cable	0	11/04/08A	12/10/08A	XE224_0150	XE224_0175											
XE224_0180	Purchase: 36PR16AS cable	0	11/04/08A	12/10/08A	XE224_0150	XE224_0185											
XE224_0190	Purchase: Hookup wire	0	11/04/08A	12/10/08A	XE224_0150	XE224_0195											
XE224_0200	Purchase: EO buttons	0	11/04/08A	12/10/08A	XE224_0150	XE224_0205											
XE224_0210	Purchase: Laser Shutters & controllers	0	11/04/08A	12/10/08A	XE224_0150	XE224_0215											
XE224_0220	Purchase: PLC Control Package	0	11/04/08A	12/10/08A	XE224_0150	XE224_0225											
XE224_0165	RCV: Crate/CPU/EVR	0	12/15/08A	12/15/08A	XE224_0160	XE224_0230											
XE224_0175	RCV: 4PR16AS cable	0	12/15/08A	12/15/08A	XE224_0170	XE224_0230											
XE224_0185	RCV: 36PR16AS cable	0	12/15/08A	12/15/08A	XE224_0180	XE224_0230											
XE224_0195	RCV: Hookup wire	0	12/15/08A	12/15/08A	XE224_0190	XE224_0230											
XE224_0205	RCV: EO buttons	0	12/15/08A	12/15/08A	XE224_0200	XE224_0230											
XE224_0215	RCV: Laser Shutters & controllers	0	12/15/08A	12/15/08A	XE224_0210	XE224_0230											
XE224_0225	RCV: PLC Control Package	0	12/15/08A	12/15/08A	XE224_0220	XE224_0230											
XE224_0230	LSS Hardware Development	1	01/02/09A	04/01/09	XE224_0150, XE224_0165, XE224_0175, XE224_0185,	XE224_0232*											
XE224_0130	Preliminary Design Review (PDR)	0		05/28/08A	XE224_0125	XE224_0135											
XE224_0232	AVAIL: Controls LSS	0		04/01/09	XE224_0155, XE224_0230*	MS3_XE060, S8X7_NH090											
1.06.02.10.05 User Safeguards																	
XE225_0001	START: User Safeguard Near Hall	0	02/01/08A		XE_RB	XE225_0100											
XE225_0100	Specification Near Hall - User Safeguards	0	02/01/08A	06/23/08A	XE225_0001	XE225_0105											
XE225_0105	Design Near Hall - User Safeguards	0	06/24/08A	11/19/08A	XE225_0100	XE225_0110, XE225_0115											
XE225_0300	START: User Safeguard Far Hall	0	11/03/08A		MS_260	XE225_0305											
XE225_0305	Specification Far Hall - User Safeguards	0	11/03/08A	12/02/08A	XE225_0300	XE225_0310											
XE225_0115	Safety Review Near Hall - User Safeguards	0	11/20/08A	12/05/08A	XE225_0105	XE225_0110											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.05 User Safeguards																	
XE225_0120	Prep Bid Pkg Near Hall Alarms/Signs - User Safeg	0	01/02/09A	01/15/09A	XE225_0110	XE225_0135											
XE225_0125	Prep Bid Pkg NHall Interlock - User Safeguards	0	01/02/09A	01/15/09A	XE225_0110	XE225_0140											
XE225_0130	Prepare Near Hall Bid Pkg Detectors - User Safeg	0	01/02/09A	01/15/09A	XE225_0110	XE225_0145											
XE225_0310	Design Far Hall - User Safeguards	0	01/02/09A	02/24/09A	XE225_0305	XE225_0315, XE225_0320											
XE225_0110	COMP: Near Hall Design - User Safeguards	0		01/02/09A	XE225_0105, XE225_0115	XE225_0120, XE225_0125, XE225_0130											
XE225_0135	Bid Process Near Hall Alarms/Signs - User Safegu	0	01/16/09A	02/24/09A	XE225_0120	XE225_0150											
XE225_0140	Bid Process NHall Interlock - User Safeguards	0	01/16/09A	02/24/09A	XE225_0125	XE225_0155											
XE225_0145	Bid Process Near Hall Detectors - User Safeguard	0	01/16/09A	02/24/09A	XE225_0130	XE225_0160											
XE225_0320	Safety Review Far Hall - User Safeguards	0	02/24/09A	02/24/09A	XE225_0310	XE225_0315											
XE225_0150	AWARD: Contract Near Hall Alarms/Signs -User Sa	0	02/25/09A	03/02/09A	XE225_0135	XE225_0165											
XE225_0155	AWARD: Contract NHall Interlock - User Safeguar	0	02/25/09A	03/02/09A	XE225_0140	XE225_0170											
XE225_0160	AWARD: Contract Near Hall Detectors - User Safe	0	02/25/09A	03/02/09A	XE225_0145	XE225_0175											
XE225_0325	Prep Bid Pkg Far Hall Alarms/Signs - User Safegu	0	03/02/09A	03/13/09A	XE225_0315	XE225_0340											
XE225_0330	Prep Bid Pkg Far Hall Interlock - User Safeguard	0	03/02/09A	03/13/09A	XE225_0315	XE225_0345											
XE225_0335	Prepare Far Hall Bid Pkg Detectors - User Safegu	0	03/02/09A	03/13/09A	XE225_0315	XE225_0350											
XE225_0165	Vendor Fab/Ship Near Hall Alarm/Sign - User Safe	19	03/03/09A	04/27/09	XE225_0150	XE225_0180*											
XE225_0170	Vendor Ship Near Hall Intrlock-User Safeguards	19	03/03/09A	04/27/09	XE225_0155	XE225_0185*											
XE225_0175	Vendor Fab/Ship Near Hall Detectors - User Safeg	19	03/03/09A	04/27/09	XE225_0160	XE225_0190*											
XE225_0315	COMP: Far Hall Design - User Safeguards	0		03/31/09	XE225_0310, XE225_0320	XE225_0325, XE225_0330, XE225_0335											
XE225_0340	Bid Process Far Hall Alarms/Signs - User Safegua	40	04/01/09	05/26/09	XE225_0325	XE225_0355*											
XE225_0345	Bid Process Far Hall Interlock - User Safeguards	40	04/01/09	05/26/09	XE225_0330	XE225_0360*											
XE225_0350	Bid Process Far Hall Detectors - User Safeguards	40	04/01/09	05/26/09	XE225_0335	XE225_0365*											
XE225_0180	RCV: Near Hall Alarms/Signs - User Safeguards	0		04/27/09	XE225_0165*	XE225_0200*											
XE225_0185	RCV: Near Hall Interlock -User Safeguards	0		04/27/09	XE225_0170*	XE225_0200*											
XE225_0190	RCV: Near Hall Detectors - User Safeguards	0		04/27/09	XE225_0175*	XE225_0200*											
XE225_0200	AVAIL: Near Hall User Safeguard	0		04/27/09	XE225_0180*, XE225_0185*, XE225_0190*	MS3_XE060, S8X7_NH080											
XE225_0355	AWARD: Contract Far Hall Alarms/Signs -User Saf	1	05/27/09	05/27/09	XE225_0340*	XE225_0370*											
XE225_0360	AWARD: Contract Far Hall Interlck - User Safegu	1	05/27/09	05/27/09	XE225_0345*	XE225_0375*											
XE225_0365	AWARD: Contract Far Hall Detectors - User Safeg	1	05/27/09	05/27/09	XE225_0350*	XE225_0380*											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.05 User Safeguards																	
XE225_0370	Vendor Fab/Ship Far Hall Alarm/Sign - User Safeg	40	05/28/09	07/23/09	XE225_0355*	XE225_0385*											
XE225_0375	Vendor Ship Far Hall Contain/Intrck-User Safegu	40	05/28/09	07/23/09	XE225_0360*	XE225_0390*											
XE225_0380	Vendor Fab/Ship Far Hall Detectors - User Safegu	40	05/28/09	07/23/09	XE225_0365*	XE225_0395*											
XE225_0385	RCV: Far Hall Alarms/Signs - User Safeguards	0		07/23/09	XE225_0370*	XE225_0405*											
XE225_0390	RCV: Far Hall Containment/Interlock -User Safeg	0		07/23/09	XE225_0375*	XE225_0405*											
XE225_0395	RCV: Far Hall Detectors - User Safeguards	0		07/23/09	XE225_0380*	XE225_0405*											
XE225_0405	AVAIL: Far Hall User Safeguards	0		07/23/09	XE225_0385*, XE225_0390*, XE225_0395*	MS3_XE060, S8X9_FH080											
1.06.02.10.06 Timing System																	
XE226_0105	Develop Controls Timing System ICDs	0	06/11/08A	09/10/08A	XE1270125	XE226_0130											
XE226_0125	Controls Timing System Preliminary Design	0	06/11/08A	09/10/08A	XE1270125	XE226_0130											
XE226_0135	COMP: Preliminary Design Review (PDR)	0		09/17/08A	XE226_0130	XE226_0140, XE226_0160, XE226_0170											
XE226_0140	Controls Timing System Final Design	0	09/18/08A	10/15/08A	XE226_0135	XE226_0145											
XE226_0160	Purchase: 2 Crate/CPU	0	09/18/08A	10/15/08A	XE226_0135	XE226_0165											
XE226_0170	Purchase: 4 EVRs	0	09/18/08A	10/15/08A	XE226_0135	XE226_0175											
XE226_0145	Final Design Review (FDR)	0	10/16/08A	10/22/08A	XE226_0140	XE226_0150											
XE226_0150	COMP: Final Design Review (FDR)	0		10/22/08A	XE226_0145	XE226_0155, XE226_0180											
XE226_0155	Controls Timing System Software Development	17	10/23/08A	04/23/09	XE226_0150	XE226_0182											
XE226_0165	RCV: 2 Crate/CPU	0	11/13/08A	11/13/08A	XE226_0160	XE226_0180											
XE226_0175	RCV: 4 EVRs	0	11/13/08A	11/13/08A	XE226_0170	XE226_0180											
XE226_0180	Controls Timing System Hardware Development	33	11/14/08A	05/15/09	XE226_0150, XE226_0165, XE226_0175	XE226_0182*											
XE226_0130	Preliminary Design Review (PDR)	0		09/17/08A	XE226_0105, XE226_0125	XE226_0135											
XE226_0182	AVAIL: Timing System	0		05/15/09	XE226_0155, XE226_0180*	MS3_XE060, S8X7_NH080											
1.06.02.10.07 Data Management																	
XE12070100	Prepare Requirements	0	06/11/08A	08/15/08A	XE1270125	XE12070125											
XE12070105	Prepare Data Management ICD	0	06/11/08A	08/15/08A	XE1270125	XE12070125											
XE12070110	Prepare Requirements	0	06/11/08A	08/15/08A	XE1270125	XE12070125											
XE12070115	Prepare Final Computing Hardware List for Ph. 1	0	06/11/08A	08/15/08A	XE1270125	XE12070125											
XE12070120	Prepare Final Computing Hardware List for Ph. 2	0	06/11/08A	08/15/08A	XE1270125	XE12070125											
XE12070125	Preliminary Design for Data Management	0	08/18/08A	09/11/08A	XE12070100, XE12070105, XE12070110, XE12070115,	XE12070130											
XE12070130	Preliminary Design Review (PDR)	0	09/12/08A	09/18/08A	XE12070125	XE12070135											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.07 Data Management																	
XE12070200	Design Data Storage	0	09/19/08A	10/16/08A	XE12070135, XE1270125	XE12070205											
XE12070150	Develop Software for Develop Test Setup	0	09/19/08A	12/15/08A	XE12070135	XE12070215											
XE12070600	Design Data Maintenance	0	09/19/08A	01/23/09A	XE12070135	XE12070605											
XE12070300	Design Data Movement	13	09/19/08A	04/17/09	XE12070135, XE1270125	XE12070305*											
XE12070400	Design Data Reduction	13	09/19/08A	04/17/09	XE12070135	XE12070405*											
XE12070205	Final Design Review Data Storage	0	10/17/08A	10/23/08A	XE12070200	XE12070210											
XE12070140	Procure Hrdwr for Develop Test Setup	0	10/17/08A	01/05/09A	XE12070135	XE12070145											
XE12070220	Dev Software Data Storage	13	10/24/08A	04/17/09	XE12070210	XE12070240											
XE12070225	Prepare Docs Data Storage	22	11/03/08A	04/30/09	XE12070210	XE12070240											
XE12070605	Final Design Review Data Maintenance	0	01/26/09A	01/30/09A	XE12070600	XE12070610											
XE12070235	Fab/Delvr Data Storage	38	02/24/09A	05/22/09	XE12070215	XE12070240*											
XE12070620	Dev Software Data Maintenance	58	02/24/09A	06/19/09	XE12070610	XE12070640											
XE12070625	Prepare Docs Data Maintenance	58	02/24/09A	06/19/09	XE12070610	XE12070640											
XE12070635	Fab/Delvr Data Maintenance	60	04/13/09	07/06/09	XE12070615*	XE12070640*											
XE12070305	Final Design Review Data Movement	5	04/20/09	04/24/09	XE12070300*	XE12070310*											
XE12070405	Final Design Review Data Reduction	5	04/20/09	04/24/09	XE12070400*	XE12070410*											
XE12070320	Dev Software Data Movement	80	04/27/09	08/17/09	XE12070310*	XE12070340											
XE12070325	Prepare Docs Data Movement	80	04/27/09	08/17/09	XE12070310*	XE12070340											
XE12070420	Dev Software Data Reduction	80	04/27/09	08/17/09	XE12070410*	XE12070440											
XE12070425	Prepare Docs Data Reduction	80	04/27/09	08/17/09	XE12070410*	XE12070440											
XE12070245	Performance Improvement Data Storage	200	05/25/09	03/03/10	XE12070240*	XE_LOE											
XE12070335	Fab/Delvr Data Movement	60	06/08/09	08/31/09	XE12070315*	XE12070340*											
XE12070435	Fab/Delvr Data Reduction	60	06/08/09	08/31/09	XE12070415*	XE12070440*											
XE12070645	Performance Improvement	200	07/07/09	04/14/10	XE12070640*	XE_LOE											
XE12070345	Performance Improvement	200	09/01/09	06/09/10	XE12070340*	XE_LOE											
XE12070445	Performance Improvement	200	09/01/09	06/09/10	XE12070440*	XE12070250*, XE_LOE											
XE12070260	Fab/Delvr Data Storage (2)	40	10/13/09	12/07/09	XE12070250*	XE_30*											
1.06.02.10.07.01 Requirements, Design, Test Setup																	
XE12070135	COMP: Preliminary Design Review (PDR) - Data Mgt	0		09/18/08A	XE12070130	XE12070140, XE12070150, XE12070200, XE12070300,											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.07.01 Requirements, Design, Test Setup																	
XE12070145	RCV: Hardware for Develop Test Setup	0		12/02/08A	XE12070140	XE12070215											
1.06.02.10.07.02 Data Storage																	
XE12070210	COMP: FDR for Data Storage	0		11/03/08A	XE12070205	XE12070215, XE12070220, XE12070225											
XE12070215	Procure Data Storage	4	12/16/08A	04/06/09	XE12070145, XE12070150, XE12070210	XE12070235, XE12070250											
XE12070240	COMP: Data Storage System	0		05/22/09	XE12070220, XE12070225, XE12070235*	XE12070245*, XE254_2160											
XE12070250	Procure Data Storage (2)	30	09/01/09	10/12/09	XE12070215, XE12070445*	XE12070260*											
1.06.02.10.07.03 Data Movement																	
XE12070310	COMP: FDR for Data Movement	0		04/24/09	XE12070305*	XE12070315*, XE12070320*, XE12070325*											
XE12070315	Procure Data Movement	30	04/27/09	06/05/09	XE12070310*	XE12070335*											
XE12070340	COMP: Data Movement System	0		08/31/09	XE12070320, XE12070325, XE12070335*	XE12070345*											
1.06.02.10.07.04 Data Reduction																	
XE12070410	COMP: FDR for Data Reduction	0		04/24/09	XE12070405*	XE12070415*, XE12070420*, XE12070425*											
XE12070415	Procure Data Reduction	30	04/27/09	06/05/09	XE12070410*	XE12070435*											
XE12070440	COMP: Data Reduction	0		08/31/09	XE12070420, XE12070425, XE12070435*	XE12070445*											
1.06.02.10.07.06 Data Maintenance																	
XE12070610	COMP: FDR for Data Maintenance	0		01/30/09A	XE12070605	XE12070615, XE12070620, XE12070625											
XE12070615	Procure Data Maintenance	8	03/02/09A	04/10/09	XE12070610	XE12070635*											
XE12070640	COMP: Data Maintenance	0		07/06/09	XE12070620, XE12070625, XE12070635*	XE12070645*											
1.06.02.10.08 Global Cabling & Racks																	
XE228_0050	Purchase: Development Rack	0	02/01/08A	08/01/08A	XE_RB	XE228_0060											
XE228_0060	RCV: Development Rack	0	02/15/08A	09/05/08A	XE228_0050	XE228_0160											
XE228_0105	Develop Cabling & Racks ICDs	0	06/11/08A	08/12/08A	XE1270125	XE228_0115											
XE228_0110	Cabling & Racks Conceptual Design	0	06/11/08A	08/12/08A	XE1270125	XE228_0115											
XE228_0115	Conceptual Design Review (CDR)	0	08/13/08A	08/26/08A	XE228_0105, XE228_0110	XE228_0120											
XE228_0125	Cabling & Racks Preliminary Design	0	08/27/08A	09/05/08A	XE228_0120	XE228_0130											
XE228_0130	Preliminary Design Review (PDR)	0	09/05/08A	09/10/08A	XE228_0125	XE228_0135											
XE228_0120	COMP: CDR for Global Cabling/Racks	0		09/05/08A	XE228_0115	XE228_0125											
XE228_0135	COMP: PDR for Global Cabling/Racks	0		09/10/08A	XE228_0130	XE228_0140, XE228_0160											
XE228_0140	Cabling & Racks Final Design	0	09/11/08A	09/15/08A	XE228_0135	XE228_0145											
XE228_0145	Final Design Review (FDR)	0	09/16/08A	09/22/08A	XE228_0140	XE228_0150											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10			
1.06.02.10.08 Global Cabling & Racks																
XE228_0160	Purchase: Racks/Remote terminal servers/ AC	0	09/16/08A	09/24/08A	MS_260, XE228_0060, XE228_0135	XE228_0165										
XE228_0150	COMP: Final Design Review (FDR)	0		09/26/08A	XE228_0145	XE228_0170										
XE228_0165	RCV: Racks/Remote terminal servers/ AC	0	11/03/08A	03/31/09	XE228_0160	XE228_0170										
XE228_0172	AVAIL: Cables & Racks	0		02/27/09A	XE228_0170	MS3_XT075, S8X7_NH060										
XE228_0170	Cabling & Racks Hardware Development	0	03/03/09A	03/31/09	XE228_0150, XE228_0165	XE228_0172										
1.06.02.10.09 Laser Timing																
XE229_0100	START: Laser Timing System	0	03/03/08A		XE_RB	XE229_0105, XE229_0110										
XE229_0105	Develop Controls Laser Timing System ICDs	0	03/03/08A	03/28/08A	XE229_0100	XE229_0115										
XE229_0110	Controls Laser Timing System Conceptual Design	0	03/03/08A	03/28/08A	XE229_0100	XE229_0115										
XE229_0115	Conceptual Design Review (CDR)	0	03/31/08A	04/11/08A	XE229_0105, XE229_0110	XE229_0120										
XE229_0120	COMP: Conceptual Design Review (CDR)	0		04/11/08A	XE229_0115	XE229_0125										
XE229_0125	Controls Timing System Preliminary Design	0	04/14/08A	05/09/08A	XE229_0120	XE229_0130										
XE229_0135	COMP: Prelim Design Review (PDR) - Laser Timing	0		05/23/08A	XE229_0130	XE229_0140										
XE229_0140	Controls Timing System Final Design	0	05/27/08A	10/30/08A	XE229_0135	XE229_0145, XE229_0160										
XE229_0145	Final Design Review (FDR)	0	01/02/09A	01/15/09A	XE229_0140	XE229_0150										
XE229_0160	Procure: Laser Timing Hardware	0	01/02/09A	01/30/09A	XE229_0140	XE229_0161, XE229_0162, XE229_0163, XE229_0200										
XE229_0150	COMP: Final Design Review (FDR)	0		01/15/09A	XE229_0145	XE229_0155, XE229_0180										
XE229_0155	Controls Timing System Software Development	0	01/16/09A	02/23/09A	XE229_0150	XE229_0182										
XE229_0161	RCV: 4 Crate/CPU/EVR	0	02/24/09A	02/24/09A	XE229_0160	XE229_0180										
XE229_0162	RCV: 1 First article laser timing	0	02/24/09A	02/24/09A	XE229_0160	XE229_0180										
XE229_0163	RCV: 32 Fiber (1)	1	02/24/09A	04/01/09	XE229_0160	XE229_0180*										
XE229_0130	Preliminary Design Review (PDR)	0		05/23/08A	XE229_0125	XE229_0135										
XE229_0180	Controls Timing System Hardware Development	80	04/02/09	07/23/09	XE229_0150, XE229_0161, XE229_0162, XE229_0163*	XE229_0182*										
XE229_0182	AVAIL: Laser Timing System	0		07/23/09	XE229_0155, XE229_0180*	MS3_XT075, S8X7_NH090										
XE229_0200	Procure: 32 Fiber (2)	40	08/03/09*	09/25/09	XE229_0160	XE229_0210*										
XE229_0210	RCV: 32 Fiber (2)	1	09/28/09	09/28/09	XE229_0200*	XE_30										
XE12109011	LBL Timing Procurement (FY10)	210	10/01/09*	07/26/10	XE2240020	XE_LOE										
1.06.02.10.11 Common Hutch Controls																
XE12110100	Design Workstation	0	06/11/08A	09/04/08A	XE1270125	XE12110105										
XE12110200	Design Photon Beam Control	0	06/11/08A	09/04/08A	XE1270125	XE12110205										

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.11 Common Hutch Controls																	
XE12110300	Design Beam Line Interface (120 Hz Data)	0	06/11/08A	09/04/08A	XE1270125	XE12110305											
XE12110400	Design Local Hutch Controls	0	06/11/08A	09/04/08A	XE1270125	XE12110405											
XE12110700	Design Pumping Section	0	08/14/08A	03/09/09A	XE1270125	XE12110705											
XE12110800	Design Focusing Optics	0	08/14/08A	03/09/09A	XE1270125	XE12110805											
XE12110105	Final Design Review Workstation	0	09/05/08A	09/11/08A	XE12110100	XE12110110											
XE12110205	Final Design Review Photon Beam Control	0	09/05/08A	09/11/08A	XE12110200	XE12110210											
XE12110305	Final Design Review Beam Line Interface (120 Hz	0	09/05/08A	09/11/08A	XE12110300	XE12110310											
XE12110120	Dev Software Workstation	0	09/12/08A	03/09/09A	XE12110110	XE12110140											
XE12110125	Prepare Docs Workstation	0	09/12/08A	03/09/09A	XE12110110	XE12110140											
XE12110220	Dev Software Photon Beam Control	0	09/12/08A	03/09/09A	XE12110210	XE12110240											
XE12110225	Prepare Docs Photon Beam Control	0	09/12/08A	03/16/09A	XE12110210	XE12110240											
XE12110320	Dev Software Beam Line Interface (120 Hz Data)	0	09/12/08A	03/16/09A	XE12110310	XE12110340											
XE12110325	Prepare Docs Beam Line Interface (120 Hz Data)	0	09/12/08A	03/16/09A	XE12110310	XE12110340											
XE12110420	Dev Software Local Hutch Controls	0	09/12/08A	03/16/09A	XE12110410	XE12110440											
XE12110425	Prepare Docs Local Hutch Controls	0	09/12/08A	03/16/09A	XE12110410	XE12110440											
XE12110135	Fab/Delvr Workstation	0	10/24/08A	03/27/09A	XE12110115	XE12110138											
XE12110335	Fab/Delvr Beam Line Interface (120 Hz Data)	0	10/24/08A	03/27/09A	XE12110315	XE12110338											
XE12110435	Fab/Delvr Local Hutch Controls	0	10/24/08A	03/27/09A	XE12110415	XE12110438											
XE12110235	Fab/Delvr Photon Beam Control	1	11/03/08A	04/01/09	XE12110215	XE12110238*											
XE12110705	Final Design Review Pumping Section	0	12/09/08A	12/15/08A	XE12110700	XE12110710											
XE12110805	Final Design Review Focusing Optics	0	12/10/08A	12/16/08A	XE12110800	XE12110810											
XE12110720	Dev Software Pumping Section	33	12/16/08A	05/15/09	XE12110710	XE12110740											
XE12110725	Prepare Docs Pumping Section	33	12/16/08A	05/15/09	XE12110710	XE12110740											
XE12110820	Dev Software Focusing Optics	33	12/16/08A	05/15/09	XE12110810	XE12110840											
XE12110825	Prepare Docs Focusing Optics	37	01/02/09A	05/21/09	XE12110810	XE12110840											
XE12110735	Fab/Delvr Pumping Section	42	03/09/09A	05/28/09	XE12110715	XE12110738*											
XE12110835	Fab/Delvr Focusing Optics	42	03/09/09A	05/28/09	XE12110815	XE12110838*											
XE12110138	RCV: Workstation	1	04/01/09	04/01/09	XE12110135	XE12110140*											
XE12110338	RCV: Beam Line Interface (120 Hz Data)	1	04/01/09	04/01/09	XE12110335	XE12110340*											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.11 Common Hutch Controls																	
XE12110438	RCV: Local Hutch Controls	1	04/01/09	04/01/09	XE12110435	XE12110440*											
XE12110238	RCV: Photon Beam Control	1	04/02/09	04/02/09	XE12110235*	XE12110240*											
XE12110738	RCV: Pumping Section	1	05/29/09	05/29/09	XE12110735*	XE12110740*											
XE12110838	RCV: Focusing Optics	1	05/29/09	05/29/09	XE12110835*	XE12110840*											
1.06.02.10.11.01 Workstation																	
XE12110110	COMP: FDR for Workstation	0		09/11/08A	XE12110105	XE12110115, XE12110120, XE12110125											
XE12110115	Procure Workstation	0	09/12/08A	10/23/08A	XE12110110	XE12110135											
XE12110140	AVAIL: Workstation System	0		04/01/09	XE12110120, XE12110125, XE12110138*	S8X7_NH080											
1.06.02.10.11.02 Photon Beam Control																	
XE12110210	COMP: FDR for Photon Beam Control	0		09/11/08A	XE12110205	XE12110215, XE12110220, XE12110225											
XE12110215	Procure Photon Beam Control	0	09/12/08A	10/23/08A	XE12110210	XE12110235											
XE12110240	AVAIL: Photon Beam Control System	0		04/02/09	XE12110220, XE12110225, XE12110238*	S8X7_NH080											
1.06.02.10.11.03 Beam Line Processor																	
XE12110310	COMP: FDR for Beam Line Interface (120 Hz Data)	0		09/11/08A	XE12110305	XE12110315, XE12110320, XE12110325											
XE12110315	Procure Beam Line Interface (120 Hz Data)	0	09/12/08A	10/23/08A	XE12110310	XE12110335											
XE12110340	AVAIL: Beam Line Interface (120 Hz Data)	0		04/01/09	XE12110320, XE12110325, XE12110338*	S8X7_NH080											
1.06.02.10.11.04 Local Hutch Controls																	
XE12110405	Final Design Review Local Hutch Controls	0	09/05/08A	09/11/08A	XE12110400	XE12110410											
XE12110410	COMP: FDR for Local Hutch Controls	0		09/11/08A	XE12110405	XE12110415, XE12110420, XE12110425											
XE12110415	Procure Local Hutch Controls	0	09/12/08A	10/23/08A	XE12110410	XE12110435											
XE12110440	AVAIL: Local Hutch Controls System	0		04/01/09	XE12110420, XE12110425, XE12110438*	S8X7_NH080											
1.06.02.10.11.07 Pumping Section																	
XE12110710	COMP: FDR for Pumping Section	0		12/15/08A	XE12110705	XE12110715, XE12110720, XE12110725											
XE12110715	Procure Pumping Section	0	12/16/08A	03/06/09A	XE12110710	XE12110735											
XE12110740	AVAIL: Pumping Section System	0		05/29/09	XE12110720, XE12110725, XE12110738*	S8X7_NH100											
1.06.02.10.11.08 Focusing Optics																	
XE12110810	COMP: FDR for Focusing Optics	0		12/15/08A	XE12110805	XE12110815, XE12110820, XE12110825											
XE12110815	Procure Focusing Optics	0	12/16/08A	03/06/09A	XE12110810	XE12110835											
XE12110840	AVAIL: Focusing Optics System	0		05/29/09	XE12110820, XE12110825, XE12110838*	S8X7_NH100											
1.06.02.10.12 Data Acquisition (DAQ)																	
XE12120100	Prepare Requirements	0	06/11/08A	08/06/08A	XE1270125	XE12120125											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.12 Data Acquisition (DAQ)																	
XE12120105	Prepare DAQ ICD	0	06/11/08A	08/06/08A	XE1270125	XE12120125											
XE12120110	Prepare Requirements	0	06/11/08A	08/06/08A	XE1270125	XE12120125											
XE12120115	Prepare Final Device List for Phase 1	0	06/11/08A	08/06/08A	XE1270125	XE12120125											
XE12120120	Prepare Final Device List for Phase 2	0	06/11/08A	08/06/08A	XE1270125	XE12120125											
XE12120500	Design 2D Detector	0	08/01/08A	01/06/09A	XE1270125	XE12120505											
XE12120125	Preliminary Design for DAQ	0	08/07/08A	08/20/08A	XE12120100, XE12120105, XE12120110, XE12120115, XE12120125	XE12120130											
XE12120130	Preliminary Design Review (PDR)	0	08/21/08A	08/27/08A	XE12120125	XE12120135											
XE12120140	Procure Hrdwr for Develop Test Setup	0	08/28/08A	11/14/08A	XE12120135	XE12120145											
XE12120150	Develop Software for Test Setup	0	08/28/08A	11/24/08A	XE12120135	XE12120215											
XE12120200	Design DAQ Common	0	08/28/08A	11/24/08A	XE12120135, XE1270125	XE12120205											
XE12120300	Design CE	0	08/28/08A	02/24/09A	XE12120135, XE1270125	XE12120305											
XE12120400	Design CPCI	0	08/28/08A	02/24/09A	XE12120135, XE1270125	XE12120405											
XE12120205	Final Design Review DAQ Common	0	11/25/08A	12/03/08A	XE12120200	XE12120210											
XE12120220	Dev Software DAQ Common	0	12/04/08A	02/24/09A	XE12120210	XE12120240											
XE12120225	Prepare Docs DAQ Common	0	12/04/08A	02/24/09A	XE12120210	XE12120240											
XE12120505	Final Design Review 2D Detector	0	02/25/09A	03/06/09A	XE12120500	XE12120510											
XE12120420	Dev Software CPCI	8	02/25/09A	04/10/09	XE12120410	XE12120440*											
XE12120425	Prepare Docs CPCI	8	02/25/09A	04/10/09	XE12120410	XE12120440*											
XE12120235	Fab/Delvr DAQ Common	38	02/25/09A	05/22/09	XE12120215	XE12120240*											
XE12120320	Dev Software CE	58	02/25/09A	06/19/09	XE12120310	XE12120340											
XE12120325	Prepare Docs CE	58	02/25/09A	06/19/09	XE12120310	XE12120340											
XE12120520	Dev Software 2D Detector	58	02/25/09A	06/19/09	XE12120510	XE12120540*											
XE12120525	Prepare Docs 2D Detector	58	02/25/09A	06/19/09	XE12120510	XE12120540*											
XE12120305	Final Design Review CE	5	04/01/09	04/07/09	XE12120300	XE12120310											
XE12120405	Final Design Review CPCI	5	04/01/09	04/07/09	XE12120400	XE12120410											
XE12120335	Fab/Delvr CE	60	04/13/09	07/06/09	XE12120315*	XE12120340*											
1.06.02.10.12.01 Requirements, Design, Test Setup																	
XE12120135	COMP: Preliminary Design Review (PDR) - DAQ	0		10/01/08A	XE12120130	XE12120140, XE12120150, XE12120200, XE12120300,											
XE12120145	RVCV: Hardware for Develop Test Setup	0		10/14/08A	XE12120140	XE12120215											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10			
1.06.02.10.12.02 DAQ Common																
XE12120210	COMP: FDR for DAQ Common	0		12/03/08A	XE12120205	XE12120215, XE12120220, XE12120225										
XE12120215	Procure DAQ Common	0	12/04/08A	01/27/09A	XE12120145, XE12120150, XE12120210	XE12120235										
XE12120240	AVAIL: DAQ Common System	0		05/22/09	XE12120220, XE12120225, XE12120235*	MS3_XT075, S8X7_NH100, XE_S16_010, XE_S26_010										
1.06.02.10.12.03 CE																
XE12120310	COMP: FDR for CE	0		01/13/09A	XE12120305	XE12120315, XE12120320, XE12120325										
XE12120315	Procure CE	8	01/14/09A	04/10/09	XE12120310	XE12120335*										
XE12120340	AVAIL: CE System	0		07/06/09	XE12120320, XE12120325, XE12120335*	XE254_2150										
1.06.02.10.12.04 CPCI																
XE12120410	COMP: FDR for CPCI	0		01/13/09A	XE12120405	XE12120420, XE12120425										
XE12120440	AVAIL: CPCI System	0		04/10/09	XE12120420*, XE12120425*	S8X7_NH080										
1.06.02.10.12.05 2D Detector																
XE12120510	COMP: FDR for 2D Detector	0		12/11/08A	XE12120505	XE12120520, XE12120525										
XE12120540	AVAIL: 2D Detector System	0		06/19/09	XE12120520*, XE12120525*	XE254_2150										
1.06.02.10.13 Archives																
XE12130100	Prepare Requirements	0	06/11/08A	08/08/08A	XE1270125	XE12130125										
XE12130105	Prepare Archives ICD	0	06/11/08A	08/08/08A	XE1270125	XE12130125										
XE12130110	Prepare Requirements	0	06/11/08A	08/08/08A	XE1270125	XE12130125										
XE12130115	Prepare Final Device List for Phase 1	0	06/11/08A	08/08/08A	XE1270125	XE12130125										
XE12130120	Prepare Final Device List for Phase 2	0	06/11/08A	08/08/08A	XE1270125	XE12130125										
XE12130125	Preliminary Design for Archives	0	08/11/08A	09/08/08A	XE12130100, XE12130105, XE12130110, XE12130115,	XE12130130										
XE12130130	Preliminary Design Review (PDR)	0	09/09/08A	09/15/08A	XE12130125	XE12130135										
XE12130150	Develop Software for Test Setup	0	09/16/08A	01/13/09A	XE12130135	XE12130210										
XE12130200	Design DAQ Archive	0	09/16/08A	01/13/09A	XE12130135, XE1270125	XE12130205										
XE12130300	Design 120 Hz Archive	0	09/16/08A	01/13/09A	XE12130135, XE1270125	XE12130305										
XE12130400	Design EPICS Archive	0	09/16/08A	01/13/09A	XE12130135, XE1270125	XE12130405										
XE12130405	Final Design Review EPICS Archive	0	01/14/09A	01/14/09A	XE12130400	XE12130410										
XE12130205	Final Design Review DAQ Archive	0	01/14/09A	01/20/09A	XE12130200	XE12130210										
XE12130305	Final Design Review 120 Hz Archive	0	01/14/09A	01/20/09A	XE12130300	XE12130310										
XE12130220	Dev Software DAQ Archive	5	01/15/09A	04/07/09	XE12130210	XE12130240*										
XE12130225	Prepare Docs DAQ Archive	5	01/15/09A	04/07/09	XE12130210	XE12130240*										

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.10.13 Archives																	
XE12130320	Dev Software 120 Hz Archive	5	01/15/09A	04/07/09	XE12130310	XE12130340*											
XE12130325	Prepare Docs 120 Hz Archive	5	01/15/09A	04/07/09	XE12130310	XE12130340*											
XE12130420	Dev Software EPICS Archive	5	01/15/09A	04/07/09	XE12130410	XE12130440*											
XE12130425	Prepare Docs EPICS Archive	5	01/15/09A	04/07/09	XE12130410	XE12130440*											
1.06.02.10.13.01 Requirements, Design, Test Setup																	
XE12130135	COMP: Preliminary Design Review (PDR) - Archives	0		09/15/08A	XE12130130	XE12130150, XE12130200, XE12130300, XE12130400											
1.06.02.10.13.02 DAQ Archive																	
XE12130210	COMP: FDR for DAQ Archive	0		01/20/09A	XE12130150, XE12130205	XE12130220, XE12130225											
XE12130240	AVAIL: DAQ Archive System	0		04/07/09	XE12130220*, XE12130225*	MS3_XE060, S8X7_NH080											
1.06.02.10.13.03 120 Hz Archives																	
XE12130310	COMP: FDR for 120 Hz Archive	0		01/20/09A	XE12130305	XE12130320, XE12130325											
XE12130340	AVAIL: 120 Hz Archive System	0		04/07/09	XE12130320*, XE12130325*	S8X7_NH080											
1.06.02.10.13.04 EPICS Archive																	
XE12130410	COMP: FDR for EPICS Archive	0		01/14/09A	XE12130405	XE12130420, XE12130425											
XE12130440	AVAIL: EPICS Archive System	0		04/07/09	XE12130420*, XE12130425*	S8X7_NH080											
1.06.02.10.14 Data Retrieval & Analysis																	
XE12140100	Prepare Requirements	0	11/03/08A	01/12/09A	MS_260	XE12140125											
XE12140105	Prepare Data Retrieval ICD	0	11/03/08A	01/12/09A	MS_260	XE12140125											
XE12140115	Prepare Final Device List for Phase 1	0	11/03/08A	01/12/09A	MS_260	XE12140125											
XE12140125	Preliminary Design for Data Retrieval	4	01/13/09A	04/06/09	XE12140100, XE12140105, XE12140115	XE12140130*											
XE12140140	Procure Hrdwr for Develop Test Setup	31	04/01/09	05/13/09	XE12140135	XE12140145*											
XE12140150	Develop Software for Test Setup	60	04/01/09	06/23/09	XE12140135	XE12140210											
XE12140130	Preliminary Design Review (PDR)	5	04/07/09	04/13/09	XE12140125*	XE12140135											
XE12140200	Design Data Retrieval	80	08/11/09	11/30/09	XE12140135*	XE12140205*											
XE12140300	Design Data Analysis	80	08/11/09	11/30/09	XE12140135*	XE12140305*											
XE12140205	Final Design Review Data Retrieval	5	12/01/09	12/07/09	XE12140200*	XE12140210*											
XE12140305	Final Design Review Data Analysis	5	12/01/09	12/07/09	XE12140300*	XE12140310*											
XE12140220	Dev Software Data Retrieval	80	12/08/09	03/31/10	XE12140210*	XE12140240*											
XE12140225	Prepare Docs Data Retrieval	80	12/08/09	03/31/10	XE12140210*	XE12140240*											
XE12140320	Dev Software Data Analysis	80	12/08/09	03/31/10	XE12140310*	XE12140340*											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.06.02.10.14 Data Retrieval & Analysis																		
XE12140325	Prepare Docs Data Analysis	80	12/08/09	03/31/10	XE12140310*	XE12140340*												
1.06.02.10.14.01 Requirements, Design, Test Setup																		
XE12140135	COMP: PDR for Data Retrieval/Analysis	0		03/20/09A	XE12140130	MS1_PM040, XE12140140, XE12140150, XE12140200*												
XE12140145	RCV: Hardware for Develop Test Setup	0		05/13/09	XE12140140*	XE12140210												
1.06.02.10.14.02 Data Retrieval																		
XE12140210	COMP: FDR for Data Retrieval	0		12/07/09	XE12140145, XE12140150, XE12140205*	XE12140220*, XE12140225*												
XE12140240	AVAIL: Data Retrieval System	0		03/31/10	XE12140220*, XE12140225*	MS1_PM040												
1.06.02.10.14.03 Data Analysis																		
XE12140310	COMP: FDR for Data Analysis	0		12/07/09	XE12140305*	XE12140320*, XE12140325*												
XE12140340	AVAIL: Data Analysis System	0		03/31/10	XE12140320*, XE12140325*	MS1_PM040												
1.06.02.11 Laser Controls																		
XE624_0105	Develop Laser Controls System ICDs	0	06/11/08A	08/08/08A	XE1270125	XE624_0130												
XE624_0125	Laser Controls System Preliminary Design	0	06/11/08A	08/08/08A	XE1270125	XE624_0130												
XE624_0130	Preliminary Design Review (PDR)	0	08/11/08A	08/15/08A	XE624_0105, XE624_0125	XE624_0135												
XE624_0140	Laser Controls System Final Design	0	08/18/08A	12/01/08A	XE624_0135	XE624_0145, XE624_0160												
XE624_0135	COMP: Prelim Design Review (PDR) - Laser Control	0		09/03/08A	XE624_0130	XE624_0140												
XE624_0160	Procure: Laser Controls Hardware	3	12/08/08A	04/03/09	XE624_0140	XE624_0165, XE624_0170, XE624_0175, XE624_0180,												
XE624_0150	COMP: Final Design Review (FDR) - Laser Control	0		12/08/08A	XE624_0145	XE624_0155, XE624_0195												
XE624_0155	Laser Controls System Software Development	0	12/09/08A	02/24/09A	XE624_0150	XE624_0197												
XE624_0145	Final Design Review (FDR)	0	01/02/09A	01/08/09A	XE624_0140	XE624_0150												
XE624_0165	RCV: 1 Crate/CPU/EVR	0	02/24/09A	03/02/09A	XE624_0160	XE624_0195												
XE624_0170	RCV: 24 Position controls	0	02/24/09A	03/02/09A	XE624_0160	XE624_0195												
XE624_0175	RCV: 1 General IO	0	02/24/09A	03/02/09A	XE624_0160	XE624_0195												
XE624_0180	RCV: 1 Timing	0	02/24/09A	03/02/09A	XE624_0160	XE624_0195												
XE624_0185	RCV: 5 Video Diagnostics	0	02/24/09A	03/02/09A	XE624_0160	XE624_0195												
XE624_0195	Laser Controls System Hardware Development	10	03/03/09A	04/14/09	XE624_0150, XE624_0165, XE624_0170, XE624_0175,	XE624_0197*												
XE624_0197	AVAIL: Laser Controls System	0		04/14/09	XE624_0155, XE624_0195*	MS3_XE060, S8X7_NH090												
1.06.02.12 SXR Controls																		
1.06.02.12.01 SXR Requirement - Design & Setup																		
XE_SXR0900	Prepare Documents	26	01/02/09A	05/06/09	XE_S1_0010	XE_SXR0920*												
XE_SXR0920	Preliminary Design - SXR Phase 1	20	05/07/09	06/03/09	XE_SXR0900*	XE_SXR0940*												

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
1.06.02.12.01 SXR Requirement - Design & Setup																	
XE_SXR0940	Preliminary Design - SXR Phase 2	42	06/04/09	08/03/09	XE_SXR0920*	XE_SXR0960*											
XE_SXR0960	Preliminary Design Review - SXR	1	08/04/09	08/04/09	XE_SXR0940*	XE_SXR0980*											
XE_SXR0980	COMP: Preliminary Design Review (PDR) - SXR	0		08/04/09	XE_SXR0960*												
1.06.02.12.02 SXR Hardware Procurement																	
XE_SXR0780	Spec/Bid/Award SXR Racks	0	01/02/09A	01/15/09A	XE_S1_0010	XE_SXR0790											
XE_SXR0700	Spec/Bid/Award SXR MPS/PPS	0	01/02/09A	02/24/09A	XE_S1_0010	XE_SXR0710, XE_SXR0740, XE_SXR1000											
XE_SXR0740	Spec/Bid/Award SXR VME	0	01/16/09A	02/24/09A	XE_SXR0700	XE_SXR0750											
XE_SXR0790	AWARD: SXR Racks	0	01/16/09A	02/24/09A	XE_SXR0780	XE_SXR0800											
XE_SXR0800	Fab/Deliver SXR Racks	58	01/19/09A	06/19/09	XE_SXR0790	XE_SXR0810											
XE_SXR1050	Spec/Bid/Award Cables - SXR	2	01/29/09A	04/02/09	XE_S1_0010	XE_SXR1060*, XE_SXR1190											
XE_SXR0820	Spec/Bid/Award SXR Workstation	0	02/24/09A	02/24/09A	XE_S1_0010	XE_SXR0830, XE_SXR0860											
XE_SXR0710	AWARD: SXR MPS/PPS	1	03/02/09A	04/01/09	XE_SXR0700	XE_SXR0720											
XE_SXR0750	AWARD: SXR VME	1	03/02/09A	04/01/09	XE_SXR0740	XE_SXR0760											
XE_SXR0830	AWARD: SXR Workstation	1	03/02/09A	04/01/09	XE_SXR0820	XE_SXR0840											
XE_SXR1000	Spec/Bid/Award Laser Controls - SXR CY 08	18	03/02/09A	04/24/09	XE_SXR0700	XE_SXR1020*, XE_SXR1190											
XE_SXR0760	Fab/Deliver SXR VME	69	03/03/09A	07/07/09	XE_SXR0750	XE_SXR0770*											
XE_SXR0840	Fab/Deliver SXR Workstation	69	03/03/09A	07/07/09	XE_SXR0830	XE_SXR0850*											
XE_SXR0720	Fab/Deliver SXR MPS/PPS	82	03/03/09A	07/24/09	XE_SXR0710	XE_SXR0730*											
XE_SXR0860	Spec/Bid/Award Vacuum Controllers - SXR	4	03/10/09A	04/06/09	XE_SXR0820	XE_SXR0870*											
XE_SXR1190	Spec/Bid/Award Laser Controls - SXR CY 09	6	03/12/09A	04/08/09	XE_S1_0010, XE_SXR1000, XE_SXR1050	XE_SXR1200*											
XE_SXR1170	Fab/Deliver SXR Cables	37	03/13/09A	05/21/09	XE_SXR1060	XE_SXR1180											
XE_SXR1060	AWARD: Cables - SXR	1	04/03/09	04/03/09	XE_SXR1050*	XE_SXR1170											
XE_SXR1200	AWARD: Laser Controls Phase 2 - SXR	1	04/09/09	04/09/09	XE_SXR1190*	XE_SXR1210*											
XE_SXR0870	AWARD: SXR Vacuum Controllers	1	04/10/09	04/10/09	XE_SXR0860*	XE_SXR0880*											
XE_SXR1210	Fab/Deliver SXR Laser Controls Phase 2	55	04/10/09	06/25/09	XE_SXR1200*	XE_SXR1220*, XE_SXR1240											
XE_SXR0880	Fab/Deliver SXR Vacuum Controllers	90	04/13/09	08/17/09	XE_SXR0870*	XE_SXR0890*											
XE_SXR1020	AWARD: Laser Controls Phase 1 - SXR	1	04/27/09	04/27/09	XE_SXR1000*	XE_SXR1030*											
XE_SXR1030	Fab/Deliver SXR Laser Controls Phase 1	90	04/28/09	09/01/09	XE_SXR1020*	XE_SXR1040*											
XE_SXR1220	RCV: SXR Laser Controls Phase 2	1	06/26/09	06/26/09	XE_SXR1210*	XE_SXR1240											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
1.06.02.12.02 SXR Hardware Procurement																		
XE_SXR0770	RCV: SXR VME	1	07/08/09	07/08/09	XE_SXR0760*	XE_SXR0810*, XE_SXR1240												
XE_SXR0850	RCV: SXR Workstation	1	07/08/09	07/08/09	XE_SXR0840*	XE_SXR1240												
XE_SXR0810	RCV: SXR Racks	24	07/09/09	08/11/09	XE_SXR0770*, XE_SXR0800	XE_SXR1180*, XE_SXR1240												
XE_SXR0730	RCV: SXR MPS/PPS	1	07/27/09	07/27/09	XE_SXR0720*	XE_SXR1240												
XE_SXR1180	RCV: SXR Cables	1	08/12/09	08/12/09	XE_SXR0810*, XE_SXR1170	XE_SXR1260*												
XE_SXR1260	Cables Available	0		08/12/09	XE_SXR1180*	XE_S16_250*, XE_SXR1400												
XE_SXR0890	RCV: SXR Vacuum Controllers	1	08/18/09	08/18/09	XE_SXR0880*	XE_SXR1240												
XE_SXR1040	RCV: SXR Laser Controls Phase 1	1	09/02/09	09/02/09	XE_SXR1030*	XE_SXR1240*												
XE_SXR1240	Hardware Available	0		09/02/09	XE_SXR0730, XE_SXR0770, XE_SXR0810, XE_SXR0850,	XE_S16_260*, XE_SXR1400*												
XE_SXR1400	I & C infrastructure complete	0		09/02/09	XE_SXR1240*, XE_SXR1260	XE_S16_301												
1.06.02.12.03 EDI Software & Hardware																		
XE_SXR0300	EDI Device software / hardware - SXR	256	01/29/09A	03/29/10	XE_S1_0010													
2 LCLS PROJECT - R&D, SPARES, COMMISSIONING																		
2.01 LCLS PROJECT MGMT, PLANNING & ADMN (OPC)																		
2.01.01 LCLS Commissioning Mgmt & Physics Support																		
2.01.01.11 Global Controls OPC																		
2.01.01.11.15 Controls S/W Applications																		
PM1115_001	LCLS Share of Network Cost	0	02/01/08A	09/30/08A	PMSTART	PM1115_125												
PM1115_125	COMP: Network Installation	0		10/01/08A	PM1115_001, PMSTART	PM_LOE												
2.02 INJECTOR SYSTEM (OPC)																		
2.02.02 Injector Controls Subsystem																		
2.02.02.04 Power Conv (beamline pwr supp) Spares																		
IJ16020400	Procure 12 AMP MCOR Modules (2)-Spares	0	05/27/08A	07/31/08A	PMSTART	IJ_OPCSPR												
IJ16020405	Procure 30 AMP MCOR Modules (1)-Spares	0	05/27/08A	07/31/08A	MS_250	IJ_OPCSPR												
IJ16020410	Procure 15KW Power Supply-Spares	0	05/27/08A	02/27/09A	MS_250	IJ_OPCSPR												
2.02.08 Injector System Emittance Enhancement																		
2.02.08.07 Laser Heater Controls																		
IJ20807010	Laser Heater Controls Conceptual Design	0	02/01/08A	07/31/08A	PMSTART	IJ20807015												
IJ20807095	Procure: 1 Motor Drivers	0	06/30/08A	07/29/08A	IJ20807040	IJ20807100												
IJ20807105	Procure: 8 Motor Drivers	0	06/30/08A	07/29/08A	IJ20807040	IJ20807110												
IJ20807125	Procure: 1 IOC Crate	0	07/01/08A	07/31/08A	IJ20807040	IJ20807130												

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
2.02.08.07 Laser Heater Controls																	
IJ20807100	RCV: 1 Motor Drivers	0	07/30/08A	07/30/08A	IJ20807095	IJ20807155											
IJ20807110	RCV: 8 Motor Drivers	0	07/30/08A	07/30/08A	IJ20807105	IJ20807155											
IJ20807130	RCV: 1 IOC Crate	0	07/31/08A	07/31/08A	IJ20807125	IJ20807155											
IJ20807012	Laser Heater Controls Conceptual Design - 2	0	08/01/08A	08/31/08A	PMSTART	IJ20807015			■								
IJ20807085	Procure: 4 Interrick Cables	0	08/04/08A	08/27/08A	IJ20807040	IJ20807090			■								
IJ20807145	Procure: 1 Function Generator	0	08/04/08A	08/27/08A	IJ20807040	IJ20807150			■								
IJ20807090	RCV: 4 Interrick Cables	0	08/27/08A	08/27/08A	IJ20807085	IJ20807155											
IJ20807150	RCV: 1 Function Generator	0	08/28/08A	08/28/08A	IJ20807145	IJ20807155											
IJ20807060	Laser Heater Controls Software	0	08/29/08A	11/14/08A	IJ20807030	IJ20807160			■								
IJ20807000	Start: Laser Heater Controls	0	09/02/08A		IJ20807155	IJ20807160			◆								
IJ20807015	Conceptual Design Review	0	09/02/08A	09/02/08A	IJ20807010, IJ20807012	IJ20807020, IJ20807025											
IJ20807025	Preliminary Design Review (PDR)	0	09/02/08A	09/02/08A	IJ20807015	IJ20807035											
IJ20807035	Laser Heater Cntrls Final Design Review (FDR)	0	09/02/08A	09/02/08A	IJ20807025, IJ20807030	IJ20807040											
IJ20807070	RCV: 4 Camera	0	09/02/08A	09/02/08A	IJ20807065	IJ20807155											
IJ20807140	RCV: 1 UPS	0	09/02/08A	09/02/08A	IJ20807135	IJ20807155											
IJ20807020	Laser Heater Controls Preliminary Design	0	09/02/08A	09/15/08A	IJ20807015	IJ20807030			■								
IJ20807030	Laser Heater Controls Final Design	0	09/02/08A	09/15/08A	IJ20807020	IJ20807035, IJ20807060			■								
IJ20807040	COMP: Laser Heater Controls Design	0		09/02/08A	IJ20807035	IJ20807045, IJ20807050, IJ20807065, IJ20807075, IJ20807085, IJ20807095, IJ20807055			◆								
IJ20807045	Laser Heater Controls Prototype Software	0	09/03/08A	09/17/08A	IJ20807040	IJ20807055			■								
IJ20807050	Laser Heater Controls Prototype Hardware	0	09/03/08A	09/17/08A	IJ20807040	IJ20807055			■								
IJ20807065	Procure: 4 Camera	0	09/03/08A	09/30/08A	IJ20807040	IJ20807070			■								
IJ20807075	Procure: 4 PMC Interface and Cables	0	09/03/08A	09/30/08A	IJ20807040	IJ20807080			■								
IJ20807135	Procure: 1 UPS	0	09/03/08A	09/30/08A	IJ20807040	IJ20807140			■								
IJ20807055	COMP: Laser Heater Controls Prototype	0		09/17/08A	IJ20807045, IJ20807050	IJ20807155			◆								
IJ20807170	Procure: Laser Heater Controls misc	0	10/01/08A	11/26/08A	IJ20807040	IJ20807155			■								
IJ20807120	RCV: 5 IOCs CPU/EVR/Span	0	10/06/08A	10/08/08A	IJ20807115	IJ20807155											
IJ20807155	LTU Laser Heater Controls H/W Fab	0	10/09/08A	10/29/08A	IJ20807055, IJ20807070, IJ20807080, IJ20807090, IJ20807100, IJ20807110,	IJ20807000, IJ20807160			■								
IJ20807160	LTU Laser Heater Cntrls Integration and Test	0	10/30/08A	11/14/08A	IJ20807000, IJ20807060, IJ20807155, MS_260	IJ20807165			■								
IJ20807165	AVAIL: Laser Heater Controls	0		11/14/08A	IJ20807160	IJ1715_040, IJ1715_120, PM_LOE			◆								

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
2.02.08.07 Laser Heater Controls																	
IJ20807115	Procure: 5 IOCs CPU/EVR/Span	0		10/03/08A	IJ20807040	IJ20807120											
IJ20807080	RCV: 4 PMC Interface and Cables	0		10/15/08A	IJ20807075	IJ20807155											
2.03 LINAC SYSTEM (OPC)																	
2.03.02 Linac Controls & Power Conversion Subsystem																	
2.03.02.04 Power Conversion																	
2.03.02.04.01 Spare Power Supply (Dipole Type)																	
LN020436	SPARE PWR SUPPLY SUMMARY-DIPOLE TYPE (1ea)	0	02/01/08A	12/19/08A	PMSTART	LN02043621											
LN02043621	Spare Pwr Supply (Dipole Type) Procurement	0	02/01/08A	12/19/08A	LN020436, MS_250	LN02043622, LN02043633											
LN02043628	Integrate Pwr Supply, Transducer & Control	0	07/01/08A	07/10/08A	LN02043622	LN02043630											
LN02043630	Integrate Cables	0	07/11/08A	07/31/08A	LN02043628	LN02043633											
LN02043633	AVAIL: Spare Power Supply Available - Dipole Type	0		12/19/08A	LN02043621, LN02043630	PM_LOE											
LN02043622	Assemble Pwr Supply, Transducer & Control	0		06/30/08A	LN02043621	LN02043628											
2.03.02.04.02 Spare Power Supply (Quad Type)																	
LN02045317	Spare Pwr Supply (Quad Type) Procurement	0	02/01/08A	06/23/08A	LN020453, MS_250	LN02045318											
LN020453	SPARE PWR SUPPLY SUMMARY-QUAD TYPE (1ea)	0	02/01/08A	08/29/08A	PMSTART	LN02045317											
LN02045320	Integrate Pwr Supply, Transducer & Control	0	07/01/08A	07/10/08A	LN02045318	LN02045322											
LN02045322	Integrate Cables	0	07/11/08A	07/14/08A	LN02045320	LN02045324											
LN02045324	Integrate Magnet Interlock	0	07/15/08A	07/31/08A	LN02045322	LN02045326											
LN02045326	AVAIL: Spare Power Supply Available - Quad Type	0		08/29/08A	LN02045324	PM_LOE											
LN02045318	Assemble Pwr Supply, Transducer & Control	0		06/30/08A	LN02045317	LN02045320											
2.03.02.04.03 Spare Power Supply (Trim Type)																	
LN02045225	Spare Power Supply Procurement	0	02/01/08A	12/19/08A	MS_250	LN02045226, LN02045241											
LN02045238	Integrate Cables	0	06/24/08A	07/31/08A	LN02045226	LN02045241											
LN02045226	RCV: Spare MCOR System Hardware/Equip.	0		12/19/08A	LN02045225, MS_220	LN02045238											
LN02045241	AVAIL: Spare Power Supply Available - Trim Type	0		12/19/08A	LN02045225, LN02045238	LN_LOE											
2.04 UNDULATOR SYSTEM (OPC)																	
2.04.02 Controls																	
2.04.02.01 Controls Management and Integration																	
UN35_00000	Start: Controls Management and Integration	0	02/01/08A		UNREBA	UN35_00211											
UN35_00130	START: Undulator Controls Spares	0	01/26/09A		MS_260	UN35_00211, UN35_00272, UN45_00201, UN45_00211,											
UN45_00201	AWARD: SDB Ion Pump (1)	0	02/02/09A	02/03/09A	UN35_00130	UN45_00325											

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
2.04.02.01 Controls Management and Integration																	
UN45_00211	AWARD: SDB Ion Pump Power Supply (1)	0	02/02/09A	02/03/09A	UN35_00130	UN45_00327											
UN45_00221	AWARD: SDB Ion Pump Cable (1)	0	02/02/09A	02/03/09A	UN35_00130	UN45_00329											
UN46_00251	AWARD: LDB Ion Pump (1)	0	02/02/09A	02/03/09A	UN35_00130	UN46_00256, UN46_00405											
UN35_00272	AWARD - Contract - Quad Cables (2)	1	03/02/09A	04/01/09	UN35_00130	UN35_00151, UN46_00257					■						
UN45_00325	RCV: SDB Ion Pump	1	03/02/09A	04/01/09	UN45_00201	UN_LOE					■						
UN45_00327	RCV: SDB Ion Pump Power Supply	1	03/02/09A	04/01/09	UN45_00211	UN_LOE					■						
UN45_00329	RCV: SDB Ion Pump Cable	1	03/02/09A	04/01/09	UN45_00221	UN_LOE					■						
UN46_00405	RCV: LDB Ion Pump (1)	1	03/02/09A	04/01/09	UN46_00251	UN_LOE					■						
UN35_00151	Vendor Fab/Assy - Quad Cables (2)	0	03/03/09A	03/16/09A	UN35_00272	UN_LOE					■						
UN46_00253	AWARD: LDB Power Supply (1)	2	04/01/09	04/02/09	UN35_00130	UN46_00257*											
UN35_00211	AWARD: Contract-Quad PS+addl items (2)	10	04/01/09	04/14/09	UN35_00000, UN35_00130	UN35_00133*					■						
UN46_00256	RCV: LDB Power Supply (1)	35	04/01/09	05/19/09	UN46_00251	UN_LOE					■						
UN46_00257	RCV: LDB Cable (1)	18	04/03/09	04/28/09	UN35_00272, UN46_00253*	UN_LOE					■						
UN35_00133	Vendor Fab/Assy - Quad PS+ addl items (2)	40	04/15/09	06/09/09	UN35_00211*	UN35_00143*					■						
UN35_00143	RCV: Quad PS + addl items (2)	12	06/10/09	06/25/09	UN35_00133*	UN_LOE					■						
2.04.02.10 Undulator Controls Module Spares																	
UN210_0040	UCM-IC Prototype Fabrication	0	05/01/08A	06/02/08A	UN21014011, UNBCR_O804	UN210_0050	■										
UN210_0020	Production IOC units tested	0	05/01/08A	06/30/08A	UN21010015, UNBCR_O804	UN21010025	■										
UN210_0030	UCM-IC Testing	0	05/01/08A	06/30/08A	UN21014011, UNBCR_O804	UN210_0050	■										
UN210_0010	Production UCMI unit tests	0	06/02/08A	06/20/08A	UN21005020, UN21009015	UN21009025	■										
UN210_0050	Prepare Bid Package for UCM-IC	0	06/03/08A	06/16/08A	UN210_0030, UN210_0040	UN21014027, UN210_0060	■										
UN210_0060	RCV: Production UCM-IC	0	06/20/08A	06/20/08A	UN21014027, UN210_0050	UN210_0070	■										
UN210_0070	Prepare UCM-IC for Shipment to SLAC	0	06/23/08A	06/27/08A	UN210_0060	UN210_0080	■										
UN210_0080	Ship UCM-IC Units to SLAC	0	06/30/08A	06/30/08A	UN210_0070	UN2003B055	■										
UN210S9001	Procure Spare Production UCMI	0	07/01/08A	07/31/08A	UNREBA	UN_LOE	■										
UN210S9005	Procure Spare Production Blade IOC	0	07/01/08A	07/31/08A	UNREBA	UN_LOE	■										
UN210S9010	Procure Spare Production Motors	0	07/01/08A	07/31/08A	UNREBA	UN_LOE	■										
UN210S9015	Procure Spare Production Potentiometers	0	07/01/08A	07/31/08A	UNREBA	UN_LOE	■										
UN210S9020	Procure Spare Production RTD	0	07/01/08A	07/31/08A	UNREBA	UN42_SP041, UN42_SP042, UN42_SP043, UN42_SP044,	■										

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10					
2.04.02.12 Undulator Controls Racks & Cables Spares																		
UN210S1075	Spare Undulator Racks	0	07/01/08A	07/31/08A	UNREBA	UN_LOE												
UN210S1080	Spare Intra-Undulator Cabling	0	07/01/08A	07/31/08A	UNREBA	UN_LOE												
UN210S1085	Spare Electronics Interface Assembly	0	07/01/08A	07/31/08A	UNREBA	UN_LOE												
2.04.02.15 BLM Interface Module Development																		
UN2150000	Start: BLM Interface Module Development	0	02/01/08A		UNREBA	UN21501006												
UN21501001	Electronic Design	0	02/01/08A	04/30/08A	UNREBA	UN21501011												
UN21501006	Interface Supervision	0	02/01/08A	04/30/08A	UN2150000, UNREBA	UN_LOE												
UN21501016	BLM-IM Prototype Fabrication	0	02/01/08A	04/30/08A	UNREBA	UN21501011												
UN21501011	BLM-IM Testing	0	07/01/08A	11/17/08A	UN21501001, UN21501016	UN21501041												
UN21501041	Prepare BLM-IM for Shipment to SLAC	0	11/18/08A	11/24/08A	UN21501011	UN21501046												
UN21501046	Ship BLM-IM to SLAC	0	11/25/08A	11/25/08A	UN21501041	UN_LOE												
2.06 X-RAY END STATION SYSTEMS (OPC)																		
2.06.02 Controls Subsystem																		
2.06.02.04 LBNL Laser Timing																		
XE2240020	LBL Timing Procurement (FY08)	0	02/01/08A	09/30/08A	XE_RB	XE12109011, XE2240030												
XE2240030	LBL Timing Procurement (FY09)	150	10/01/08A	10/28/09	XE2240020	XE_LOE												
XE2240130	Procure Controls	0	12/01/08A	03/11/09A	XE2240110	XE2240150												
XE2240150	Procure Helix	0	12/01/08A	03/11/09A	XE2240130	XE2240170												
XE2240050	Fab Phase Cavities	6	12/01/08A	04/08/09		XE2240070, XE2240190*												
XE2240070	Procure Phase Cavity Electronics	6	12/01/08A	04/08/09	XE2240050	XE2240090, XE2240110												
XE2240110	Procure Water Chiller system	6	12/01/08A	04/08/09	XE2240070	XE2240130												
XE2240190	Phase Cavity Testing	12	04/09/09	04/24/09	XE2240050*	XE2240090*, XE2240170*												
XE2240090	Install Phase Cavities	10	04/27/09	05/08/09	XE2240070, XE2240190*													
XE2240170	Install Helix	10	04/27/09	05/08/09	XE2240150, XE2240190*													
2.06.02.08 2-D X-Ray Detector Controls																		
XE2281010	DAQ system & component design	0	03/03/08A	12/03/08A	XE_RB	XE2281020, XE2281025, XE2281030												
XE2282010	Mechanical Design & Analysis, testing	0	03/03/08A	12/03/08A	XE_RB	XE2282020												
XE2281020	DAQ Software Development (FY08)	0	04/28/08A	10/01/08A	XE2281010	XE2281025												
XE2281030	ASIC interface board schematic/layout	0	05/27/08A	12/03/08A	XE2281010	XE2281040												
XE2281025	DAQ Software Development (FY09)	40	10/01/08A	05/26/09	XE2281010, XE2281020	XE2281080												

Activity ID	Activity Description	Rem Dur	Early Start	Early Finish	Predecessors	Successors	FY08			FY09			FY10				
2.06.02.08 2-D X-Ray Detector Controls																	
XE2281040	Fabrication of interface board	0	12/04/08A	01/14/09A	XE2281030	XE2281050											
XE2282020	Mech. Fabrication, first article (1st half)	9	12/09/08A	04/13/09	XE2282010	XE2282021*, XE2282025*											
XE2281050	Testing/commissioning DAQ - Functional	8	01/15/09A	04/10/09	XE2281040	XE2281060*, XE2281070*											
XE2281060	AVAIL: DAQ system - Functional	0		04/10/09	XE2281050*	XE2281070*											
XE2281070	Testing/commissioning DAQ - Performance	124	04/13/09	10/02/09	XE2281050*, XE2281060*	XE2281080*											
XE2282021	Mech. Fabrication, first article (2nd half)	40	04/14/09	06/08/09	XE2282020*	XE2282025											
XE2282025	Mech. Test & Design Modifications, 1st Article	48	04/14/09	06/18/09	XE2282020*, XE2282021	XE2282030*											
XE2282030	Mech. Fabrication, Final System	52	06/19/09	09/01/09	XE2282025*	XE2282040*, XE2282050											
XE2282040	Mech. Assembly, Final System	20	09/02/09	09/29/09	XE2282030*	XE2282050*											
XE2282050	Mechanical Assembly Ready for Integration	0		09/29/09	XE2282030, XE2282040*	XE1644030											
XE2281080	AVAIL: DAQ system - Performance	0		10/02/09	XE2281025, XE2281070*	XE_30											