(O) NEXT - Detail Schedule

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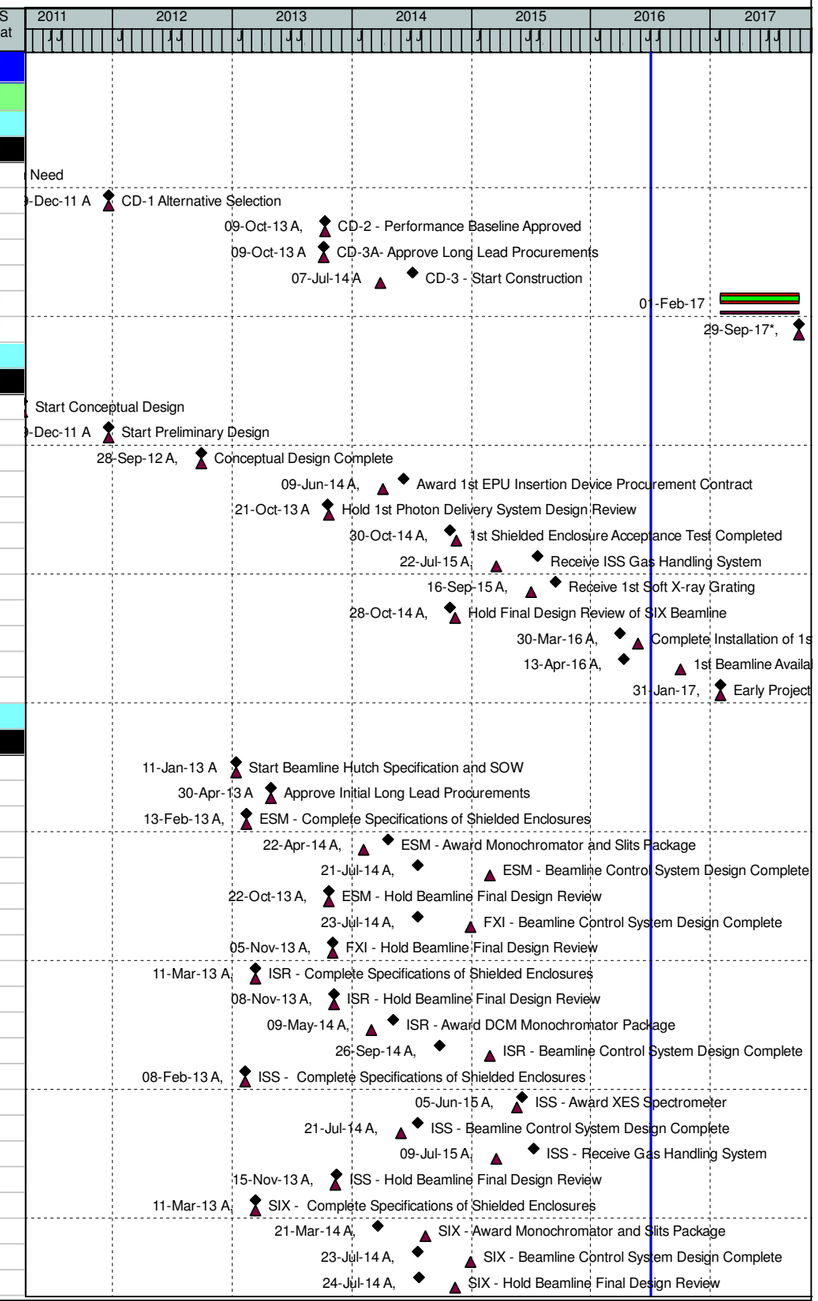
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
NEXT Working Schedule			88.17%	1837	27-May-10 A	29-Sep-17	27-May-10	29-Sep-17	0	$82,684,713.92	0
NEXT Milestones			0%	1837	27-May-10 A	29-Sep-17	27-May-10	29-Sep-17	0	$0.00	0
Level 1 Milestones			0%	1837	27-May-10 A	29-Sep-17	27-May-10	29-Sep-17	0	$0.00	0
Top Level Milestones			0%	1837	27-May-10 A	29-Sep-17	27-May-10	29-Sep-17	0	$0.00	0
2-W.M.1	M1000	CD-0 - Mission Need	100%	0	27-May-10 A		27-May-10		0	$0.00	
2-W.M.1	M1005	CD-1 Alternative Selection	100%	0	19-Dec-11 A		19-Dec-11		0	$0.00	
2-W.M.1	M1006	CD-2 - Performance Baseline Approved	100%	0		09-Oct-13 A		09-Oct-13	0	$0.00	
2-W.M.1	M1010	CD-3A- Approve Long Lead Procurements	100%	0	09-Oct-13 A		09-Oct-13		0	$0.00	
2-W.M.1	M1015	CD-3 - Start Construction	100%	0	07-Jul-14 A		31-Mar-14		-67	$0.00	
2-W.M.1	M1020	NEXT Project - Built-In Float for Schedule Contingency	0%	168	01-Feb-17	29-Sep-17	01-Feb-17	29-Sep-17	0	$0.00	0
2-W.M.1	M1025	CD-4 Project Completion	0%	0		29-Sep-17*		29-Sep-17	0	$0.00	0
Level 2 Milestones			0%	1458	01-Apr-11 A	31-Jan-17	01-Apr-11	31-Jan-17	0	$0.00	0
Top Level Milestones			0%	1458	01-Apr-11 A	31-Jan-17	01-Apr-11	31-Jan-17	0	$0.00	0
2-W.M.2	M2000	Start Conceptual Design	100%	0	01-Apr-11 A		01-Apr-11		0	$0.00	
2-W.M.2	M2010	Start Preliminary Design	100%	0	19-Dec-11 A		19-Dec-11		0	$0.00	
2-W.M.2	M2020	Conceptual Design Complete	100%	0		28-Sep-12 A		28-Sep-12	0	$0.00	
2-W.M.2	M2025	Award 1st EPU Insertion Device Procurement Contract	100%	0		09-Jun-14 A		07-Apr-14	-43	$0.00	
2-W.M.2	M2030	Hold 1st Photon Delivery System Design Review	100%	0	21-Oct-13 A		21-Oct-13		0	$0.00	
2-W.M.2	M2033	1st Shielded Enclosure Acceptance Test Completed	100%	0		30-Oct-14 A		17-Nov-14	13	$0.00	
2-W.M.2	M2040	Receive ISS Gas Handling System	100%	0		22-Jul-15 A		17-Mar-15	-88	$0.00	
2-W.M.2	M2055	Receive 1st Soft X-ray Grating	100%	0		16-Sep-15 A		01-Jul-15	-52	$0.00	
2-W.M.2	M2056	Hold Final Design Review of SIX Beamline	100%	0		28-Oct-14 A		13-Nov-14	13	$0.00	
2-W.M.2	M2060	Complete Installation of 1st Beamline Components	100%	0		30-Mar-16 A		25-May-16	41	$0.00	
2-W.M.2	M2070	1st Beamline Available	100%	0		13-Apr-16 A		30-Sep-16	119	$0.00	
2-W.M.2	M2075	Early Project Completion - Including IRR	0%	0		31-Jan-17		31-Jan-17	0	$0.00	0
Level 3 Milestones			0%	622	11-Jan-13 A	09-Jul-15 A	11-Jan-13	21-May-15	-32	$0.00	
Top Level Milestones			0%	622	11-Jan-13 A	09-Jul-15 A	11-Jan-13	21-May-15	-32	$0.00	
2-W.M.3	M3001	Start Beamline Hutch Specification and SOW	100%	0	11-Jan-13 A		11-Jan-13		0	$0.00	
2-W.M.3	M3003	Approve Initial Long Lead Procurements	100%	0	30-Apr-13 A		30-Apr-13		0	$0.00	
2-W.M.3	M3025	ESM - Complete Specifications of Shielded Enclosures	100%	0		13-Feb-13 A		13-Feb-13	0	$0.00	
2-W.M.3	M3030	ESM - Award Monochromator and Slits Package	100%	0		22-Apr-14 A		06-Feb-14	-52	$0.00	
2-W.M.3	M3035	ESM - Beamline Control System Design Complete	100%	0		21-Jul-14 A		27-Feb-15	151	$0.00	
2-W.M.3	M3037	ESM - Hold Beamline Final Design Review	100%	0		22-Oct-13 A		22-Oct-13	1	$0.00	
2-W.M.3	M3065	FXI - Beamline Control System Design Complete	100%	0		23-Jul-14 A		29-Dec-14	109	$0.00	
2-W.M.3	M3070	FXI - Hold Beamline Final Design Review	100%	0		05-Nov-13 A		05-Nov-13	0	$0.00	
2-W.M.3	M3075	ISR - Complete Specifications of Shielded Enclosures	100%	0		11-Mar-13 A		11-Mar-13	0	$0.00	
2-W.M.3	M3076	ISR - Hold Beamline Final Design Review	100%	0		08-Nov-13 A		08-Nov-13	-1	$0.00	
2-W.M.3	M3085	ISR - Award DCM Monochromator Package	100%	0		09-May-14 A		03-Mar-14	-49	$0.00	
2-W.M.3	M3090	ISR - Beamline Control System Design Complete	100%	0		26-Sep-14 A		27-Feb-15	103	$0.00	
2-W.M.3	M3115	ISS - Complete Specifications of Shielded Enclosures	100%	0		08-Feb-13 A		08-Feb-13	0	$0.00	
2-W.M.3	M3125	ISS - Award XES Spectrometer	100%	0		05-Jun-15 A		21-May-15	-10	$0.00	
2-W.M.3	M3130	ISS - Beamline Control System Design Complete	100%	0		21-Jul-14 A		29-May-14	-34	$0.00	
2-W.M.3	M3135	ISS - Receive Gas Handling System	100%	0		09-Jul-15 A		17-Mar-15	-79	$0.00	
2-W.M.3	M3141	ISS - Hold Beamline Final Design Review	100%	0		15-Nov-13 A		11-Nov-13	-4	$0.00	
2-W.M.3	M3155	SIX - Complete Specifications of Shielded Enclosures	100%	0		11-Mar-13 A		11-Mar-13	0	$0.00	
2-W.M.3	M3160	SIX - Award Monochromator and Slits Package	100%	0		21-Mar-14 A		15-Aug-14	103	$0.00	
2-W.M.3	M3170	SIX - Beamline Control System Design Complete	100%	0		23-Jul-14 A		29-Dec-14	109	$0.00	
2-W.M.3	M3171	SIX - Hold Beamline Final Design Review	100%	0		24-Jul-14 A		13-Nov-14	79	$0.00	



Remaining Level of Effort | Remaining Work | WBS Remaining | Built In Days | Baseline Milestone | IPL
Actual Level of Effort | Actual Work | WBS Summary | Critical Remaining Work | Built In Float | Milestone

(O) NEXT - Detail Schedule

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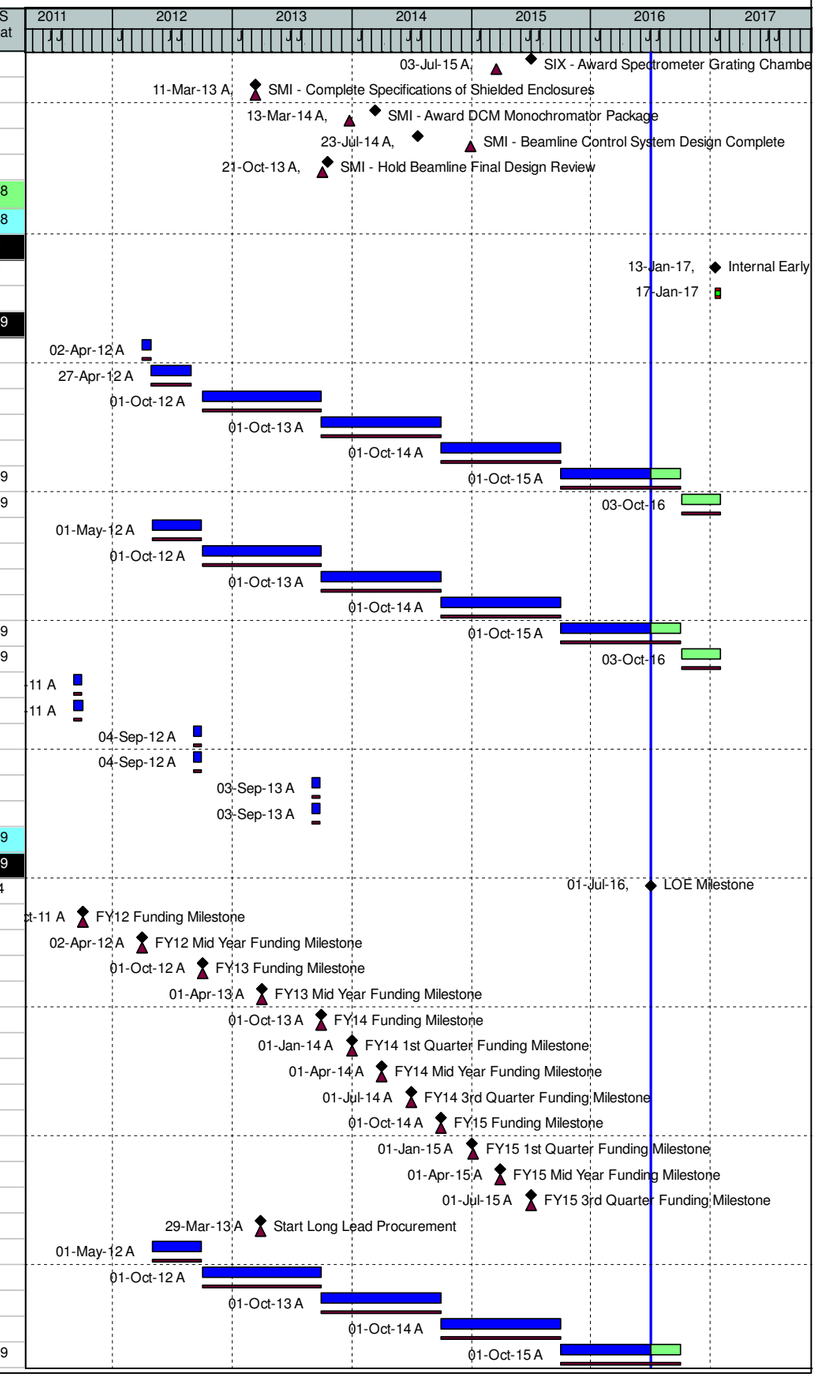
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.M.3	M3180	SIX - Award Spectrometer Grating Chamber	100%	0		03-Jul-15 A		17-Mar-15	-76	$0.00	
2-W.M.3	M3200	SMI - Complete Specifications of Shielded Enclosures	100%	0		11-Mar-13 A		11-Mar-13	0	$0.00	
2-W.M.3	M3205	SMI - Award DCM Monochromator Package	100%	0		13-Mar-14 A		24-Dec-13	-53	$0.00	
2-W.M.3	M3215	SMI - Beamline Control System Design Complete	100%	0		23-Jul-14 A		29-Dec-14	109	$0.00	
2-W.M.3	M3220	SMI - Hold Beamline Final Design Review	100%	0		21-Oct-13 A		01-Oct-13	-12	$0.00	
Project Management and Support			88.08%	1350	06-Sep-11 A	31-Jan-17	06-Sep-11	30-Jan-17	-1	$9,918,223.32	168
Project Management			88.77%	1350	06-Sep-11 A	31-Jan-17	06-Sep-11	30-Jan-17	-1	$4,598,027.00	168
Top Level Milestones			0%	11	13-Jan-17	31-Jan-17				$0.00	0
2-W.01.01	M2085	Internal Early Project Completion - Beamlines	0%	0		13-Jan-17				$0.00	0
2-W.01.01	M2090	NEXT Project - Internal Built-In Float	0%	11	17-Jan-17	31-Jan-17				$0.00	0
Management			88.77%	1349	06-Sep-11 A	30-Jan-17	06-Sep-11	30-Jan-17	0	$4,598,027.00	169
2-W.01.01	CMFY12125	Common Beamline Design FY12	100%	19	02-Apr-12 A	26-Apr-12 A	02-Apr-12	26-Apr-12	0	$47,963.99	
2-W.01.01	PM0010	Project Management FY12	100%	86	27-Apr-12 A	28-Aug-12 A	27-Apr-12	28-Aug-12	0	$0.00	
2-W.01.01	PM0020	Project Management FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.01.01	PM0030	Project Management FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$911,291.02	
2-W.01.01	PM0040	Project Management FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$870,324.93	
2-W.01.01	PM0045	Project Management FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$841,851.94	169
2-W.01.01	PM0050	Project Management FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	30-Jan-17	0	$268,837.94	169
2-W.01.01	PM0060	ESH FY12	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.01.01	PM0070	ESH FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.01.01	PM0080	ESH FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$58,441.69	
2-W.01.01	PM0090	ESH FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$60,311.84	
2-W.01.01	PM0095	ESH FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$53,573.11	169
2-W.01.01	PM0100	ESH FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	30-Jan-17	0	$20,117.70	169
2-W.01.01	PMFY111255	Project Management FY11	100%	19	06-Sep-11 A	30-Sep-11 A	06-Sep-11	30-Sep-11	0	$212,639.08	
2-W.01.01	PMFY111255	Project Management FY11	100%	19	06-Sep-11 A	03-Oct-11 A	06-Sep-11	30-Sep-11	0	$4,787.39	
2-W.01.01	PMFY12125	Project Management FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$670,018.99	
2-W.01.01	PMFY12501	Project Management FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$13,505.54	
2-W.01.01	PMFY13125	Project Management FY13	100%	19	03-Sep-13 A	27-Sep-13 A	03-Sep-13	27-Sep-13	0	($2,942.07)	
2-W.01.01	PMFY13501	Project Management FY13	100%	19	03-Sep-13 A	27-Sep-13 A	03-Sep-13	27-Sep-13	0	$567,303.91	
Project Support			87.48%	1330	03-Oct-11 A	30-Jan-17	03-Oct-11	30-Jan-17	0	$5,320,196.32	169
Management			87.48%	1330	03-Oct-11 A	30-Jan-17	03-Oct-11	30-Jan-17	0	$5,320,196.32	169
2-W.01.02	M10000	LOE Milestone	0%	0		01-Jul-16				$0.00	44
2-W.01.02	M1FY12	FY12 Funding Milestone	100%	0	03-Oct-11 A		03-Oct-11		0	$0.00	
2-W.01.02	M1FY125	FY12 Mid Year Funding Milestone	100%	0	02-Apr-12 A		02-Apr-12		0	$0.00	
2-W.01.02	M1FY13	FY13 Funding Milestone	100%	0	01-Oct-12 A		01-Oct-12		0	$0.00	
2-W.01.02	M1FY135	FY13 Mid Year Funding Milestone	100%	0	01-Apr-13 A		02-Apr-13		1	$0.00	
2-W.01.02	M1FY14	FY14 Funding Milestone	100%	0	01-Oct-13 A		01-Oct-13		0	$0.00	
2-W.01.02	M1FY1425	FY14 1st Quarter Funding Milestone	100%	0	01-Jan-14 A		02-Jan-14		0	$0.00	
2-W.01.02	M1FY145	FY14 Mid Year Funding Milestone	100%	0	01-Apr-14 A		01-Apr-14		0	$0.00	
2-W.01.02	M1FY1475	FY14 3rd Quarter Funding Milestone	100%	0	01-Jul-14 A		01-Jul-14		0	$0.00	
2-W.01.02	M1FY15	FY15 Funding Milestone	100%	0	01-Oct-14 A		01-Oct-14		0	$0.00	
2-W.01.02	M1FY1525	FY15 1st Quarter Funding Milestone	100%	0	01-Jan-15 A		05-Jan-15		0	$0.00	
2-W.01.02	M1FY155	FY15 Mid Year Funding Milestone	100%	0	01-Apr-15 A		01-Apr-15		0	$0.00	
2-W.01.02	M1FY1575	FY15 3rd Quarter Funding Milestone	100%	0	01-Jul-15 A		01-Jul-15		0	$0.00	
2-W.01.02	M4001	Start Long Lead Procurement	100%	0	29-Mar-13 A		29-Mar-13		0	$0.00	
2-W.01.02	PS0010	Bus Ops FY12	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.01.02	PS0020	Bus Ops FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.01.02	PS0030	Bus Ops FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$257,595.60	
2-W.01.02	PS0040	Bus Ops FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$265,838.64	
2-W.01.02	PS0050	Bus Ops FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$274,336.94	169



(O) NEXT - Detail Schedule

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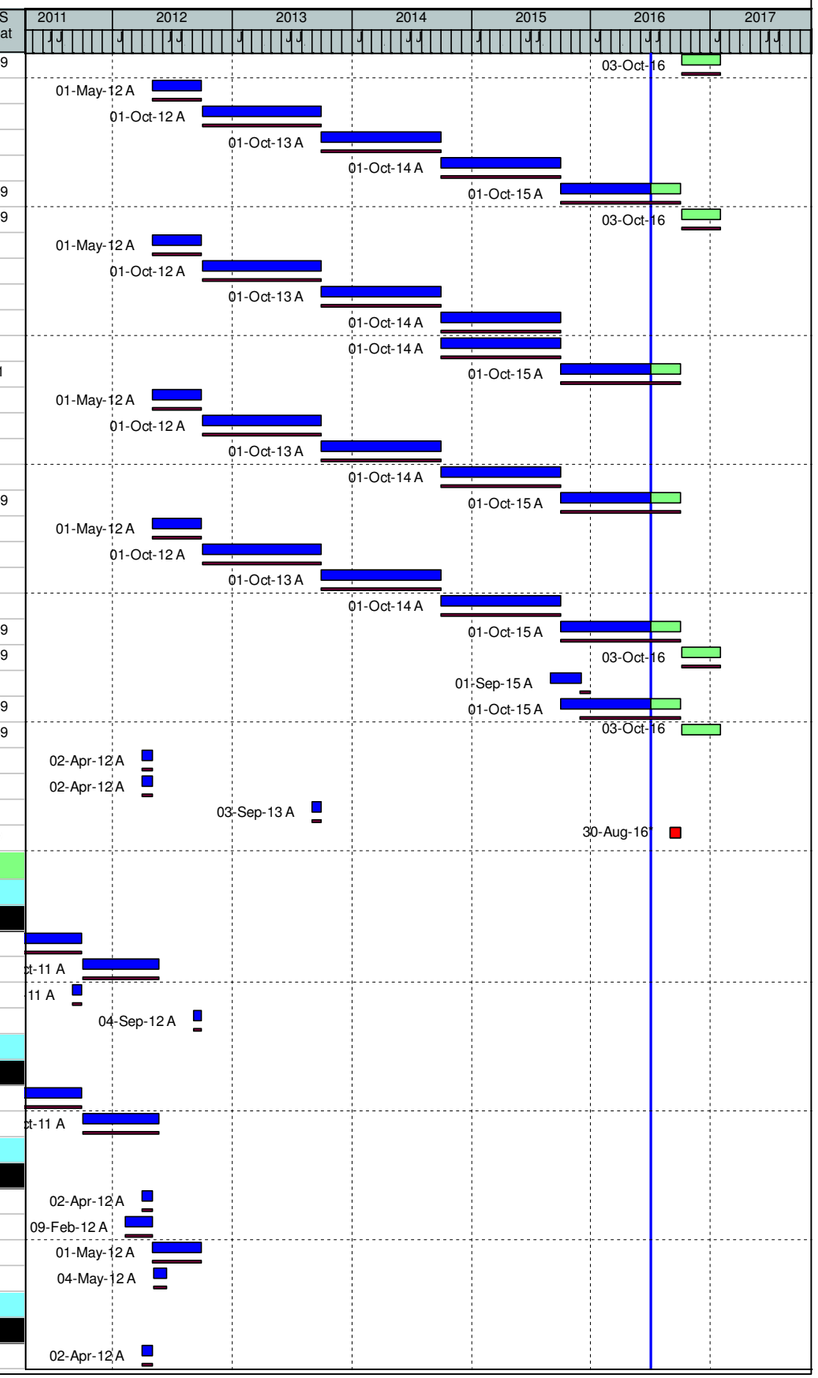
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.01.02	PS0055	Bus Ops FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	30-Jan-17	0	$131,170.39	169
2-W.01.02	PS0060	Proj Cntrls FY12	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.01.02	PS0070	Proj Cntrls FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.01.02	PS0080	Proj Cntrls FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$384,260.07	
2-W.01.02	PS0090	Proj Cntrls FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$396,556.48	
2-W.01.02	PS0100	Proj Cntrls FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$407,010.07	169
2-W.01.02	PS0105	Proj Cntrls FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	30-Jan-17	0	$206,340.74	169
2-W.01.02	PS0110	Procurement FY12	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.01.02	PS0120	Procurement FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.01.02	PS0130	Procurement & Procurement Liaison FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$518,947.89	
2-W.01.02	PS0140	Procurement FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$426,591.13	
2-W.01.02	PS0145	Procurement Liaison FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$72,642.13	
2-W.01.02	PS0150	Procurement FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$316,224.36	81
2-W.01.02	PS0160	Human Resources FY12	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.01.02	PS0170	Human Resources FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.01.02	PS0180	Human Resources FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$215,318.58	
2-W.01.02	PS0190	Human Resources FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$53,104.53	
2-W.01.02	PS0200	Human Resources FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$36,968.57	169
2-W.01.02	PS0210	QA & Config Mgmt FY12	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.01.02	PS0220	QA & Config Mgmt FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.01.02	PS0230	QA & Config Mgmt FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$109,224.99	
2-W.01.02	PS0240	QA & Config Mgmt FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$112,720.21	
2-W.01.02	PS0250	QA & Config Mgmt FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$58,163.89	169
2-W.01.02	PS0255	QA & Config Mgmt FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	30-Jan-17	0	$31,357.68	169
2-W.01.02	PS0260	Vac. Equipment Support	100%	63	01-Sep-15 A	02-Dec-15 A	01-Dec-15	29-Dec-15	18	$40,108.80	
2-W.01.02	PS0265	Metrology Support FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Dec-15	30-Sep-16	0	$77,388.30	169
2-W.01.02	PS0270	Procurement FY17	0%	80	03-Oct-16	30-Jan-17				$0.00	169
2-W.01.02	PSFY1212563	Project Support FY12	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$239,330.74	
2-W.01.02	PSFY1250179	Project Support FY12	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$31,583.41	
2-W.01.02	PSFY1350179	Project Support FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$657,412.17	
2-W.01.02	SD0020	OPS - NSLS-II Accelerator Shutdown Fall '16	0%	32	30-Aug-16*	30-Sep-16				$0.00	0
Conceptual Design and Advanced Conceptual Design			100%	625	01-Apr-11 A	30-Sep-13 A	01-Apr-11	30-Sep-13	0	$1,807,316.34	
Conceptual Design and Analysis of Photon Delivery Systems			100%	376	01-Apr-11 A	28-Sep-12 A	01-Apr-11	28-Sep-12	0	$849,881.22	
General Design			100%	376	01-Apr-11 A	28-Sep-12 A	01-Apr-11	28-Sep-12	0	$849,881.22	
2-W.02.02	CD0010	Optical Design and Analysis FY11	100%	127	01-Apr-11 A	30-Sep-11 A	01-Apr-11	30-Sep-11	0	$0.00	
2-W.02.02	CD0020	Optical Design and Analysis FY12	100%	159	03-Oct-11 A	22-May-12 A	03-Oct-11	22-May-12	0	$0.00	
2-W.02.02	CDFY111255	Conceptual Design FY11	100%	21	01-Sep-11 A	30-Sep-11 A	01-Sep-11	30-Sep-11	0	$104,923.93	
2-W.02.02	CDFY12125	Conceptual Design FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$744,957.29	
Conceptual Design of User Instruments			0%	287	01-Apr-11 A	23-May-12 A	01-Apr-11	23-May-12	0	$0.00	
General Design			0%	287	01-Apr-11 A	23-May-12 A	01-Apr-11	23-May-12	0	$0.00	
2-W.02.03	CD0030	User Instruments FY11	100%	127	01-Apr-11 A	30-Sep-11 A	01-Apr-11	30-Sep-11	0	$0.00	
2-W.02.03	CD0040	User Instruments FY12	100%	160	03-Oct-11 A	23-May-12 A	03-Oct-11	23-May-12	0	$0.00	
ESM Advanced Conceptual Design			100%	163	09-Feb-12 A	28-Sep-12 A	09-Feb-12	28-Sep-12	0	$101,375.77	
General Design			100%	163	09-Feb-12 A	28-Sep-12 A	09-Feb-12	28-Sep-12	0	$101,375.77	
2-W.02.04	CDFY12125	ESM Advanced Conceptual Design	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$101,375.77	
2-W.02.04	ESM0000	ESM Early Conceptual Design	100%	60	09-Feb-12 A	03-May-12 A	09-Feb-12	03-May-12	0	$0.00	
2-W.02.04	ESM0001	ESM BL Management Conceptual Design	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.02.04	ESM0020	ESM Conceptual Design	100%	29	04-May-12 A	14-Jun-12 A	04-May-12	14-Jun-12	0	$0.00	
FXI Advanced Conceptual Design			100%	138	16-Mar-12 A	28-Sep-12 A	16-Mar-12	28-Sep-12	0	$120,634.34	
General Design			100%	138	16-Mar-12 A	28-Sep-12 A	16-Mar-12	28-Sep-12	0	$120,634.34	
2-W.02.05	CDFY12125	FXI Advanced Conceptual Design	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$120,634.34	



(O) NEXT - Detail Schedule

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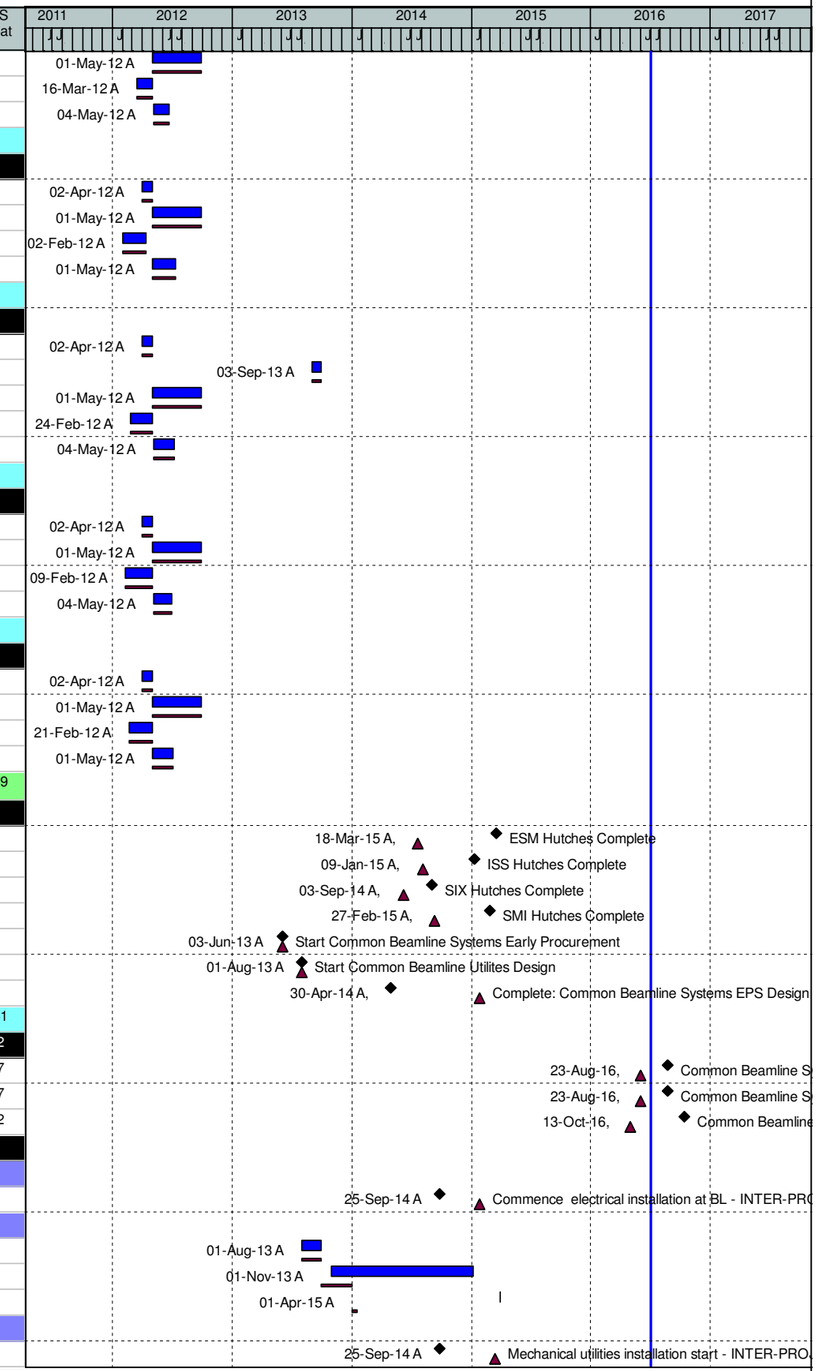
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.02.05	FXI0001	FXI BL Management Conceptual Design	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.02.05	FXI0011	FXI Early Concelptual Design	100%	35	16-Mar-12 A	03-May-12 A	16-Mar-12	03-May-12	0	$0.00	
2-W.02.05	FXI0012	FXI Conceptual Design	100%	33	04-May-12 A	20-Jun-12 A	04-May-12	20-Jun-12	0	$0.00	
ISR Advanced Conceptual Design			100%	168	02-Feb-12 A	28-Sep-12 A	02-Feb-12	28-Sep-12	0	$210,700.21	
General Design			100%	168	02-Feb-12 A	28-Sep-12 A	02-Feb-12	28-Sep-12	0	$210,700.21	
2-W.02.06	CDFY12125(	ISR Advanced Conceptual Design	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$210,700.21	
2-W.02.06	ISR0001	ISR BL Management Conceptual Design	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.02.06	ISR0030	ISR Early Conceptual Design	100%	50	02-Feb-12 A	12-Apr-12 A	02-Feb-12	12-Apr-12	0	$0.00	
2-W.02.06	ISR0040	ISR Conceptual Design	100%	50	01-May-12 A	11-Jul-12 A	01-May-12	11-Jul-12	0	$0.00	
ISS Advanced Conceptual Design			100%	402	24-Feb-12 A	30-Sep-13 A	24-Feb-12	30-Sep-13	0	$163,508.07	
General Design			100%	402	24-Feb-12 A	30-Sep-13 A	24-Feb-12	30-Sep-13	0	$163,508.07	
2-W.02.07	CDFY12125:	ISS Advanced Conceptual Design	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$165,320.27	
2-W.02.07	CDFY12A12:	ISS Advanced Conceptual Design Ajustment	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	($1,812.20)	
2-W.02.07	ISS0001	ISS BL Management Conceptual Design	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.02.07	ISS0030	ISS Early Conceptual Design	100%	50	24-Feb-12 A	03-May-12 A	24-Feb-12	03-May-12	0	$0.00	
2-W.02.07	ISS0040	ISS Conceptual Design	100%	45	04-May-12 A	09-Jul-12 A	04-May-12	09-Jul-12	0	$0.00	
SIX Advanced Conceptual Design			100%	163	09-Feb-12 A	28-Sep-12 A	09-Feb-12	28-Sep-12	0	$179,532.73	
General Design			100%	163	09-Feb-12 A	28-Sep-12 A	09-Feb-12	28-Sep-12	0	$179,532.73	
2-W.02.08	CDFY12125:	SIX Advanced Conceptual Design	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$179,532.73	
2-W.02.08	SIX0001	SIX BL Management Conceptual Design	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.02.08	SIX0020	SIX Early Conceptual Design	100%	60	09-Feb-12 A	03-May-12 A	09-Feb-12	03-May-12	0	$0.00	
2-W.02.08	SIX0030	SIX Conceptual Design	100%	40	04-May-12 A	29-Jun-12 A	04-May-12	29-Jun-12	0	$0.00	
SMI Advanced Conceptual Design			100%	156	21-Feb-12 A	28-Sep-12 A	21-Feb-12	28-Sep-12	0	$181,684.00	
General Design			100%	156	21-Feb-12 A	28-Sep-12 A	21-Feb-12	28-Sep-12	0	$181,684.00	
2-W.02.09	CDFY12125(	SMI Advanced Conceptual Design	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$181,684.00	
2-W.02.09	SMI0001	SMI BL Management Conceptual Design	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.02.09	SMI0030	SMI Early Conceptual Design	100%	50	21-Feb-12 A	30-Apr-12 A	21-Feb-12	30-Apr-12	0	$0.00	
2-W.02.09	SMI0040	SMI Conceptual Design	100%	46	01-May-12 A	05-Jul-12 A	01-May-12	05-Jul-12	0	$0.00	
Common Beamline Systems			88.12%	1350	03-Oct-11 A	28-Feb-17	03-Oct-11	30-Jan-17	-20	$7,266,637.79	149
Milestones			0%	445	03-Jun-13 A	18-Mar-15 A	03-Jun-13	26-Jan-15	-35	$0.00	
2-W.03	MCM050	ESM Hutches Complete	100%	0		18-Mar-15 A		22-Jul-14	-161	$0.00	
2-W.03	MCM053	ISS Hutches Complete	100%	0		09-Jan-15 A		07-Aug-14	-103	$0.00	
2-W.03	MCM054	SIX Hutches Complete	100%	0		03-Sep-14 A		09-Jun-14	-58	$0.00	
2-W.03	MCM055	SMI Hutches Complete	100%	0		27-Feb-15 A		12-Sep-14	-111	$0.00	
2-W.03	MCM070	Start Common Beamline Systems Early Procurement	100%	0	03-Jun-13 A		03-Jun-13		0	$0.00	
2-W.03	MCM080	Start Common Beamline Utilites Design	100%	0	01-Aug-13 A		01-Aug-13		0	$0.00	
2-W.03	MCM210	Complete: Common Beamline Systems EPS Design	100%	0		30-Apr-14 A		26-Jan-15	183	$0.00	
Utilities			96.17%	865	01-May-13 A	13-Oct-16	01-Oct-12	31-May-16	-94	$4,209,385.93	241
Top Level Milestones			0%	35	23-Aug-16	13-Oct-16	29-Apr-16	31-May-16	-94	$0.00	62
2-W.03.01	M2005	Common Beamline Systems: Mechanical Utilities Installed	0%	0		23-Aug-16		31-May-16	-59	$0.00	97
2-W.03.01	M3000	Common Beamline Systems: Mechanical Utilities Installed	0%	0		23-Aug-16		31-May-16	-59	$0.00	97
2-W.03.01	M3005	Common Beamline Systems: Electrical Utilities Installed	0%	0		13-Oct-16		29-Apr-16	-115	$0.00	62
FXI Utilities			0%	414	01-Aug-13 A	01-Apr-15 A	01-Aug-13	13-Mar-15	-13	$0.00	
FXI Electrical Utilities Install			0%	0	25-Sep-14 A	25-Sep-14 A	28-Jan-15	28-Jan-15	82	$0.00	
2-W.03.01	CMNU9270	Commence electrical installation at BL - INTER-PROJECT LINK - FXI	100%	0	25-Sep-14 A		28-Jan-15		82	$0.00	
FXI Mechanical Utilities Design			0%	414	01-Aug-13 A	01-Apr-15 A	01-Aug-13	16-Jan-14	-299	$0.00	
2-W.03.01	CMNU9600	Gather mechanical requirements - FXI	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU9600FA	Gather mechanical requirements - FXI	100%	290	01-Nov-13 A	05-Jan-15 A	01-Oct-13	02-Jan-14	-249	$0.00	
2-W.03.01	CMNU9610	Specify mechanical requirements - FXI	100%	0	01-Apr-15 A	01-Apr-15 A	03-Jan-14	16-Jan-14	-299	$0.00	
FXI Mechanical Utilities Install			0%	0	25-Sep-14 A	25-Sep-14 A	13-Mar-15	13-Mar-15	113	$0.00	
2-W.03.01	CMNU09930	Mechanical utilities installation start - INTER-PROJECT LINK - FXI	100%	0	25-Sep-14 A		13-Mar-15		113	$0.00	



(O) NEXT - Detail Schedule

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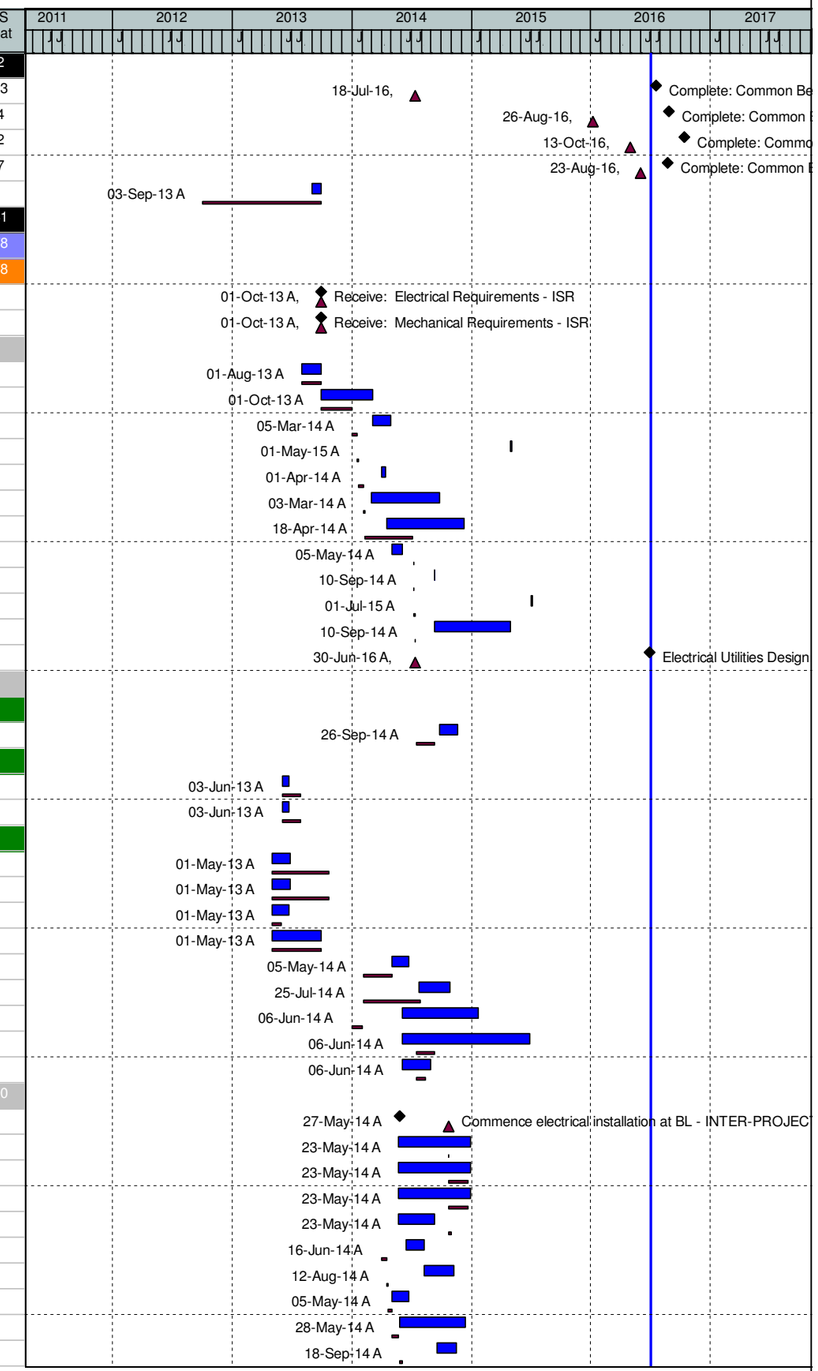
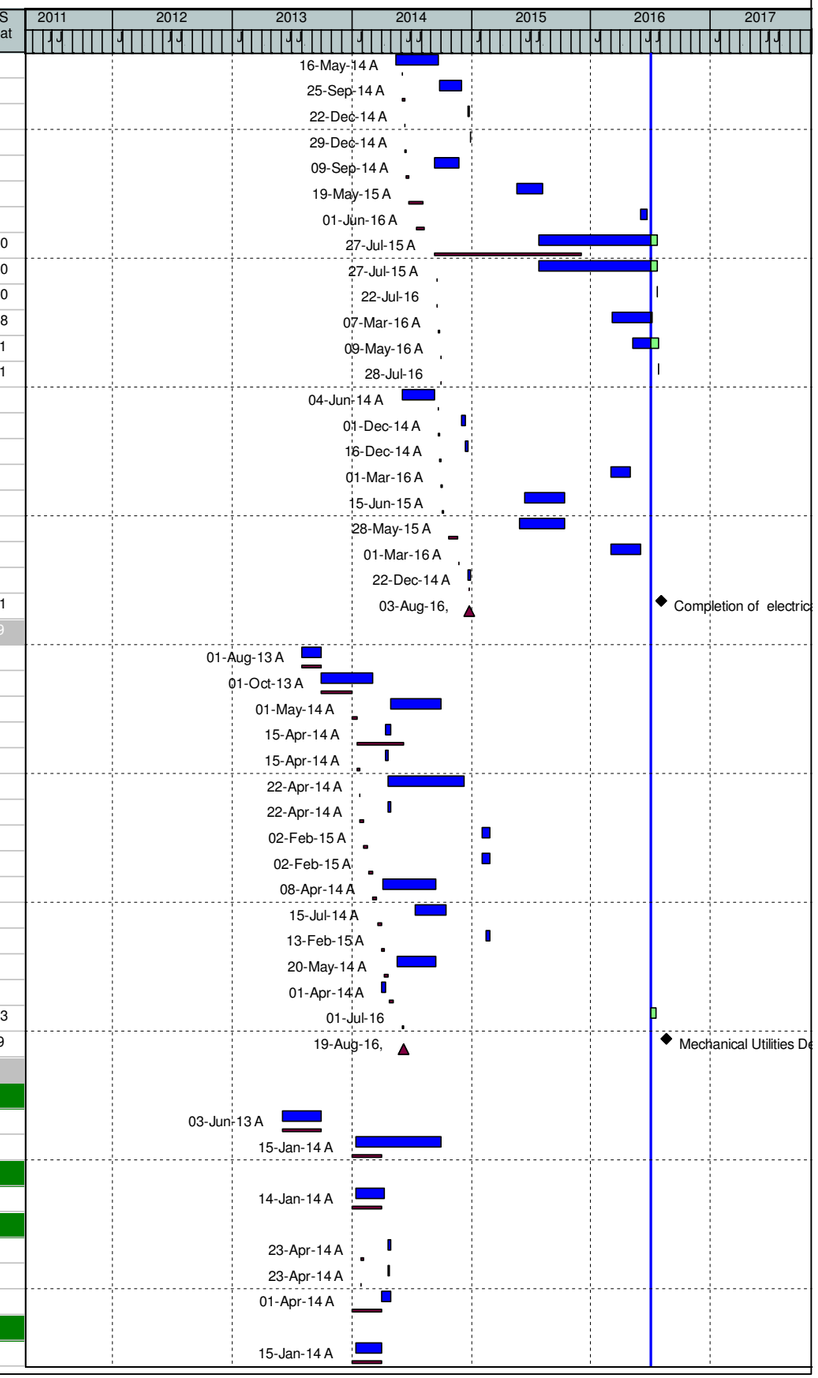
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
Milestones			100%	780	03-Sep-13 A	13-Oct-16	01-Oct-12	31-May-16	-94	$235,802.38	62
2-W.03.01	MCM190	Complete: Common Beamline Systems Electrical Utilities Design	0%	0		18-Jul-16		15-Jul-14	-503	$0.00	123
2-W.03.01	MCM195	Complete: Common Beamline Systems Mechanical Utilities Design	0%	0		26-Aug-16		06-Jan-16	-163	$0.00	94
2-W.03.01	MCM250	Complete: Common Beamline Systems Electrical Utilities Install	0%	0		13-Oct-16		29-Apr-16	-115	$0.00	62
2-W.03.01	MCM255	Complete: Common Beamline Systems Mechanical Utilities Install	0%	0		23-Aug-16		31-May-16	-59	$0.00	97
2-W.03.01	UTFY1350181	Utilities FY13	100%	20	03-Sep-13 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$235,802.38	
CMN Common Beamline Systems Work Package			96.06%	865	01-May-13 A	13-Oct-16	04-Feb-13	24-May-16	-98	$2,955,127.37	241
ISR Common Systems			98.83%	828	01-May-13 A	19-Aug-16	01-May-13	20-Jan-16	-149	$470,200.05	278
ISR Utilities			98.83%	828	01-May-13 A	19-Aug-16	01-May-13	20-Jan-16	-149	$470,200.05	278
2-W.03.01	MCM130	Receive: Electrical Requirements - ISR	100%	0		01-Oct-13 A		01-Oct-13	0	$0.00	
2-W.03.01	MCM140	Receive: Mechanical Requirements - ISR	100%	0		01-Oct-13 A		01-Oct-13	0	$0.00	
ISR Electrical Utilities Design			100%	730	01-Aug-13 A	30-Jun-16 A	01-Aug-13	15-Jul-14	-492	$47,471.67	
2-W.03.01	CMNU011	Gather generic electrical requirements - ISR	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU011FA	Gather generic electrical requirements - ISR	100%	104	01-Oct-13 A	04-Mar-14 A	01-Oct-13	02-Jan-14	-41	$995.96	
2-W.03.01	CMNU100	Gather beamline specific requirements - ISR	100%	41	05-Mar-14 A	30-Apr-14 A	03-Jan-14	16-Jan-14	-72	$2,441.08	
2-W.03.01	CMNU110	Define alarm signals / protocol to send to control room - ISR	100%	2	01-May-15 A	04-May-15 A	17-Jan-14	21-Jan-14	-321	$390.57	
2-W.03.01	CMNU120	Specify electrical requirements - ISR	100%	11	01-Apr-14 A	16-Apr-14 A	22-Jan-14	04-Feb-14	-49	$1,659.94	
2-W.03.01	CMNU880	Drawings ("single line" diagrams) - ISR	100%	144	03-Mar-14 A	25-Sep-14 A	05-Feb-14	11-Feb-14	-156	$3,837.12	
2-W.03.01	CMNU890	Design - ISR	100%	161	18-Apr-14 A	09-Dec-14 A	12-Feb-14	07-Jul-14	-107	$34,702.78	
2-W.03.01	CMNU900	Define water leak alarms - ISR	100%	22	05-May-14 A	05-Jun-14 A	08-Jul-14	08-Jul-14	22	$195.29	
2-W.03.01	CMNU910	Write procedure for hutch panel grounding checks - ISR	100%	0	10-Sep-14 A	10-Sep-14 A	09-Jul-14	09-Jul-14	-43	$97.64	
2-W.03.01	CMNU920	Ethernet interconnection diagram - ISR	100%	3	01-Jul-15 A	06-Jul-15 A	10-Jul-14	14-Jul-14	-244	$2,370.13	
2-W.03.01	CMNU930	Review of electrical utilities design - ISR	100%	160	10-Sep-14 A	01-May-15 A	15-Jul-14	15-Jul-14	-199	$781.15	
2-W.03.01	CMNU935	Electrical Utilities Design Complete - ISR	100%	0		30-Jun-16 A		15-Jul-14	-492	$0.00	
ISR Electrical Utilities Procure			100%	540	01-May-13 A	30-Jun-15 A	01-May-13	10-Sep-14	-199	$33,240.09	
ISR Communications			100%	40	26-Sep-14 A	21-Nov-14 A	16-Jul-14	10-Sep-14	-51	$8,801.67	
2-W.03.01	CMNU6001	Proc/Fab Communications Components - ISR	100%	40	26-Sep-14 A	21-Nov-14 A	16-Jul-14	10-Sep-14	-51	$8,801.67	
ISR Mains Wiring			0%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	30-Jul-13	24	$0.00	
2-W.03.01	CMNU6002	Proc/Fab Mains Electrical Cable and Fitting Components - ISR	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	30-Jul-13	24	$0.00	
2-W.03.01	CMNU9140	Procure electrical items - ISR	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	29-Jul-13	23	$0.00	
ISR Other			100%	540	01-May-13 A	30-Jun-15 A	01-May-13	10-Sep-14	-199	$24,438.42	
2-W.03.01	CMNU6003	Proc/Fab Motion control racks for beamlines - ISR	100%	39	01-May-13 A	26-Jun-13 A	01-May-13	22-Oct-13	81	$0.00	
2-W.03.01	CMNU6004	Proc/Fab End station racks (also water cooled) - ISR	100%	40	01-May-13 A	27-Jun-13 A	01-May-13	22-Oct-13	80	$0.00	
2-W.03.01	CMNU6005	Proc/Fab Other Misc. items for racks - ISR	100%	38	01-May-13 A	25-Jun-13 A	01-May-13	29-May-13	-18	$0.00	
2-W.03.01	CMNU6006	Proc/Fab Items we add to racks - ISR	100%	104	01-May-13 A	30-Sep-13 A	01-May-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU6006FA	Proc/Fab Items we add to racks - ISR	100%	36	05-May-14 A	25-Jun-14 A	05-Feb-14	02-May-14	-36	$13,180.73	
2-W.03.01	CMNU6008	Proc/Fab Temperature sensing system for hutches, racks etc. - ISR	100%	65	25-Jul-14 A	28-Oct-14 A	05-Feb-14	28-Jul-14	-63	$2,353.70	
2-W.03.01	CMNU6009	Proc/Fab PPS wiring and conduit - ISR	100%	156	06-Jun-14 A	23-Jan-15 A	03-Jan-14	31-Jan-14	-243	$5,884.26	
2-W.03.01	CMNU6010	Proc/Fab TraceTek leak detection cable - ISR	100%	265	06-Jun-14 A	30-Jun-15 A	16-Jul-14	10-Sep-14	-199	$2,824.44	
2-W.03.01	CMNU9150	Procure water leak alarms - ISR	100%	58	06-Jun-14 A	29-Aug-14 A	16-Jul-14	12-Aug-14	-12	$195.29	
ISR Electrical Utilities Install			96.29%	564	05-May-14 A	03-Aug-16	03-Apr-14	03-Dec-15	-168	$148,431.69	290
2-W.03.01	CMNU0960	Commence electrical installation at BL - INTER-PROJECT LINK - ISR	100%	0	27-May-14 A		23-Oct-14		103	$0.00	
2-W.03.01	CMNU0970	Logistics administration (0.5 FTE for duration of work) - ISR	100%	150	23-May-14 A	31-Dec-14 A	23-Oct-14	23-Oct-14	-46	$0.00	
2-W.03.01	CMNU0980	Supervision of installation electricians - ISR	100%	150	23-May-14 A	31-Dec-14 A	23-Oct-14	23-Dec-14	-4	$2,519.20	
2-W.03.01	CMNU0990	Design updates - ISR	100%	150	23-May-14 A	31-Dec-14 A	23-Oct-14	23-Dec-14	-4	$0.00	
2-W.03.01	CMNU1000	Install cable tray (internal to each hutch) - ISR	100%	75	23-May-14 A	11-Sep-14 A	23-Oct-14	30-Oct-14	35	$7,074.55	
2-W.03.01	CMNU1010	Install pylons and roof stanchions - ISR	100%	39	16-Jun-14 A	11-Aug-14 A	03-Apr-14	16-Apr-14	-80	$11,425.31	
2-W.03.01	CMNU1020	Install cable tray (external) - ISR	100%	63	12-Aug-14 A	10-Nov-14 A	17-Apr-14	22-Apr-14	-139	$4,570.12	
2-W.03.01	CMNU1030	Install breaker panels - ISR	100%	35	05-May-14 A	24-Jun-14 A	23-Apr-14	02-May-14	-35	$13,710.37	
2-W.03.01	CMNU1040	Install mains wiring (per hutch) - ISR	100%	138	28-May-14 A	15-Dec-14 A	05-May-14	23-May-14	-139	$17,137.96	
2-W.03.01	CMNU1050	Install mains wiring (on floor outside hutch and on the hutch roof) - ISR	100%	42	18-Sep-14 A	17-Nov-14 A	27-May-14	02-Jun-14	-116	$5,712.65	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU1060	Install lighting circuits incl switches - ISR	100%	89	16-May-14 A	24-Sep-14 A	03-Jun-14	05-Jun-14	-75	$3,427.59	
2-W.03.01	CMNU1070	Install wiring to hutch ventilation fans - ISR	100%	47	25-Sep-14 A	03-Dec-14 A	06-Jun-14	10-Jun-14	-120	$3,427.59	
2-W.03.01	CMNU1080	Test mains wiring - ISR	100%	4	22-Dec-14 A	26-Dec-14 A	11-Jun-14	12-Jun-14	-134	$2,285.06	
2-W.03.01	CMNU1090	Connection to BL transformer incl cable installation - ISR	100%	2	29-Dec-14 A	31-Dec-14 A	13-Jun-14	16-Jun-14	-134	$2,285.06	
2-W.03.01	CMNU1100	Install wiremold in hutches - ISR	100%	55	09-Sep-14 A	26-Nov-14 A	17-Jun-14	24-Jun-14	-106	$6,855.18	
2-W.03.01	CMNU1110	Install PPS conduits only - ISR	100%	56	19-May-15 A	06-Aug-15 A	25-Jun-14	06-Aug-14	-250	$13,710.37	
2-W.03.01	CMNU1120	Install EPS ethernet cables - ISR	100%	15	01-Jun-16 A	21-Jun-16 A	18-Jul-14	11-Aug-14	-466	$1,827.94	
2-W.03.01	CMNU1130	Install campus network ethernet + telephone cables - ISR	50%	249	27-Jul-15 A	21-Jul-16	11-Sep-14	03-Dec-15	-159	$6,067.11	120
2-W.03.01	CMNU1140	Connection of campus network ethernet + telephone to switches - ISR	25%	249	27-Jul-15 A	21-Jul-16	18-Sep-14	18-Sep-14	-460	$365.59	120
2-W.03.01	CMNU1150	Test campus network ethernet + telephone cables + outlets - ISR	0%	0	22-Jul-16	22-Jul-16	19-Sep-14	19-Sep-14	-459	$731.18	120
2-W.03.01	CMNU1160	Install controls network ethernet cables - ISR	80%	88	07-Mar-16 A	08-Jul-16	22-Sep-14	26-Sep-14	-445	$3,290.30	308
2-W.03.01	CMNU1170	Connection of controls network ethernet to switches - ISR	80%	56	09-May-16 A	27-Jul-16	29-Sep-14	29-Sep-14	-457	$365.59	111
2-W.03.01	CMNU1180	Test campus network ethernet cables + outlets - ISR	0%	0	28-Jul-16	28-Jul-16	30-Sep-14	30-Sep-14	-456	$731.18	111
2-W.03.01	CMNU1190	Install grounding bus - ISR	100%	67	04-Jun-14 A	10-Sep-14 A	22-Sep-14	23-Sep-14	10	$1,096.77	
2-W.03.01	CMNU1200	Checking of hutch panel grounding - ISR	100%	10	01-Dec-14 A	15-Dec-14 A	24-Sep-14	24-Sep-14	-54	$584.94	
2-W.03.01	CMNU1210	Final documentation for electrical installation - ISR	100%	4	16-Dec-14 A	22-Dec-14 A	25-Sep-14	01-Oct-14	-54	$6,844.26	
2-W.03.01	CMNU1230	Install water leak alarms - ISR	100%	43	01-Mar-16 A	29-Apr-16 A	02-Oct-14	03-Oct-14	-391	$1,131.86	
2-W.03.01	CMNU1250	Install ODH sensors - ISR	100%	85	15-Jun-15 A	14-Oct-15 A	06-Oct-14	08-Oct-14	-253	$1,886.44	
2-W.03.01	CMNU1260	Install PPS conduit and cables - ISR	100%	97	28-May-15 A	14-Oct-15 A	23-Oct-14	19-Nov-14	-224	$26,623.38	
2-W.03.01	CMNU1270	Test PPS cables - ISR	100%	67	01-Mar-16 A	02-Jun-16 A	24-Nov-14	25-Nov-14	-379	$1,131.86	
2-W.03.01	CMNU1290	Inspect electrical installation - ISR	100%	6	22-Dec-14 A	31-Dec-14 A	24-Dec-14	25-Dec-14	-2	$1,612.29	
2-W.03.01	CMNU1300	Completion of electrical utilities - ISR	0%	0		03-Aug-16		25-Dec-14	-402	$0.00	111
ISR Mechanical Utilities Design			100%	765	01-Aug-13 A	19-Aug-16	01-Aug-13	06-Jun-14	-552	$16,156.02	99
2-W.03.01	CMNU1310	Gather mechanical requirements - ISR	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU1310FA	Gather mechanical requirements - ISR	100%	104	01-Oct-13 A	04-Mar-14 A	01-Oct-13	02-Jan-14	-41	$0.00	
2-W.03.01	CMNU1320	Specify mechanical requirements - ISR	100%	104	01-May-14 A	30-Sep-14 A	03-Jan-14	16-Jan-14	-176	$0.00	
2-W.03.01	CMNU1330	Supervise drawings of pylons, utilites bridges and stanchions - ISR	100%	11	15-Apr-14 A	30-Apr-14 A	17-Jan-14	06-Jun-14	27	$3,446.76	
2-W.03.01	CMNU1340	Drawings (stick diagrams) - ISR	100%	5	15-Apr-14 A	21-Apr-14 A	17-Jan-14	24-Jan-14	-60	$1,470.83	
2-W.03.01	CMNU1350	Final update of drawings (stick diagrams) - ISR	100%	158	22-Apr-14 A	08-Dec-14 A	27-Jan-14	27-Jan-14	-217	$2,332.52	
2-W.03.01	CMNU1360	Create drawings of pylons, utilites bridges and stanchions - ISR	100%	7	22-Apr-14 A	30-Apr-14 A	27-Jan-14	04-Feb-14	-60	$956.04	
2-W.03.01	CMNU1370	Specification of experimental gas manifold - ISR	100%	19	02-Feb-15 A	27-Feb-15 A	05-Feb-14	19-Feb-14	-255	$689.35	
2-W.03.01	CMNU1380	Design of experimental gas manifold - ISR	100%	19	02-Feb-15 A	27-Feb-15 A	20-Feb-14	05-Mar-14	-245	$588.33	
2-W.03.01	CMNU1390	Specification of experimental cryogenics - ISR	100%	110	08-Apr-14 A	14-Sep-14 A	06-Mar-14	19-Mar-14	-123	$689.35	
2-W.03.01	CMNU1400	Design of experimental cryogenics - ISR	100%	64	15-Jul-14 A	14-Oct-14 A	20-Mar-14	02-Apr-14	-134	$588.33	
2-W.03.01	CMNU1410	Specification of exhaust system - ISR	100%	10	13-Feb-15 A	27-Feb-15 A	03-Apr-14	09-Apr-14	-220	$861.69	
2-W.03.01	CMNU1420	Create 3D layout - ISR	100%	80	20-May-14 A	15-Sep-14 A	10-Apr-14	23-Apr-14	-98	$3,067.93	
2-W.03.01	CMNU1430	Design prototype of 0.1C temp control system - ISR	100%	10	01-Apr-14 A	14-Apr-14 A	24-Apr-14	07-May-14	17	$1,464.87	
2-W.03.01	CMNU1450	Review of mechanical utilties design - ISR	0%	11	01-Jul-16	18-Jul-16	06-Jun-14	06-Jun-14	-528	$0.00	123
2-W.03.01	CMNU1455	Mechanical Utilities Design Complete - ISR	0%	0		19-Aug-16		06-Jun-14	-552	$0.00	99
ISR Mechanical Utilities Procure			100%	748	03-Jun-13 A	27-May-16 A	03-Jun-13	20-Jan-16	-91	$127,750.05	
ISR Processed Chilled Water			100%	332	03-Jun-13 A	30-Sep-14 A	03-Jun-13	02-Apr-14	-124	$30,261.92	
2-W.03.01	CMNU6011	Proc/Fab Chilled Water Equipment - ISR	100%	82	03-Jun-13 A	30-Sep-13 A	03-Jun-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU6011FA	Proc/Fab Chilled Water Equipment - ISR	100%	178	15-Jan-14 A	30-Sep-14 A	03-Jan-14	02-Apr-14	-124	$30,261.92	
ISR Compressed Air			100%	61	14-Jan-14 A	10-Apr-14 A	03-Jan-14	31-Mar-14	-8	$6,171.41	
2-W.03.01	CMNU6013	Proc/Fab Compressed Air Equipment - ISR	100%	61	14-Jan-14 A	10-Apr-14 A	03-Jan-14	31-Mar-14	-8	$6,171.41	
ISR Mains DI Water			100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$10,283.26	
2-W.03.01	CMNU1460	Procure gauges, valves, trantters, readouts, manifolds, driers etc - ISR	100%	5	23-Apr-14 A	30-Apr-14 A	28-Jan-14	05-Feb-14	-58	$1,034.03	
2-W.03.01	CMNU1480	Procure pipe and fittings - ISR	100%	2	23-Apr-14 A	24-Apr-14 A	28-Jan-14	29-Jan-14	-60	$258.51	
2-W.03.01	CMNU6012	Proc/Fab DI Water Equipment - ISR	100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$8,990.73	
ISR Gaseous Nitrogen			100%	54	15-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	
2-W.03.01	CMNU6014	Proc/Fab Gaseous Nitrogen - ISR	100%	54	15-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	



(O) NEXT - Detail Schedule

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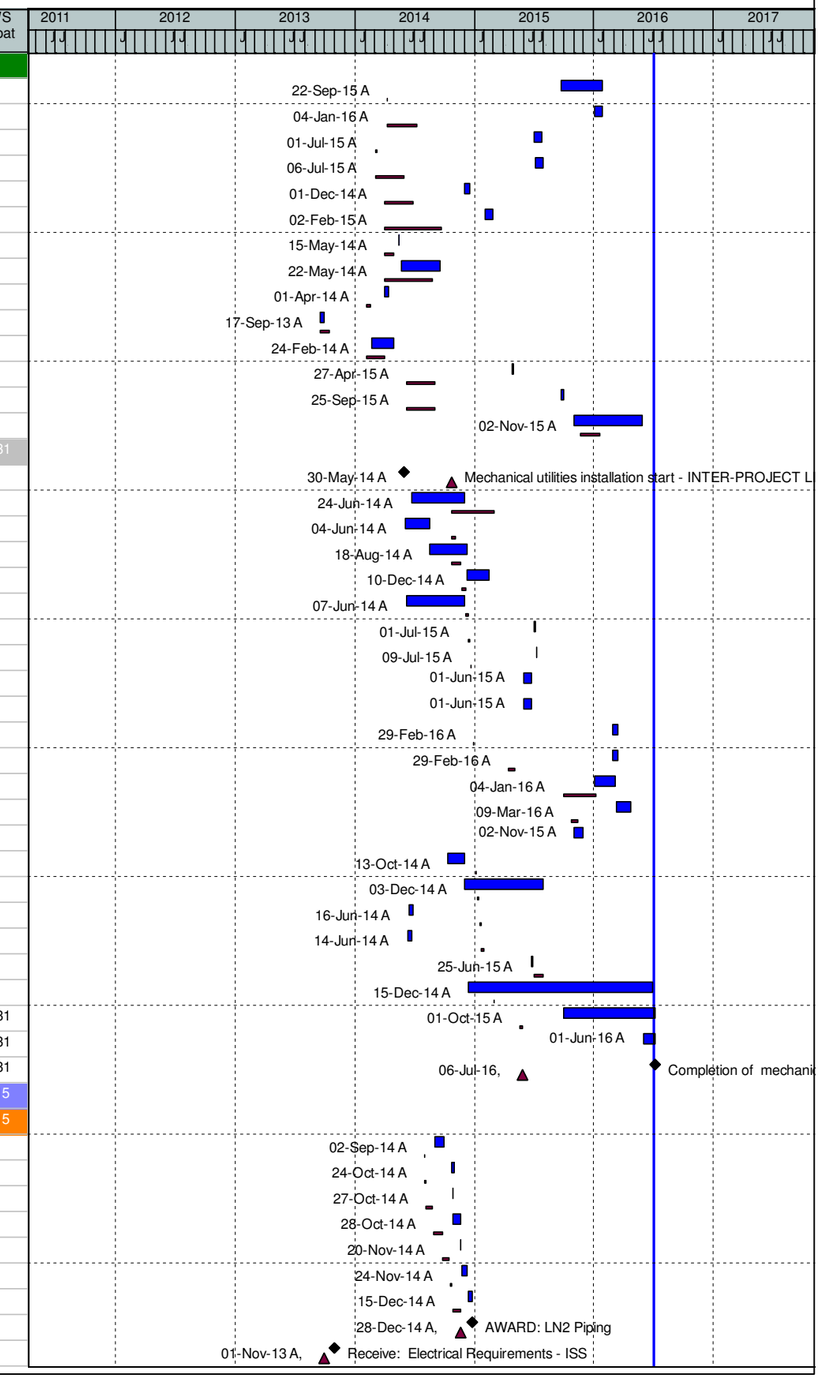
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
ISR Other Systems			100%	675	17-Sep-13 A	27-May-16 A	17-Sep-13	20-Jan-16	-91	$79,484.72	
2-W.03.01	CMNU60141	Procure Exhaust system - ISR	100%	87	22-Sep-15 A	29-Jan-16 A	10-Apr-14	10-Apr-14	-449	$673.04	
2-W.03.01	CMNU6015	Proc/Fab Exhaust System - ISR	100%	17	04-Jan-16 A	28-Jan-16 A	11-Apr-14	08-Jul-14	-388	$3,530.55	
2-W.03.01	CMNU60151	Procurement of parts for experimental gas manifold - ISR	100%	17	01-Jul-15 A	24-Jul-15 A	06-Mar-14	11-Mar-14	-344	$538.43	
2-W.03.01	CMNU6016	Proc/Fab Bottle Gas System - ISR	100%	18	06-Jul-15 A	30-Jul-15 A	06-Mar-14	29-May-14	-291	$7,061.11	
2-W.03.01	CMNU60161	Procure LN2 pipe - ISR	100%	13	01-Dec-14 A	18-Dec-14 A	03-Apr-14	26-Jun-14	-118	$1,034.03	
2-W.03.01	CMNU6018	Proc/Fab Fill stations for LN2 dewars - ISR	100%	18	02-Feb-15 A	27-Feb-15 A	03-Apr-14	23-Sep-14	-104	$5,884.26	
2-W.03.01	CMNU60181	Define and procure ODH sensors - ISR	100%	1	15-May-14 A	16-May-14 A	03-Apr-14	30-Apr-14	-11	$390.57	
2-W.03.01	CMNU6019	Proc/Fab Oxygen depletion hazard monitors - ISR	100%	80	22-May-14 A	17-Sep-14 A	03-Apr-14	25-Aug-14	-15	$3,530.55	
2-W.03.01	CMNU60191	Procure utility bridges and piping stanchions - ISR	100%	9	01-Apr-14 A	14-Apr-14 A	05-Feb-14	19-Feb-14	-37	$1,464.87	
2-W.03.01	CMNU6020	Proc/Fab Pylons and L-brackets - ISR	100%	9	17-Sep-13 A	30-Sep-13 A	17-Sep-13	14-Oct-13	11	$0.00	
2-W.03.01	CMNU6020FA	Proc/Fab Pylons and L-brackets - ISR	100%	47	24-Feb-14 A	30-Apr-14 A	05-Feb-14	02-Apr-14	-19	$26,317.48	
2-W.03.01	CMNU6021	Proc/Fab Paint for floor marking - ISR	100%	3	27-Apr-15 A	30-Apr-15 A	09-Jun-14	03-Sep-14	-162	$235.37	
2-W.03.01	CMNU6022	Proc/Fab Plumbing for emergency eye-wash and showers - ISR	100%	3	25-Sep-15 A	30-Sep-15 A	09-Jun-14	03-Sep-14	-268	$2,824.44	
2-W.03.01	CMNU6023	Proc/Fab Sprinkler System - ISR	100%	144	02-Nov-15 A	27-May-16 A	23-Nov-15	20-Jan-16	-91	$26,000.00	
ISR Mechanical Utilities Install			99.99%	526	30-May-14 A	06-Jul-16	23-Oct-14	06-Jan-16	-126	$97,150.52	131
2-W.03.01	CMNU1520	Mechanical utilities installation start - INTER-PROJECT LINK - ISR	100%	0	30-May-14 A		23-Oct-14		100	$0.00	
2-W.03.01	CMNU1530	Supervision of installation techs - ISR	100%	110	24-Jun-14 A	02-Dec-14 A	23-Oct-14	03-Mar-15	60	$347.29	
2-W.03.01	CMNU1540	Install DI water pipework - ISR	100%	52	04-Jun-14 A	18-Aug-14 A	23-Oct-14	05-Nov-14	55	$6,876.33	
2-W.03.01	CMNU1550	Install chilled water pipework - ISR	100%	78	18-Aug-14 A	09-Dec-14 A	23-Oct-14	19-Nov-14	-12	$17,568.47	
2-W.03.01	CMNU1560	Insulate chilled water piping - ISR	100%	44	10-Dec-14 A	13-Feb-15 A	24-Nov-14	05-Dec-14	-46	$11,673.01	
2-W.03.01	CMNU1570	Install compressed air pipework - ISR	100%	121	07-Jun-14 A	02-Dec-14 A	08-Dec-14	12-Dec-14	8	$7,494.68	
2-W.03.01	CMNU1580	Build of experimental gas manifold - ISR	100%	5	01-Jul-15 A	08-Jul-15 A	15-Dec-14	19-Dec-14	-136	$555.66	
2-W.03.01	CMNU1590	Install experimental gas pipework - ISR	100%	2	09-Jul-15 A	10-Jul-15 A	22-Dec-14	23-Dec-14	-136	$1,041.87	
2-W.03.01	CMNU1595	EAC activity - Emergency Power for gas handling system; Procure/receive mat	100%	20	01-Jun-15 A	26-Jun-15 A				$0.00	
2-W.03.01	CMNU1600	EAC activity - Emergency Power for gas handling system; Installation - ISR	100%	20	01-Jun-15 A	26-Jun-15 A				$0.00	
2-W.03.01	CMNU1610	Install Exhaust system - ISR	100%	12	29-Feb-16 A	15-Mar-16 A	29-Dec-14	31-Dec-14	-300	$1,389.16	
2-W.03.01	CMNU16101	Install Exhaust system (extra support) - ISR	100%	12	29-Feb-16 A	15-Mar-16 A	15-Apr-15	05-May-15	-215	$2,778.32	
2-W.03.01	CMNU16102	Procure and recieve additional Exhaust system Components - ISR	100%	45	04-Jan-16 A	08-Mar-16 A	01-Oct-15	06-Jan-16	-42	$28,765.53	
2-W.03.01	CMNU16103	Install additional Exhaust system connections - ISR	100%	32	09-Mar-16 A	21-Apr-16 A	23-Oct-15	12-Nov-15	-109	$5,161.00	
2-W.03.01	CMNU16104	EAC: Install & Insulate PCHW Piping for Master Gas Controller - ISR	100%	18	02-Nov-15 A	30-Nov-15 A				$0.00	
2-W.03.01	CMNU1620	Flushing and testing of all pipework - ISR	100%	34	13-Oct-14 A	02-Dec-14 A	05-Jan-15	08-Jan-15	24	$2,083.74	
2-W.03.01	CMNU1630	Production of 'as-built' drawings (stick diagrams) - ISR	100%	164	03-Dec-14 A	30-Jul-15 A	09-Jan-15	16-Jan-15	-134	$3,794.74	
2-W.03.01	CMNU1640	Build of 0.1C temp control system prototype - ISR	100%	10	16-Jun-14 A	30-Jun-14 A	20-Jan-15	22-Jan-15	139	$555.66	
2-W.03.01	CMNU1650	Document of 0.1C temp control system - ISR	100%	6	14-Jun-14 A	24-Jun-14 A	23-Jan-15	29-Jan-15	148	$711.41	
2-W.03.01	CMNU1660	Retrofit resistor and install rack flow controllers - ISR	100%	3	25-Jun-15 A	30-Jun-15 A	01-Jul-15	29-Jul-15	21	$4,532.19	
2-W.03.01	CMNU1670	Inspect Mechanical installation - ISR	100%	386	15-Dec-14 A	28-Jun-16 A	02-Mar-15	03-Mar-15	-334	$1,214.32	
2-W.03.01	CMNU16701	Inspect Mechanical installation (extra support), Traveler/Acceptance Work & D	98%	191	01-Oct-15 A	06-Jul-16	22-May-15	26-May-15	-280	$607.16	131
2-W.03.01	CMNU167011	Inspect Mechanical installation, Traveler/Acceptance Work & Docs - ISR - ETC	98%	25	01-Jun-16 A	06-Jul-16				$0.00	131
2-W.03.01	CMNU1680	Completion of mechanical utilities - ISR	0%	0		06-Jul-16		29-May-15	-277	$0.00	131
ISS Common Systems			98.07%	790	03-Jun-13 A	28-Jul-16	04-Feb-13	16-Dec-15	-155	$451,159.36	115
ISS Utilities			98.07%	790	03-Jun-13 A	28-Jul-16	04-Feb-13	16-Dec-15	-155	$451,159.36	115
2-W.03.01	CMNU0400	LN2 Piping - Prepare Specs/REQ	100%	20	02-Sep-14 A	30-Sep-14 A	01-Aug-14	01-Aug-14	-40	$0.00	
2-W.03.01	CMNU0410	LN2 Piping - PPM Accepts REQ	100%	5	24-Oct-14 A	31-Oct-14 A	04-Aug-14	04-Aug-14	-61	$0.00	
2-W.03.01	CMNU0420	LN2 Piping - Prepare & Submit RFQ	100%	0	27-Oct-14 A	27-Oct-14 A	05-Aug-14	27-Aug-14	-40	$0.00	
2-W.03.01	CMNU0430	LN2 Piping - Offerors Prepare & Submit Proposals	100%	17	28-Oct-14 A	20-Nov-14 A	28-Aug-14	25-Sep-14	-38	$0.00	
2-W.03.01	CMNU0440	LN2 Piping - Evaluate Proposals	100%	2	20-Nov-14 A	21-Nov-14 A	26-Sep-14	17-Oct-14	-25	$0.00	
2-W.03.01	CMNU0450	LN2 Piping - Negotiate with Offerors	100%	12	24-Nov-14 A	12-Dec-14 A	20-Oct-14	24-Oct-14	-32	$0.00	
2-W.03.01	CMNU0460	LN2 Piping - Prepare & Approve Contract Package	100%	9	15-Dec-14 A	28-Dec-14 A	27-Oct-14	21-Nov-14	-22	$0.00	
2-W.03.01	CMNU0470	AWARD: LN2 Piping	100%	0		28-Dec-14 A		21-Nov-14	-22	$0.00	
2-W.03.01	MCM150	Receive: Electrical Requirements - ISS	100%	0		01-Nov-13 A		01-Oct-13	-22	$0.00	



(O) NEXT - Detail Schedule

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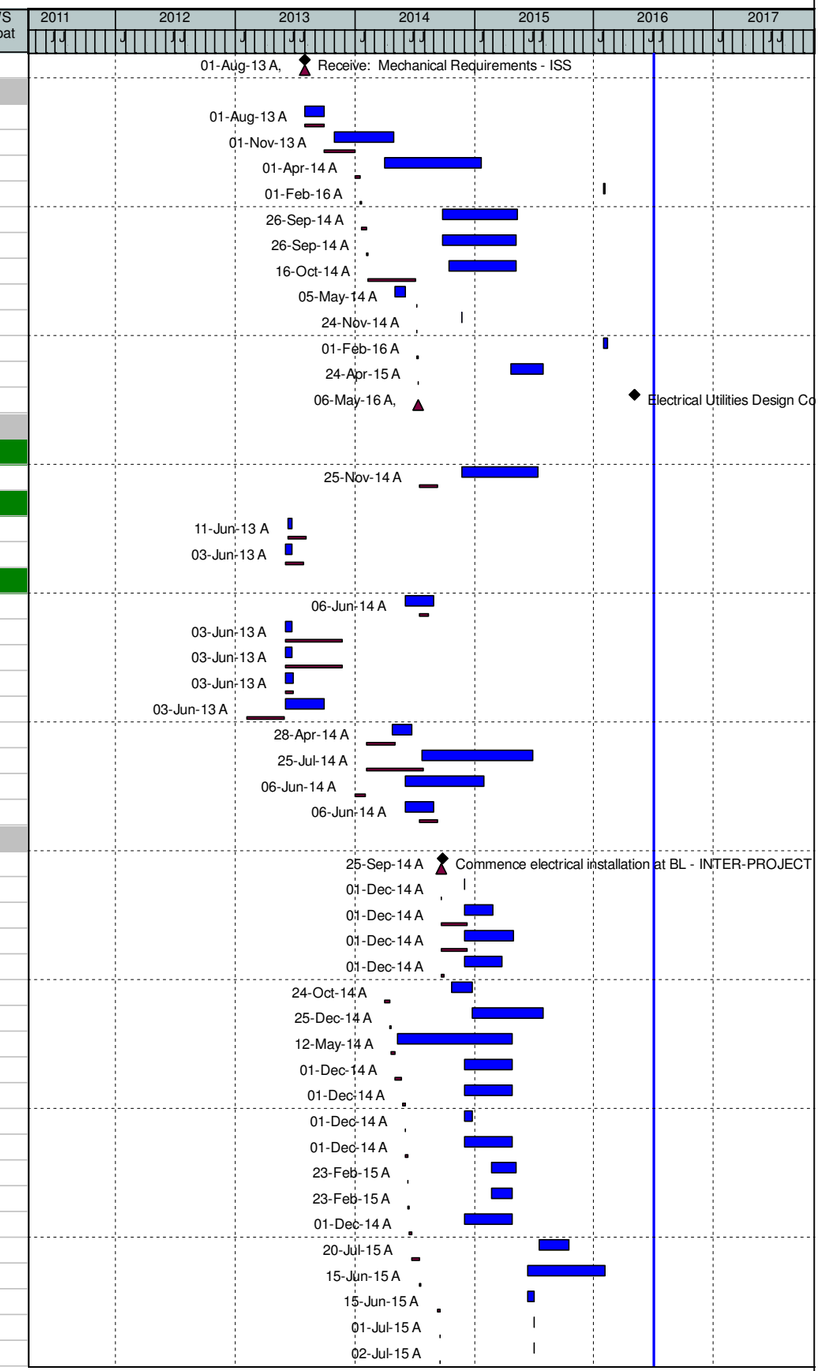
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	MCM160	Receive: Mechanical Requirements - ISS	100%	0		01-Aug-13 A		01-Aug-13	0	$0.00	
ISS Electrical Utilities Design			100%	692	01-Aug-13 A	06-May-16 A	01-Aug-13	15-Jul-14	-454	$47,588.85	
2-W.03.01	CMNU021	Gather generic electrical requirements - ISS	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU021FA	Gather generic electrical requirements - ISS	100%	123	01-Nov-13 A	30-Apr-14 A	01-Oct-13	02-Jan-14	-82	$1,113.13	
2-W.03.01	CMNU1690	Gather beamline specific requirements - ISS	100%	201	01-Apr-14 A	21-Jan-15 A	03-Jan-14	16-Jan-14	-251	$2,441.08	
2-W.03.01	CMNU1700	Define alarm signals / protocol to send to control room - ISS	100%	5	01-Feb-16 A	05-Feb-16 A	17-Jan-14	21-Jan-14	-511	$390.57	
2-W.03.01	CMNU1710	Specify electrical requirements - ISS	100%	157	26-Sep-14 A	14-May-15 A	22-Jan-14	04-Feb-14	-319	$1,659.94	
2-W.03.01	CMNU1720	Drawings ("single line" diagrams) - ISS	100%	152	26-Sep-14 A	07-May-15 A	05-Feb-14	11-Feb-14	-309	$3,837.12	
2-W.03.01	CMNU1730	Design - ISS	100%	139	16-Oct-14 A	07-May-15 A	12-Feb-14	07-Jul-14	-209	$34,702.78	
2-W.03.01	CMNU1740	Define water leak alarms - ISS	100%	22	05-May-14 A	05-Jun-14 A	08-Jul-14	08-Jul-14	22	$195.29	
2-W.03.01	CMNU1750	Write procedure for hutch panel grounding checks - ISS	100%	2	24-Nov-14 A	26-Nov-14 A	09-Jul-14	09-Jul-14	-97	$97.64	
2-W.03.01	CMNU1760	Ethernet interconnection diagram - ISS	100%	10	01-Feb-16 A	12-Feb-16 A	10-Jul-14	14-Jul-14	-396	$2,370.13	
2-W.03.01	CMNU1770	Review of electrical utilities design - ISS	100%	68	24-Apr-15 A	30-Jul-15 A	15-Jul-14	15-Jul-14	-261	$781.15	
2-W.03.01	CMNU1775	Electrical Utilities Design Complete - ISS	100%	0		06-May-16 A		15-Jul-14	-454	$0.00	
ISS Electrical Utilities Procure			100%	529	03-Jun-13 A	16-Jul-15 A	04-Feb-13	10-Sep-14	-210	$32,298.61	
ISS Communications			100%	158	25-Nov-14 A	16-Jul-15 A	16-Jul-14	10-Sep-14	-210	$8,801.67	
2-W.03.01	CMNU7001	Proc/Fab Communications Components - ISS	100%	158	25-Nov-14 A	16-Jul-15 A	16-Jul-14	10-Sep-14	-210	$8,801.67	
ISS Mains Wiring			0%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	06-Aug-13	29	$0.00	
2-W.03.01	CMNU1790	Procure electrical items - ISS	100%	10	11-Jun-13 A	25-Jun-13 A	11-Jun-13	06-Aug-13	29	$0.00	
2-W.03.01	CMNU7002	Proc/Fab Mains Electrical Cable and Fitting Components - ISS	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	30-Jul-13	24	$0.00	
ISS Other			100%	518	03-Jun-13 A	30-Jun-15 A	04-Feb-13	10-Sep-14	-199	$23,496.94	
2-W.03.01	CMNU2060	Procure water leak alarms - ISS	100%	58	06-Jun-14 A	29-Aug-14 A	16-Jul-14	12-Aug-14	-12	$195.29	
2-W.03.01	CMNU7003	Proc/Fab Motion control racks for beamlines - ISS	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	25-Nov-13	104	$0.00	
2-W.03.01	CMNU7004	Proc/Fab End station racks (also water cooled) - ISS	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	25-Nov-13	104	$0.00	
2-W.03.01	CMNU7005	Proc/Fab Other Misc. items for racks - ISS	100%	20	03-Jun-13 A	28-Jun-13 A	03-Jun-13	28-Jun-13	0	$0.00	
2-W.03.01	CMNU7006	Proc/Fab Items we add to racks - ISS	100%	82	03-Jun-13 A	30-Sep-13 A	04-Feb-13	31-May-13	-82	$0.00	
2-W.03.01	CMNU7006FA	Proc/Fab Items we add to racks - ISS	100%	41	28-Apr-14 A	25-Jun-14 A	05-Feb-14	02-May-14	-36	$12,239.25	
2-W.03.01	CMNU7008	Proc/Fab Temperature sensing system for hutches, racks etc. - ISS	100%	232	25-Jul-14 A	30-Jun-15 A	05-Feb-14	28-Jul-14	-230	$2,353.70	
2-W.03.01	CMNU7009	Proc/Fab PPS wiring and conduit - ISS	100%	160	06-Jun-14 A	30-Jan-15 A	03-Jan-14	31-Jan-14	-247	$5,884.26	
2-W.03.01	CMNU7010	Proc/Fab TraceTek leak detection cable - ISS	100%	58	06-Jun-14 A	29-Aug-14 A	16-Jul-14	10-Sep-14	8	$2,824.44	
ISS Electrical Utilities Install			100%	508	12-May-14 A	23-May-16 A	03-Apr-14	12-Dec-14	-360	$145,425.58	
2-W.03.01	CMNU1800	Commence electrical installation at BL - INTER-PROJECT LINK - ISS	100%	0	25-Sep-14 A		22-Sep-14		-3	$0.00	
2-W.03.01	CMNU1810	Logistics administration (0.5 FTE for duration of work) - ISS	100%	3	01-Dec-14 A	03-Dec-14 A	23-Sep-14	23-Sep-14	-49	$0.00	
2-W.03.01	CMNU1820	Supervision of installation electricians - ISS	100%	59	01-Dec-14 A	27-Feb-15 A	22-Sep-14	10-Dec-14	-51	$2,509.26	
2-W.03.01	CMNU1830	Design updates - ISS	100%	104	01-Dec-14 A	01-May-15 A	23-Sep-14	10-Dec-14	-96	$0.00	
2-W.03.01	CMNU1840	Install cable tray (internal to each hutch) - ISS	100%	80	01-Dec-14 A	27-Mar-15 A	22-Sep-14	29-Sep-14	-121	$6,855.18	
2-W.03.01	CMNU1850	Install pylons and roof stanchions - ISS	100%	42	24-Oct-14 A	24-Dec-14 A	03-Apr-14	16-Apr-14	-173	$11,425.31	
2-W.03.01	CMNU1860	Install cable tray (external) - ISS	100%	149	25-Dec-14 A	30-Jul-15 A	17-Apr-14	22-Apr-14	-318	$4,570.12	
2-W.03.01	CMNU1870	Install breaker panels - ISS	100%	240	12-May-14 A	28-Apr-15 A	23-Apr-14	02-May-14	-245	$13,710.37	
2-W.03.01	CMNU1880	Install mains wiring (per hutch) - ISS	100%	102	01-Dec-14 A	28-Apr-15 A	05-May-14	23-May-14	-230	$17,137.96	
2-W.03.01	CMNU1890	Install mains wiring (on floor outside hutch and on the hutch roof) - ISS	100%	102	01-Dec-14 A	28-Apr-15 A	27-May-14	02-Jun-14	-225	$5,712.65	
2-W.03.01	CMNU1900	Install lighting circuits incl switches - ISS	100%	18	01-Dec-14 A	24-Dec-14 A	03-Jun-14	05-Jun-14	-138	$3,427.59	
2-W.03.01	CMNU1910	Install wiring to hutch ventilation fans - ISS	100%	102	01-Dec-14 A	28-Apr-15 A	06-Jun-14	10-Jun-14	-219	$3,427.59	
2-W.03.01	CMNU1920	Test mains wiring - ISS	100%	54	23-Feb-15 A	07-May-15 A	11-Jun-14	12-Jun-14	-224	$2,285.06	
2-W.03.01	CMNU1930	Connection to BL transformer incl cable installation - ISS	100%	47	23-Feb-15 A	28-Apr-15 A	13-Jun-14	16-Jun-14	-215	$2,285.06	
2-W.03.01	CMNU1940	Install wiremold in hutches - ISS	100%	102	01-Dec-14 A	28-Apr-15 A	17-Jun-14	24-Jun-14	-209	$6,855.18	
2-W.03.01	CMNU1950	Install PPS conduits only - ISS	100%	62	20-Jul-15 A	15-Oct-15 A	25-Jun-14	17-Jul-14	-312	$13,710.37	
2-W.03.01	CMNU1960	Install EPS ethernet cables - ISS	100%	160	15-Jun-15 A	03-Feb-16 A	18-Jul-14	22-Jul-14	-383	$1,827.94	
2-W.03.01	CMNU1970	Install campus network ethernet + telephone cables - ISS	100%	12	15-Jun-15 A	01-Jul-15 A	11-Sep-14	17-Sep-14	-195	$3,290.30	
2-W.03.01	CMNU1980	Connection of campus network ethernet + telephone to switches - ISS	100%	1	01-Jul-15 A	01-Jul-15 A	18-Sep-14	18-Sep-14	-195	$365.59	
2-W.03.01	CMNU1990	Test campus network ethernet + telephone cables + outlets - ISS	100%	1	02-Jul-15 A	02-Jul-15 A	19-Sep-14	19-Sep-14	-195	$731.18	



(O) NEXT - Detail Schedule

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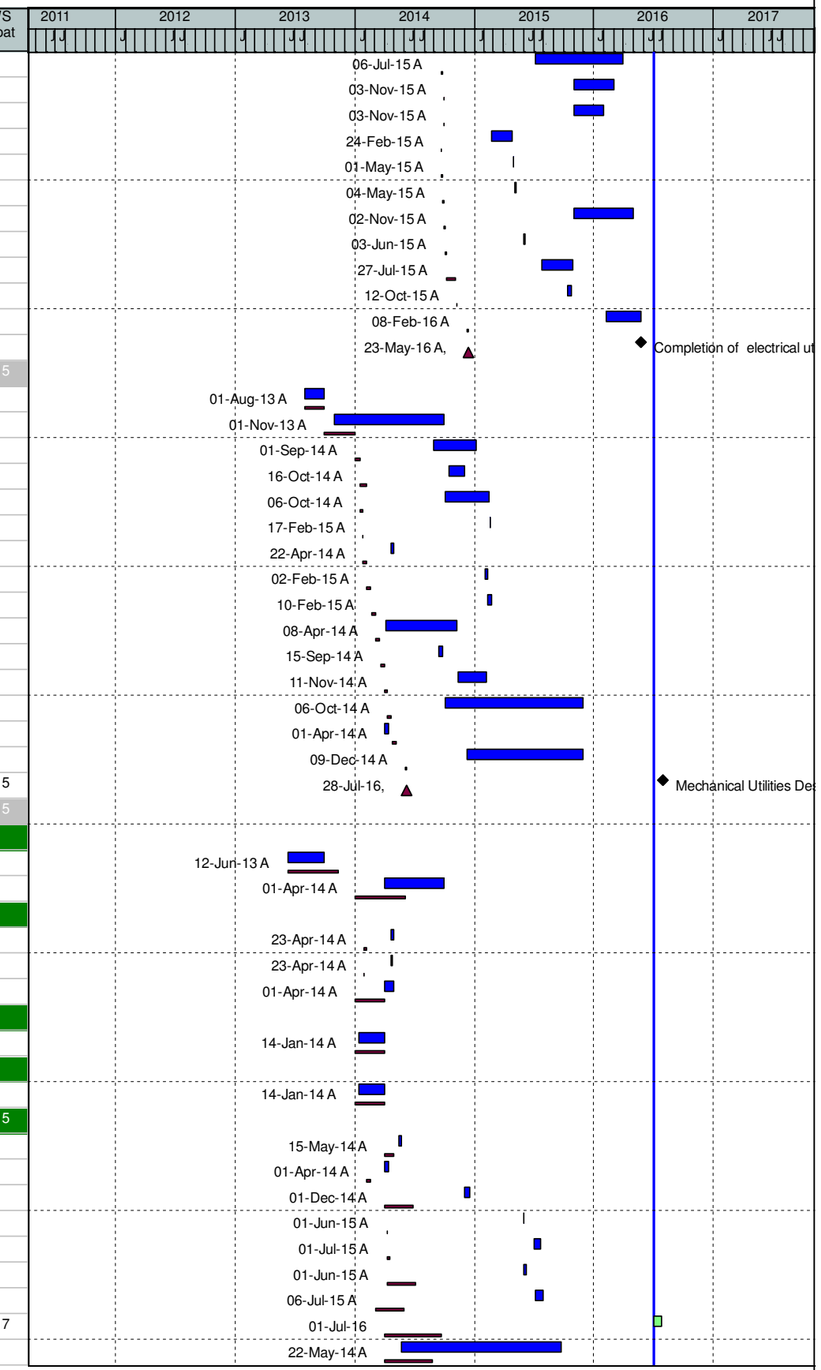
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU2000	Install controls network ethernet cables - ISS	100%	184	06-Jul-15 A	29-Mar-16 A	22-Sep-14	26-Sep-14	-374	$3,290.30	
2-W.03.01	CMNU2010	Connection of controls network ethernet to switches - ISS	100%	80	03-Nov-15 A	01-Mar-16 A	29-Sep-14	29-Sep-14	-353	$365.59	
2-W.03.01	CMNU2020	Test campus network ethernet cables + outlets - ISS	100%	60	03-Nov-15 A	01-Feb-16 A	30-Sep-14	30-Sep-14	-332	$731.18	
2-W.03.01	CMNU2030	Install grounding bus - ISS	100%	46	24-Feb-15 A	29-Apr-15 A	22-Sep-14	23-Sep-14	-147	$1,096.77	
2-W.03.01	CMNU2040	Checking of hutch panel grounding - ISS	100%	1	01-May-15 A	01-May-15 A	24-Sep-14	24-Sep-14	-149	$584.94	
2-W.03.01	CMNU2050	Final documentation for electrical installation - ISS	100%	5	04-May-15 A	08-May-15 A	25-Sep-14	01-Oct-14	-149	$6,844.26	
2-W.03.01	CMNU2070	Install water leak alarms - ISS	100%	123	02-Nov-15 A	29-Apr-16 A	02-Oct-14	03-Oct-14	-391	$1,131.86	
2-W.03.01	CMNU2090	Install ODH sensors - ISS	100%	3	03-Jun-15 A	05-Jun-15 A	06-Oct-14	08-Oct-14	-163	$1,886.44	
2-W.03.01	CMNU2100	Install PPS conduit and cables - ISS	100%	67	27-Jul-15 A	30-Oct-15 A	09-Oct-14	06-Nov-14	-244	$26,623.38	
2-W.03.01	CMNU2110	Test PPS cables - ISS	100%	9	12-Oct-15 A	26-Oct-15 A	07-Nov-14	10-Nov-14	-238	$1,131.86	
2-W.03.01	CMNU2130	Inspect electrical installation - ISS	100%	74	08-Feb-16 A	23-May-16 A	11-Dec-14	12-Dec-14	-360	$1,612.29	
2-W.03.01	CMNU2140	Completion of electrical utilities - ISS	100%	0		23-May-16 A		12-Dec-14	-360	$0.00	
ISS Mechanical Utilities Design			100%	749	01-Aug-13 A	28-Jul-16	01-Aug-13	06-Jun-14	-536	$16,156.02	115
2-W.03.01	CMNU2150	Gather mechanical requirements - ISS	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU2150FA	Gather mechanical requirements - ISS	100%	228	01-Nov-13 A	01-Oct-14 A	01-Oct-13	02-Jan-14	-187	$0.00	
2-W.03.01	CMNU2160	Specify mechanical requirements - ISS	100%	83	01-Sep-14 A	05-Jan-15 A	03-Jan-14	16-Jan-14	-239	$0.00	
2-W.03.01	CMNU2170	Supervise drawings of pylons, utilites bridges and stanchions - ISS	100%	31	16-Oct-14 A	01-Dec-14 A	17-Jan-14	04-Feb-14	-206	$3,446.76	
2-W.03.01	CMNU2180	Drawings (stick diagrams) - ISS	100%	88	06-Oct-14 A	13-Feb-15 A	17-Jan-14	24-Jan-14	-263	$1,470.83	
2-W.03.01	CMNU2190	Final update of drawings (stick diagrams) - ISS	100%	1	17-Feb-15 A	17-Feb-15 A	27-Jan-14	27-Jan-14	-263	$2,332.52	
2-W.03.01	CMNU2200	Create drawings of pylons, utilites bridges and stanchions - ISS	100%	7	22-Apr-14 A	30-Apr-14 A	27-Jan-14	04-Feb-14	-60	$956.04	
2-W.03.01	CMNU2210	Specification of experimental gas manifold - ISS	100%	6	02-Feb-15 A	09-Feb-15 A	05-Feb-14	19-Feb-14	-242	$689.35	
2-W.03.01	CMNU2220	Design of experimental gas manifold - ISS	100%	10	10-Feb-15 A	24-Feb-15 A	20-Feb-14	05-Mar-14	-242	$588.33	
2-W.03.01	CMNU2230	Specification of experimental cryogenics - ISS	100%	150	08-Apr-14 A	10-Nov-14 A	06-Mar-14	19-Mar-14	-163	$689.35	
2-W.03.01	CMNU2240	Design of experimental cryogenics - ISS	100%	10	15-Sep-14 A	28-Sep-14 A	20-Mar-14	02-Apr-14	-123	$588.33	
2-W.03.01	CMNU2250	Specification of exhaust system - ISS	100%	58	11-Nov-14 A	06-Feb-15 A	03-Apr-14	09-Apr-14	-206	$861.69	
2-W.03.01	CMNU2260	Create 3D layout - ISS	100%	287	06-Oct-14 A	30-Nov-15 A	10-Apr-14	23-Apr-14	-400	$3,067.93	
2-W.03.01	CMNU2270	Design prototype of 0.1C temp control system - ISS	100%	10	01-Apr-14 A	14-Apr-14 A	24-Apr-14	07-May-14	17	$1,464.87	
2-W.03.01	CMNU2290	Review of mechanical utilties design - ISS	100%	244	09-Dec-14 A	30-Nov-15 A	06-Jun-14	06-Jun-14	-369	$0.00	
2-W.03.01	CMNU2295	Mechanical Utilities Design Complete - ISS	0%	0		28-Jul-16		06-Jun-14	-536	$0.00	115
ISS Mechanical Utilities Procure			94.14%	783	12-Jun-13 A	28-Jul-16	12-Jun-13	16-Dec-15	-155	$148,550.05	115
ISS Processed Chilled Water			100%	325	12-Jun-13 A	30-Sep-14 A	12-Jun-13	02-Jun-14	-82	$30,261.92	
2-W.03.01	CMNU7011	Proc/Fab Chilled Water Equipment - ISS	100%	75	12-Jun-13 A	30-Sep-13 A	12-Jun-13	13-Nov-13	32	$0.00	
2-W.03.01	CMNU7011FA	Proc/Fab Chilled Water Equipment - ISS	100%	126	01-Apr-14 A	30-Sep-14 A	03-Jan-14	02-Jun-14	-82	$30,261.92	
ISS Mains DI Water			100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$10,283.26	
2-W.03.01	CMNU2300	Procure gauges, valves, trantters, readouts, manifolds, driers etc - ISS	100%	5	23-Apr-14 A	30-Apr-14 A	28-Jan-14	05-Feb-14	-58	$1,034.03	
2-W.03.01	CMNU2320	Procure pipe and fittings - ISS	100%	2	23-Apr-14 A	24-Apr-14 A	28-Jan-14	29-Jan-14	-60	$258.51	
2-W.03.01	CMNU7012	Proc/Fab DI Water Equipment - ISS	100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$8,990.73	
ISS Compressed Air			100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$6,171.41	
2-W.03.01	CMNU7013	Proc/Fab Compressed Air Equipment - ISS	100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$6,171.41	
ISS Gaseous Nitrogen			100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	
2-W.03.01	CMNU7014	Proc/Fab Gaseous Nitrogen - ISS	100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	
ISS Other Systems			91.32%	727	03-Sep-13 A	28-Jul-16	03-Sep-13	16-Dec-15	-155	$100,284.72	115
2-W.03.01	CMNU2080	Define and procure ODH sensors - ISS	100%	5	15-May-14 A	22-May-14 A	03-Apr-14	30-Apr-14	-15	$390.57	
2-W.03.01	CMNU2310	Procure utility bridges and piping stanchions - ISS	100%	9	01-Apr-14 A	14-Apr-14 A	05-Feb-14	19-Feb-14	-37	$1,464.87	
2-W.03.01	CMNU2330	Procure LN2 pipe - ISS	100%	13	01-Dec-14 A	18-Dec-14 A	03-Apr-14	26-Jun-14	-118	$1,034.03	
2-W.03.01	CMNU2340	Procure Exhaust system - ISS	100%	1	01-Jun-15 A	01-Jun-15 A	10-Apr-14	10-Apr-14	-284	$673.04	
2-W.03.01	CMNU2350	Procurement of parts for experimental gas manifold - ISS	100%	15	01-Jul-15 A	22-Jul-15 A	11-Apr-14	16-Apr-14	-316	$538.43	
2-W.03.01	CMNU7015	Proc/Fab Exhaust System - ISS	100%	8	01-Jun-15 A	11-Jun-15 A	10-Apr-14	07-Jul-14	-232	$3,530.55	
2-W.03.01	CMNU7016	Proc/Fab Bottle Gas System - ISS	100%	18	06-Jul-15 A	30-Jul-15 A	06-Mar-14	29-May-14	-291	$7,061.11	
2-W.03.01	CMNU7018	Proc/Fab Fill stations for LN2 dewars - ISS	0%	17	01-Jul-16	26-Jul-16	03-Apr-14	23-Sep-14	-460	$5,884.26	117
2-W.03.01	CMNU7019	Proc/Fab Oxygen depletion monitors - ISS	100%	335	22-May-14 A	23-Sep-15 A	03-Apr-14	25-Aug-14	-270	$3,530.55	



(O) NEXT - Detail Schedule

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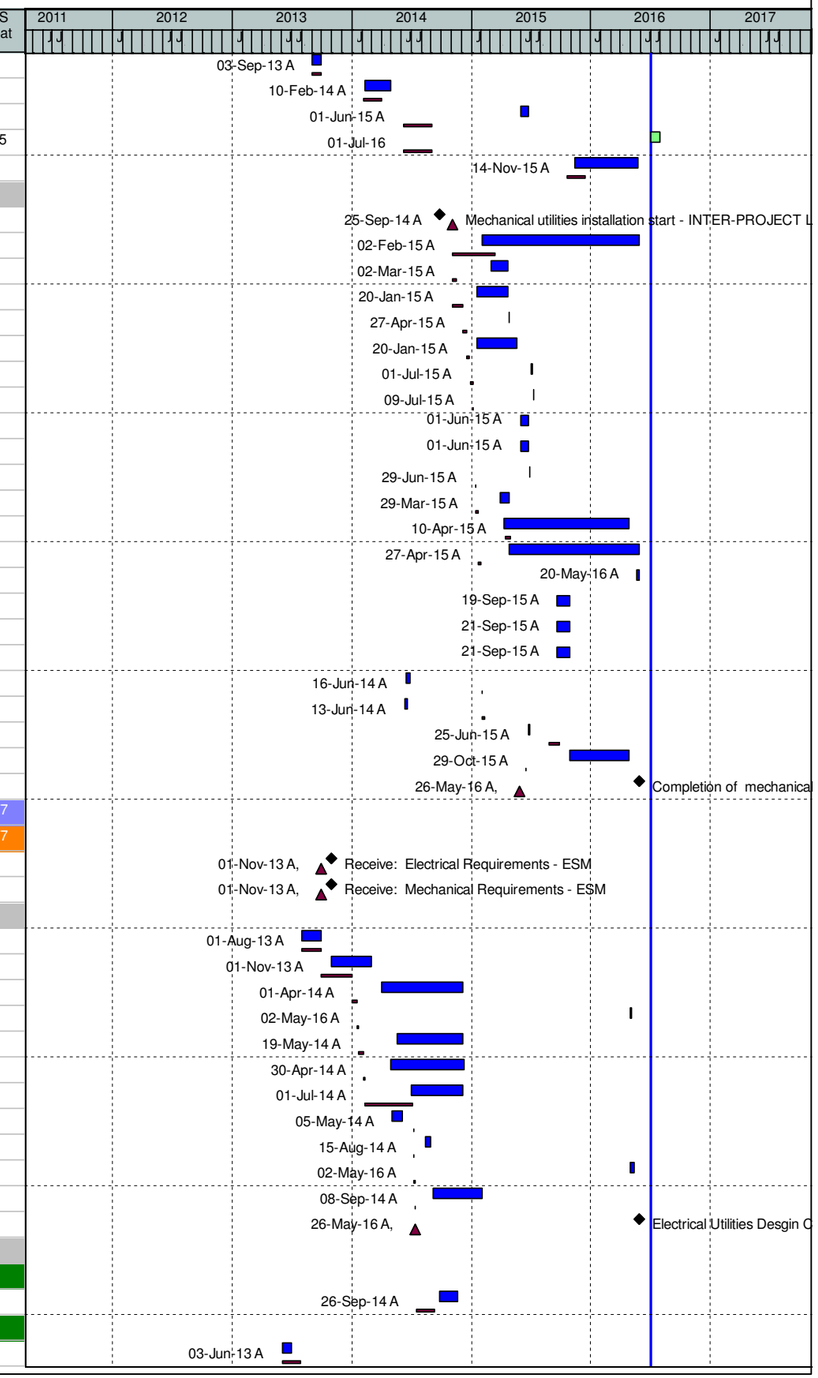
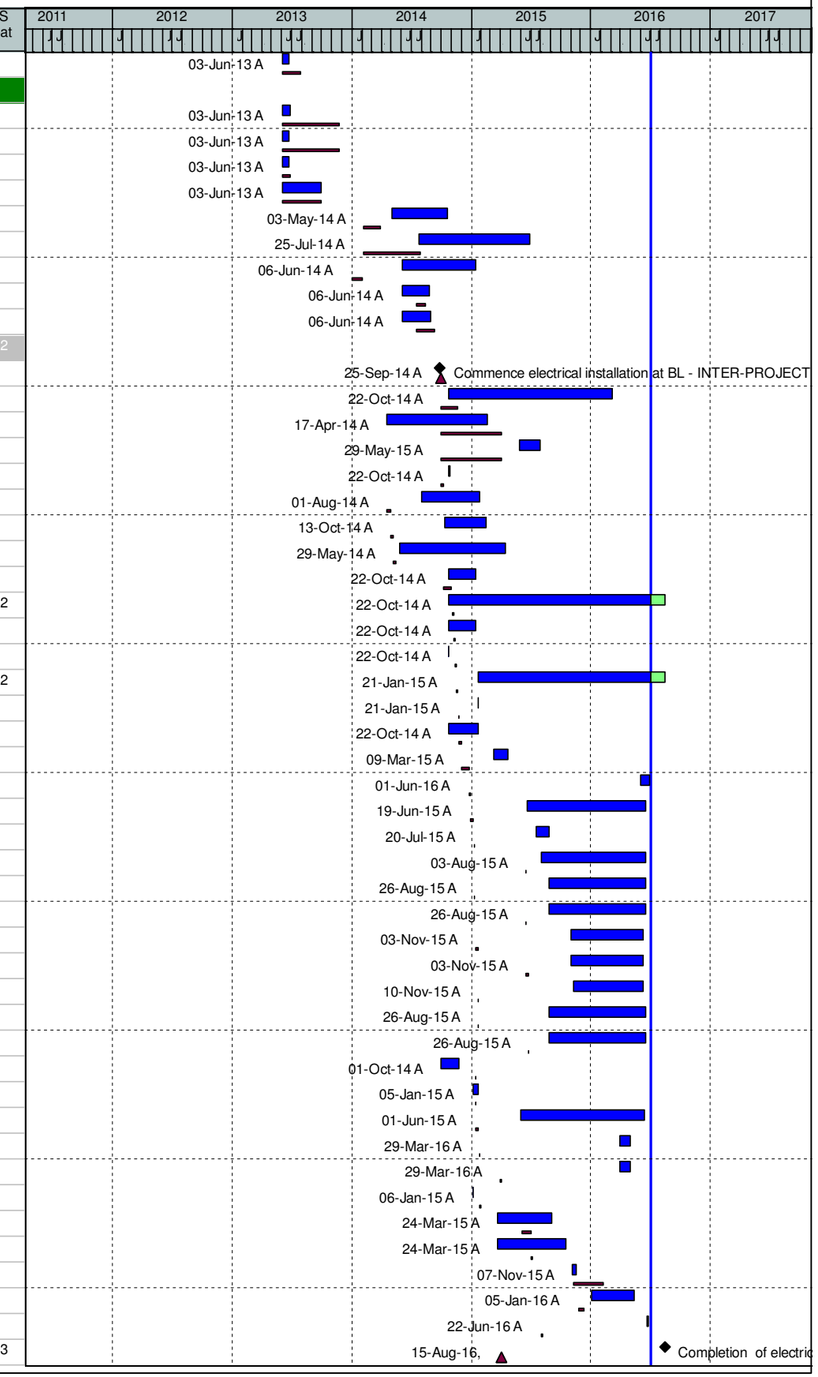
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU7020	Proc/Fab Pylons and L-brackets - ISS	100%	19	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU7020FA	Proc/Fab Pylons and L-brackets - ISS	100%	56	10-Feb-14 A	30-Apr-14 A	05-Feb-14	02-Apr-14	-19	$26,317.48	
2-W.03.01	CMNU7021	Proc/Fab Paint for floor marking - ISS	100%	20	01-Jun-15 A	26-Jun-15 A	09-Jun-14	03-Sep-14	-203	$235.37	
2-W.03.01	CMNU7022	Proc/Fab Plumbing for emergency eye-wash and showers - ISS	0%	19	01-Jul-16	28-Jul-16	09-Jun-14	03-Sep-14	-476	$2,824.44	115
2-W.03.01	CMNU7023	Proc/Fab Sprinkler System - ISS	100%	129	14-Nov-15 A	23-May-16 A	20-Oct-15	16-Dec-15	-108	$46,800.00	
ISS Mechanical Utilities Install			100%	489	13-Jun-14 A	26-May-16 A	05-Nov-14	25-Sep-15	-167	$61,140.26	
2-W.03.01	CMNU2360	Mechanical utilities installation start - INTER-PROJECT LINK - ISS	100%	0	25-Sep-14 A		05-Nov-14		28	$0.00	
2-W.03.01	CMNU2370	Supervision of installation techs - ISS	100%	333	02-Feb-15 A	26-May-16 A	05-Nov-14	16-Mar-15	-303	$347.29	
2-W.03.01	CMNU2380	Install DI water pipework - ISS	100%	39	02-Mar-15 A	24-Apr-15 A	05-Nov-14	18-Nov-14	-105	$6,876.33	
2-W.03.01	CMNU2390	Install chilled water pipework - ISS	100%	68	20-Jan-15 A	24-Apr-15 A	05-Nov-14	04-Dec-14	-96	$17,568.47	
2-W.03.01	CMNU2400	Insulate chilled water piping - ISS	100%	1	27-Apr-15 A	28-Apr-15 A	05-Dec-14	18-Dec-14	-87	$11,673.01	
2-W.03.01	CMNU2410	Install compressed air pipework - ISS	100%	85	20-Jan-15 A	20-May-15 A	19-Dec-14	25-Dec-14	-98	$7,494.68	
2-W.03.01	CMNU2420	Build of experimental gas manifold - ISS	100%	5	01-Jul-15 A	08-Jul-15 A	29-Dec-14	06-Jan-15	-127	$555.66	
2-W.03.01	CMNU2430	Install experimental gas pipework - ISS	100%	2	09-Jul-15 A	10-Jul-15 A	07-Jan-15	08-Jan-15	-127	$1,041.87	
2-W.03.01	CMNU2440	EAC activity - Emergency Power for gas handling system; Procure/receive mat	100%	20	01-Jun-15 A	26-Jun-15 A				$0.00	
2-W.03.01	CMNU2445	EAC activity - Emergency Power for gas handling system; Installation - ISS	100%	20	01-Jun-15 A	26-Jun-15 A				$0.00	
2-W.03.01	CMNU2450	Install Exhaust system - ISS	100%	1	29-Jun-15 A	30-Jun-15 A	13-Jan-15	15-Jan-15	-114	$1,389.16	
2-W.03.01	CMNU2460	Flushing and testing of all pipework - ISS	100%	22	29-Mar-15 A	29-Apr-15 A	16-Jan-15	22-Jan-15	-67	$2,083.74	
2-W.03.01	CMNU24601	Flushing and testing of all pipework (extra support) - ISS	100%	264	10-Apr-15 A	27-Apr-16 A	13-Apr-15	30-Apr-15	-249	$694.58	
2-W.03.01	CMNU2470	Production of 'as-built' drawings (stick diagrams) - ISS	100%	274	27-Apr-15 A	26-May-16 A	23-Jan-15	30-Jan-15	-333	$3,794.74	
2-W.03.01	CMNU24701	Production of 'as-built' drawings (stick diagrams) - ISS - ETC	100%	5	20-May-16 A	26-May-16 A				$0.00	
2-W.03.01	CMNU2475	EAC; Receipt of components for the Experimental Gas System - ISS	100%	27	19-Sep-15 A	28-Oct-15 A				$0.00	
2-W.03.01	CMNU24751	EAC; Install & insulate PCHW piping for Master Gas Controller - ISS	100%	27	21-Sep-15 A	28-Oct-15 A				$0.00	
2-W.03.01	CMNU24752	EAC; Install & insulate PCHW valves for 2 additional Racks - ISS	100%	29	21-Sep-15 A	30-Oct-15 A				$0.00	
2-W.03.01	CMNU2480	Build of 0.1C temp control system prototype - ISS	100%	10	16-Jun-14 A	30-Jun-14 A	02-Feb-15	04-Feb-15	148	$555.66	
2-W.03.01	CMNU2490	Document of 0.1C temp control system - ISS	100%	4	13-Jun-14 A	19-Jun-14 A	05-Feb-15	11-Feb-15	160	$711.41	
2-W.03.01	CMNU2500	Retrofit resistor and install rack flow controllers - ISS	100%	3	25-Jun-15 A	30-Jun-15 A	28-Aug-15	25-Sep-15	62	$4,532.19	
2-W.03.01	CMNU2510	Inspect Mechanical installation, Traveler/Acceptance Work & Docs - ISS	100%	124	29-Oct-15 A	27-Apr-16 A	15-Jun-15	16-Jun-15	-217	$1,821.47	
2-W.03.01	CMNU2520	Completion of mechanical utilities - ISS	100%	0		26-May-16 A		29-May-15	-250	$0.00	
ESM Common Systems			98.03%	807	03-Jun-13 A	22-Aug-16	03-Jun-13	09-Feb-16	-136	$704,611.21	277
ESM Utilities			98.03%	807	03-Jun-13 A	22-Aug-16	03-Jun-13	09-Feb-16	-136	$704,611.21	277
2-W.03.01	MCM090	Receive: Electrical Requirements - ESM	100%	0		01-Nov-13 A		01-Oct-13	-22	$0.00	
2-W.03.01	MCM100	Receive: Mechanical Requirements - ESM	100%	0		01-Nov-13 A		01-Oct-13	-22	$0.00	
ESM Electrical Utilities Design			100%	706	01-Aug-13 A	26-May-16 A	01-Aug-13	15-Jul-14	-468	$47,530.26	
2-W.03.01	CMNU001	Gather generic electrical requirements - ESM	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU001FA	Gather generic electrical requirements - ESM	100%	80	01-Nov-13 A	28-Feb-14 A	01-Oct-13	02-Jan-14	-39	$1,054.55	
2-W.03.01	CMNU010	Gather beamline specific requirements - ESM	100%	172	01-Apr-14 A	05-Dec-14 A	03-Jan-14	16-Jan-14	-222	$2,441.08	
2-W.03.01	CMNU020	Define alarm signals / protocol to send to control room - ESM	100%	5	02-May-16 A	06-May-16 A	17-Jan-14	21-Jan-14	-575	$390.57	
2-W.03.01	CMNU030	Specify electrical requirements - ESM	100%	138	19-May-14 A	05-Dec-14 A	22-Jan-14	04-Feb-14	-210	$1,659.94	
2-W.03.01	CMNU040	Drawings ("single line" diagrams) - ESM	100%	154	30-Apr-14 A	10-Dec-14 A	05-Feb-14	11-Feb-14	-208	$3,837.12	
2-W.03.01	CMNU050	Design Electrical Systems- ESM	100%	108	01-Jul-14 A	05-Dec-14 A	12-Feb-14	07-Jul-14	-105	$34,702.78	
2-W.03.01	CMNU060	Define water leak alarms - ESM	100%	22	05-May-14 A	05-Jun-14 A	08-Jul-14	08-Jul-14	22	$195.29	
2-W.03.01	CMNU070	Write procedure for hutch panel grounding checks - ESM	100%	10	15-Aug-14 A	29-Aug-14 A	09-Jul-14	09-Jul-14	-36	$97.64	
2-W.03.01	CMNU080	Ethernet interconnection diagram - ESM	100%	10	02-May-16 A	13-May-16 A	10-Jul-14	14-Jul-14	-460	$2,370.13	
2-W.03.01	CMNU090	Review of electrical utilities design - ESM	100%	99	08-Sep-14 A	02-Feb-15 A	15-Jul-14	15-Jul-14	-136	$781.15	
2-W.03.01	CMNU095	Electrical Utilities Desgin Complete - ESM	100%	0		26-May-16 A		15-Jul-14	-468	$0.00	
ESM Electrical Utilities Procure			100%	518	03-Jun-13 A	30-Jun-15 A	03-Jun-13	10-Sep-14	-199	$33,240.09	
ESM Communications			100%	40	26-Sep-14 A	21-Nov-14 A	16-Jul-14	10-Sep-14	-51	$8,801.67	
2-W.03.01	CMNU5001	Proc/Fab Communications Components - ESM	100%	40	26-Sep-14 A	21-Nov-14 A	16-Jul-14	10-Sep-14	-51	$8,801.67	
ESM Mains Wiring			0%	20	03-Jun-13 A	30-Jun-13 A	03-Jun-13	30-Jul-13	20	$0.00	
2-W.03.01	CMNU5002	Proc/Fab Mains Electrical Cable and Fitting Components - ESM	100%	20	03-Jun-13 A	30-Jun-13 A	03-Jun-13	30-Jul-13	20	$0.00	



(O) NEXT - Detail Schedule

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU5002A	Procure electrical items - ESM	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	29-Jul-13	23	$0.00	
ESM Other			100%	518	03-Jun-13 A	30-Jun-15 A	03-Jun-13	10-Sep-14	-199	$24,438.42	
2-W.03.01	CMNU5003	Proc/Fab Motion control racks for beamlines - ESM	100%	17	03-Jun-13 A	26-Jun-13 A	03-Jun-13	25-Nov-13	103	$0.00	
2-W.03.01	CMNU5004	Proc/Fab End station racks (also water cooled) - ESM	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	25-Nov-13	104	$0.00	
2-W.03.01	CMNU5005	Proc/Fab Other Misc. Items for Racks - ESM	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	28-Jun-13	4	$0.00	
2-W.03.01	CMNU5006	Proc/Fab Items we add to racks - ESM	100%	82	03-Jun-13 A	30-Sep-13 A	03-Jun-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU5006FA	Proc/Fab Items we add to racks - ESM	100%	117	03-May-14 A	21-Oct-14 A	05-Feb-14	28-Mar-14	-142	$13,180.73	
2-W.03.01	CMNU5008	Proc/Fab Temperature sensing system for hutches, racks etc. - ESM	100%	232	25-Jul-14 A	30-Jun-15 A	05-Feb-14	28-Jul-14	-230	$2,353.70	
2-W.03.01	CMNU5009	Proc/Fab PPS wiring and conduit - ESM	100%	150	06-Jun-14 A	14-Jan-15 A	03-Jan-14	31-Jan-14	-237	$5,884.26	
2-W.03.01	CMNU50092	Procurement Support for water leak alarms - ESM	100%	57	06-Jun-14 A	28-Aug-14 A	16-Jul-14	12-Aug-14	-11	$195.29	
2-W.03.01	CMNU5010	Proc/Fab TraceTek leak detection cable - ESM	100%	58	06-Jun-14 A	29-Aug-14 A	16-Jul-14	10-Sep-14	8	$2,824.44	
ESM Electrical Utilities Install			99.53%	583	17-Apr-14 A	15-Aug-16	17-Apr-14	09-Feb-16	-131	$198,993.92	282
2-W.03.01	CMNU150	Commence electrical installation at BL - INTER-PROJECT LINK - ESM	100%	0	25-Sep-14 A		02-Oct-14		5	$0.00	
2-W.03.01	CMNU160	Logistics administration (0.5 FTE for duration of work) - ESM	100%	342	22-Oct-14 A	07-Mar-16 A	02-Oct-14	19-Nov-14	-321	$3,277.43	
2-W.03.01	CMNU170	Supervision of installation electricians - ESM	100%	208	17-Apr-14 A	20-Feb-15 A	02-Oct-14	01-Apr-15	29	$2,519.20	
2-W.03.01	CMNU180	Design updates per as-built - ESM	100%	44	29-May-15 A	30-Jul-15 A	02-Oct-14	01-Apr-15	-84	$0.00	
2-W.03.01	CMNU190	Install cable tray (internal to each hutch) - ESM	100%	6	22-Oct-14 A	29-Oct-14 A	02-Oct-14	09-Oct-14	-13	$7,074.55	
2-W.03.01	CMNU200	Install pylons and roof stanchions - ESM	100%	120	01-Aug-14 A	28-Jan-15 A	17-Apr-14	30-Apr-14	-183	$11,425.31	
2-W.03.01	CMNU210	Install cable tray (external) - ESM	100%	83	13-Oct-14 A	13-Feb-15 A	01-May-14	06-May-14	-192	$4,570.12	
2-W.03.01	CMNU220	Install breaker panels - ESM	100%	218	29-May-14 A	14-Apr-15 A	07-May-14	16-May-14	-225	$13,710.37	
2-W.03.01	CMNU230	Install mains wiring (per hutch) - ESM	100%	58	22-Oct-14 A	16-Jan-15 A	10-Oct-14	31-Oct-14	-50	$17,686.38	
2-W.03.01	CMNU240	Install mains wiring (on floor outside hutch and on the hutch roof) - ESM	90%	455	22-Oct-14 A	15-Aug-16	03-Nov-14	07-Nov-14	-442	$5,895.46	282
2-W.03.01	CMNU250	Install lighting circuits incl switches - ESM	100%	58	22-Oct-14 A	16-Jan-15 A	10-Nov-14	12-Nov-14	-42	$3,537.28	
2-W.03.01	CMNU260	Install wiring to hutch ventilation fans - ESM	100%	2	22-Oct-14 A	24-Oct-14 A	13-Nov-14	17-Nov-14	17	$3,537.28	
2-W.03.01	CMNU270	Test mains wiring - ESM	85%	396	21-Jan-15 A	15-Aug-16	18-Nov-14	19-Nov-14	-434	$2,358.18	282
2-W.03.01	CMNU280	Connection to BL transformer incl cable installation - ESM	100%	3	21-Jan-15 A	23-Jan-15 A	24-Nov-14	25-Nov-14	-37	$2,358.18	
2-W.03.01	CMNU290	Install wiremold in hutches - ESM	100%	62	22-Oct-14 A	23-Jan-15 A	26-Nov-14	03-Dec-14	-33	$7,074.55	
2-W.03.01	CMNU300	Install PPS conduits only - ESM	100%	34	09-Mar-15 A	24-Apr-15 A	04-Dec-14	24-Dec-14	-81	$14,149.10	
2-W.03.01	CMNU310	Install EPS ethernet cables - ESM	100%	19	01-Jun-16 A	28-Jun-16 A	25-Dec-14	30-Dec-14	-374	$1,886.44	
2-W.03.01	CMNU320	Install campus network ethernet + telephone cables - ESM	100%	251	19-Jun-15 A	17-Jun-16 A	31-Dec-14	08-Jan-15	-363	$3,395.59	
2-W.03.01	CMNU330	Connection of campus network ethernet + telephone to switches - ESM	100%	27	20-Jul-15 A	25-Aug-15 A	09-Jan-15	09-Jan-15	-158	$377.29	
2-W.03.01	CMNU3301	Connection of campus network ethernet + telephone to switches (extra suppor	100%	221	03-Aug-15 A	17-Jun-16 A	16-Jun-15	16-Jun-15	-253	$226.37	
2-W.03.01	CMNU340	Test campus network ethernet + telephone cables + outlets - ESM	100%	204	26-Aug-15 A	17-Jun-16 A	12-Jan-15	12-Jan-15	-361	$754.58	
2-W.03.01	CMNU3401	Test campus network ethernet + telephone cables + outlets (extra support)- ES	100%	204	26-Aug-15 A	17-Jun-16 A	17-Jun-15	17-Jun-15	-252	$452.75	
2-W.03.01	CMNU350	Install controls network ethernet cables - ESM	100%	152	03-Nov-15 A	10-Jun-16 A	13-Jan-15	20-Jan-15	-351	$3,395.59	
2-W.03.01	CMNU3501	Install controls network ethernet cables (extra support)- ESM	100%	152	03-Nov-15 A	10-Jun-16 A	18-Jun-15	24-Jun-15	-242	$1,131.86	
2-W.03.01	CMNU360	Connection of controls network ethernet to switches - ESM	100%	147	10-Nov-15 A	10-Jun-16 A	21-Jan-15	21-Jan-15	-350	$377.29	
2-W.03.01	CMNU370	Test campus network ethernet cables + outlets - ESM	100%	204	26-Aug-15 A	17-Jun-16 A	22-Jan-15	22-Jan-15	-354	$754.58	
2-W.03.01	CMNU3701	Test campus network ethernet cables + outlets (extra support) - ESM	100%	204	26-Aug-15 A	17-Jun-16 A	26-Jun-15	26-Jun-15	-245	$2,263.73	
2-W.03.01	CMNU380	Install grounding bus - ESM	100%	39	01-Oct-14 A	26-Nov-14 A	13-Jan-15	14-Jan-15	31	$1,131.86	
2-W.03.01	CMNU390	Checking of hutch panel grounding - ESM	100%	14	05-Jan-15 A	23-Jan-15 A	15-Jan-15	15-Jan-15	-5	$603.66	
2-W.03.01	CMNU400	Final documentation for electrical installation - ESM	100%	262	01-Jun-15 A	15-Jun-16 A	16-Jan-15	23-Jan-15	-350	$7,018.36	
2-W.03.01	CMNU420	Install water leak alarms - ESM	100%	23	29-Mar-16 A	29-Apr-16 A	26-Jan-15	27-Jan-15	-316	$1,131.86	
2-W.03.01	CMNU4201	Install water leak alarms (extra support) - ESM	100%	23	29-Mar-16 A	29-Apr-16 A	01-Apr-15	03-Apr-15	-269	$679.12	
2-W.03.01	CMNU440	Install ODH sensors - ESM	100%	2	06-Jan-15 A	08-Jan-15 A	28-Jan-15	30-Jan-15	16	$1,886.44	
2-W.03.01	CMNU450	Install PPS conduit and cables - ESM	100%	114	24-Mar-15 A	02-Sep-15 A	04-Jun-15	01-Jul-15	-43	$52,444.62	
2-W.03.01	CMNU460	Test PPS cables - ESM	100%	144	24-Mar-15 A	15-Oct-15 A	02-Jul-15	06-Jul-15	-71	$6,036.61	
2-W.03.01	CMNU465	Procure Smoke Detectors components - NEXT	100%	7	07-Nov-15 A	18-Nov-15 A	11-Nov-15	09-Feb-16	55	$3,133.50	
2-W.03.01	CMNU470	Install Smoke Detectors - ESM	100%	92	05-Jan-16 A	13-May-16 A	27-Nov-15	10-Dec-15	-107	$9,126.17	
2-W.03.01	CMNU480	Inspect electrical installation - ESM	100%	2	22-Jun-16 A	24-Jun-16 A	04-Aug-15	05-Aug-15	-222	$1,612.29	
2-W.03.01	CMNU490	Completion of electrical utilities - ESM	0%	0		15-Aug-16		03-Apr-15	-344	$0.00	103



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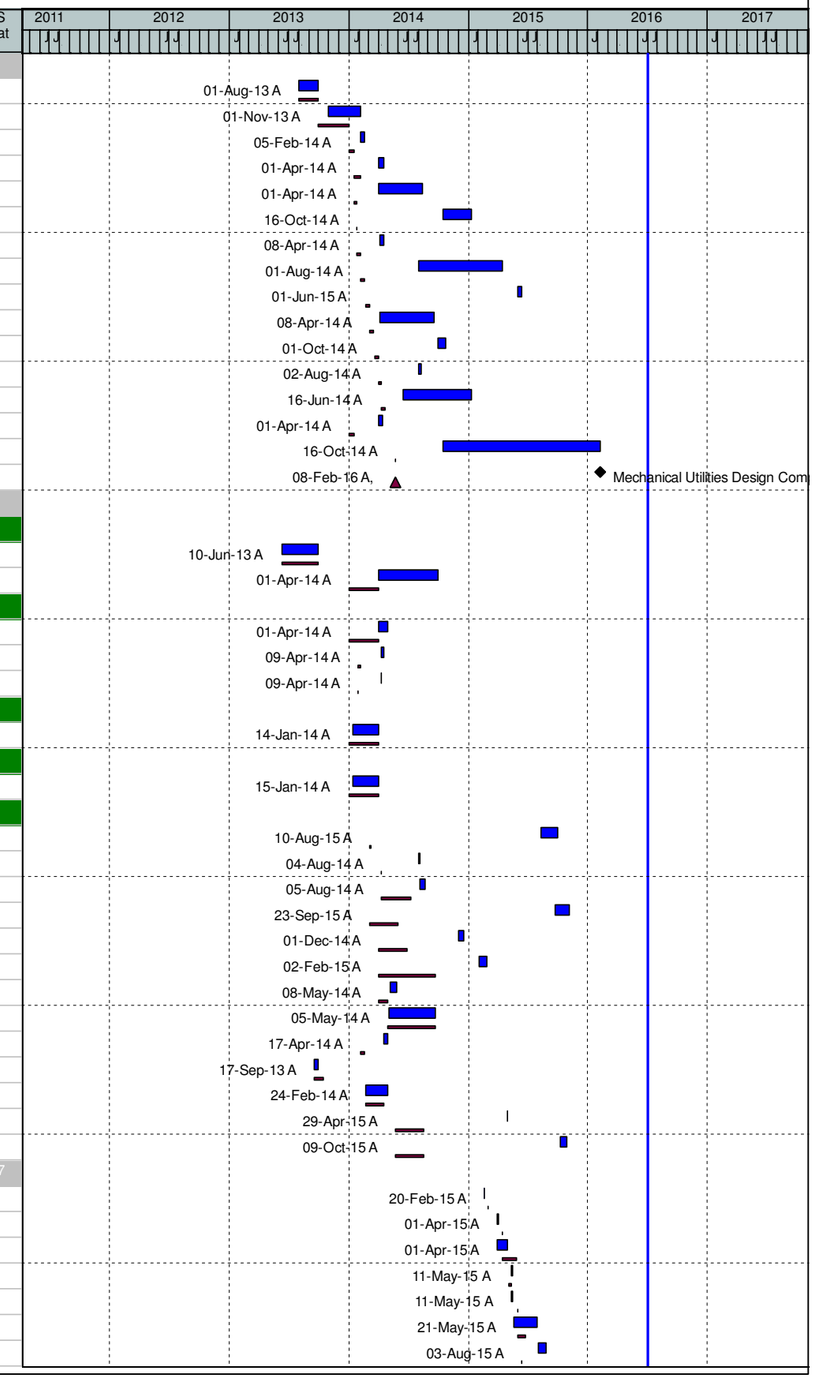
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
ESM Mechanical Utilities Design			100%	629	01-Aug-13 A	08-Feb-16 A	01-Aug-13	22-May-14	-426	$16,156.02	
2-W.03.01	CMNU500	Gather mechanical requirements - ESM	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU500FA	Gather mechanical requirements - ESM	100%	63	01-Nov-13 A	04-Feb-14 A	01-Oct-13	02-Jan-14	-22	$0.00	
2-W.03.01	CMNU510	Specify mechanical requirements - ESM	100%	10	05-Feb-14 A	19-Feb-14 A	03-Jan-14	16-Jan-14	-22	$0.00	
2-W.03.01	CMNU520	Supervise drawings of pylons, utilites bridges and stanchions - ESM	100%	12	01-Apr-14 A	16-Apr-14 A	17-Jan-14	04-Feb-14	-50	$3,446.76	
2-W.03.01	CMNU530	Drawings (stick diagrams) - ESM	100%	95	01-Apr-14 A	14-Aug-14 A	17-Jan-14	24-Jan-14	-140	$1,470.83	
2-W.03.01	CMNU540	Final update of drawings (stick diagrams) - ESM	100%	57	16-Oct-14 A	09-Jan-15 A	27-Jan-14	27-Jan-14	-238	$2,332.52	
2-W.03.01	CMNU550	Create drawings of pylons, utilites bridges and stanchions - ESM	100%	7	08-Apr-14 A	16-Apr-14 A	27-Jan-14	04-Feb-14	-50	$956.04	
2-W.03.01	CMNU560	Specification of experimental gas manifold - ESM	100%	175	01-Aug-14 A	15-Apr-15 A	05-Feb-14	19-Feb-14	-288	$689.35	
2-W.03.01	CMNU570	Design of experimental gas manifold - ESM	100%	10	01-Jun-15 A	12-Jun-15 A	20-Feb-14	05-Mar-14	-319	$588.33	
2-W.03.01	CMNU580	Specification of experimental cryogenics - ESM	100%	114	08-Apr-14 A	19-Sep-14 A	06-Mar-14	19-Mar-14	-127	$689.35	
2-W.03.01	CMNU590	Design of experimental cryogenics - ESM	100%	16	01-Oct-14 A	24-Oct-14 A	20-Mar-14	02-Apr-14	-141	$588.33	
2-W.03.01	CMNU600	Specification of exhaust system - ESM	100%	5	02-Aug-14 A	11-Aug-14 A	03-Apr-14	09-Apr-14	-84	$861.69	
2-W.03.01	CMNU610	Create 3D layout - ESM	100%	141	16-Jun-14 A	09-Jan-15 A	10-Apr-14	23-Apr-14	-177	$3,067.93	
2-W.03.01	CMNU620	Design prototype of 0.1C temp control system - ESM	100%	10	01-Apr-14 A	14-Apr-14 A	03-Jan-14	16-Jan-14	-60	$1,464.87	
2-W.03.01	CMNU640	Review of mechanical utilties design - ESM	100%	327	16-Oct-14 A	08-Feb-16 A	22-May-14	22-May-14	-426	$0.00	
2-W.03.01	CMNU940	Mechanical Utilities Design Complete - ESM	100%	0		08-Feb-16 A		22-May-14	-426	$0.00	
ESM Mechanical Utilities Procure			100%	601	10-Jun-13 A	04-Nov-15 A	10-Jun-13	23-Sep-14	-278	$101,750.05	
ESM Processed Chilled Water			100%	327	10-Jun-13 A	30-Sep-14 A	10-Jun-13	02-Apr-14	-124	$30,261.92	
2-W.03.01	CMNU5011	Proc/Fab Chilled Water Equipment - ESM	100%	77	10-Jun-13 A	30-Sep-13 A	10-Jun-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU5011FA	Proc/Fab Chilled Water Equipment - ESM	100%	126	01-Apr-14 A	30-Sep-14 A	03-Jan-14	02-Apr-14	-124	$30,261.92	
ESM Mains DI Water			100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$10,283.26	
2-W.03.01	CMNU5012	Proc/Fab DI Water Equipment - ESM	100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$8,990.73	
2-W.03.01	CMNU650	Procure gauges, valves, trantters, readouts, manifolds, driers etc - ESM	100%	7	09-Apr-14 A	17-Apr-14 A	28-Jan-14	05-Feb-14	-50	$1,034.03	
2-W.03.01	CMNU670	Procure pipe and fittings - ESM	100%	2	09-Apr-14 A	10-Apr-14 A	28-Jan-14	29-Jan-14	-50	$258.51	
ESM Compressed Air			100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$6,171.41	
2-W.03.01	CMNU5013	Proc/Fab Compressed Air Equipment - ESM	100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$6,171.41	
ESM Gaseous Nitrogen			100%	54	15-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	
2-W.03.01	CMNU5014	Proc/Fab Gaseous Nitrogen - ESM	100%	54	15-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	
ESM Other Systems			100%	533	17-Sep-13 A	04-Nov-15 A	17-Sep-13	23-Sep-14	-278	$53,484.72	
2-W.03.01	CMNU50101	Procurement of parts for experimental gas manifold - ESM	100%	36	10-Aug-15 A	30-Sep-15 A	06-Mar-14	11-Mar-14	-390	$538.43	
2-W.03.01	CMNU50151	Procure Exhaust system - ESM	100%	1	04-Aug-14 A	05-Aug-14 A	10-Apr-14	10-Apr-14	-79	$673.04	
2-W.03.01	CMNU50152	Proc/Fab Exhaust System - ESM	100%	12	05-Aug-14 A	21-Aug-14 A	11-Apr-14	08-Jul-14	-31	$3,530.55	
2-W.03.01	CMNU5016	Proc/Fab Bottle Gas System - ESM	100%	29	23-Sep-15 A	04-Nov-15 A	06-Mar-14	29-May-14	-358	$7,061.11	
2-W.03.01	CMNU50161	Procure LN2 pipe - ESM	100%	13	01-Dec-14 A	18-Dec-14 A	03-Apr-14	26-Jun-14	-118	$1,034.03	
2-W.03.01	CMNU5018	Proc/Fab Fill stations for LN2 dewars - ESM	100%	18	02-Feb-15 A	27-Feb-15 A	03-Apr-14	23-Sep-14	-104	$5,884.26	
2-W.03.01	CMNU50181	Define and procure ODH sensors - ESM	100%	12	08-May-14 A	27-May-14 A	03-Apr-14	30-Apr-14	-17	$390.57	
2-W.03.01	CMNU5019	Proc/Fab Oxygen depletion hazard monitors - ESM	100%	96	05-May-14 A	21-Sep-14 A	01-May-14	23-Sep-14	2	$3,530.55	
2-W.03.01	CMNU50191	Procure utility bridges and piping stanchions - ESM	100%	10	17-Apr-14 A	30-Apr-14 A	05-Feb-14	19-Feb-14	-50	$1,464.87	
2-W.03.01	CMNU5020	Proc/Fab Pylons and L-brackets - ESM	100%	9	17-Sep-13 A	30-Sep-13 A	17-Sep-13	14-Oct-13	11	$0.00	
2-W.03.01	CMNU5020FA	Proc/Fab Pylons and L-brackets - ESM	100%	47	24-Feb-14 A	30-Apr-14 A	20-Feb-14	16-Apr-14	-9	$26,317.48	
2-W.03.01	CMNU5021	Proc/Fab Paint for floor marking - ESM	100%	1	29-Apr-15 A	30-Apr-15 A	23-May-14	19-Aug-14	-172	$235.37	
2-W.03.01	CMNU5022	Proc/Fab Plumbing for emergency eye-wash and showers - ESM	100%	12	09-Oct-15 A	28-Oct-15 A	23-May-14	19-Aug-14	-297	$2,824.44	
ESM Mechanical Utilities Install			95.79%	558	02-Jun-14 A	22-Aug-16	17-Nov-14	14-Dec-15	-174	$306,940.87	277
2-W.03.01	CMNU0480	LN2 pipework; Completion & BSA approval of On-Site Survey - NEXT	100%	0	20-Feb-15 A	20-Feb-15 A	02-Mar-15	02-Mar-15	7	$1,805.39	
2-W.03.01	CMNU0490	LN2 pipework; Receipt & BSA approval of all VJ pipe & components - NEXT	100%	1	01-Apr-15 A	01-Apr-15 A	13-Apr-15	13-Apr-15	8	$140,875.69	
2-W.03.01	CMNU0495	LN2 pipework; Vendor Installation - NEXT	100%	21	01-Apr-15 A	30-Apr-15 A	14-Apr-15	28-May-15	20	$0.00	
2-W.03.01	CMNU0500	LN2 pipework; BSA approval of complete installation - NEXT	100%	4	11-May-15 A	15-May-15 A	05-May-15	11-May-15	-3	$44,575.09	
2-W.03.01	CMNU0510	LN2 pipework; Proc/Fab mechanical components - NEXT	100%	4	11-May-15 A	15-May-15 A	02-Jun-15	02-Jun-15	12	$2,429.02	
2-W.03.01	CMNU0520	LN2 pipework; Install mechanical components - NEXT	100%	48	21-May-15 A	30-Jul-15 A	03-Jun-15	26-Jun-15	-22	$22,226.52	
2-W.03.01	CMNU0530	LN2 pipework; Proc/Fab electrical components - NEXT	100%	19	03-Aug-15 A	28-Aug-15 A	12-Jun-15	12-Jun-15	-53	$1,821.77	



(O) NEXT - Detail Schedule

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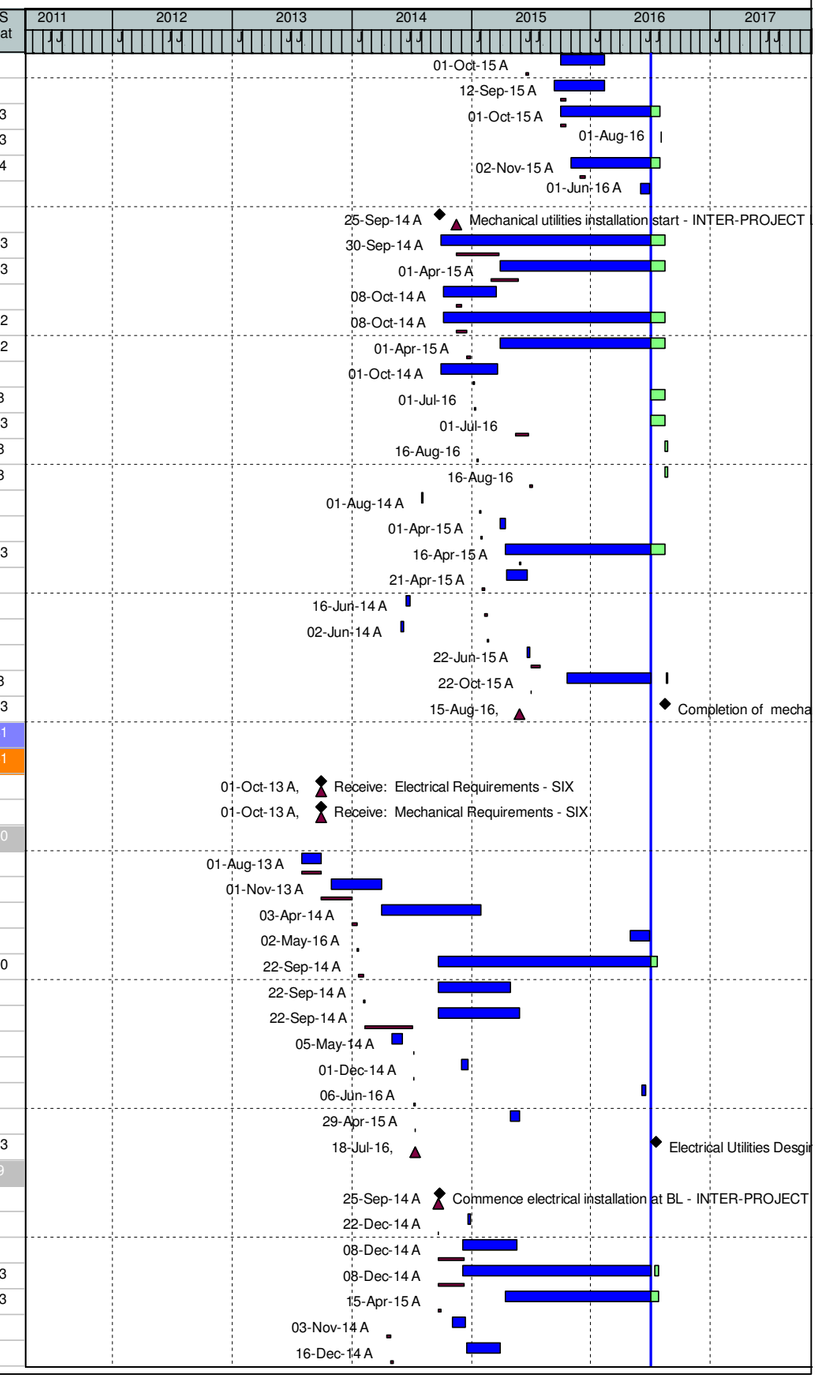
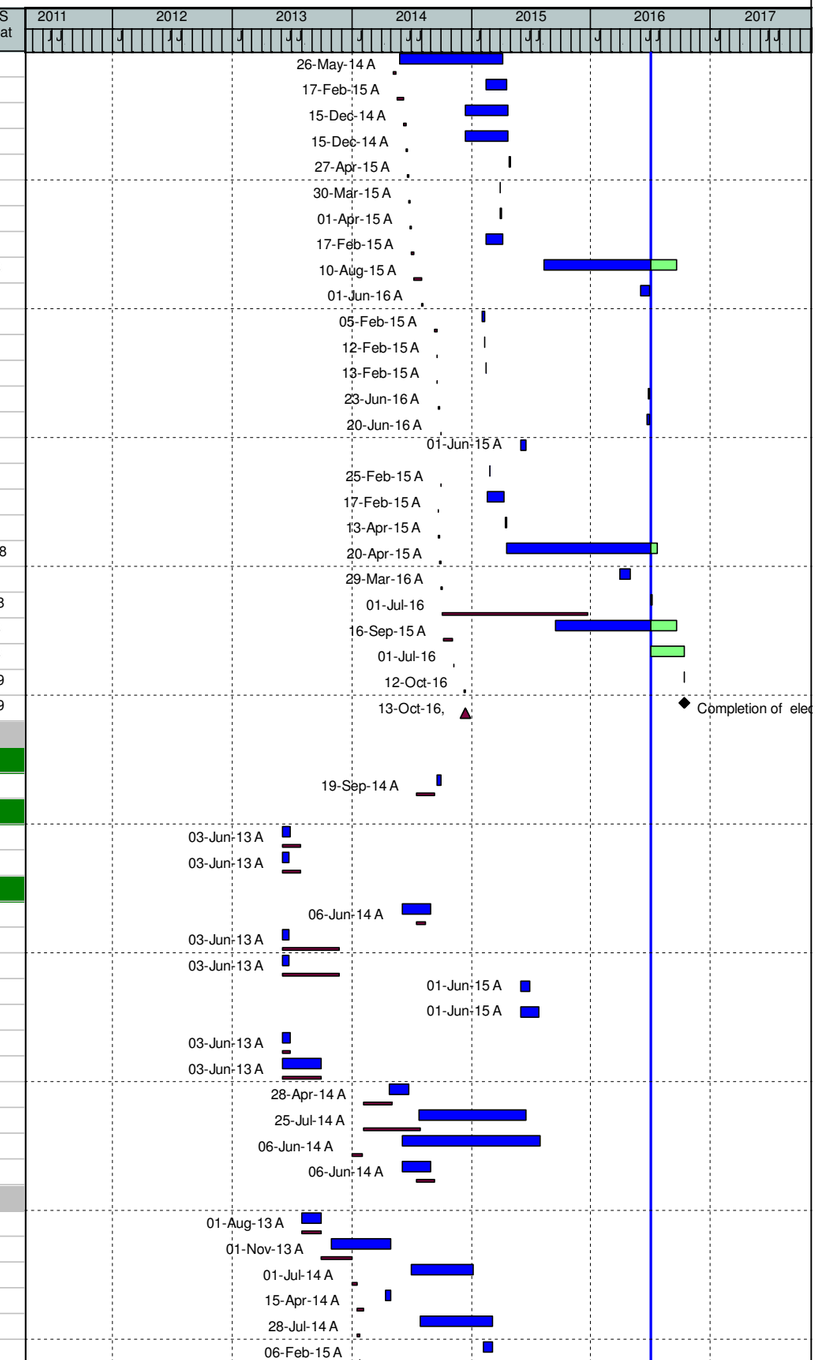
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU0540	LN2 pipework; Install electrical components - NEXT	100%	91	01-Oct-15 A	12-Feb-16 A	15-Jun-15	26-Jun-15	-157	$4,527.45	
2-W.03.01	CMNU0545	Label/Tag Piping Systems - NEXT	100%	104	12-Sep-15 A	12-Feb-16 A	01-Oct-15	15-Oct-15	-81	$10,406.77	
2-W.03.01	CMNU0550	Tie in PCHW hoses to rack heat exchangers for 50 racks - NEXT	70%	208	01-Oct-15 A	29-Jul-16	01-Oct-15	15-Oct-15	-198	$6,084.11	113
2-W.03.01	CMNU05501	Tie in PCHW hoses to rack heat exchangers for 50 racks - NEXT - ETC	0%	1	01-Aug-16	01-Aug-16				$0.00	113
2-W.03.01	CMNU0555	Label Rack/Power Systems - NEXT	50%	187	02-Nov-15 A	29-Jul-16	01-Dec-15	14-Dec-15	-158	$6,881.33	114
2-W.03.01	CMNU0560	Pylon gusset arm installations - NEXT	100%	21	01-Jun-16 A	30-Jun-16 A				$0.00	
2-W.03.01	CMNU710	Mechanical utilities installation start - INTER-PROJECT LINK - ESM	100%	0	25-Sep-14 A		17-Nov-14		36	$0.00	
2-W.03.01	CMNU720	Supervision of installation techs - ESM	98%	470	30-Sep-14 A	15-Aug-16	17-Nov-14	26-Mar-15	-350	$347.29	103
2-W.03.01	CMNU7201	Supervision of installation techs (extra support) - ESM	85%	347	01-Apr-15 A	15-Aug-16	02-Mar-15	22-May-15	-309	$1,319.70	103
2-W.03.01	CMNU730	Install DI water pipework - ESM	100%	109	08-Oct-14 A	19-Mar-15 A	17-Nov-14	02-Dec-14	-72	$6,876.33	
2-W.03.01	CMNU740	Install chilled water pipework - ESM	90%	464	08-Oct-14 A	15-Aug-16	17-Nov-14	16-Dec-14	-417	$17,568.47	282
2-W.03.01	CMNU750	Insulate chilled water piping - ESM	90%	347	01-Apr-15 A	15-Aug-16	17-Dec-14	31-Dec-14	-407	$11,673.01	282
2-W.03.01	CMNU760	Install compressed air pipework - ESM	100%	116	01-Oct-14 A	23-Mar-15 A	05-Jan-15	09-Jan-15	-49	$7,494.68	
2-W.03.01	CMNU770	Build of experimental gas manifold - ESM	0%	31	01-Jul-16	15-Aug-16	12-Jan-15	16-Jan-15	-397	$555.66	98
2-W.03.01	CMNU7701	Build of experimental gas manifold (extra support)- ESM	0%	31	01-Jul-16	15-Aug-16	15-May-15	26-Jun-15	-285	$1,111.33	103
2-W.03.01	CMNU780	Install experimental gas pipework - ESM	0%	5	16-Aug-16	22-Aug-16	20-Jan-15	21-Jan-15	-400	$1,041.87	98
2-W.03.01	CMNU7801	Install experimental gas pipework (extra support)- ESM	0%	5	16-Aug-16	22-Aug-16	29-Jun-15	06-Jul-15	-285	$1,180.78	98
2-W.03.01	CMNU800	Install Exhaust system - ESM	100%	3	01-Aug-14 A	05-Aug-14 A	26-Jan-15	28-Jan-15	118	$1,389.16	
2-W.03.01	CMNU810	Flushing and testing of all pipework - ESM	100%	10	01-Apr-15 A	15-Apr-15 A	29-Jan-15	03-Feb-15	-49	$2,083.74	
2-W.03.01	CMNU8101	Flushing and testing of all pipework (extra support) - ESM	70%	336	16-Apr-15 A	15-Aug-16	28-May-15	02-Jun-15	-303	$1,250.24	103
2-W.03.01	CMNU820	Production of "as-built" drawings (stick diagrams) - ESM	100%	43	21-Apr-15 A	19-Jun-15 A	04-Feb-15	11-Feb-15	-90	$3,794.74	
2-W.03.01	CMNU830	Build of 0.1C temp control system prototype - ESM	100%	10	16-Jun-14 A	30-Jun-14 A	12-Feb-15	17-Feb-15	156	$555.66	
2-W.03.01	CMNU840	Document of 0.1C temp control system - ESM	100%	5	02-Jun-14 A	06-Jun-14 A	18-Feb-15	24-Feb-15	176	$711.41	
2-W.03.01	CMNU850	Retrofit resistor and install rack flow controllers - ESM	100%	6	22-Jun-15 A	30-Jun-15 A	01-Jul-15	29-Jul-15	21	$4,532.19	
2-W.03.01	CMNU860	Inspect Mechanical installation, Traveler/Acceptance Work & Docs - ESM	85%	210	22-Oct-15 A	22-Aug-16	01-Jul-15	02-Jul-15	-286	$1,821.47	98
2-W.03.01	CMNU870	Completion of mechanical utilities - ESM	0%	0		15-Aug-16		29-May-15	-305	$0.00	103
SIX Common Systems			94%	843	03-Jun-13 A	13-Oct-16	03-Jun-13	15-Jan-16	-188	$855,047.11	241
SIX Utilities			94%	843	03-Jun-13 A	13-Oct-16	03-Jun-13	15-Jan-16	-188	$855,047.11	241
2-W.03.01	MCM110	Receive: Electrical Requirements - SIX	100%	0		01-Oct-13 A		01-Oct-13	0	$0.00	
2-W.03.01	MCM120	Receive: Mechanical Requirements - SIX	100%	0		01-Oct-13 A		01-Oct-13	0	$0.00	
SIX Electrical Utilities Design			99.65%	743	01-Aug-13 A	20-Jul-16	01-Aug-13	15-Jul-14	-505	$47,471.67	300
2-W.03.01	CMNU031	Gather generic electrical requirements - SIX	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU031FA	Gather generic electrical requirements - SIX	100%	103	01-Nov-13 A	02-Apr-14 A	01-Oct-13	02-Jan-14	-62	$995.96	
2-W.03.01	CMNU2530	Gather beamline specific requirements - SIX	100%	204	03-Apr-14 A	28-Jan-15 A	03-Jan-14	16-Jan-14	-256	$2,441.08	
2-W.03.01	CMNU2540	Define alarm signals / protocol to send to control room - SIX	100%	42	02-May-16 A	30-Jun-16 A	17-Jan-14	21-Jan-14	-612	$390.57	
2-W.03.01	CMNU2550	Specify electrical requirements - SIX	90%	458	22-Sep-14 A	20-Jul-16	22-Jan-14	04-Feb-14	-616	$1,659.94	300
2-W.03.01	CMNU2560	Drawings ("single line" diagrams) - SIX	100%	152	22-Sep-14 A	01-May-15 A	05-Feb-14	11-Feb-14	-305	$3,837.12	
2-W.03.01	CMNU2570	Design - SIX	100%	171	22-Sep-14 A	29-May-15 A	12-Feb-14	07-Jul-14	-224	$34,702.78	
2-W.03.01	CMNU2580	Define water leak alarms - SIX	100%	22	05-May-14 A	05-Jun-14 A	08-Jul-14	08-Jul-14	22	$195.29	
2-W.03.01	CMNU2590	Write procedure for hutch panel grounding checks - SIX	100%	16	01-Dec-14 A	23-Dec-14 A	09-Jul-14	09-Jul-14	-114	$97.64	
2-W.03.01	CMNU2600	Ethernet interconnection diagram - SIX	100%	9	06-Jun-16 A	17-Jun-16 A	10-Jul-14	14-Jul-14	-483	$2,370.13	
2-W.03.01	CMNU2610	Review of electrical utilities design - SIX	100%	22	29-Apr-15 A	29-May-15 A	15-Jul-14	15-Jul-14	-218	$781.15	
2-W.03.01	CMNU2615	Electrical Utilities Desgin Complete - SIX	0%	0		18-Jul-16		15-Jul-14	-503	$0.00	123
SIX Electrical Utilities Install			87.35%	598	26-May-14 A	13-Oct-16	17-Apr-14	24-Dec-15	-202	$146,504.80	59
2-W.03.01	CMNU2640	Commence electrical installation at BL - INTER-PROJECT LINK - SIX	100%	0	25-Sep-14 A		22-Sep-14		-3	$0.00	
2-W.03.01	CMNU2650	Logistics administration (0.5 FTE for duration of work) - SIX	100%	6	22-Dec-14 A	31-Dec-14 A	22-Sep-14	22-Sep-14	-68	$0.00	
2-W.03.01	CMNU2660	Supervision of installation electricians - SIX	100%	113	08-Dec-14 A	20-May-15 A	22-Sep-14	10-Dec-14	-110	$2,509.26	
2-W.03.01	CMNU2670	Design updates - SIX	85%	409	08-Dec-14 A	25-Jul-16	22-Sep-14	10-Dec-14	-406	$0.00	113
2-W.03.01	CMNU2680	Install cable tray (internal to each hutch) - SIX	90%	322	15-Apr-15 A	25-Jul-16	22-Sep-14	29-Sep-14	-455	$6,855.18	113
2-W.03.01	CMNU2690	Install pylons and roof stanchions - SIX	100%	29	03-Nov-14 A	15-Dec-14 A	17-Apr-14	30-Apr-14	-156	$11,425.31	
2-W.03.01	CMNU2700	Install cable tray (external) - SIX	100%	71	16-Dec-14 A	01-Apr-15 A	01-May-14	06-May-14	-223	$4,570.12	



(O) NEXT - Detail Schedule

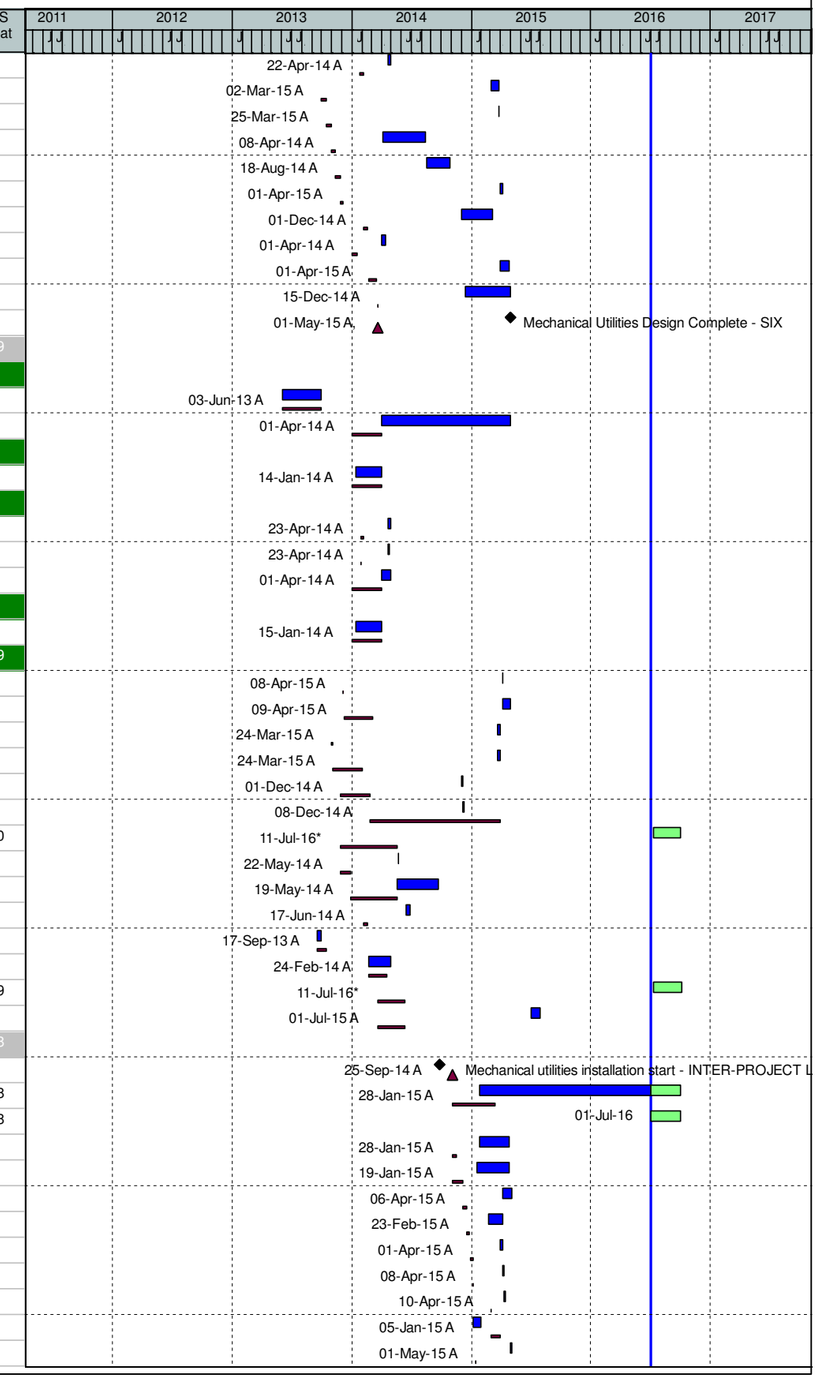
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU2710	Install breaker panels - SIX	100%	214	26-May-14 A	06-Apr-15 A	07-May-14	16-May-14	-219	$13,710.37	
2-W.03.01	CMNU2720	Install mains wiring (per hutch) - SIX	100%	45	17-Feb-15 A	20-Apr-15 A	19-May-14	09-Jun-14	-214	$17,137.96	
2-W.03.01	CMNU2730	Install mains wiring (on floor outside hutch and on the hutch roof) - SIX	100%	90	15-Dec-14 A	24-Apr-15 A	10-Jun-14	16-Jun-14	-213	$5,712.65	
2-W.03.01	CMNU2740	Install lighting circuits incl switches - SIX	100%	90	15-Dec-14 A	24-Apr-15 A	17-Jun-14	19-Jun-14	-210	$3,427.59	
2-W.03.01	CMNU2750	Install wiring to hutch ventilation fans - SIX	100%	3	27-Apr-15 A	29-Apr-15 A	20-Jun-14	24-Jun-14	-210	$3,427.59	
2-W.03.01	CMNU2760	Test mains wiring - SIX	100%	1	30-Mar-15 A	31-Mar-15 A	25-Jun-14	26-Jun-14	-186	$2,285.06	
2-W.03.01	CMNU2770	Connection to BL transformer incl cable installation - SIX	100%	2	01-Apr-15 A	02-Apr-15 A	27-Jun-14	30-Jun-14	-187	$2,285.06	
2-W.03.01	CMNU2780	Install wiremold in hutches - SIX	100%	37	17-Feb-15 A	08-Apr-15 A	01-Jul-14	10-Jul-14	-185	$6,855.18	
2-W.03.01	CMNU2790	Install PPS conduits only - SIX	75%	280	10-Aug-15 A	19-Sep-16	11-Jul-14	31-Jul-14	-535	$13,710.37	6
2-W.03.01	CMNU2800	Install EPS ethernet cables - SIX	100%	21	01-Jun-16 A	30-Jun-16 A	01-Aug-14	05-Aug-14	-476	$1,827.94	
2-W.03.01	CMNU2810	Install campus network ethernet + telephone cables - SIX	100%	5	05-Feb-15 A	11-Feb-15 A	11-Sep-14	17-Sep-14	-98	$3,290.30	
2-W.03.01	CMNU2820	Connection of campus network ethernet + telephone to switches - SIX	100%	1	12-Feb-15 A	12-Feb-15 A	18-Sep-14	18-Sep-14	-98	$365.59	
2-W.03.01	CMNU2830	Test campus network ethernet + telephone cables + outlets - SIX	100%	1	13-Feb-15 A	13-Feb-15 A	19-Sep-14	19-Sep-14	-98	$731.18	
2-W.03.01	CMNU2840	Install controls network ethernet cables - SIX	100%	5	23-Jun-16 A	30-Jun-16 A	22-Sep-14	26-Sep-14	-439	$3,290.30	
2-W.03.01	CMNU2850	Connection of controls network ethernet to switches - SIX	100%	8	20-Jun-16 A	30-Jun-16 A	29-Sep-14	29-Sep-14	-438	$365.59	
2-W.03.01	CMNU2855	Install 10 extra equipment racks - SIX	100%	11	01-Jun-15 A	15-Jun-15 A				$0.00	
2-W.03.01	CMNU2860	Test campus network ethernet cables + outlets - SIX	100%	1	25-Feb-15 A	25-Feb-15 A	30-Sep-14	30-Sep-14	-98	$731.18	
2-W.03.01	CMNU2870	Install grounding bus - SIX	100%	39	17-Feb-15 A	10-Apr-15 A	22-Sep-14	23-Sep-14	-135	$1,096.77	
2-W.03.01	CMNU2880	Checking of hutch panel grounding - SIX	100%	5	13-Apr-15 A	17-Apr-15 A	24-Sep-14	24-Sep-14	-139	$584.94	
2-W.03.01	CMNU2890	Final documentation for electrical installation - SIX	70%	316	20-Apr-15 A	20-Jul-16	25-Sep-14	01-Oct-14	-450	$6,844.26	118
2-W.03.01	CMNU2910	Install water leak alarms - SIX	100%	23	29-Mar-16 A	29-Apr-16 A	02-Oct-14	03-Oct-14	-391	$1,131.86	
2-W.03.01	CMNU2930	Install ODH sensors - SIX	0%	3	01-Jul-16	06-Jul-16	06-Oct-14	24-Dec-15	-133	$2,965.67	58
2-W.03.01	CMNU2940	Install PPS conduit and cables - SIX	75%	254	16-Sep-15 A	19-Sep-16	09-Oct-14	06-Nov-14	-467	$26,623.38	6
2-W.03.01	CMNU2950	Test PPS cables - SIX	0%	70	01-Jul-16	11-Oct-16	07-Nov-14	10-Nov-14	-480	$1,131.86	6
2-W.03.01	CMNU2970	Inspect electrical installation - SIX	0%	2	12-Oct-16	13-Oct-16	11-Dec-14	12-Dec-14	-460	$1,612.29	59
2-W.03.01	CMNU2980	Completion of electrical utilities - SIX	0%	0		13-Oct-16		12-Dec-14	-460	$0.00	59
SIX Electrical Utilities Procure			100%	540	03-Jun-13 A	30-Jul-15 A	03-Jun-13	10-Sep-14	-221	$33,240.09	
SIX Communications			100%	7	19-Sep-14 A	30-Sep-14 A	16-Jul-14	10-Sep-14	-13	$8,801.67	
2-W.03.01	CMNU8001	Proc/Fab Communications Components - SIX	100%	7	19-Sep-14 A	30-Sep-14 A	16-Jul-14	10-Sep-14	-13	$8,801.67	
SIX Mains Wiring			0%	17	03-Jun-13 A	26-Jun-13 A	03-Jun-13	30-Jul-13	23	$0.00	
2-W.03.01	CMNU2630	Procure electrical items - SIX	100%	17	03-Jun-13 A	26-Jun-13 A	03-Jun-13	29-Jul-13	22	$0.00	
2-W.03.01	CMNU8002	Proc/Fab Mains Electrical Cable and Fitting Components - SIX	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	30-Jul-13	24	$0.00	
SIX Other			100%	540	03-Jun-13 A	30-Jul-15 A	03-Jun-13	10-Sep-14	-221	$24,438.42	
2-W.03.01	CMNU2900	Procure water leak alarms - SIX	100%	58	06-Jun-14 A	29-Aug-14 A	16-Jul-14	12-Aug-14	-12	$195.29	
2-W.03.01	CMNU8003	Proc/Fab Motion control racks for beamlines - SIX	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	25-Nov-13	104	$0.00	
2-W.03.01	CMNU8004	Proc/Fab End station racks (also water cooled) - SIX	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	25-Nov-13	104	$0.00	
2-W.03.01	CMNU80041	Proc/Fab 7 Extra End station racks - SIX	100%	21	01-Jun-15 A	30-Jun-15 A				$0.00	
2-W.03.01	CMNU80042	Proc/Fab Fit-out components for 10 racks - SIX (Value updated on EAC)	100%	40	01-Jun-15 A	28-Jul-15 A				$0.00	
2-W.03.01	CMNU8005	Proc/Fab Other Misc. items for racks - SIX	100%	20	03-Jun-13 A	28-Jun-13 A	03-Jun-13	28-Jun-13	0	$0.00	
2-W.03.01	CMNU8006	Proc/Fab Items we add to racks - SIX	100%	82	03-Jun-13 A	30-Sep-13 A	03-Jun-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU8006FA	Proc/Fab Items we add to racks - SIX	100%	41	28-Apr-14 A	25-Jun-14 A	05-Feb-14	02-May-14	-36	$13,180.73	
2-W.03.01	CMNU8008	Proc/Fab Temperature sensing system for hutches, racks etc. - SIX	100%	221	25-Jul-14 A	15-Jun-15 A	05-Feb-14	28-Jul-14	-219	$2,353.70	
2-W.03.01	CMNU8009	Proc/Fab PPS wiring and conduit - SIX	100%	287	06-Jun-14 A	30-Jul-15 A	03-Jan-14	31-Jan-14	-374	$5,884.26	
2-W.03.01	CMNU8010	Proc/Fab TraceTek leak detection cable - SIX	100%	58	06-Jun-14 A	29-Aug-14 A	16-Jul-14	10-Sep-14	8	$2,824.44	
SIX Mechanical Utilities Design			100%	437	01-Aug-13 A	01-May-15 A	01-Aug-13	20-Mar-14	-279	$16,156.02	
2-W.03.01	CMNU2990	Gather mechanical requirements - SIX	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU2990FA	Gather mechanical requirements - SIX	100%	123	01-Nov-13 A	01-May-14 A	01-Oct-13	02-Jan-14	-82	$0.00	
2-W.03.01	CMNU3000	Specify mechanical requirements - SIX	100%	125	01-Jul-14 A	05-Jan-15 A	03-Jan-14	16-Jan-14	-239	$0.00	
2-W.03.01	CMNU3010	Supervise drawings of pylons, utilites bridges and stanchions - SIX	100%	12	15-Apr-14 A	30-Apr-14 A	17-Jan-14	04-Feb-14	-60	$3,446.76	
2-W.03.01	CMNU3020	Drawings (stick diagrams) - SIX	100%	150	28-Jul-14 A	05-Mar-15 A	17-Jan-14	24-Jan-14	-276	$1,470.83	
2-W.03.01	CMNU3030	Final update of drawings (stick diagrams) - SIX	100%	20	06-Feb-15 A	06-Mar-15 A	27-Jan-14	27-Jan-14	-276	$2,332.52	



(O) NEXT - Detail Schedule

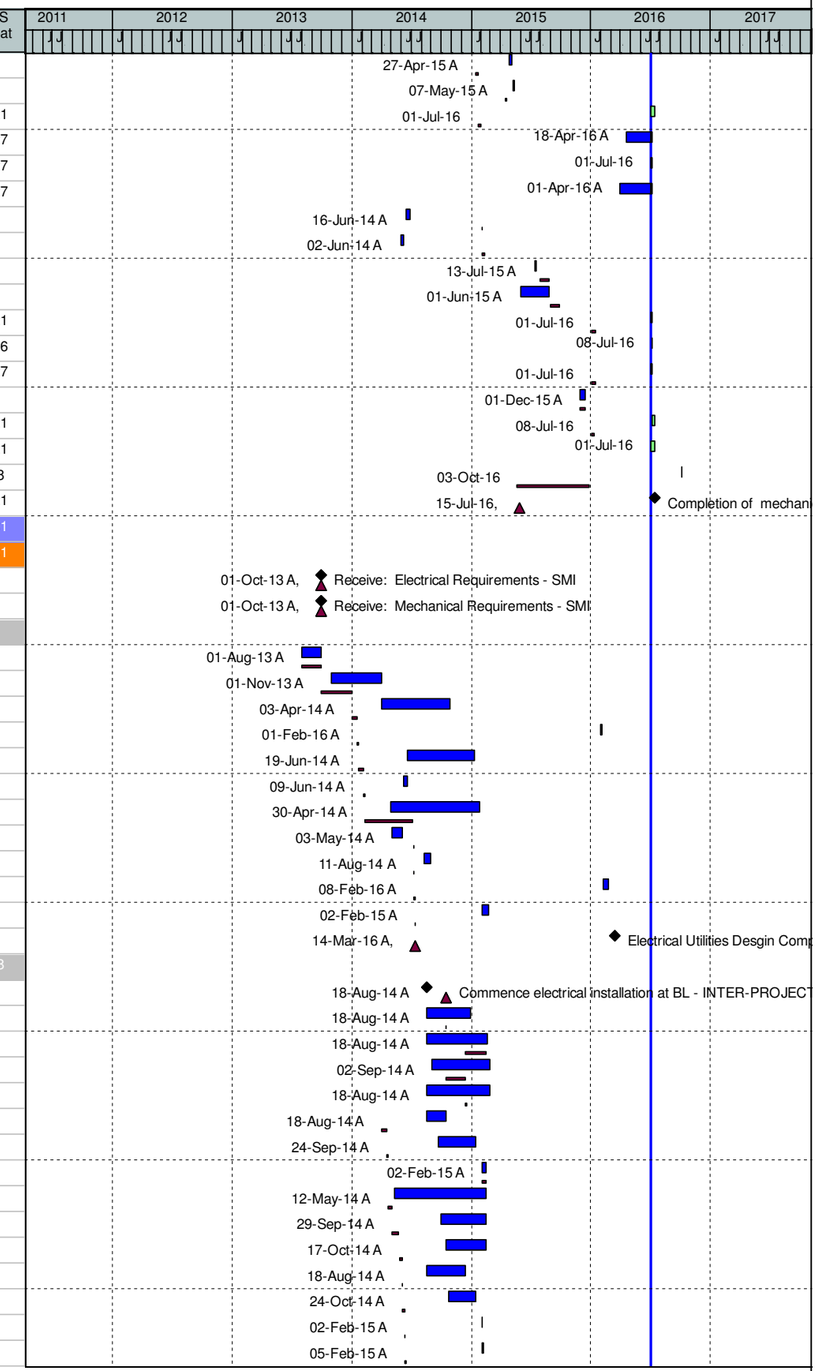
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU3040	Create drawings of pylons, utilites bridges and stanchions - SIX	100%	7	22-Apr-14 A	30-Apr-14 A	27-Jan-14	04-Feb-14	-60	$956.04	
2-W.03.01	CMNU3050	Specification of experimental gas manifold - SIX	100%	17	02-Mar-15 A	24-Mar-15 A	01-Oct-13	14-Oct-13	-357	$689.35	
2-W.03.01	CMNU3060	Design of experimental gas manifold - SIX	100%	2	25-Mar-15 A	26-Mar-15 A	16-Oct-13	29-Oct-13	-349	$588.33	
2-W.03.01	CMNU3070	Specification of experimental cryogenics - SIX	100%	91	08-Apr-14 A	15-Aug-14 A	30-Oct-13	12-Nov-13	-189	$689.35	
2-W.03.01	CMNU3080	Design of experimental cryogenics - SIX	100%	50	18-Aug-14 A	29-Oct-14 A	13-Nov-13	28-Nov-13	-229	$588.33	
2-W.03.01	CMNU3090	Specification of exhaust system - SIX	100%	5	01-Apr-15 A	07-Apr-15 A	29-Nov-13	05-Dec-13	-332	$861.69	
2-W.03.01	CMNU3100	Create 3D layout - SIX	100%	64	01-Dec-14 A	05-Mar-15 A	05-Feb-14	19-Feb-14	-259	$3,067.93	
2-W.03.01	CMNU3110	Design prototype of 0.1C temp control system - SIX	100%	10	01-Apr-14 A	14-Apr-14 A	03-Jan-14	16-Jan-14	-60	$1,464.87	
2-W.03.01	CMNU3120	Mechanical utilities design schedule float - SIX	100%	20	01-Apr-15 A	29-Apr-15 A	20-Feb-14	19-Mar-14	-277	$0.00	
2-W.03.01	CMNU3130	Review of mechanical utilties design - SIX	100%	95	15-Dec-14 A	01-May-15 A	20-Mar-14	20-Mar-14	-279	$0.00	
2-W.03.01	CMNU3135	Mechanical Utilities Design Complete - SIX	100%	0		01-May-15 A		20-Mar-14	-279	$0.00	
SIX Mechanical Utilities Procure			96.24%	836	03-Jun-13 A	03-Oct-16	03-Jun-13	30-Mar-15	-382	$162,669.40	69
SIX Processed Chilled Water			100%	477	03-Jun-13 A	01-May-15 A	03-Jun-13	02-Apr-14	-269	$30,261.92	
2-W.03.01	CMNU8011	Proc/Fab Chilled Water Equipment - SIX	100%	82	03-Jun-13 A	30-Sep-13 A	03-Jun-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU8011FA	Proc/Fab Chilled Water Equipment - SIX	100%	271	01-Apr-14 A	01-May-15 A	03-Jan-14	02-Apr-14	-269	$30,261.92	
SIX Compressed Air			100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$6,171.41	
2-W.03.01	CMNU8013	Proc/Fab Compressed Air Equipment - SIX	100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$6,171.41	
SIX Mains DI Water			100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$10,283.26	
2-W.03.01	CMNU3140	Procure gauges, valves, trantters, readouts, manifolds, driers etc - SIX	100%	5	23-Apr-14 A	30-Apr-14 A	28-Jan-14	05-Feb-14	-58	$1,034.03	
2-W.03.01	CMNU3160	Procure pipe and fittings - SIX	100%	2	23-Apr-14 A	24-Apr-14 A	28-Jan-14	29-Jan-14	-60	$258.51	
2-W.03.01	CMNU8012	Proc/Fab DI Water Equipment - SIX	100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$8,990.73	
SIX Gaseous Nitrogen			100%	54	15-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	
2-W.03.01	CMNU8014	Proc/Fab Gaseous Nitrogen - SIX	100%	54	15-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	
SIX Other Systems			94.65%	763	17-Sep-13 A	03-Oct-16	17-Sep-13	30-Mar-15	-382	$114,404.07	69
2-W.03.01	CMNU80141	Procure Exhaust system - SIX	100%	1	08-Apr-15 A	08-Apr-15 A	06-Dec-13	06-Dec-13	-332	$673.04	
2-W.03.01	CMNU8015	Proc/Fab Exhaust System - SIX	100%	15	09-Apr-15 A	30-Apr-15 A	09-Dec-13	06-Mar-14	-287	$3,530.55	
2-W.03.01	CMNU80151	Procurement of parts for experimental gas manifold - SIX	100%	4	24-Mar-15 A	30-Mar-15 A	30-Oct-13	04-Nov-13	-346	$538.43	
2-W.03.01	CMNU8016	Proc/Fab Bottle Gas System - SIX	100%	4	24-Mar-15 A	30-Mar-15 A	05-Nov-13	03-Feb-14	-286	$7,061.11	
2-W.03.01	CMNU80161	Procure LN2 pipe - SIX	100%	4	01-Dec-14 A	05-Dec-14 A	29-Nov-13	26-Feb-14	-194	$1,034.03	
2-W.03.01	CMNU8017	Proc/Fab LN2 Piping - SIX	100%	2	08-Dec-14 A	10-Dec-14 A	27-Feb-14	30-Mar-15	74	$60,919.36	
2-W.03.01	CMNU8018	Proc/Fab Fill stations for LN2 dewars - SIX	0%	59	11-Jul-16*	30-Sep-16	29-Nov-13	21-May-14	-592	$5,884.26	70
2-W.03.01	CMNU80181	Define and procure ODH sensors - SIX	100%	1	22-May-14 A	23-May-14 A	29-Nov-13	27-Dec-13	-101	$390.57	
2-W.03.01	CMNU8019	Proc/Fab Oxygen depletion hazard monitors - SIX	100%	88	19-May-14 A	24-Sep-14 A	30-Dec-13	21-May-14	-85	$3,530.55	
2-W.03.01	CMNU80191	Procure utility bridges and piping stanchions - SIX	100%	9	17-Jun-14 A	30-Jun-14 A	05-Feb-14	19-Feb-14	-91	$1,464.87	
2-W.03.01	CMNU8020	Proc/Fab Pylons and L-brackets - SIX	100%	9	17-Sep-13 A	30-Sep-13 A	17-Sep-13	14-Oct-13	11	$0.00	
2-W.03.01	CMNU8020FA	Proc/Fab Pylons and L-brackets - SIX	100%	47	24-Feb-14 A	30-Apr-14 A	20-Feb-14	16-Apr-14	-9	$26,317.48	
2-W.03.01	CMNU8021	Proc/Fab Paint for floor marking - SIX	0%	60	11-Jul-16*	03-Oct-16	21-Mar-14	13-Jun-14	-577	$235.37	69
2-W.03.01	CMNU8022	Proc/Fab Plumbing for emergency eye-wash and showers - SIX	100%	20	01-Jul-15 A	30-Jul-15 A	21-Mar-14	13-Jun-14	-280	$2,824.44	
SIX Mechanical Utilities Install			94.1%	588	02-Jun-14 A	04-Oct-16	05-Nov-14	15-Jan-16	-182	$449,005.11	68
2-W.03.01	CMNU3200	Mechanical utilities installation start - INTER-PROJECT LINK - SIX	100%	0	25-Sep-14 A		05-Nov-14		28	$0.00	
2-W.03.01	CMNU3210	Supervision of installation techs - SIX	90%	424	28-Jan-15 A	30-Sep-16	05-Nov-14	16-Mar-15	-391	$347.29	68
2-W.03.01	CMNU32101	Supervision of installation techs - SIX - ETC	0%	64	01-Jul-16	30-Sep-16				$0.00	68
2-W.03.01	CMNU3220	Install DI water pipework - SIX	100%	62	28-Jan-15 A	27-Apr-15 A	05-Nov-14	18-Nov-14	-106	$6,876.33	
2-W.03.01	CMNU3230	Install chilled water pipework - SIX	100%	70	19-Jan-15 A	28-Apr-15 A	05-Nov-14	04-Dec-14	-98	$17,568.47	
2-W.03.01	CMNU3240	Insulate chilled water piping - SIX	100%	22	06-Apr-15 A	05-May-15 A	05-Dec-14	18-Dec-14	-93	$11,673.01	
2-W.03.01	CMNU3250	Install compressed air pipework - SIX	100%	32	23-Feb-15 A	08-Apr-15 A	19-Dec-14	25-Dec-14	-68	$7,494.68	
2-W.03.01	CMNU3260	Build of experimental gas manifold - SIX	100%	5	01-Apr-15 A	07-Apr-15 A	29-Dec-14	06-Jan-15	-63	$555.66	
2-W.03.01	CMNU3270	Install experimental gas pipework - SIX	100%	2	08-Apr-15 A	09-Apr-15 A	07-Jan-15	08-Jan-15	-63	$1,041.87	
2-W.03.01	CMNU32701	Install experimental gas pipework (extra support) - SIX	100%	2	10-Apr-15 A	13-Apr-15 A	02-Mar-15	03-Mar-15	-29	$625.12	
2-W.03.01	CMNU3280	Install assistance of LN2 pipework - SIX	100%	18	05-Jan-15 A	30-Jan-15 A	04-Mar-15	30-Mar-15	41	$833.49	
2-W.03.01	CMNU3290	Install Exhaust system - SIX	100%	3	01-May-15 A	05-May-15 A	13-Jan-15	15-Jan-15	-76	$1,389.16	



(O) NEXT - Detail Schedule

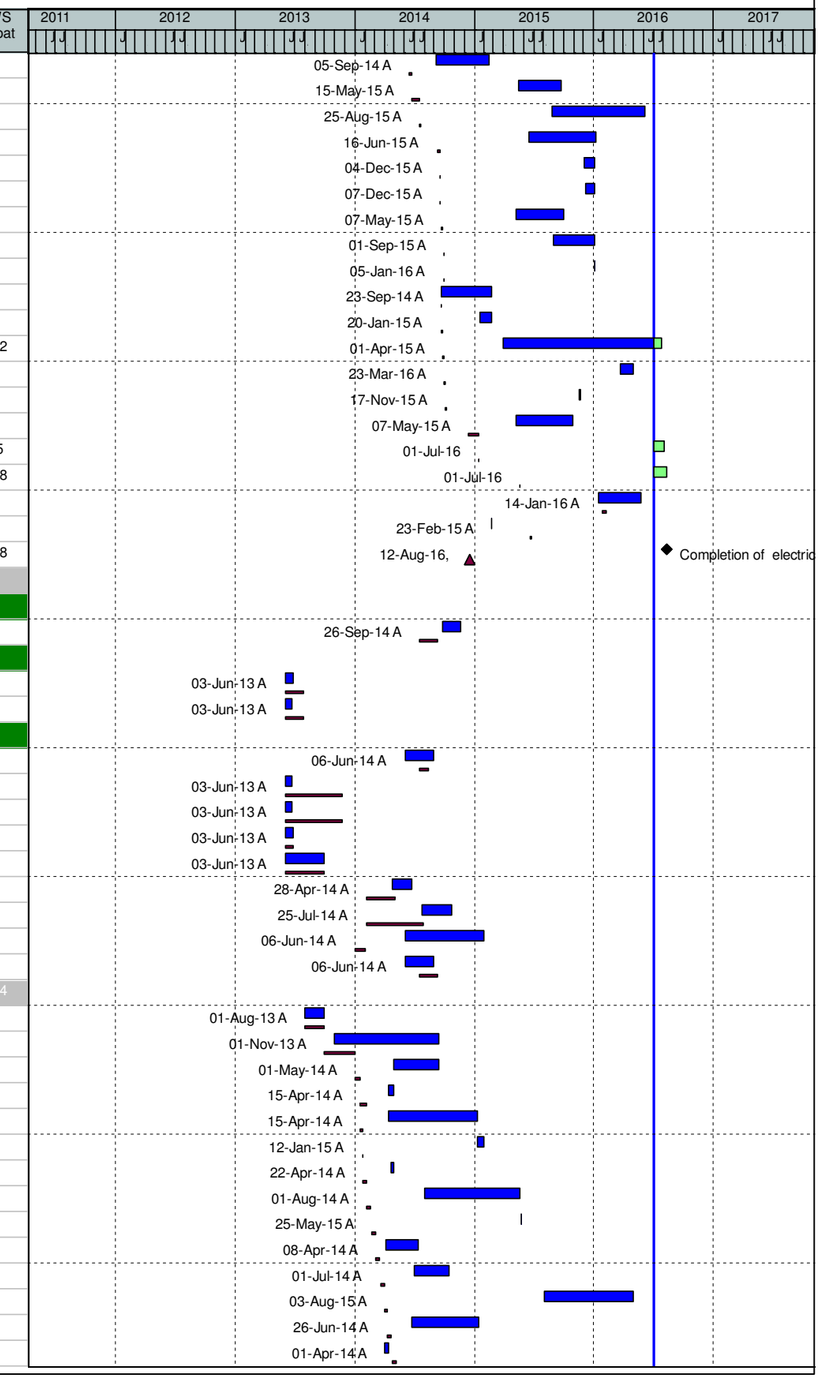
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU3300	Flushing and testing of all pipework - SIX	100%	8	27-Apr-15 A	06-May-15 A	16-Jan-15	22-Jan-15	-73	$2,083.74	
2-W.03.01	CMNU33001	Flushing and testing of all pipework (extra support) - SIX	100%	4	07-May-15 A	12-May-15 A	14-Apr-15	17-Apr-15	-17	$694.58	
2-W.03.01	CMNU3310	Production of 'as-built' drawings (stick diagrams) - SIX	0%	10	01-Jul-16	15-Jul-16	23-Jan-15	30-Jan-15	-367	$3,794.74	121
2-W.03.01	CMNU33101	Mechanical Utilities Modifications on Expr. floor & End Stn. (DIW, PCW & CA)	5%	57	18-Apr-16 A	07-Jul-16				$0.00	127
2-W.03.01	CMNU33102	Mechanical Utilities Modifications on Expr. floor & End Stn. (DIW, PCW & CA)	0%	4	01-Jul-16	07-Jul-16				$0.00	127
2-W.03.01	CMNU33103	Mechanical Utilities Modifications on Expr. floor & End Stn. (DIW, PCW & CA)	20%	68	01-Apr-16 A	07-Jul-16				$0.00	127
2-W.03.01	CMNU3320	Build of 0.1C temp control system prototype - SIX	100%	10	16-Jun-14 A	30-Jun-14 A	02-Feb-15	04-Feb-15	148	$555.66	
2-W.03.01	CMNU3330	Document of 0.1C temp control system - SIX	100%	5	02-Jun-14 A	06-Jun-14 A	05-Feb-15	11-Feb-15	168	$711.41	
2-W.03.01	CMNU3340	Procure and recieve seven additional racks - SIX	100%	5	13-Jul-15 A	20-Jul-15 A	30-Jul-15	28-Aug-15	30	$51,124.29	
2-W.03.01	CMNU3345	Install associated PPG & Electrical for add'l racks- SIX	100%	63	01-Jun-15 A	28-Aug-15 A	31-Aug-15	28-Sep-15	21	$156,965.09	
2-W.03.01	CMNU33452	Extend PCHW piping for Compressor in SEB2 MER - SIX - Labor	0%	4	01-Jul-16	07-Jul-16	04-Jan-16	15-Jan-16	-120	$8,561.75	121
2-W.03.01	CMNU33452	Extend PCHW piping for Compressor in SEB2 MER - SIX - Labor - ETC	0%	1	08-Jul-16	08-Jul-16				$0.00	126
2-W.03.01	CMNU334521	Extend PCHW piping for Compressor in SEB2 MER - SIX - Material	0%	4	01-Jul-16	07-Jul-16	04-Jan-16	15-Jan-16	-120	$10,027.20	127
2-W.03.01	CMNU334522	Extra support for additional racks	100%	10	01-Dec-15 A	14-Dec-15 A	01-Dec-15	14-Dec-15	0	$161,987.93	
2-W.03.01	CMNU33453	Update Mechanical As-Builts at 2-ID - SIX	0%	6	08-Jul-16	15-Jul-16	04-Jan-16	12-Jan-16	-129	$993.68	121
2-W.03.01	CMNU334531	Update Mechanical As-Builts at 2-ID - SIX - ETC	0%	10	01-Jul-16	15-Jul-16				$0.00	121
2-W.03.01	CMNU3350	Inspect Mechanical installation, Traveler/Acceptance Work & Docs - SIX	0%	2	03-Oct-16	04-Oct-16	19-May-15	28-Dec-15	-195	$3,099.96	68
2-W.03.01	CMNU3360	Completion of mechanical utilities - SIX	0%	0		15-Jul-16		29-May-15	-284	$0.00	121
SMI Common Systems			92.18%	814	03-Jun-13 A	31-Aug-16	03-Jun-13	24-May-16	-69	$474,109.65	101
SMI Utilities			92.18%	814	03-Jun-13 A	31-Aug-16	03-Jun-13	24-May-16	-69	$474,109.65	101
2-W.03.01	MCM170	Receive: Electrical Requirements - SMI	100%	0		01-Oct-13 A		01-Oct-13	0	$0.00	
2-W.03.01	MCM180	Receive: Mechanical Requirements - SMI	100%	0		01-Oct-13 A		01-Oct-13	0	$0.00	
SMI Electrical Utilities Design			100%	653	01-Aug-13 A	14-Mar-16 A	01-Aug-13	15-Jul-14	-415	$47,588.85	
2-W.03.01	CMNU041	Gather generic electrical requirements - SMI	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU041FA	Gather generic electrical requirements - SMI	100%	103	01-Nov-13 A	02-Apr-14 A	01-Oct-13	02-Jan-14	-62	$1,113.13	
2-W.03.01	CMNU3370	Gather beamline specific requirements - SMI	100%	145	03-Apr-14 A	30-Oct-14 A	03-Jan-14	16-Jan-14	-197	$2,441.08	
2-W.03.01	CMNU3380	Define alarm signals / protocol to send to control room - SMI	100%	5	01-Feb-16 A	05-Feb-16 A	17-Jan-14	21-Jan-14	-511	$390.57	
2-W.03.01	CMNU3390	Specify electrical requirements - SMI	100%	138	19-Jun-14 A	09-Jan-15 A	22-Jan-14	04-Feb-14	-232	$1,659.94	
2-W.03.01	CMNU3400	Drawings ("single line" diagrams) - SMI	100%	9	09-Jun-14 A	20-Jun-14 A	05-Feb-14	11-Feb-14	-90	$3,837.12	
2-W.03.01	CMNU3410	Design - SMI	100%	183	30-Apr-14 A	26-Jan-15 A	12-Feb-14	07-Jul-14	-137	$34,702.78	
2-W.03.01	CMNU3420	Define water leak alarms - SMI	100%	22	03-May-14 A	05-Jun-14 A	08-Jul-14	08-Jul-14	22	$195.29	
2-W.03.01	CMNU3430	Write procedure for hutch panel grounding checks - SMI	100%	14	11-Aug-14 A	29-Aug-14 A	09-Jul-14	09-Jul-14	-36	$97.64	
2-W.03.01	CMNU3440	Ethernet interconnection diagram - SMI	100%	10	08-Feb-16 A	22-Feb-16 A	10-Jul-14	14-Jul-14	-401	$2,370.13	
2-W.03.01	CMNU3450	Review of electrical utilities design - SMI	100%	14	02-Feb-15 A	23-Feb-15 A	15-Jul-14	15-Jul-14	-149	$781.15	
2-W.03.01	CMNU3455	Electrical Utilities Desgin Complete - SMI	100%	0		14-Mar-16 A		15-Jul-14	-415	$0.00	
SMI Electrical Utilities Install			95.07%	566	12-May-14 A	12-Aug-16	03-Apr-14	09-Feb-16	-130	$191,978.04	68
2-W.03.01	CMNU3480	Commence electrical installation at BL - INTER-PROJECT LINK - SMI	100%	0	18-Aug-14 A		15-Oct-14		40	$0.00	
2-W.03.01	CMNU3490	Logistics administration (0.5 FTE for duration of work) - SMI	100%	92	18-Aug-14 A	30-Dec-14 A	15-Oct-14	15-Oct-14	-52	$0.00	
2-W.03.01	CMNU3500	Supervision of installation electricians - SMI	100%	124	18-Aug-14 A	18-Feb-15 A	12-Dec-14	13-Feb-15	-2	$2,519.20	
2-W.03.01	CMNU3510	Design updates - SMI	100%	119	02-Sep-14 A	26-Feb-15 A	15-Oct-14	15-Dec-14	-47	$0.00	
2-W.03.01	CMNU3520	Install cable tray (internal to each hutch) - SMI	100%	130	18-Aug-14 A	27-Feb-15 A	12-Dec-14	19-Dec-14	-44	$7,074.55	
2-W.03.01	CMNU3530	Install pylons and roof stanchions - SMI	100%	41	18-Aug-14 A	15-Oct-14 A	03-Apr-14	16-Apr-14	-125	$11,425.31	
2-W.03.01	CMNU3540	Install cable tray (external) - SMI	100%	77	24-Sep-14 A	16-Jan-15 A	17-Apr-14	22-Apr-14	-183	$4,570.12	
2-W.03.01	CMNU35401	Install cable tray (external); extra support - SMI	100%	10	02-Feb-15 A	13-Feb-15 A	02-Feb-15	13-Feb-15	0	$3,301.46	
2-W.03.01	CMNU3550	Install breaker panels - SMI	100%	189	12-May-14 A	13-Feb-15 A	23-Apr-14	02-May-14	-194	$13,710.37	
2-W.03.01	CMNU3560	Install mains wiring (per hutch) - SMI	100%	93	29-Sep-14 A	13-Feb-15 A	05-May-14	23-May-14	-179	$17,137.96	
2-W.03.01	CMNU3570	Install mains wiring (on floor outside hutch and on the hutch roof) - SMI	100%	80	17-Oct-14 A	13-Feb-15 A	27-May-14	02-Jun-14	-174	$5,712.65	
2-W.03.01	CMNU3580	Install lighting circuits incl switches - SMI	100%	81	18-Aug-14 A	12-Dec-14 A	03-Jun-14	05-Jun-14	-130	$3,427.59	
2-W.03.01	CMNU3590	Install wiring to hutch ventilation fans - SMI	100%	56	24-Oct-14 A	16-Jan-15 A	06-Jun-14	10-Jun-14	-149	$3,427.59	
2-W.03.01	CMNU3600	Test mains wiring - SMI	100%	3	02-Feb-15 A	04-Feb-15 A	11-Jun-14	12-Jun-14	-159	$2,285.06	
2-W.03.01	CMNU3610	Connection to BL transformer incl cable installation - SMI	100%	2	05-Feb-15 A	06-Feb-15 A	13-Jun-14	16-Jun-14	-159	$2,285.06	



(O) NEXT - Detail Schedule

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU3620	Install wiremold in hutches - SMI	100%	109	05-Sep-14 A	13-Feb-15 A	17-Jun-14	24-Jun-14	-158	$6,855.18	
2-W.03.01	CMNU3630	Install PPS conduits only - SMI	100%	91	15-May-15 A	23-Sep-15 A	25-Jun-14	17-Jul-14	-297	$13,710.37	
2-W.03.01	CMNU3640	Install EPS ethernet cables - SMI	100%	195	25-Aug-15 A	03-Jun-16 A	18-Jul-14	22-Jul-14	-468	$1,827.94	
2-W.03.01	CMNU3650	Install campus network ethernet + telephone cables - SMI	100%	140	16-Jun-15 A	06-Jan-16 A	11-Sep-14	17-Sep-14	-324	$3,290.30	
2-W.03.01	CMNU3660	Connection of campus network ethernet + telephone to switches - SMI	100%	20	04-Dec-15 A	04-Jan-16 A	18-Sep-14	18-Sep-14	-321	$365.59	
2-W.03.01	CMNU3670	Test campus network ethernet + telephone cables + outlets - SMI	100%	19	07-Dec-15 A	04-Jan-16 A	19-Sep-14	19-Sep-14	-320	$731.18	
2-W.03.01	CMNU3680	Install controls network ethernet cables - SMI	100%	102	07-May-15 A	30-Sep-15 A	22-Sep-14	26-Sep-14	-252	$3,290.30	
2-W.03.01	CMNU3690	Connection of controls network ethernet to switches - SMI	100%	84	01-Sep-15 A	04-Jan-16 A	29-Sep-14	29-Sep-14	-314	$365.59	
2-W.03.01	CMNU3700	Test campus network ethernet cables + outlets - SMI	100%	1	05-Jan-16 A	05-Jan-16 A	30-Sep-14	30-Sep-14	-314	$731.18	
2-W.03.01	CMNU3710	Install grounding bus - SMI	100%	101	23-Sep-14 A	23-Feb-15 A	22-Sep-14	23-Sep-14	-100	$1,096.77	
2-W.03.01	CMNU3720	Checking of hutch panel grounding - SMI	100%	23	20-Jan-15 A	23-Feb-15 A	24-Sep-14	24-Sep-14	-99	$584.94	
2-W.03.01	CMNU3730	Final documentation for electrical installation - SMI	50%	332	01-Apr-15 A	25-Jul-16	25-Sep-14	01-Oct-14	-453	$6,844.26	82
2-W.03.01	CMNU3750	Install water leak alarms - SMI	100%	27	23-Mar-16 A	29-Apr-16 A	02-Oct-14	03-Oct-14	-391	$1,131.86	
2-W.03.01	CMNU3770	Install ODH sensors - SMI	100%	2	17-Nov-15 A	22-Nov-15 A	06-Oct-14	08-Oct-14	-278	$1,886.44	
2-W.03.01	CMNU3780	Install PPS conduit and cables - SMI	100%	121	07-May-15 A	29-Oct-15 A	12-Dec-14	13-Jan-15	-200	$26,623.38	
2-W.03.01	CMNU3790	Test PPS cables - SMI	0%	21	01-Jul-16	01-Aug-16	14-Jan-15	15-Jan-15	-388	$1,131.86	5
2-W.03.01	CMNU37901	Test PPS cables (extra support) - SMI	0%	30	01-Jul-16	12-Aug-16	20-May-15	21-May-15	-309	$4,904.74	68
2-W.03.01	CMNU3800	Install Smoke Detectors - SMI	100%	90	14-Jan-16 A	23-May-16 A	27-Jan-16	09-Feb-16	-72	$36,504.67	
2-W.03.01	CMNU3810	Inspect electrical installation - SMI	100%	0	23-Feb-15 A	23-Feb-15 A	22-Jun-15	23-Jun-15	86	$3,224.58	
2-W.03.01	CMNU3820	Completion of electrical utilities - SMI	0%	0		12-Aug-16		17-Dec-14	-415	$0.00	68
SMI Electrical Utilities Procure			100%	413	03-Jun-13 A	30-Jan-15 A	03-Jun-13	10-Sep-14	-94	$33,240.09	
SMI Communications			100%	40	26-Sep-14 A	21-Nov-14 A	16-Jul-14	10-Sep-14	-51	$8,801.67	
2-W.03.01	CMNU9001	Proc/Fab Communications Components - SMI	100%	40	26-Sep-14 A	21-Nov-14 A	16-Jul-14	10-Sep-14	-51	$8,801.67	
SMI Mains Wiring			0%	20	03-Jun-13 A	29-Jun-13 A	03-Jun-13	30-Jul-13	20	$0.00	
2-W.03.01	CMNU3470	Procure electrical items - SMI	100%	20	03-Jun-13 A	29-Jun-13 A	03-Jun-13	29-Jul-13	19	$0.00	
2-W.03.01	CMNU9002	Proc/Fab Mains Electrical Cable and Fitting Components - SMI	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	30-Jul-13	24	$0.00	
SMI Other			100%	413	03-Jun-13 A	30-Jan-15 A	03-Jun-13	10-Sep-14	-94	$24,438.42	
2-W.03.01	CMNU3740	Procure water leak alarms - SMI	100%	58	06-Jun-14 A	29-Aug-14 A	16-Jul-14	12-Aug-14	-12	$195.29	
2-W.03.01	CMNU9003	Proc/Fab Motion control racks for beamlines - SMI	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	25-Nov-13	104	$0.00	
2-W.03.01	CMNU9004	Proc/Fab End station racks (also water cooled) - SMI	100%	16	03-Jun-13 A	25-Jun-13 A	03-Jun-13	25-Nov-13	104	$0.00	
2-W.03.01	CMNU9005	Proc/Fab Other Misc. items for racks - SMI	100%	20	03-Jun-13 A	28-Jun-13 A	03-Jun-13	28-Jun-13	0	$0.00	
2-W.03.01	CMNU9006	Proc/Fab Items we add to racks - SMI	100%	82	03-Jun-13 A	30-Sep-13 A	03-Jun-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU9006FA	Proc/Fab Items we add to racks - SMI	100%	41	28-Apr-14 A	25-Jun-14 A	05-Feb-14	02-May-14	-36	$13,180.73	
2-W.03.01	CMNU9008	Proc/Fab Temperature sensing system for hutches, racks etc. - SMI	100%	62	25-Jul-14 A	23-Oct-14 A	05-Feb-14	28-Jul-14	-60	$2,353.70	
2-W.03.01	CMNU9009	Proc/Fab PPS wiring and conduit - SMI	100%	160	06-Jun-14 A	30-Jan-15 A	03-Jan-14	31-Jan-14	-247	$5,884.26	
2-W.03.01	CMNU9010	Proc/Fab TraceTek leak detection cable - SMI	100%	58	06-Jun-14 A	29-Aug-14 A	16-Jul-14	10-Sep-14	8	$2,824.44	
SMI Mechanical Utilities Design			100%	770	01-Aug-13 A	26-Aug-16	01-Aug-13	06-Jun-14	-557	$16,156.02	94
2-W.03.01	CMNU3830	Gather mechanical requirements - SMI	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU3830FA	Gather mechanical requirements - SMI	100%	216	01-Nov-13 A	15-Sep-14 A	01-Oct-13	02-Jan-14	-175	$0.00	
2-W.03.01	CMNU3840	Specify mechanical requirements - SMI	100%	93	01-May-14 A	15-Sep-14 A	03-Jan-14	16-Jan-14	-165	$0.00	
2-W.03.01	CMNU3850	Supervise drawings of pylons, utilites bridges and stanchions - SMI	100%	12	15-Apr-14 A	30-Apr-14 A	17-Jan-14	04-Feb-14	-60	$3,446.76	
2-W.03.01	CMNU3860	Drawings (stick diagrams) - SMI	100%	184	15-Apr-14 A	09-Jan-15 A	17-Jan-14	24-Jan-14	-239	$1,470.83	
2-W.03.01	CMNU3870	Final update of drawings (stick diagrams) - SMI	100%	13	12-Jan-15 A	29-Jan-15 A	27-Jan-14	27-Jan-14	-251	$2,332.52	
2-W.03.01	CMNU3880	Create drawings of pylons, utilites bridges and stanchions - SMI	100%	7	22-Apr-14 A	30-Apr-14 A	27-Jan-14	04-Feb-14	-60	$956.04	
2-W.03.01	CMNU3890	Specification of experimental gas manifold - SMI	100%	201	01-Aug-14 A	22-May-15 A	05-Feb-14	19-Feb-14	-314	$689.35	
2-W.03.01	CMNU3900	Design of experimental gas manifold - SMI	100%	0	25-May-15 A	26-May-15 A	20-Feb-14	05-Mar-14	-305	$588.33	
2-W.03.01	CMNU3910	Specification of experimental cryogenics - SMI	100%	68	08-Apr-14 A	15-Jul-14 A	06-Mar-14	19-Mar-14	-81	$689.35	
2-W.03.01	CMNU3920	Design of experimental cryogenics - SMI	100%	73	01-Jul-14 A	16-Oct-14 A	20-Mar-14	02-Apr-14	-135	$588.33	
2-W.03.01	CMNU3930	Specification of exhaust system - SMI	100%	186	03-Aug-15 A	29-Apr-16 A	03-Apr-14	09-Apr-14	-514	$861.69	
2-W.03.01	CMNU3940	Create 3D layout - SMI	100%	138	26-Jun-14 A	16-Jan-15 A	10-Apr-14	23-Apr-14	-182	$3,067.93	
2-W.03.01	CMNU3950	Design prototype of 0.1C temp control system - SMI	100%	10	01-Apr-14 A	14-Apr-14 A	24-Apr-14	07-May-14	17	$1,464.87	



(O) NEXT - Detail Schedule

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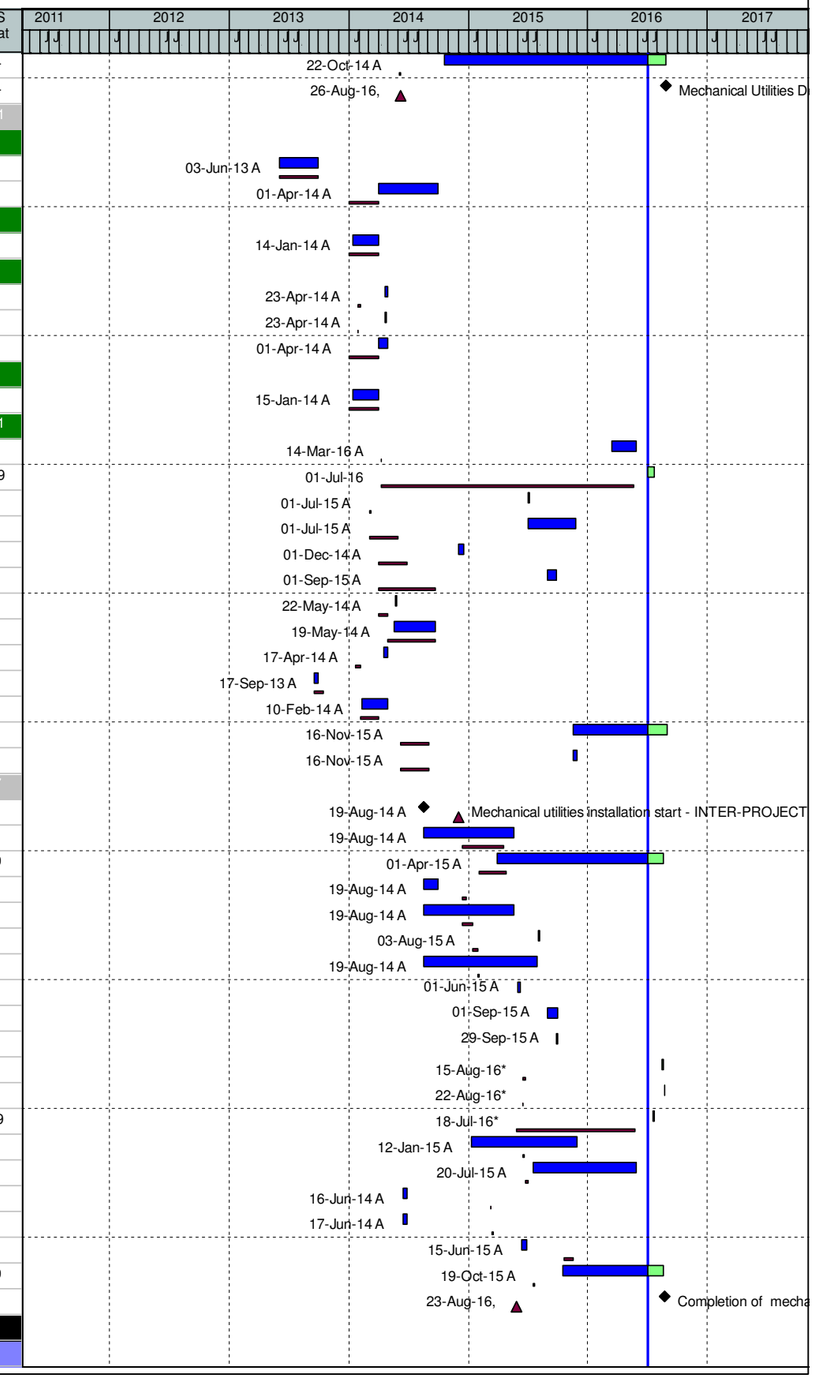
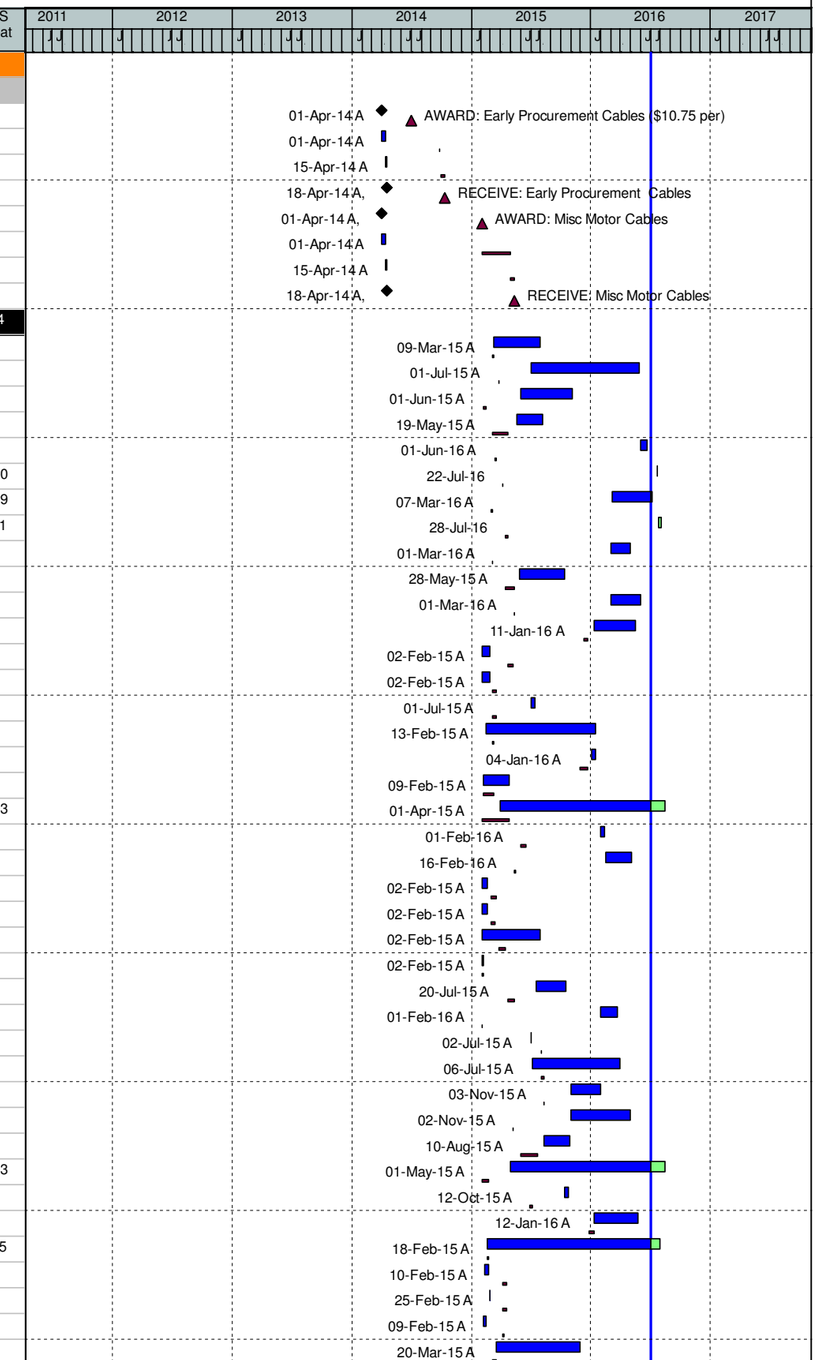
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU3970	Review of mechanical utilities design - SMI	95%	464	22-Oct-14 A	26-Aug-16	06-Jun-14	06-Jun-14	-557	$0.00	94
2-W.03.01	CMNU3975	Mechanical Utilities Design Complete - SMI	0%	0		26-Aug-16		06-Jun-14	-557	$0.00	94
SMI Mechanical Utilities Procure			88.81%	814	03-Jun-13 A	31-Aug-16	03-Jun-13	19-May-16	-72	$110,523.85	101
SMI Processed Chilled Water			100%	332	03-Jun-13 A	30-Sep-14 A	03-Jun-13	02-Apr-14	-124	$30,261.92	
2-W.03.01	CMNU9011	Proc/Fab Chilled Water Equipment - SMI	100%	82	03-Jun-13 A	30-Sep-13 A	03-Jun-13	30-Sep-13	1	$0.00	
2-W.03.01	CMNU9011FA	Proc/Fab Chilled Water Equipment - SMI	100%	126	01-Apr-14 A	30-Sep-14 A	03-Jan-14	02-Apr-14	-124	$30,261.92	
SMI Compressed Air			100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$6,171.41	
2-W.03.01	CMNU9013	Proc/Fab Compressed Air Equipment - SMI	100%	55	14-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$6,171.41	
SMI Mains DI Water			100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$10,283.26	
2-W.03.01	CMNU3980	Procure gauges, valves, trantters, readouts, manifolds, driers etc - SMI	100%	5	23-Apr-14 A	30-Apr-14 A	28-Jan-14	05-Feb-14	-58	$1,034.03	
2-W.03.01	CMNU4000	Procure pipe and fittings - SMI	100%	2	23-Apr-14 A	24-Apr-14 A	28-Jan-14	29-Jan-14	-60	$258.51	
2-W.03.01	CMNU9012	Proc/Fab DI Water Equipment - SMI	100%	21	01-Apr-14 A	30-Apr-14 A	03-Jan-14	31-Mar-14	-21	$8,990.73	
SMI Gaseous Nitrogen			100%	54	15-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	
2-W.03.01	CMNU9014	Proc/Fab Gaseous Nitrogen - SMI	100%	54	15-Jan-14 A	02-Apr-14 A	03-Jan-14	31-Mar-14	-2	$1,548.74	
SMI Other Systems			80.14%	741	17-Sep-13 A	31-Aug-16	17-Sep-13	19-May-16	-72	$62,258.51	101
2-W.03.01	CMNU90141	Procure Exhaust system - SMI	100%	54	14-Mar-16 A	27-May-16 A	10-Apr-14	10-Apr-14	-533	$673.04	
2-W.03.01	CMNU9015	Fabrication Exhaust System - SMI	0%	15	01-Jul-16	22-Jul-16	11-Apr-14	19-May-16	-44	$12,304.35	129
2-W.03.01	CMNU90151	Procurement of parts for experimental gas manifold - SMI	100%	4	01-Jul-15 A	07-Jul-15 A	06-Mar-14	11-Mar-14	-331	$538.43	
2-W.03.01	CMNU9016	Proc/Fab Bottle Gas System - SMI	100%	102	01-Jul-15 A	26-Nov-15 A	06-Mar-14	29-May-14	-373	$7,061.11	
2-W.03.01	CMNU90161	Procure LN2 pipe - SMI	100%	13	01-Dec-14 A	18-Dec-14 A	03-Apr-14	26-Jun-14	-118	$1,034.03	
2-W.03.01	CMNU9018	Proc/Fab Fill stations for LN2 dewars - SMI	100%	18	01-Sep-15 A	28-Sep-15 A	03-Apr-14	23-Sep-14	-252	$5,884.26	
2-W.03.01	CMNU90181	Define and procure ODH sensors - SMI	100%	3	22-May-14 A	28-May-14 A	03-Apr-14	30-Apr-14	-18	$390.57	
2-W.03.01	CMNU9019	Proc/Fab Oxygen depletion hazard monitors - SMI	100%	88	19-May-14 A	24-Sep-14 A	01-May-14	23-Sep-14	0	$3,530.55	
2-W.03.01	CMNU90191	Procure utility bridges and piping stanchions - SMI	100%	10	17-Apr-14 A	30-Apr-14 A	22-Jan-14	04-Feb-14	-60	$1,464.87	
2-W.03.01	CMNU9020	Proc/Fab Pylons and L-brackets - SMI	100%	9	17-Sep-13 A	30-Sep-13 A	17-Sep-13	14-Oct-13	11	$0.00	
2-W.03.01	CMNU9020FA	Proc/Fab Pylons and L-brackets - SMI	100%	56	10-Feb-14 A	30-Apr-14 A	05-Feb-14	02-Apr-14	-19	$26,317.48	
2-W.03.01	CMNU9021	Proc/Fab Paint for floor marking - SMI	75%	200	16-Nov-15 A	31-Aug-16	09-Jun-14	03-Sep-14	-500	$235.37	91
2-W.03.01	CMNU9022	Proc/Fab Plumbing for emergency eye-wash and showers - SMI	100%	8	16-Nov-15 A	30-Nov-15 A	09-Jun-14	03-Sep-14	-308	$2,824.44	
SMI Mechanical Utilities Install			79.53%	549	16-Jun-14 A	23-Aug-16	01-Dec-14	24-May-16	-63	$74,622.80	97
2-W.03.01	CMNU4040	Mechanical utilities installation start - INTER-PROJECT LINK - SMI	100%	0	19-Aug-14 A		01-Dec-14		70	$0.00	
2-W.03.01	CMNU4050	Supervision of installation techs - SMI	100%	187	19-Aug-14 A	19-May-15 A	12-Dec-14	20-Apr-15	-21	$347.29	
2-W.03.01	CMNU40501	Supervision of installation techs (extra support) - SMI	97%	351	01-Apr-15 A	19-Aug-16	02-Feb-15	27-Apr-15	-332	$2,014.28	99
2-W.03.01	CMNU4060	Install DI water pipework - SMI	100%	29	19-Aug-14 A	30-Sep-14 A	12-Dec-14	25-Dec-14	60	$6,876.33	
2-W.03.01	CMNU4070	Install chilled water pipework - SMI	100%	187	19-Aug-14 A	19-May-15 A	12-Dec-14	13-Jan-15	-88	$17,568.47	
2-W.03.01	CMNU4080	Insulate chilled water piping - SMI	100%	5	03-Aug-15 A	07-Aug-15 A	14-Jan-15	28-Jan-15	-134	$11,673.01	
2-W.03.01	CMNU4090	Install compressed air pipework - SMI	100%	237	19-Aug-14 A	30-Jul-15 A	29-Jan-15	04-Feb-15	-123	$7,494.68	
2-W.03.01	CMNU4091	EAC activity - Extend high-capacity air line from 10-ID to 12-ID - SMI	100%	5	01-Jun-15 A	08-Jun-15 A				$0.00	
2-W.03.01	CMNU4093	EAC activity - Procure and receive high-capacity air line components for Hutch	100%	20	01-Sep-15 A	29-Sep-15 A				$0.00	
2-W.03.01	CMNU4096	EAC activity - Install high-capacity air line in hutches- SMI	100%	1	29-Sep-15 A	30-Sep-15 A				$0.00	
2-W.03.01	CMNU4100	Build of experimental gas manifold - SMI	0%	5	15-Aug-16*	19-Aug-16	17-Jun-15	23-Jun-15	-292	$1,666.99	61
2-W.03.01	CMNU4110	Install experimental gas pipework - SMI	0%	2	22-Aug-16*	23-Aug-16	16-Jun-15	17-Jun-15	-298	$1,041.87	61
2-W.03.01	CMNU4130	Install Exhaust system - SMI	0%	5	18-Jul-16*	22-Jul-16	27-May-15	24-May-16	-41	$11,045.40	119
2-W.03.01	CMNU4140	Flushing and testing of all pipework - SMI	100%	222	12-Jan-15 A	30-Nov-15 A	17-Jun-15	22-Jun-15	-109	$3,333.98	
2-W.03.01	CMNU4150	Production of 'as-built' drawings (stick diagrams) - SMI	100%	217	20-Jul-15 A	27-May-16 A	24-Jun-15	01-Jul-15	-228	$3,794.74	
2-W.03.01	CMNU4160	Build of 0.1C temp control system prototype - SMI	100%	10	16-Jun-14 A	30-Jun-14 A	10-Mar-15	12-Mar-15	173	$555.66	
2-W.03.01	CMNU4170	Document of 0.1C temp control system - SMI	100%	9	17-Jun-14 A	30-Jun-14 A	13-Mar-15	19-Mar-15	178	$711.41	
2-W.03.01	CMNU4180	Retrofit resistor and install rack flow controllers - SMI	100%	11	15-Jun-15 A	30-Jun-15 A	21-Oct-15	17-Nov-15	98	$4,677.22	
2-W.03.01	CMNU4190	Inspect Mechanical installation, Traveler/Acceptance Work & Docs - SMI	20%	212	19-Oct-15 A	19-Aug-16	17-Jul-15	20-Jul-15	-274	$1,821.47	99
2-W.03.01	CMNU4200	Completion of mechanical utilities - SMI	0%	0		23-Aug-16		29-May-15	-311	$0.00	61
Controls Installation Work Package			100%	13	01-Apr-14 A	18-Apr-14 A	02-Jul-14	13-May-15	267	$385,470.63	
Controls Baseline			100%	13	01-Apr-14 A	18-Apr-14 A	02-Jul-14	13-May-15	267	$385,470.63	



(O) NEXT - Detail Schedule

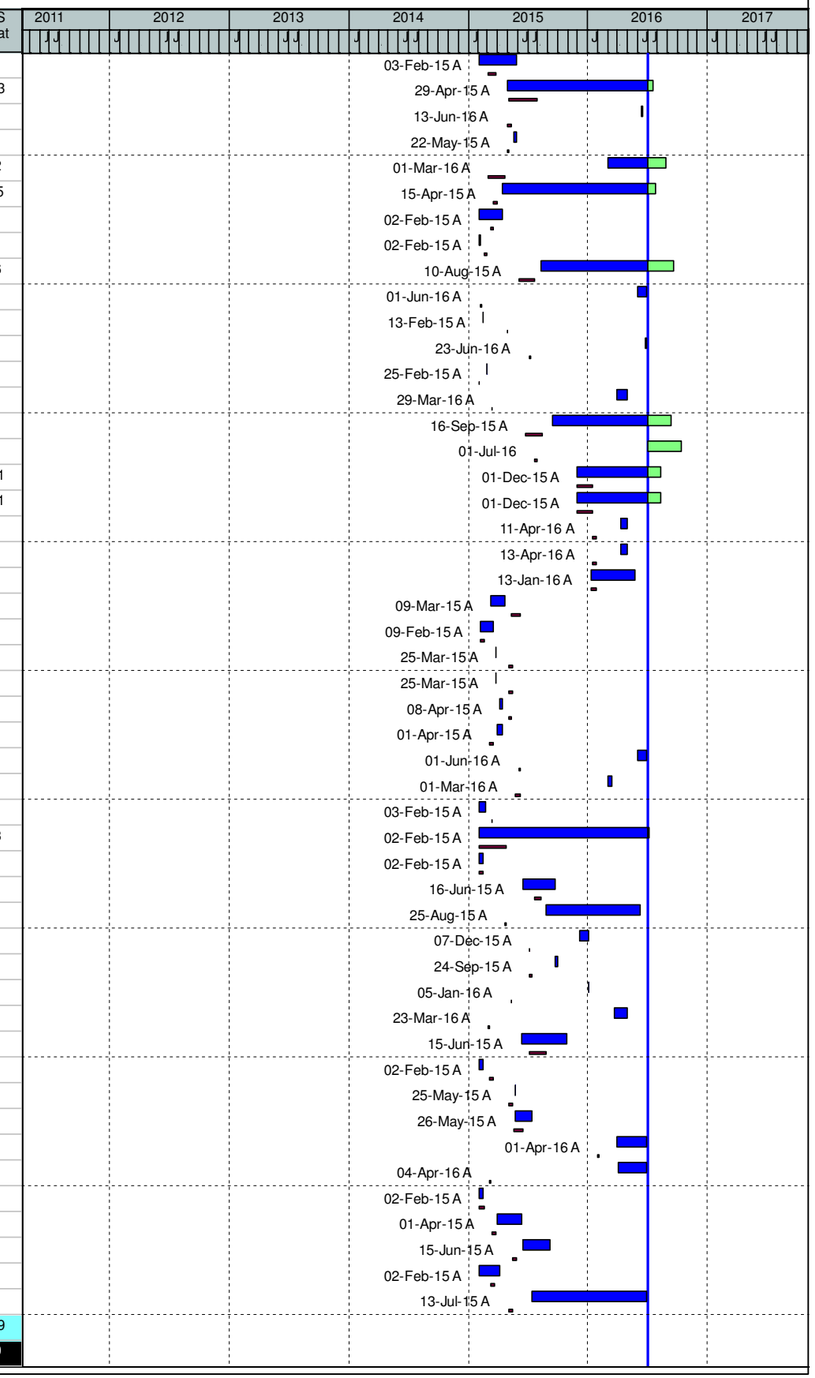
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
ALL PROCUREMENT OF CONTROLS EQUIPMENT			100%	13	01-Apr-14 A	18-Apr-14 A	02-Jul-14	13-May-15	267	$385,470.63	
Cables			100%	13	01-Apr-14 A	18-Apr-14 A	02-Jul-14	13-May-15	267	$385,470.63	
2-W.03.01	CON1660	AWARD: Early Procurement Cables ($10.75 per)	100%	0	01-Apr-14 A		02-Jul-14		65	$0.00	
2-W.03.01	CON1670	Procure: Early Procurement Cables	100%	9	01-Apr-14 A	14-Apr-14 A	25-Sep-14	25-Sep-14	115	$345,817.00	
2-W.03.01	CON1690	Vendor Ship Early Procurement Cables	100%	3	15-Apr-14 A	18-Apr-14 A	29-Sep-14	10-Oct-14	122	$0.00	
2-W.03.01	CON1700	RECEIVE: Early Procurement Cables	100%	0		18-Apr-14 A		10-Oct-14	122	$0.00	
2-W.03.01	CON2120	AWARD: Misc Motor Cables	100%	0		01-Apr-14 A		04-Feb-15	209	$0.00	
2-W.03.01	CON2130	Procure Cables	100%	9	01-Apr-14 A	14-Apr-14 A	04-Feb-15	29-Apr-15	261	$39,653.63	
2-W.03.01	CON2150	Vendor Ship Misc Motor Cables	100%	3	15-Apr-14 A	18-Apr-14 A	30-Apr-15	13-May-15	267	$0.00	
2-W.03.01	CON2160	RECEIVE: Misc Motor Cables	100%	0		18-Apr-14 A		13-May-15	267	$0.00	
No Procurement Work Packages - Glb			92.91%	427	02-Feb-15 A	11-Oct-16	02-Feb-15	05-Feb-16	-172	$632,985.54	64
2-W.03.01	CMNU0501	Design Electrical Systems (extra support) - ESM	100%	100	09-Mar-15 A	29-Jul-15 A	06-Mar-15	12-Mar-15	-96	$31,507.92	
2-W.03.01	CMNU0901	Review of electrical utilities design (extra support) - ESM	100%	228	01-Jul-15 A	26-May-16 A	27-Mar-15	27-Mar-15	-294	$2,821.50	
2-W.03.01	CMNU09801	Supervision of installation electricians (extra support)- ISR	100%	111	01-Jun-15 A	05-Nov-15 A	09-Feb-15	13-Feb-15	-184	$2,216.90	
2-W.03.01	CMNU11101	Install PPS conduits extra support - ISR	100%	56	19-May-15 A	06-Aug-15 A	05-Mar-15	22-Apr-15	-74	$18,275.92	
2-W.03.01	CMNU11201	Install EPS ethernet cables extra support - ISR	100%	15	01-Jun-16 A	21-Jun-16 A	13-Mar-15	17-Mar-15	-319	$4,150.17	
2-W.03.01	CMNU11501	Test campus network ethernet + telephone cables + outlets (extra support) - IS	0%	0	22-Jul-16	22-Jul-16	07-Apr-15	07-Apr-15	-325	$679.12	120
2-W.03.01	CMNU11601	Install controls network ethernet cables extra support - ISR	80%	88	07-Mar-16 A	08-Jul-16	02-Mar-15	06-Mar-15	-338	$1,131.86	129
2-W.03.01	CMNU11801	Test campus network ethernet cables + outlets extra support - ISR	0%	5	28-Jul-16	03-Aug-16	16-Apr-15	22-Apr-15	-323	$2,263.73	111
2-W.03.01	CMNU12301	Install water leak alarms extra support- ISR	100%	43	01-Mar-16 A	29-Apr-16 A	05-Mar-15	06-Mar-15	-289	$679.12	
2-W.03.01	CMNU12601	Install PPS conduit and cables extra support - ISR	100%	97	28-May-15 A	14-Oct-15 A	14-Apr-15	11-May-15	-108	$25,821.25	
2-W.03.01	CMNU12701	Test PPS cables extra support- ISR	100%	67	01-Mar-16 A	02-Jun-16 A	12-May-15	13-May-15	-265	$4,904.74	
2-W.03.01	CMNU1280	Install Smoke Detectors - ISR	100%	89	11-Jan-16 A	16-May-16 A	11-Dec-15	24-Dec-15	-98	$36,504.67	
2-W.03.01	CMNU13501	Final update of drawings (finalize stick diagrams) - ISR	100%	18	02-Feb-15 A	27-Feb-15 A	24-Apr-15	07-May-15	50	$4,792.85	
2-W.03.01	CMNU13701	Specification of experimental gas manifold extra support- ISR	100%	19	02-Feb-15 A	27-Feb-15 A	05-Mar-15	18-Mar-15	13	$2,134.24	
2-W.03.01	CMNU13801	Design of experimental gas manifold extra support - ISR	100%	10	01-Jul-15 A	15-Jul-15 A	05-Mar-15	18-Mar-15	-83	$4,866.45	
2-W.03.01	CMNU14101	Specification of exhaust system extra support - ISR	100%	231	13-Feb-15 A	15-Jan-16 A	05-Mar-15	11-Mar-15	-213	$2,667.79	
2-W.03.01	CMNU14102	Specification of exhaust system extra support - ISR ()	100%	9	04-Jan-16 A	15-Jan-16 A	01-Dec-15	22-Dec-15	-15	$9,118.49	
2-W.03.01	CMNU15301	Supervision of installation techs extra support - ISR	100%	56	09-Feb-15 A	28-Apr-15 A	09-Feb-15	09-Mar-15	-36	$1,666.99	
2-W.03.01	CMNU1701	Supervision of installation electricians extra support - ESM	90%	347	01-Apr-15 A	15-Aug-16	02-Feb-15	27-Apr-15	-328	$1,299.91	103
2-W.03.01	CMNU17601	Ethernet interconnection diagram; extra support - ISS	100%	10	01-Feb-16 A	12-Feb-16 A	02-Jun-15	15-Jun-15	-166	$2,069.67	
2-W.03.01	CMNU17701	Review of electrical utilities design; extra support - ISS	100%	59	16-Feb-16 A	06-May-16 A	12-May-15	18-May-15	-244	$806.14	
2-W.03.01	CMNU18201	Supervision of installation electricians; extra support - ISS	100%	12	02-Feb-15 A	18-Feb-15 A	02-Mar-15	17-Mar-15	19	$1,511.52	
2-W.03.01	CMNU18401	Install cable tray (internal to each hutch); extra support - ISS	100%	11	02-Feb-15 A	17-Feb-15 A	02-Mar-15	16-Mar-15	19	$2,358.18	
2-W.03.01	CMNU18601	Install cable tray (external); extra support - ISS	100%	126	02-Feb-15 A	30-Jul-15 A	26-Mar-15	15-Apr-15	-74	$4,716.37	
2-W.03.01	CMNU19001	Install lighting circuits incl switches; extra support - ISS	100%	5	02-Feb-15 A	06-Feb-15 A	02-Feb-15	06-Feb-15	0	$1,179.09	
2-W.03.01	CMNU19501	Install PPS conduits only; extra support - ISS	100%	62	20-Jul-15 A	15-Oct-15 A	22-Apr-15	12-May-15	-108	$14,149.10	
2-W.03.01	CMNU19601	Install EPS ethernet cables; extra support - ISS	100%	35	01-Feb-16 A	21-Mar-16 A	02-Feb-15	04-Feb-15	-282	$4,150.17	
2-W.03.01	CMNU19901	Test campus network ethernet + telephone cables + outlets; extra support - IS	100%	1	02-Jul-15 A	02-Jul-15 A	03-Aug-15	03-Aug-15	21	$679.12	
2-W.03.01	CMNU20001	Install controls network ethernet cables; extra support - ISS	100%	184	06-Jul-15 A	29-Mar-16 A	04-Aug-15	10-Aug-15	-158	$1,131.86	
2-W.03.01	CMNU20201	Test campus network ethernet cables + outlets; extra support - ISS	100%	60	03-Nov-15 A	01-Feb-16 A	11-Aug-15	11-Aug-15	-117	$2,263.73	
2-W.03.01	CMNU20701	Install water leak alarms; extra support - ISS	100%	123	02-Nov-15 A	29-Apr-16 A	07-May-15	08-May-15	-244	$679.12	
2-W.03.01	CMNU21001	Install PPS conduit and cables; extra support - ISS	100%	57	10-Aug-15 A	30-Oct-15 A	02-Jun-15	21-Jul-15	-70	$25,821.25	
2-W.03.01	CMNU2101	Install cable tray (external); extra support- ESM	90%	325	01-May-15 A	15-Aug-16	02-Feb-15	23-Feb-15	-373	$4,716.37	103
2-W.03.01	CMNU21101	Test PPS cables; extra support - ISS	100%	9	12-Oct-15 A	26-Oct-15 A	30-Jun-15	07-Jul-15	-76	$4,904.74	
2-W.03.01	CMNU2120	Install Smoke Detectors - ISS	100%	92	12-Jan-16 A	23-May-16 A	28-Dec-15	11-Jan-16	-92	$27,378.50	
2-W.03.01	CMNU21901	Final update of drawings (stick diagrams) - ISS	95%	365	18-Feb-15 A	28-Jul-16	17-Feb-15	23-Feb-15	-361	$3,777.86	115
2-W.03.01	CMNU22101	Specification of experimental gas manifold; extra support - ISS	100%	10	10-Feb-15 A	24-Feb-15 A	06-Apr-15	17-Apr-15	38	$2,845.65	
2-W.03.01	CMNU22201	Design of experimental gas manifold; extra support - ISS	100%	2	25-Feb-15 A	27-Feb-15 A	06-Apr-15	17-Apr-15	36	$2,888.59	
2-W.03.01	CMNU22501	Specification of exhaust system; extra support - ISS	100%	5	09-Feb-15 A	13-Feb-15 A	06-Apr-15	10-Apr-15	39	$2,667.79	
2-W.03.01	CMNU22601	Create 3D layout; extra support - ISS	100%	176	20-Mar-15 A	30-Nov-15 A	05-Mar-15	18-Mar-15	-177	$2,003.92	



(O) NEXT - Detail Schedule

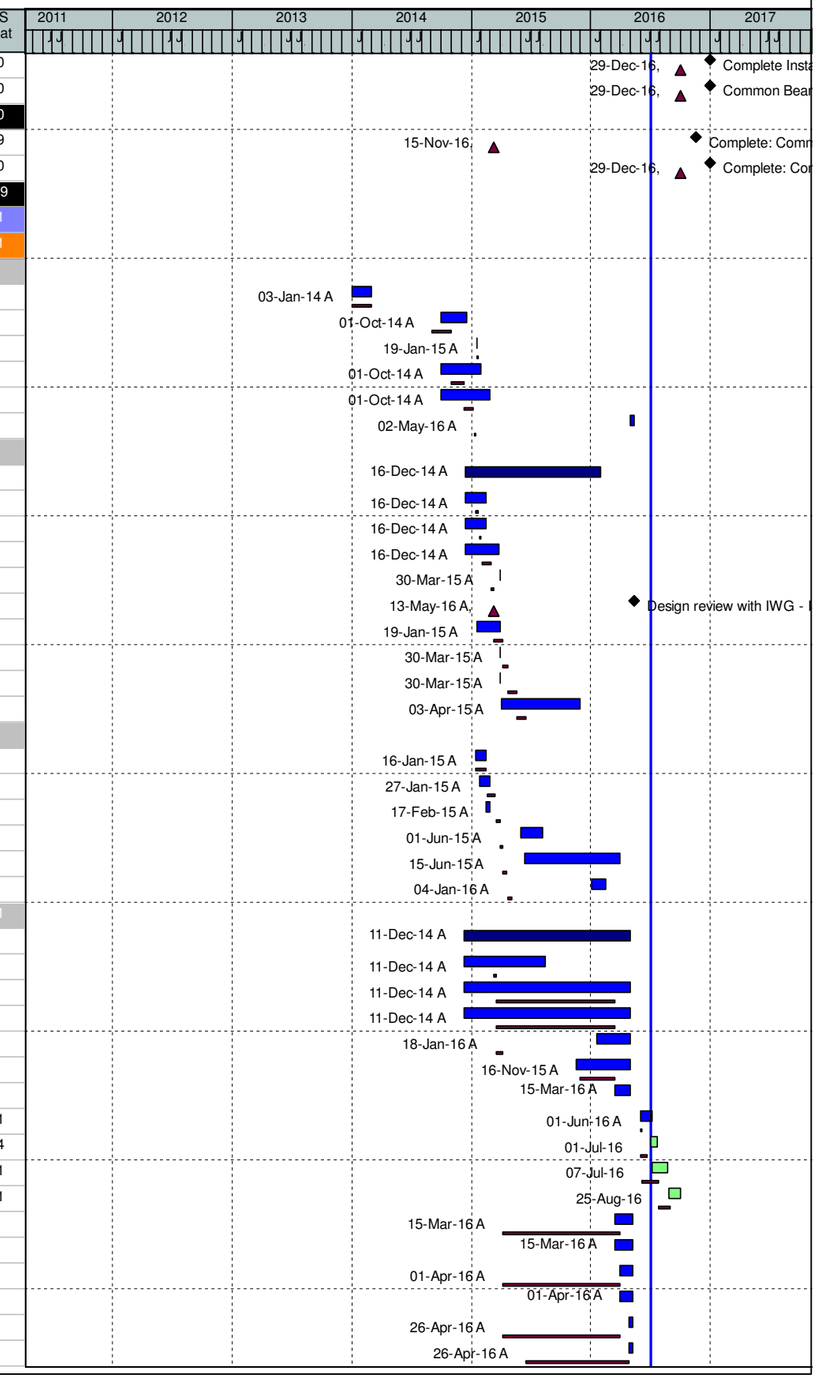
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.01	CMNU25601	Drawings ("single line" diagrams) - Additional Support - All BLs	100%	82	03-Feb-15 A	29-May-15 A	02-Mar-15	27-Mar-15	-44	$67,621.54	
2-W.03.01	CMNU25701	Design Electrical - Additional Support for all BLs	90%	307	29-Apr-15 A	18-Jul-16	04-May-15	28-Jul-15	-244	$48,658.41	123
2-W.03.01	CMNU26001	Ethernet interconnection diagram; extra support - SIX	100%	4	13-Jun-16 A	17-Jun-16 A	29-Apr-15	12-May-15	-276	$1,370.60	
2-W.03.01	CMNU26101	Review of electrical utilities design; extra support - SIX	100%	5	22-May-15 A	29-May-15 A	29-Apr-15	05-May-15	-17	$806.14	
2-W.03.01	CMNU26601	Supervision of installation electricians; extra support - SIX	20%	126	01-Mar-16 A	25-Aug-16	02-Mar-15	23-Apr-15	-338	$1,511.52	92
2-W.03.01	CMNU26801	Install cable tray (internal to each hutch); extra support - SIX	90%	322	15-Apr-15 A	25-Jul-16	18-Mar-15	30-Mar-15	-333	$2,358.18	115
2-W.03.01	CMNU27001	Install cable tray (external); extra support - SIX	100%	51	02-Feb-15 A	14-Apr-15 A	09-Mar-15	20-Mar-15	-17	$9,432.73	
2-W.03.01	CMNU27401	Install lighting circuits incl switches; extra support - SIX	100%	5	02-Feb-15 A	06-Feb-15 A	20-Feb-15	26-Feb-15	13	$1,179.09	
2-W.03.01	CMNU27901	Install PPS conduits only; extra support - SIX	75%	280	10-Aug-15 A	19-Sep-16	04-Jun-15	23-Jul-15	-291	$16,507.29	76
2-W.03.01	CMNU28001	Install EPS ethernet cables; extra support - SIX	100%	21	01-Jun-16 A	30-Jun-16 A	09-Feb-15	11-Feb-15	-348	$4,150.17	
2-W.03.01	CMNU28301	Test campus network ethernet + telephone cables + outlets; extra support - SI	100%	1	13-Feb-15 A	13-Feb-15 A	01-May-15	01-May-15	54	$679.12	
2-W.03.01	CMNU28401	Install controls network ethernet cables; extra support - SIX	100%	5	23-Jun-16 A	30-Jun-16 A	06-Jul-15	10-Jul-15	-244	$1,131.86	
2-W.03.01	CMNU28601	Test campus network ethernet cables + outlets; extra support - SIX	100%	1	25-Feb-15 A	25-Feb-15 A	02-Feb-15	02-Feb-15	-16	$2,263.73	
2-W.03.01	CMNU29101	Install water leak alarms; extra support - SIX	100%	23	29-Mar-16 A	29-Apr-16 A	13-Mar-15	16-Mar-15	-283	$679.12	
2-W.03.01	CMNU29401	Install PPS conduit and cables; extra support - SIX	70%	249	16-Sep-15 A	12-Sep-16	25-Jun-15	13-Aug-15	-271	$28,179.43	81
2-W.03.01	CMNU29501	Test PPS cables; extra support - SIX	0%	70	01-Jul-16	11-Oct-16	24-Jul-15	30-Jul-15	-301	$4,904.74	61
2-W.03.01	CMNU29551	Electrical Design & Installation for SEB2 Exper. Area - SIX - Labor	60%	178	01-Dec-15 A	12-Aug-16	01-Dec-15	13-Jan-16	-148	$32,526.33	101
2-W.03.01	CMNU295511	Electrical Design & Installation for SEB2 Exper. Area - SIX - Material	60%	178	01-Dec-15 A	12-Aug-16	01-Dec-15	13-Jan-16	-148	$9,525.84	101
2-W.03.01	CMNU29552	Install Electric for Compressors in SEB2 MER - SIX - Labor	100%	14	11-Apr-16 A	29-Apr-16 A	14-Jan-16	28-Jan-16	-64	$5,646.86	
2-W.03.01	CMNU295521	IInstall Electric for Compressors in SEB2 MER - SIX - Material	100%	12	13-Apr-16 A	29-Apr-16 A	14-Jan-16	28-Jan-16	-64	$2,506.80	
2-W.03.01	CMNU2960	Install Smoke Detectors - SIX	100%	91	13-Jan-16 A	23-May-16 A	12-Jan-16	26-Jan-16	-82	$9,126.17	
2-W.03.01	CMNU3001	Install PPS conduits only; extra support - ESM	100%	34	09-Mar-15 A	24-Apr-15 A	13-May-15	10-Jun-15	33	$14,149.10	
2-W.03.01	CMNU30301	Final update of drawings (stick diagrams); extra support - SIX	100%	29	09-Feb-15 A	20-Mar-15 A	06-Feb-15	20-Feb-15	-20	$3,474.28	
2-W.03.01	CMNU30501	Specification of experimental gas manifold; extra support - SIX	100%	1	25-Mar-15 A	26-Mar-15 A	05-May-15	18-May-15	38	$1,422.82	
2-W.03.01	CMNU30601	Design of experimental gas manifold; extra support - SIX	100%	2	25-Mar-15 A	26-Mar-15 A	05-May-15	18-May-15	37	$1,335.75	
2-W.03.01	CMNU30901	Specification of exhaust system; extra support - SIX	100%	5	08-Apr-15 A	14-Apr-15 A	05-May-15	11-May-15	19	$1,244.97	
2-W.03.01	CMNU31001	Create 3D layout; extra support - SIX	100%	10	01-Apr-15 A	14-Apr-15 A	05-Mar-15	18-Mar-15	-19	$2,003.92	
2-W.03.01	CMNU3101	Install EPS ethernet cables; extra support - ESM	100%	19	01-Jun-16 A	28-Jun-16 A	04-Jun-15	08-Jun-15	-265	$4,150.17	
2-W.03.01	CMNU34401	Ethernet interconnection diagram; extra support - SMI	100%	10	01-Mar-16 A	14-Mar-16 A	26-May-15	08-Jun-15	-191	$1,370.60	
2-W.03.01	CMNU34501	Review of electrical utilities design; extra support - SMI	100%	13	03-Feb-15 A	23-Feb-15 A	16-Mar-15	16-Mar-15	16	$806.14	
2-W.03.01	CMNU35001	Supervision of installation electricians; extra support - SMI	85%	362	02-Feb-15 A	08-Jul-16	02-Feb-15	27-Apr-15	-302	$2,116.13	93
2-W.03.01	CMNU35801	Install lighting circuits incl switches; extra support - SMI	100%	10	02-Feb-15 A	13-Feb-15 A	02-Feb-15	13-Feb-15	0	$2,947.73	
2-W.03.01	CMNU36301	Install PPS conduits only; extra support - SMI	100%	70	16-Jun-15 A	23-Sep-15 A	23-Jul-15	12-Aug-15	-29	$14,149.10	
2-W.03.01	CMNU36401	Install EPS ethernet cables; extra support - SMI	100%	197	25-Aug-15 A	07-Jun-16 A	22-Apr-15	28-Apr-15	-279	$4,150.17	
2-W.03.01	CMNU36701	Test campus network ethernet + telephone cables + outlets; extra support - SI	100%	19	07-Dec-15 A	04-Jan-16 A	06-Jul-15	06-Jul-15	-124	$679.12	
2-W.03.01	CMNU36801	Install controls network ethernet cables; extra support - SMI	100%	5	24-Sep-15 A	30-Sep-15 A	07-Jul-15	13-Jul-15	-56	$1,131.86	
2-W.03.01	CMNU37001	Test campus network ethernet cables + outlets; extra support - SMI	100%	1	05-Jan-16 A	05-Jan-16 A	14-May-15	14-May-15	-160	$2,263.73	
2-W.03.01	CMNU37501	Install water leak alarms; extra support - SMI	100%	27	23-Mar-16 A	29-Apr-16 A	03-Mar-15	06-Mar-15	-289	$679.12	
2-W.03.01	CMNU37801	Install PPS conduit and cables; extra support - SMI	100%	95	15-Jun-15 A	29-Oct-15 A	06-Jul-15	26-Aug-15	-43	$25,821.25	
2-W.03.01	CMNU38701	Final update of drawings (stick diagrams); extra support - SMI	100%	10	02-Feb-15 A	13-Feb-15 A	05-Mar-15	18-Mar-15	22	$2,259.96	
2-W.03.01	CMNU38901	Specification of experimental gas manifold; extra support - SMI	100%	0	25-May-15 A	26-May-15 A	05-May-15	18-May-15	-4	$746.98	
2-W.03.01	CMNU39001	Design of experimental gas manifold; extra support - SMI	100%	36	26-May-15 A	15-Jul-15 A	19-May-15	16-Jun-15	-20	$3,955.71	
2-W.03.01	CMNU39300	Specification of exhaust system; extra support (contract labor) - SMI	100%	60	01-Apr-16 A	27-Jun-16 A	01-Feb-16	05-Feb-16	-98	$958.85	
2-W.03.01	CMNU39301	Specification of exhaust system; extra support - SMI	100%	59	04-Apr-16 A	27-Jun-16 A	05-Mar-15	11-Mar-15	-326	$1,956.38	
2-W.03.01	CMNU39401	Create 3D layout; extra support - SMI	100%	10	02-Feb-15 A	13-Feb-15 A	05-Feb-15	19-Feb-15	3	$2,667.79	
2-W.03.01	CMNU5601	Specification of experimental gas manifold; extra support - ESM	100%	52	01-Apr-15 A	12-Jun-15 A	16-Mar-15	27-Mar-15	-54	$889.26	
2-W.03.01	CMNU5701	Design of experimental gas manifold; extra support - ESM	100%	61	15-Jun-15 A	09-Sep-15 A	15-May-15	29-May-15	-71	$5,274.28	
2-W.03.01	CMNU6101	Create 3D layout; extra support - ESM	100%	46	02-Feb-15 A	07-Apr-15 A	10-Mar-15	23-Mar-15	-11	$8,041.74	
2-W.03.01	CMNU9201	Ethernet interconnection diagram; extra support - ISR	100%	245	13-Jul-15 A	30-Jun-16 A	05-May-15	18-May-15	-282	$1,370.60	
Personnel Protection System (PPS)			69.03%	822	01-Oct-13 A	13-Jan-17	03-Jan-14	30-Sep-16	-70	$1,547,648.91	179
Top Level Milestones			0%	0	29-Dec-16	29-Dec-16	30-Sep-16	30-Sep-16	-60	$0.00	10



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

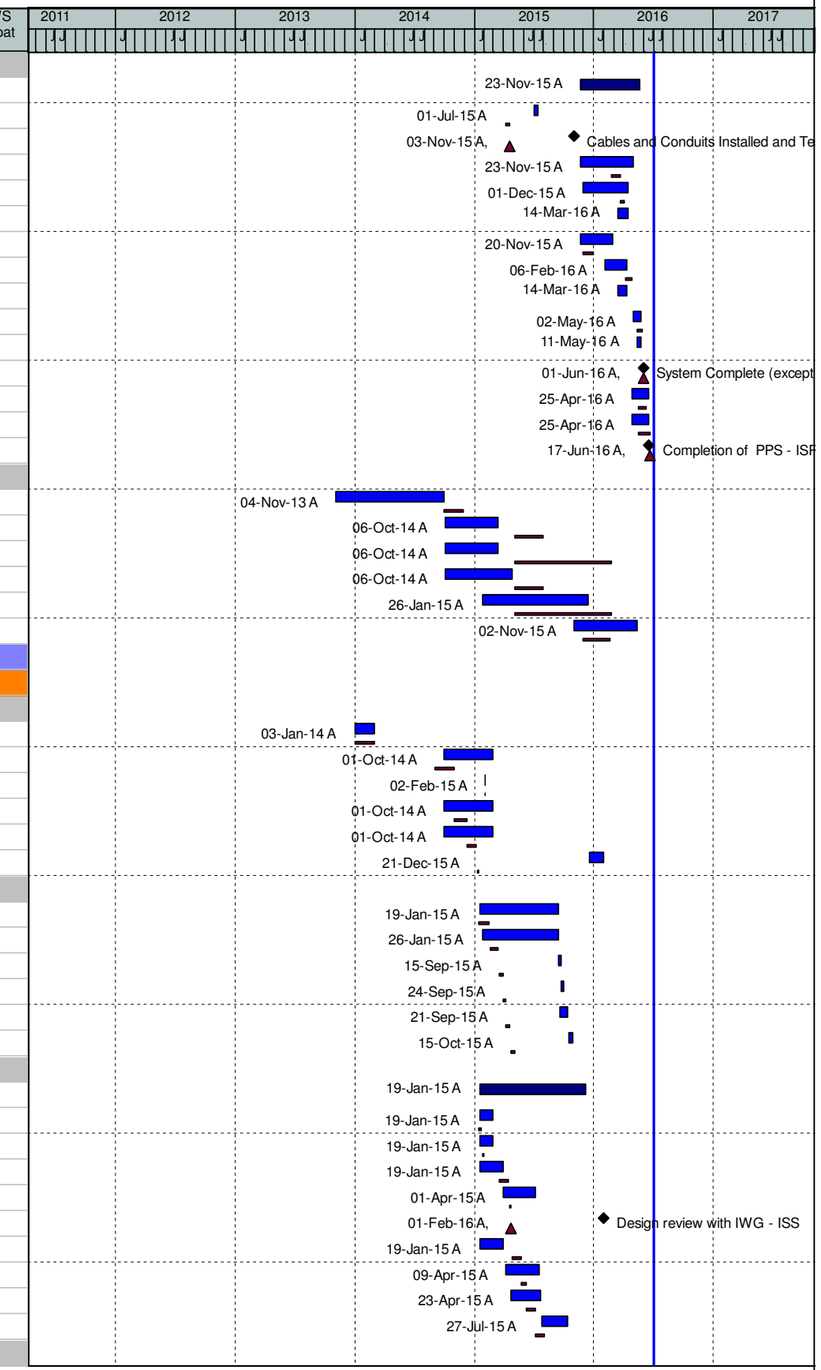
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.02	M2065	Complete Installation of Common Beamline Systems PPS	0%	0		29-Dec-16		30-Sep-16	-60	$0.00	10
2-W.03.02	M3010	Common Beamline Systems: PPS Installed	0%	0		29-Dec-16		30-Sep-16	-60	$0.00	10
Milestones			0%	29	15-Nov-16	29-Dec-16	10-Mar-15	30-Sep-16	-60	$0.00	10
2-W.03.02	MCM200	Complete: Common Beamline Systems PPS Design	0%	0		15-Nov-16		10-Mar-15	-426	$0.00	39
2-W.03.02	MCM260	Complete: Common Beamline Systems PPS Install	0%	0		29-Dec-16		30-Sep-16	-60	$0.00	10
CMN Common Beamline Systems Work Package			69.03%	822	01-Oct-13 A	13-Jan-17	03-Jan-14	22-Sep-16	-76	$1,547,648.91	179
ISR Common Systems			92.34%	728	04-Nov-13 A	29-Sep-16	03-Jan-14	29-Aug-16	-22	$316,956.96	71
ISR Personnel Protection System (PPS)			92.34%	728	04-Nov-13 A	29-Sep-16	03-Jan-14	29-Aug-16	-22	$316,956.96	71
ISR PPS Refine Requirements			100%	592	03-Jan-14 A	13-May-16 A	03-Jan-14	20-Jan-15	-332	$3,065.02	
2-W.03.02	CMPPS021	Update PPS diagram (PD staff) - ISR	100%	40	03-Jan-14 A	03-Mar-14 A	03-Jan-14	03-Mar-14	0	$630.82	
2-W.03.02	CMPPS0211	Update PPS diagram (PD staff) - ISR	100%	54	01-Oct-14 A	18-Dec-14 A	04-Sep-14	30-Oct-14	-33	$15.77	
2-W.03.02	CMPPS405	PPS Conduit Walk-Through - ISR	100%	0	19-Jan-15 A	20-Jan-15 A	20-Jan-15	20-Jan-15	1	$0.00	
2-W.03.02	CMPPS410	Update PPS diagram (PPS staff) - ISR	100%	79	01-Oct-14 A	28-Jan-15 A	31-Oct-14	08-Dec-14	-33	$503.84	
2-W.03.02	CMPPS420	Tabulate specifications - ISR	100%	99	01-Oct-14 A	26-Feb-15 A	09-Dec-14	08-Jan-15	-33	$1,612.29	
2-W.03.02	CMPPS430	Review specifications (by IWG) - ISR	100%	10	02-May-16 A	13-May-16 A	09-Jan-15	15-Jan-15	-334	$302.30	
ISR PPS Hardware Development			100%	354	16-Dec-14 A	13-May-16 A	16-Jan-15	08-Feb-16	-68	$7,219.70	
2-W.03.02	CMPPS500	Monitor Hardware Development - ISR	100%	280	16-Dec-14 A	01-Feb-16 A	16-Jan-15	08-Feb-16	6	$1,272.78	
2-W.03.02	CMPPS510	Decide on I/O panel size - ISR	100%	40	16-Dec-14 A	13-Feb-15 A	16-Jan-15	23-Jan-15	-15	$100.77	
2-W.03.02	CMPPS520	Decide on stack lamp or sign - ISR	100%	40	16-Dec-14 A	13-Feb-15 A	26-Jan-15	30-Jan-15	-10	$0.00	
2-W.03.02	CMPPS530	Preliminary I/O panel and HMI layout (design) - ISR	100%	69	16-Dec-14 A	27-Mar-15 A	02-Feb-15	02-Mar-15	-19	$554.39	
2-W.03.02	CMPPS540	Review Preliminary I/O panel and HMI layout - ISR	100%	1	30-Mar-15 A	31-Mar-15 A	03-Mar-15	09-Mar-15	-15	$302.30	
2-W.03.02	CMPPS550	Design review with IWG - ISR	100%	0		13-May-16 A		10-Mar-15	-298	$0.00	
2-W.03.02	CMPPS560	Procure prototype components - ISR	100%	49	19-Jan-15 A	31-Mar-15 A	11-Mar-15	07-Apr-15	6	$1,713.06	
2-W.03.02	CMPPS570	Finalize I/O panel and HMI layout - ISR	100%	1	30-Mar-15 A	31-Mar-15 A	08-Apr-15	21-Apr-15	16	$201.54	
2-W.03.02	CMPPS580	Prototype panel manufacture - ISR	100%	1	30-Mar-15 A	31-Mar-15 A	22-Apr-15	19-May-15	36	$555.66	
2-W.03.02	CMPPS590	Wire Control Cabinet - ISR	100%	165	03-Apr-15 A	30-Nov-15 A	20-May-15	17-Jun-15	-112	$2,519.20	
ISR PPS Electrical Design			100%	301	16-Jan-15 A	29-Mar-16 A	16-Jan-15	04-May-15	-226	$3,124.14	
2-W.03.02	CMPPS440	Generic electrical design - ISR	100%	20	16-Jan-15 A	13-Feb-15 A	16-Jan-15	13-Feb-15	0	$604.61	
2-W.03.02	CMPPS450	Generate schematic diagrams - ISR	100%	22	27-Jan-15 A	27-Feb-15 A	17-Feb-15	16-Mar-15	12	$554.39	
2-W.03.02	CMPPS460	Create cabling diagram inside hutch - ISR	100%	8	17-Feb-15 A	27-Feb-15 A	17-Mar-15	30-Mar-15	22	$554.39	
2-W.03.02	CMPPS470	Review and release cabling diagram - ISR	100%	48	01-Jun-15 A	06-Aug-15 A	31-Mar-15	06-Apr-15	-86	$302.30	
2-W.03.02	CMPPS480	Generate logic Block Diagram for system - ISR	100%	198	15-Jun-15 A	29-Mar-16 A	07-Apr-15	20-Apr-15	-236	$302.30	
2-W.03.02	CMPPS490	Create Specification for PPS interlock - ISR	100%	30	04-Jan-16 A	16-Feb-16 A	21-Apr-15	04-May-15	-196	$806.14	
ISR PPS Software Development			53.49%	453	11-Dec-14 A	29-Sep-16	11-Mar-15	29-Aug-16	-22	$52,190.84	71
2-W.03.02	CMPPS600	Monitor Software development - ISR	100%	347	11-Dec-14 A	29-Apr-16 A	11-Mar-15	26-Apr-16	-3	$1,919.52	
2-W.03.02	CMPPS610	Convert requirements into S/W specifications - ISR	100%	170	11-Dec-14 A	14-Aug-15 A	11-Mar-15	17-Mar-15	-106	$604.61	
2-W.03.02	CMPPS620	Coding of modules in safety PLC A CHAIN - ISR	100%	347	11-Dec-14 A	29-Apr-16 A	18-Mar-15	15-Mar-16	-33	$2,069.80	
2-W.03.02	CMPPS630	Coding of modules in safety PLC B CHAIN - ISR	100%	347	11-Dec-14 A	29-Apr-16 A	18-Mar-15	15-Mar-16	-33	$1,379.87	
2-W.03.02	CMPPS640	Coding of modules in industrial PLC - ISR	100%	73	18-Jan-16 A	29-Apr-16 A	18-Mar-15	07-Apr-15	-268	$2,720.74	
2-W.03.02	CMPPS645	Additional support for coding - ISR -	100%	114	16-Nov-15 A	29-Apr-16 A	01-Dec-15	15-Mar-16	-33	$7,643.45	
2-W.03.02	CMPPS6451	Additional support for coding - ISR - ETC	100%	34	15-Mar-16 A	29-Apr-16 A				$0.00	
2-W.03.02	CMPPS6452	Laser interlock - design and development - ISR	5%	25	01-Jun-16 A	06-Jul-16	01-Jun-16	03-Jun-16	-22	$6,239.55	71
2-W.03.02	CMPPS6453	Laser interlock - receiipt of components - ISR	0%	15	01-Jul-16	22-Jul-16	01-Jun-16	21-Jun-16	-22	$6,267.00	94
2-W.03.02	CMPPS6454	Laser interlock - hardware installation - ISR	0%	35	07-Jul-16	24-Aug-16	06-Jun-16	25-Jul-16	-22	$4,282.97	71
2-W.03.02	CMPPS6455	Laser interlock - testing - ISR	0%	25	25-Aug-16	29-Sep-16	26-Jul-16	29-Aug-16	-22	$7,796.99	71
2-W.03.02	CMPPS650	Test safety PLC code A - ISR	100%	41	15-Mar-16 A	10-May-16 A	08-Apr-15	29-Mar-16	-30	$4,094.95	
2-W.03.02	CMPPS6501	Test safety PLC code A - ISR - ETC	100%	41	15-Mar-16 A	10-May-16 A				$0.00	
2-W.03.02	CMPPS660	Test safety PLC code B - ISR	100%	28	01-Apr-16 A	10-May-16 A	08-Apr-15	29-Mar-16	-30	$4,094.95	
2-W.03.02	CMPPS6601	Test safety PLC code B - ISR - ETC	100%	28	01-Apr-16 A	10-May-16 A				$0.00	
2-W.03.02	CMPPS670	Test industrial PLC code - ISR	100%	11	26-Apr-16 A	10-May-16 A	08-Apr-15	29-Mar-16	-30	$2,047.47	
2-W.03.02	CMPPS680	Test of completed PLC - ISR	100%	11	26-Apr-16 A	10-May-16 A	18-Jun-15	26-Apr-16	-10	$1,028.98	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 - Page 22 of 95

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
ISR PPS Final Integration			100%	243	01-Jul-15 A	17-Jun-16 A	07-Apr-15	22-Jun-16	3	$170,374.36	
2-W.03.02	CMPPS690	Monitor Final Integration - ISR - Managment	100%	126	23-Nov-15 A	20-May-16 A	07-Apr-15	22-Jun-16	22	$1,745.66	
2-W.03.02	CMPPS710	Purchase cables and conduit for hutch - ISR	100%	10	01-Jul-15 A	15-Jul-15 A	07-Apr-15	20-Apr-15	-60	$100.77	
2-W.03.02	CMPPS720	Cables and Conduits Installed and Tested in Hutch - ISR	100%	0		03-Nov-15 A		20-Apr-15	-138	$0.00	
2-W.03.02	CMPPS730	Install H/W in BL hutches (buttons, HMI, etc) - ISR	100%	110	23-Nov-15 A	29-Apr-16 A	23-Feb-16	21-Mar-16	-28	$54,436.47	
2-W.03.02	CMPPS740	Connect interconnects and power - ISR	100%	94	01-Dec-15 A	14-Apr-16 A	22-Mar-16	04-Apr-16	-8	$3,893.61	
2-W.03.02	CMPPS7401	Connect interconnects and power - ISR - ETC	100%	24	14-Mar-16 A	14-Apr-16 A				$0.00	
2-W.03.02	CMPPS745	PPS related hutch rework - ISR -	100%	67	20-Nov-15 A	29-Feb-16 A	01-Dec-15	29-Dec-15	-41	$1,159.18	
2-W.03.02	CMPPS750	Integrate PLC and components - ISR	100%	45	06-Feb-16 A	11-Apr-16 A	07-Apr-16	26-Apr-16	11	$35,946.80	
2-W.03.02	CMPPS7501	Integrate PLC and components - ISR - ETC	100%	21	14-Mar-16 A	11-Apr-16 A				$0.00	
2-W.03.02	CMPPS760	Final system test (without beam) - ISR	100%	16	02-May-16 A	23-May-16 A	11-May-16	27-May-16	4	$28,063.31	
2-W.03.02	CMPPS7601	Final system test (without beam) - ISR - ETC	100%	9	11-May-16 A	23-May-16 A				$0.00	
2-W.03.02	CMPPS770	System Complete (except shutter) - ISR	100%	0		01-Jun-16 A		31-May-16	-1	$0.00	
2-W.03.02	CMPPS780	Complete documentation - ISR	100%	39	25-Apr-16 A	17-Jun-16 A	17-May-16	10-Jun-16	-5	$20,590.52	
2-W.03.02	CMPPS790	Completion of electrical design drawings - ISR	100%	39	25-Apr-16 A	17-Jun-16 A	17-May-16	22-Jun-16	3	$24,438.05	
2-W.03.02	CMPPS800	Completion of PPS - ISR	100%	0		17-Jun-16 A		22-Jun-16	2	$0.00	
ISR PPS Procurement			100%	632	04-Nov-13 A	13-May-16 A	01-Oct-14	22-Feb-16	-59	$80,982.90	
2-W.03.02	CMPPS2100	Proc/Fab Hutch Safety Equipment Hardware - ISR	100%	226	04-Nov-13 A	30-Sep-14 A	01-Oct-14	26-Nov-14	41	$51,438.10	
2-W.03.02	CMPPS2101	Proc/Fab Custom PLC case, drilled for connectors, lock fitted, mounting hardw	100%	107	06-Oct-14 A	13-Mar-15 A	05-May-15	29-Jul-15	96	$3,835.10	
2-W.03.02	CMPPS2102	Proc/Fab HMI panels (custom fabricated case) - ISR	100%	107	06-Oct-14 A	13-Mar-15 A	05-May-15	22-Feb-16	236	$5,990.83	
2-W.03.02	CMPPS2103	Proc/Fab Other cabling H/W interlocks to EPS, RS485, network connections e	100%	137	06-Oct-14 A	27-Apr-15 A	05-May-15	29-Jul-15	66	$1,784.80	
2-W.03.02	CMPPS2104	Fab Mounting Brackets and cases for sensors Ind. Machining - ISR	100%	224	26-Jan-15 A	15-Dec-15 A	05-May-15	22-Feb-16	46	$11,981.66	
2-W.03.02	CMPPS2105	Proc/Fab/Install ARM - ISR -	100%	134	02-Nov-15 A	13-May-16 A	01-Dec-15	18-Feb-16	-61	$5,952.41	
ISS Common Systems			100%	583	04-Nov-13 A	07-Mar-16 A	03-Jan-14	20-Jul-16	96	$265,427.70	
ISS Personnel Protection System (PPS)			100%	583	04-Nov-13 A	07-Mar-16 A	03-Jan-14	20-Jul-16	96	$265,427.70	
ISS PPS Refine Requirements			100%	519	03-Jan-14 A	01-Feb-16 A	03-Jan-14	02-Feb-15	-250	$3,065.02	
2-W.03.02	CMPPS041	Update PPS diagram (PD staff) - ISS	100%	40	03-Jan-14 A	03-Mar-14 A	03-Jan-14	03-Mar-14	0	$630.82	
2-W.03.02	CMPPS0411	Update PPS diagram (PD staff) - ISS	100%	100	01-Oct-14 A	27-Feb-15 A	04-Sep-14	30-Oct-14	-79	$15.77	
2-W.03.02	CMPPS805	PPS Conduit Walk-Through - ISS	100%	1	02-Feb-15 A	02-Feb-15 A	02-Feb-15	02-Feb-15	0	$0.00	
2-W.03.02	CMPPS810	Update PPS diagram (PPS staff) - ISS	100%	99	01-Oct-14 A	26-Feb-15 A	31-Oct-14	08-Dec-14	-53	$503.84	
2-W.03.02	CMPPS820	Tabulate specifications - ISS	100%	99	01-Oct-14 A	26-Feb-15 A	09-Dec-14	08-Jan-15	-33	$1,612.29	
2-W.03.02	CMPPS830	Review specifications (by IWG) - ISS	100%	28	21-Dec-15 A	01-Feb-16 A	09-Jan-15	15-Jan-15	-261	$302.30	
ISS PPS Electrical Design			100%	199	19-Jan-15 A	30-Oct-15 A	16-Jan-15	04-May-15	-125	$3,124.14	
2-W.03.02	CMPPS840	Generic electrical design - ISS	100%	166	19-Jan-15 A	14-Sep-15 A	16-Jan-15	13-Feb-15	-147	$604.61	
2-W.03.02	CMPPS850	Generate schematic diagrams - ISS	100%	162	26-Jan-15 A	14-Sep-15 A	17-Feb-15	16-Mar-15	-127	$554.39	
2-W.03.02	CMPPS860	Create cabling diagram inside hutch - ISS	100%	7	15-Sep-15 A	23-Sep-15 A	17-Mar-15	30-Mar-15	-124	$554.39	
2-W.03.02	CMPPS870	Review and release cabling diagram - ISS	100%	4	24-Sep-15 A	29-Sep-15 A	31-Mar-15	06-Apr-15	-123	$302.30	
2-W.03.02	CMPPS880	Generate logic Block Diagram for system - ISS	100%	17	21-Sep-15 A	14-Oct-15 A	07-Apr-15	20-Apr-15	-123	$302.30	
2-W.03.02	CMPPS890	Create Specification for PPS interlock - ISS	100%	12	15-Oct-15 A	30-Oct-15 A	21-Apr-15	04-May-15	-125	$806.14	
ISS PPS Hardware Development			100%	259	19-Jan-15 A	01-Feb-16 A	16-Jan-15	04-Aug-15	-121	$8,466.11	
2-W.03.02	CMPPS900	Monitor Hardware Development - ISS	100%	223	19-Jan-15 A	08-Dec-15 A	16-Jan-15	17-Jun-15	-118	$2,519.20	
2-W.03.02	CMPPS910	Decide on I/O panel size - ISS	100%	27	19-Jan-15 A	27-Feb-15 A	16-Jan-15	23-Jan-15	-23	$100.77	
2-W.03.02	CMPPS920	Decide on stack lamp or sign - ISS	100%	27	19-Jan-15 A	27-Feb-15 A	26-Jan-15	30-Jan-15	-18	$0.00	
2-W.03.02	CMPPS930	Preliminary I/O panel and HMI layout (design) - ISS	100%	49	19-Jan-15 A	31-Mar-15 A	20-Mar-15	16-Apr-15	13	$554.39	
2-W.03.02	CMPPS940	Review Search Routine - ISS	100%	69	01-Apr-15 A	08-Jul-15 A	17-Apr-15	23-Apr-15	-52	$302.30	
2-W.03.02	CMPPS950	Design review with IWG - ISS	100%	0		01-Feb-16 A		24-Apr-15	-191	$0.00	
2-W.03.02	CMPPS960	Procure prototype components - ISS	100%	49	19-Jan-15 A	31-Mar-15 A	27-Apr-15	22-May-15	39	$1,713.06	
2-W.03.02	CMPPS970	Finalize Control Cabinet layout - ISS	100%	69	09-Apr-15 A	17-Jul-15 A	26-May-15	08-Jun-15	-27	$201.54	
2-W.03.02	CMPPS980	Assemble Control Cabinet - ISS	100%	64	23-Apr-15 A	24-Jul-15 A	09-Jun-15	07-Jul-15	-12	$555.66	
2-W.03.02	CMPPS990	Wire Control Cabinet - ISS	100%	54	27-Jul-15 A	13-Oct-15 A	08-Jul-15	04-Aug-15	-47	$2,519.20	
ISS PPS Software Development			100%	232	26-Jan-15 A	28-Dec-15 A	11-Mar-15	31-Dec-15	4	$19,925.41	



(O) NEXT - Detail Schedule

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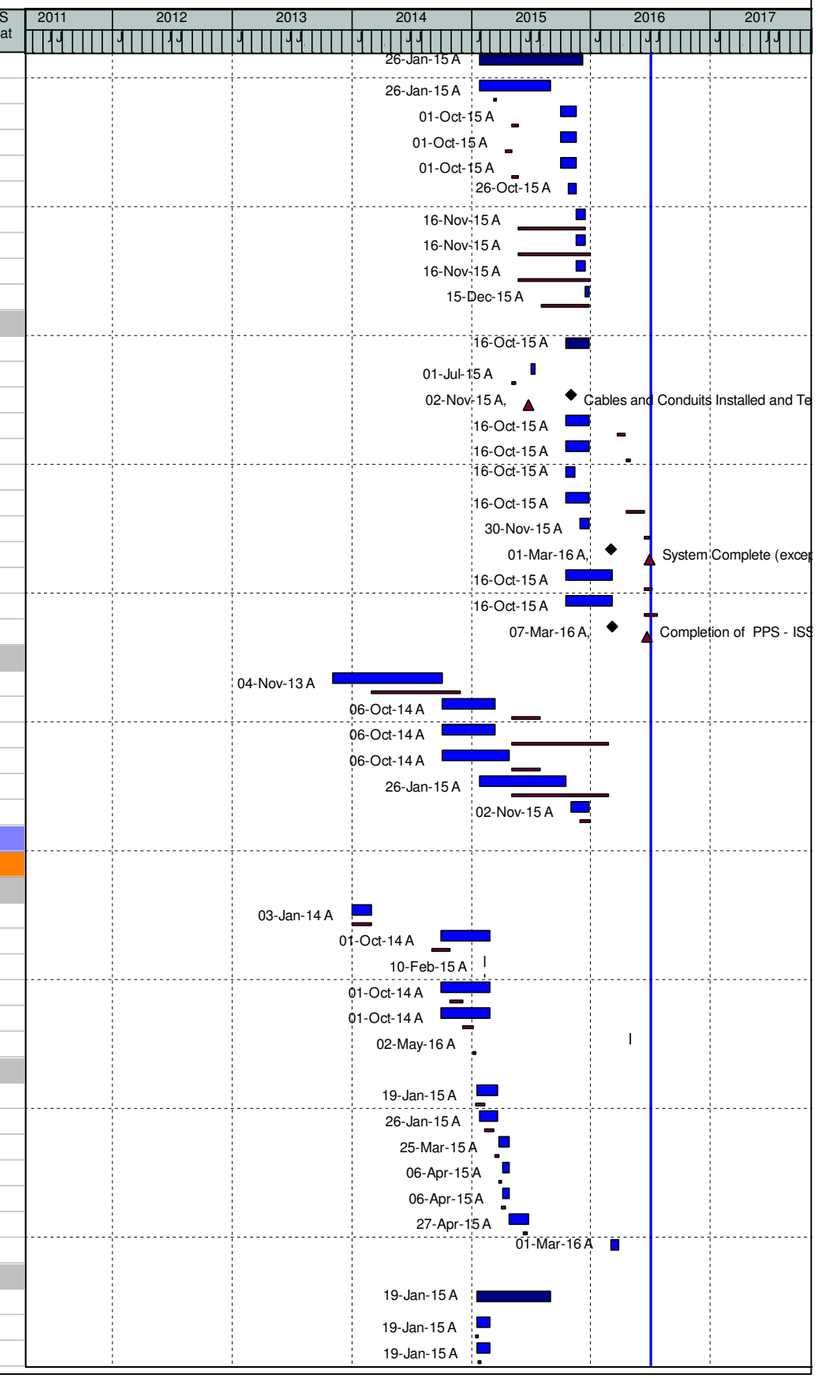
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.02	CMPPS1000	Monitor Software development - ISS	100%	219	26-Jan-15 A	08-Dec-15 A	11-Mar-15	23-Jul-15	-93	$2,519.20	
2-W.03.02	CMPPS1010	Convert requirements into S/W specifications - ISS	100%	152	26-Jan-15 A	31-Aug-15 A	11-Mar-15	17-Mar-15	-116	$604.61	
2-W.03.02	CMPPS1020	Coding of modules in safety PLC A CHAIN - ISS	100%	32	01-Oct-15 A	16-Nov-15 A	04-May-15	22-May-15	-122	$2,720.74	
2-W.03.02	CMPPS1030	Coding of modules in safety PLC B CHAIN - ISS	100%	32	01-Oct-15 A	16-Nov-15 A	14-Apr-15	04-May-15	-136	$2,720.74	
2-W.03.02	CMPPS1040	Coding of modules in industrial PLC - ISS	100%	32	01-Oct-15 A	16-Nov-15 A	04-May-15	22-May-15	-122	$2,720.74	
2-W.03.02	CMPPS1045	Additional support for coding - ISS - ETC	100%	16	26-Oct-15 A	16-Nov-15 A				$0.00	
2-W.03.02	CMPPS1050	Test safety PLC code A - ISS	100%	19	16-Nov-15 A	14-Dec-15 A	26-May-15	14-Dec-15	0	$3,032.70	
2-W.03.02	CMPPS1060	Test safety PLC code B - ISS	100%	19	16-Nov-15 A	14-Dec-15 A	26-May-15	31-Dec-15	12	$3,032.70	
2-W.03.02	CMPPS1070	Test industrial PLC code - ISS	100%	19	16-Nov-15 A	14-Dec-15 A	26-May-15	31-Dec-15	12	$1,546.95	
2-W.03.02	CMPPS1080	Test of completed PLC - ISS	100%	8	15-Dec-15 A	28-Dec-15 A	05-Aug-15	28-Dec-15	1	$1,027.04	
ISS PPS Final Integration			100%	170	01-Jul-15 A	07-Mar-16 A	04-May-15	20-Jul-16	96	$144,102.56	
2-W.03.02	CMPPS1090	Monitor Final Integration - ISS - Managment	100%	48	16-Oct-15 A	28-Dec-15 A	04-May-15	20-Jul-16	143	$1,749.40	
2-W.03.02	CMPPS1110	Purchase cables and conduit for hutch - ISS	100%	10	01-Jul-15 A	15-Jul-15 A	04-May-15	15-May-15	-41	$100.77	
2-W.03.02	CMPPS1120	Cables and Conduits Installed and Tested in Hutch - ISS	100%	0		02-Nov-15 A		26-Jun-15	-88	$0.00	
2-W.03.02	CMPPS1130	Install H/W in BL hutches (buttons, HMI, etc) - ISS	100%	48	16-Oct-15 A	28-Dec-15 A	21-Mar-16	15-Apr-16	77	$40,236.87	
2-W.03.02	CMPPS1140	Connect interconnects and power - ISS	100%	48	16-Oct-15 A	28-Dec-15 A	18-Apr-16	29-Apr-16	87	$3,893.61	
2-W.03.02	CMPPS1145	PPS related hutch rework - ISS - ETC	100%	20	16-Oct-15 A	12-Nov-15 A				$0.00	
2-W.03.02	CMPPS1150	Integrate PLC and components - ISS	100%	48	16-Oct-15 A	28-Dec-15 A	18-Apr-16	13-Jun-16	117	$26,599.69	
2-W.03.02	CMPPS1160	Final system test (without beam) - ISS (constrained due to shutdown)	100%	19	30-Nov-15 A	28-Dec-15 A	14-Jun-16	27-Jun-16	127	$26,493.65	
2-W.03.02	CMPPS1170	System Complete (except shutter) - ISS	100%	0		01-Mar-16 A		27-Jun-16	83	$0.00	
2-W.03.02	CMPPS1180	Complete documentation - ISS	100%	96	16-Oct-15 A	07-Mar-16 A	14-Jun-16	08-Jul-16	88	$20,590.52	
2-W.03.02	CMPPS1190	Completion of electrical design drawings - ISS	100%	96	16-Oct-15 A	07-Mar-16 A	14-Jun-16	20-Jul-16	96	$24,438.05	
2-W.03.02	CMPPS1200	Completion of PPS - ISS	100%	0		07-Mar-16 A		22-Jun-16	77	$0.00	
ISS PPS Procurement			100%	535	04-Nov-13 A	28-Dec-15 A	03-Mar-14	22-Feb-16	38	$86,744.47	
2-W.03.02	CMPPS2200	Proc/Fab Hutch Safety Equipment Hardware - ISS	100%	229	04-Nov-13 A	03-Oct-14 A	03-Mar-14	26-Nov-14	38	$57,361.93	
2-W.03.02	CMPPS2201	Proc/Fab Custom PLC case, drilled for connectors, lock fitted, mounting hardw	100%	107	06-Oct-14 A	13-Mar-15 A	05-May-15	29-Jul-15	96	$3,687.59	
2-W.03.02	CMPPS2202	Proc/Fab HMI panels (custom fabricated case) - ISS	100%	107	06-Oct-14 A	13-Mar-15 A	05-May-15	22-Feb-16	236	$5,990.83	
2-W.03.02	CMPPS2203	Proc/Fab Other cabling H/W interlocks to EPS, RS485, network connections e	100%	137	06-Oct-14 A	27-Apr-15 A	05-May-15	29-Jul-15	66	$1,770.04	
2-W.03.02	CMPPS2204	Fab Mounting Brackets and cases for sensors Ind. Machining - ISS	100%	184	26-Jan-15 A	15-Oct-15 A	05-May-15	22-Feb-16	86	$11,981.66	
2-W.03.02	CMPPS2205	Proc/Fab/Install ARM - ISS -	100%	37	02-Nov-15 A	28-Dec-15 A	01-Dec-15	29-Dec-15	2	$5,952.41	
ESM Common Systems			100%	679	01-Oct-13 A	17-Jun-16 A	03-Jan-14	09-Aug-16	36	$266,350.61	
ESM Personnel Protection System (PPS)			100%	679	01-Oct-13 A	17-Jun-16 A	03-Jan-14	09-Aug-16	36	$266,350.61	
ESM PPS Refine Requirements			100%	583	03-Jan-14 A	02-May-16 A	03-Jan-14	10-Feb-15	-308	$3,064.99	
2-W.03.02	CMPPS001	Update PPS diagram (PD staff) - ESM	100%	40	03-Jan-14 A	03-Mar-14 A	03-Jan-14	03-Mar-14	0	$630.82	
2-W.03.02	CMPPS0011	Update PPS diagram (PD staff) - ESM	100%	100	01-Oct-14 A	27-Feb-15 A	02-Sep-14	28-Oct-14	-81	$15.75	
2-W.03.02	CMPPS005	PPS Conduit Walk-Through - ESM	100%	1	10-Feb-15 A	10-Feb-15 A	10-Feb-15	10-Feb-15	0	$0.00	
2-W.03.02	CMPPS010	Update PPS diagram (PPS staff) - ESM	100%	99	01-Oct-14 A	26-Feb-15 A	29-Oct-14	04-Dec-14	-55	$503.84	
2-W.03.02	CMPPS020	Tabulate specifications - ESM	100%	99	01-Oct-14 A	26-Feb-15 A	05-Dec-14	06-Jan-15	-35	$1,612.29	
2-W.03.02	CMPPS030	Review specifications (by IWG) - ESM (2 weeks from end date)	100%	1	02-May-16 A	02-May-16 A	07-Jan-15	13-Jan-15	-327	$302.30	
ESM PPS Electrical Design			100%	297	19-Jan-15 A	25-Mar-16 A	14-Jan-15	19-Jun-15	-190	$3,124.14	
2-W.03.02	CMPPS040	Generic electrical design - ESM	100%	44	19-Jan-15 A	24-Mar-15 A	14-Jan-15	11-Feb-15	-27	$604.61	
2-W.03.02	CMPPS050	Generate schematic diagrams - ESM	100%	40	26-Jan-15 A	24-Mar-15 A	12-Feb-15	12-Mar-15	-7	$554.39	
2-W.03.02	CMPPS060	Create cabling diagram inside hutch - ESM	100%	25	25-Mar-15 A	29-Apr-15 A	13-Mar-15	26-Mar-15	-23	$554.39	
2-W.03.02	CMPPS070	Review and release cabling diagram - ESM	100%	17	06-Apr-15 A	29-Apr-15 A	27-Mar-15	02-Apr-15	-18	$302.30	
2-W.03.02	CMPPS080	Generate logic Block Diagram for system - ESM	100%	17	06-Apr-15 A	29-Apr-15 A	03-Apr-15	16-Apr-15	-8	$302.30	
2-W.03.02	CMPPS090	Create Specification for PPS interlock - ESM	100%	41	27-Apr-15 A	24-Jun-15 A	08-Jun-15	19-Jun-15	-2	$806.14	
2-W.03.02	CMPPS095	Rework for second photon shutter - ESM - ETC	100%	18	01-Mar-16 A	25-Mar-16 A				$0.00	
ESM PPS Hardware Development			100%	324	19-Jan-15 A	02-May-16 A	14-Jan-15	04-Aug-15	-186	$8,466.11	
2-W.03.02	CMPPS100	Monitor Hardware Development - ESM	100%	156	19-Jan-15 A	31-Aug-15 A	14-Jan-15	15-Jun-15	-53	$2,519.20	
2-W.03.02	CMPPS110	Decide on I/O panel size - ESM	100%	27	19-Jan-15 A	27-Feb-15 A	14-Jan-15	21-Jan-15	-25	$100.77	
2-W.03.02	CMPPS120	Decide on stack lamp or sign - ESM	100%	27	19-Jan-15 A	27-Feb-15 A	22-Jan-15	28-Jan-15	-20	$0.00	



(O) NEXT - Detail Schedule

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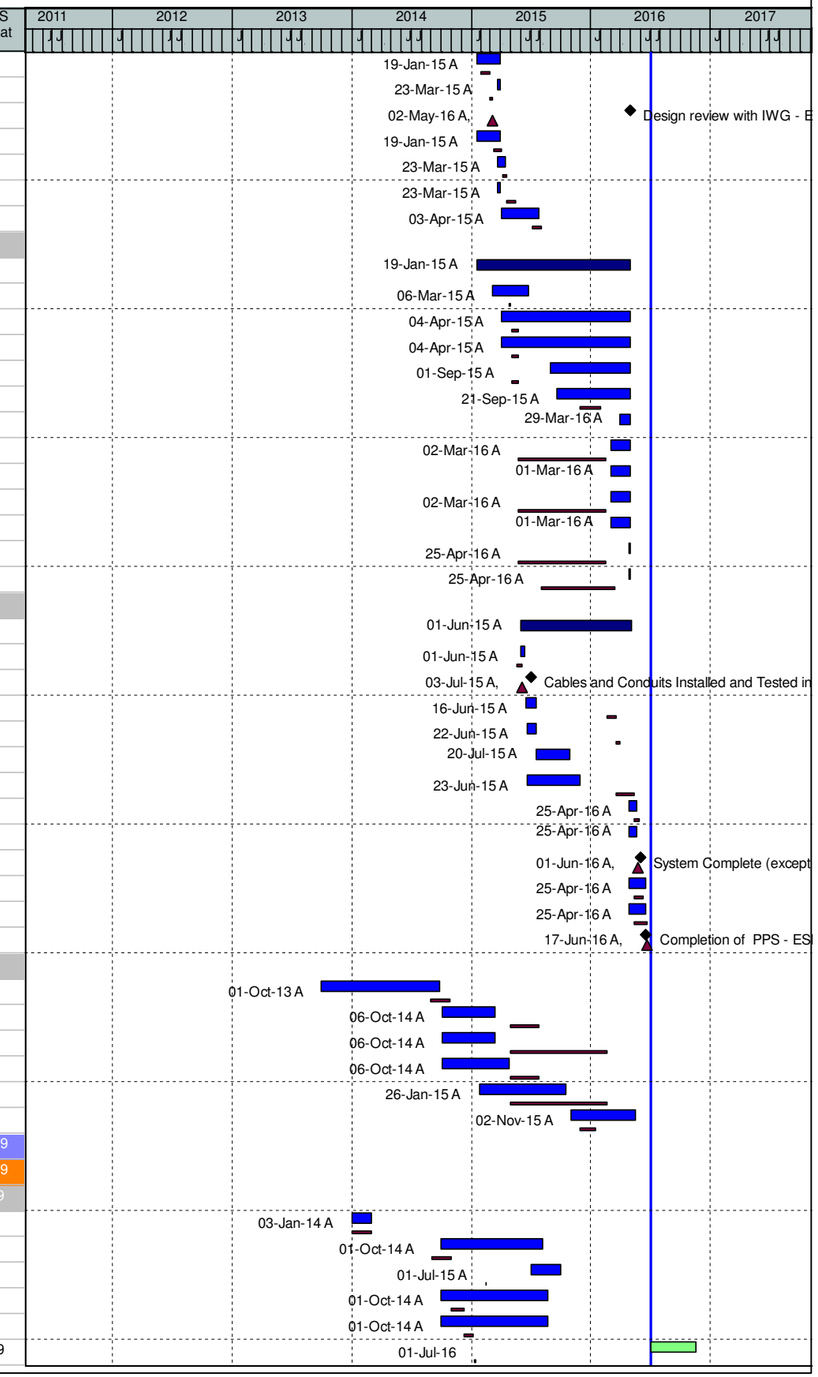
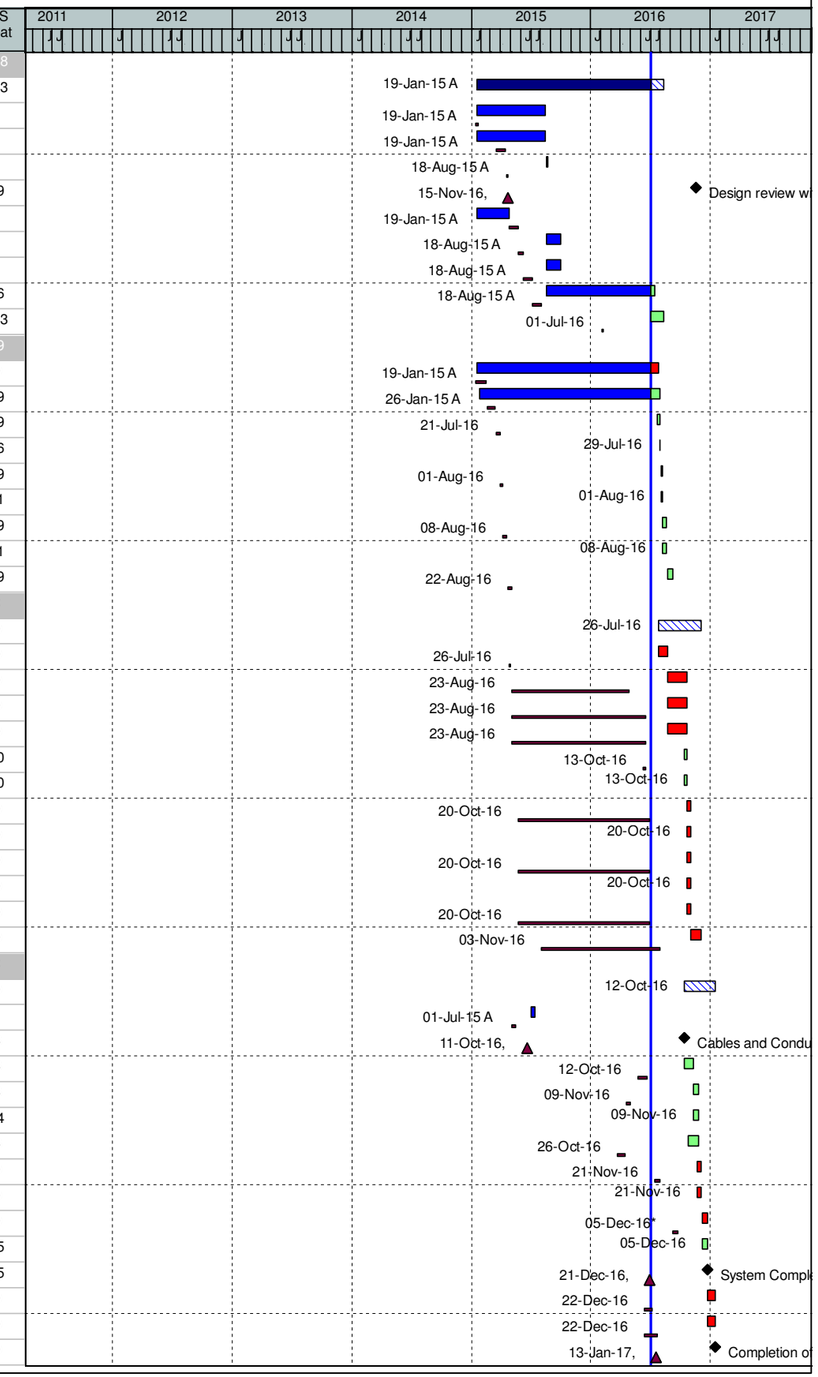
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.02	CMPPS130	Preliminary I/O panel and HMI layout (design) - ESM	100%	49	19-Jan-15 A	30-Mar-15 A	29-Jan-15	26-Feb-15	-22	$554.39	
2-W.03.02	CMPPS140	Review Preliminary I/O panel and HMI layout - ESM	100%	6	23-Mar-15 A	31-Mar-15 A	27-Feb-15	05-Mar-15	-17	$302.30	
2-W.03.02	CMPPS150	Design review with IWG - ESM	100%	0		02-May-16 A		06-Mar-15	-291	$0.00	
2-W.03.02	CMPPS160	Procure prototype components - ESM	100%	49	19-Jan-15 A	30-Mar-15 A	09-Mar-15	03-Apr-15	4	$1,713.06	
2-W.03.02	CMPPS170	Finalize I/O panel and HMI layout - ESM	100%	17	23-Mar-15 A	14-Apr-15 A	06-Apr-15	17-Apr-15	3	$201.54	
2-W.03.02	CMPPS180	Prototype panel manufacture - ESM	100%	6	23-Mar-15 A	30-Mar-15 A	20-Apr-15	15-May-15	34	$555.66	
2-W.03.02	CMPPS190	Wire Control Cabinet - ESM	100%	80	03-Apr-15 A	28-Jul-15 A	08-Jul-15	04-Aug-15	6	$2,519.20	
ESM PPS Software Development			100%	323	19-Jan-15 A	29-Apr-16 A	27-Apr-15	15-Mar-16	-33	$27,652.91	
2-W.03.02	CMPPS200	Monitor Software development - ESM	100%	323	19-Jan-15 A	29-Apr-16 A	27-Apr-15	09-Sep-15	-160	$2,519.20	
2-W.03.02	CMPPS210	Convert requirements into S/W specifications - ESM	100%	77	06-Mar-15 A	24-Jun-15 A	27-Apr-15	01-May-15	-36	$604.61	
2-W.03.02	CMPPS220	Coding of modules in safety PLC A CHAIN - ESM	100%	270	04-Apr-15 A	29-Apr-16 A	04-May-15	22-May-15	-235	$2,720.74	
2-W.03.02	CMPPS230	Coding of modules in safety PLC B CHAIN - ESM	100%	270	04-Apr-15 A	29-Apr-16 A	04-May-15	22-May-15	-235	$2,720.74	
2-W.03.02	CMPPS240	Coding of modules in industrial PLC - ESM	100%	166	01-Sep-15 A	29-Apr-16 A	04-May-15	22-May-15	-235	$2,720.74	
2-W.03.02	CMPPS245	Additional support for coding - ESM -	100%	153	21-Sep-15 A	29-Apr-16 A	01-Dec-15	01-Feb-16	-63	$5,095.67	
2-W.03.02	CMPPS2451	Additional support for coding - ESM - ETC	100%	24	29-Mar-16 A	29-Apr-16 A				$0.00	
2-W.03.02	CMPPS250	Test safety PLC code A - ESM	100%	43	02-Mar-16 A	29-Apr-16 A	26-May-15	16-Feb-16	-53	$4,095.92	
2-W.03.02	CMPPS2501	Test safety PLC code A - ESM - ETC	100%	44	01-Mar-16 A	29-Apr-16 A				$0.00	
2-W.03.02	CMPPS260	Test safety PLC code B - ESM	100%	43	02-Mar-16 A	29-Apr-16 A	26-May-15	16-Feb-16	-53	$4,095.92	
2-W.03.02	CMPPS2601	Test safety PLC code B - ESM - ETC	100%	44	01-Mar-16 A	29-Apr-16 A				$0.00	
2-W.03.02	CMPPS270	Test industrial PLC code - ESM	100%	5	25-Apr-16 A	29-Apr-16 A	26-May-15	16-Feb-16	-53	$2,047.96	
2-W.03.02	CMPPS280	Test of completed PLC - ESM	100%	5	25-Apr-16 A	29-Apr-16 A	05-Aug-15	15-Mar-16	-33	$1,031.44	
ESM PPS Final Integration			100%	265	01-Jun-15 A	17-Jun-16 A	22-May-15	09-Aug-16	36	$144,104.72	
2-W.03.02	CMPPS290	Monitor Final Integration - ESM - Managment	100%	236	01-Jun-15 A	06-May-16 A	22-May-15	09-Aug-16	65	$1,751.57	
2-W.03.02	CMPPS310	Purchase cables and conduit for hutch - ESM	100%	10	01-Jun-15 A	12-Jun-15 A	22-May-15	05-Jun-15	-5	$100.77	
2-W.03.02	CMPPS320	Cables and Conduits Installed and Tested in Hutch - ESM	100%	0		03-Jul-15 A		05-Jun-15	-20	$0.00	
2-W.03.02	CMPPS330	Install H/W in BL hutches (buttons, HMI, etc) - ESM	100%	22	16-Jun-15 A	17-Jul-15 A	19-Feb-16	17-Mar-16	167	$40,236.87	
2-W.03.02	CMPPS340	Connect interconnects and power - ESM	100%	18	22-Jun-15 A	17-Jul-15 A	18-Mar-16	31-Mar-16	177	$3,893.61	
2-W.03.02	CMPPS345	PPS related hutch rework - ESM - ETC	100%	73	20-Jul-15 A	30-Oct-15 A				$0.00	
2-W.03.02	CMPPS350	Integrate PLC and components - ESM	100%	109	23-Jun-15 A	30-Nov-15 A	18-Mar-16	12-May-16	115	$26,599.69	
2-W.03.02	CMPPS360	Final system test (without beam) - ESM (constrained due to shutdown)	100%	18	25-Apr-16 A	18-May-16 A	13-May-16	26-May-16	6	$26,493.65	
2-W.03.02	CMPPS3601	Final system test (without beam) - ESM - ETC	100%	18	25-Apr-16 A	18-May-16 A				$0.00	
2-W.03.02	CMPPS370	System Complete (except shutter) - ESM	100%	0		01-Jun-16 A		26-May-16	-3	$0.00	
2-W.03.02	CMPPS380	Complete documentation - ESM	100%	39	25-Apr-16 A	17-Jun-16 A	13-May-16	08-Jun-16	-7	$20,590.52	
2-W.03.02	CMPPS390	Completion of electrical as build drawings - ESM	100%	39	25-Apr-16 A	17-Jun-16 A	13-May-16	20-Jun-16	1	$24,438.05	
2-W.03.02	CMPPS400	Completion of PPS - ESM	100%	0		17-Jun-16 A		20-Jun-16	1	$0.00	
ESM PPS Procurement			100%	656	01-Oct-13 A	16-May-16 A	29-Aug-14	18-Feb-16	-62	$79,937.74	
2-W.03.02	CMPPS2000	Proc/Fab Hutch Safety Equipment Hardware - ESM	100%	247	01-Oct-13 A	26-Sep-14 A	29-Aug-14	27-Oct-14	21	$50,560.87	
2-W.03.02	CMPPS2001	Proc/Fab Custom PLC case, drilled for connectors, lock fitted, mounting hardw	100%	107	06-Oct-14 A	13-Mar-15 A	01-May-15	27-Jul-15	94	$3,687.59	
2-W.03.02	CMPPS2002	Proc/Fab HMI panels (custom fabricated case) - ESM	100%	107	06-Oct-14 A	13-Mar-15 A	01-May-15	18-Feb-16	234	$5,988.94	
2-W.03.02	CMPPS2003	Proc/Fab Other cabling H/W interlocks to EPS, RS485, network connections e	100%	137	06-Oct-14 A	27-Apr-15 A	01-May-15	27-Jul-15	64	$1,770.04	
2-W.03.02	CMPPS2004	Fab Mounting Brackets and cases for sensors Ind. Machining - ESM	100%	184	26-Jan-15 A	15-Oct-15 A	01-May-15	18-Feb-16	84	$11,977.89	
2-W.03.02	CMPPS2005	Proc/Fab/Install ARM - ESM (make other links) -	100%	135	02-Nov-15 A	16-May-16 A	01-Dec-15	15-Jan-16	-84	$5,952.41	
SIX Common Systems			25.95%	799	04-Nov-13 A	13-Jan-17	03-Jan-14	22-Sep-16	-76	$326,716.32	179
SIX Personnel Protection System (PPS)			25.95%	799	04-Nov-13 A	13-Jan-17	03-Jan-14	22-Sep-16	-76	$326,716.32	179
SIX PPS Refine Requirements			90.14%	720	03-Jan-14 A	15-Nov-16	03-Jan-14	13-Feb-15	-442	$3,065.02	39
2-W.03.02	CMPPS051	Update PPS diagram (PD staff) - SIX	100%	40	03-Jan-14 A	03-Mar-14 A	03-Jan-14	03-Mar-14	0	$630.82	
2-W.03.02	CMPPS0511	Update PPS diagram (PD staff) - SIX	100%	212	01-Oct-14 A	06-Aug-15 A	04-Sep-14	30-Oct-14	-191	$15.77	
2-W.03.02	CMPPS1415	PPS Conduit Walk-Through - SIX	100%	63	01-Jul-15 A	29-Sep-15 A	13-Feb-15	13-Feb-15	-158	$0.00	
2-W.03.02	CMPPS1420	Update PPS diagram (PPS staff) - SIX	100%	224	01-Oct-14 A	24-Aug-15 A	31-Oct-14	08-Dec-14	-178	$503.84	
2-W.03.02	CMPPS1430	Tabulate specifications - SIX	100%	224	01-Oct-14 A	24-Aug-15 A	09-Dec-14	08-Jan-15	-158	$1,612.29	
2-W.03.02	CMPPS1440	Review specifications (by IWG) - SIX	0%	95	01-Jul-16	15-Nov-16	09-Jan-15	15-Jan-15	-462	$302.30	39



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

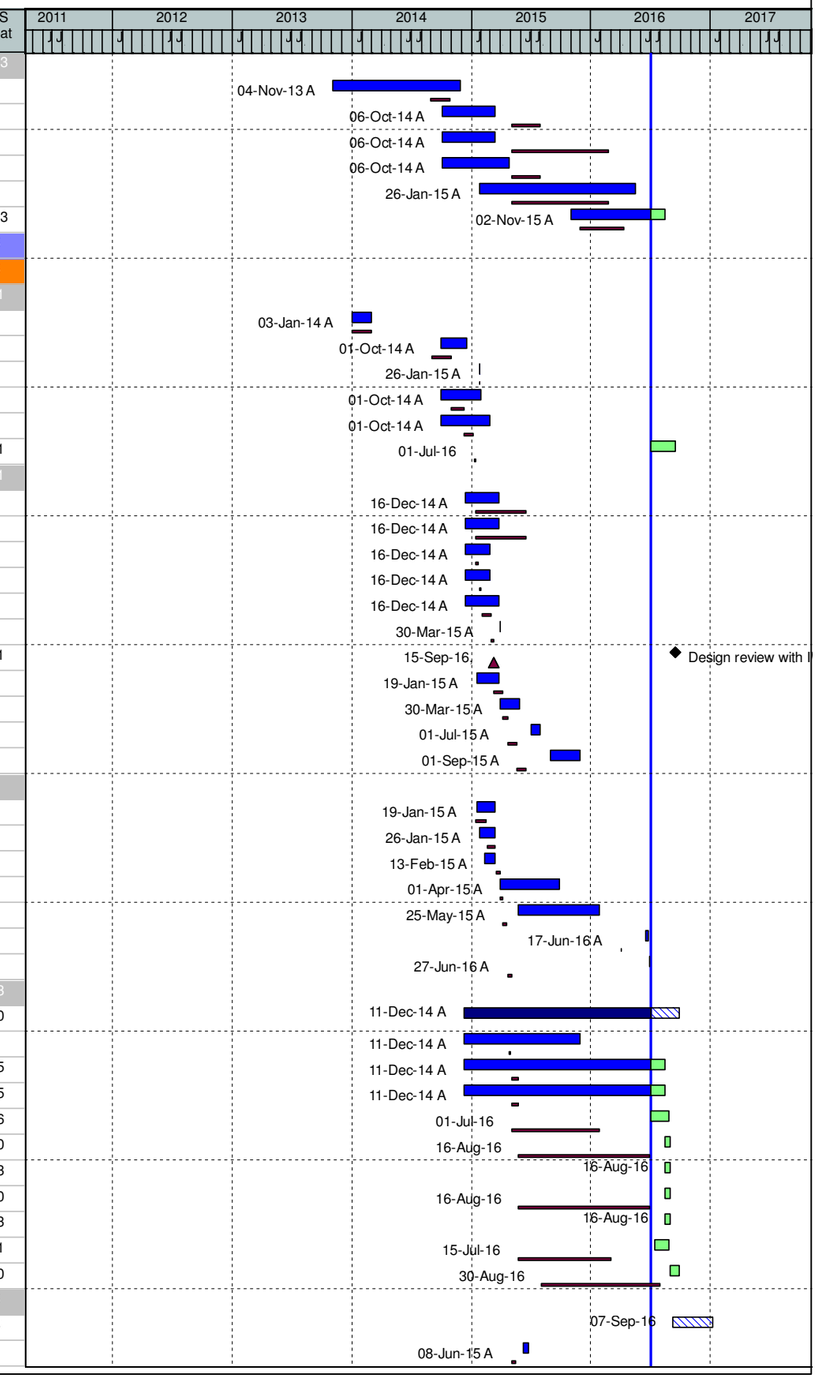
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
SIX PPS Hardware Development			33.52%	461	19-Jan-15 A	15-Nov-16	16-Jan-15	08-Feb-16	-196	$15,485.61	218
2-W.03.02	CMPPS1510	Monitor Hardware Development - SIX	20%	396	19-Jan-15 A	12-Aug-16	16-Jan-15	17-Jun-15	-291	$2,519.20	283
2-W.03.02	CMPPS1520	Determine Control Cabinet Location - SIX	100%	146	19-Jan-15 A	17-Aug-15 A	16-Jan-15	23-Jan-15	-142	$100.77	
2-W.03.02	CMPPS1540	Determine Search Routine - SIX	100%	146	19-Jan-15 A	17-Aug-15 A	20-Mar-15	16-Apr-15	-84	$554.39	
2-W.03.02	CMPPS1550	Review Search Routine - SIX	100%	5	18-Aug-15 A	25-Aug-15 A	17-Apr-15	23-Apr-15	-85	$302.30	
2-W.03.02	CMPPS1560	Design review with IWG - SIX	0%	0		15-Nov-16		24-Apr-15	-393	$0.00	39
2-W.03.02	CMPPS1570	Procure prototype components - SIX	100%	70	19-Jan-15 A	29-Apr-15 A	27-Apr-15	22-May-15	18	$1,713.06	
2-W.03.02	CMPPS1580	Finalize Control Cabinet layout - SIX	100%	30	18-Aug-15 A	29-Sep-15 A	26-May-15	08-Jun-15	-79	$201.54	
2-W.03.02	CMPPS1590	Assemble Control Cabinet - SIX	100%	30	18-Aug-15 A	29-Sep-15 A	09-Jun-15	07-Jul-15	-59	$555.66	
2-W.03.02	CMPPS1600	Wire Control Cabinet - SIX	50%	229	18-Aug-15 A	15-Jul-16	08-Jul-15	04-Aug-15	-238	$2,519.20	66
2-W.03.02	CMPPS1601	Wire Control Cabinet (extra support) - SIX	0%	30	01-Jul-16	12-Aug-16	02-Feb-16	08-Feb-16	-131	$7,019.49	283
SIX PPS Electrical Design			11.13%	413	19-Jan-15 A	07-Sep-16	16-Jan-15	04-May-15	-339	$3,124.14	39
2-W.03.02	CMPPS1450	Generic electrical design - SIX	30%	382	19-Jan-15 A	25-Jul-16	16-Jan-15	13-Feb-15	-363	$604.61	0
2-W.03.02	CMPPS1460	Generate schematic diagrams - SIX	30%	382	26-Jan-15 A	29-Jul-16	17-Feb-15	16-Mar-15	-347	$554.39	39
2-W.03.02	CMPPS1470	Create cabling diagram inside hutch - SIX	0%	7	21-Jul-16	29-Jul-16	17-Mar-15	30-Mar-15	-337	$554.39	39
2-W.03.02	CMPPS14701	Create cabling diagram inside hutch - SIX - ETC	0%	1	29-Jul-16	29-Jul-16				$0.00	66
2-W.03.02	CMPPS1480	Review and release cabling diagram - SIX	0%	5	01-Aug-16	05-Aug-16	31-Mar-15	06-Apr-15	-337	$302.30	39
2-W.03.02	CMPPS14801	Review and release cabling diagram - SIX - ETC	0%	5	01-Aug-16	05-Aug-16				$0.00	61
2-W.03.02	CMPPS1490	Generate logic Block Diagram for system - SIX	0%	10	08-Aug-16	19-Aug-16	07-Apr-15	20-Apr-15	-337	$302.30	39
2-W.03.02	CMPPS14901	Generate logic Block Diagram for system - SIX - ETC	0%	10	08-Aug-16	19-Aug-16				$0.00	51
2-W.03.02	CMPPS1500	Create Specification for PPS interlock - SIX	0%	12	22-Aug-16	07-Sep-16	21-Apr-15	04-May-15	-339	$806.14	39
SIX PPS Software Development			0%	90	26-Jul-16	02-Dec-16	27-Apr-15	29-Jul-16	-86	$47,512.71	0
2-W.03.02	CMPPS1210	Monitor Software development - SIX	0%	90	26-Jul-16	02-Dec-16	27-Apr-15	29-Jul-16	-86	$8,744.55	0
2-W.03.02	CMPPS1220	Convert requirements into S/W specifications - SIX	0%	20	26-Jul-16	22-Aug-16	27-Apr-15	01-May-15	-329	$604.61	0
2-W.03.02	CMPPS1230	Coding of modules in safety PLC A CHAIN - SIX	0%	40	23-Aug-16	19-Oct-16	04-May-15	26-Apr-16	-122	$5,541.57	0
2-W.03.02	CMPPS1240	Coding of modules in safety PLC B CHAIN - SIX	0%	40	23-Aug-16	19-Oct-16	04-May-15	15-Jun-16	-87	$5,550.76	0
2-W.03.02	CMPPS1250	Coding of modules in industrial PLC - SIX	0%	40	23-Aug-16	19-Oct-16	04-May-15	15-Jun-16	-87	$5,550.76	0
2-W.03.02	CMPPS1255	Additional support for coding - SIX	0%	5	13-Oct-16	19-Oct-16	09-Jun-16	15-Jun-16	-87	$10,191.27	10
2-W.03.02	CMPPS12551	Additional support for coding - SIX - ETC	0%	5	13-Oct-16	19-Oct-16				$0.00	10
2-W.03.02	CMPPS1260	Test safety PLC code A - SIX	0%	10	20-Oct-16	02-Nov-16	26-May-15	29-Jun-16	-87	$4,117.79	0
2-W.03.02	CMPPS12601	Test safety PLC code A - SIX - ETC	0%	10	20-Oct-16	02-Nov-16				$0.00	0
2-W.03.02	CMPPS1270	Test safety PLC code B - SIX	0%	10	20-Oct-16	02-Nov-16	26-May-15	29-Jun-16	-87	$4,117.79	0
2-W.03.02	CMPPS12701	Test safety PLC code B - SIX - ETC	0%	10	20-Oct-16	02-Nov-16				$0.00	0
2-W.03.02	CMPPS1280	Test industrial PLC code - SIX	0%	10	20-Oct-16	02-Nov-16	26-May-15	29-Jun-16	-87	$2,058.90	0
2-W.03.02	CMPPS1290	Test of completed PLC - SIX	0%	20	03-Nov-16	02-Dec-16	05-Aug-15	28-Jul-16	-87	$1,034.70	0
SIX PPS Final Integration			0.06%	386	01-Jul-15 A	13-Jan-17	04-May-15	22-Sep-16	-76	$177,585.45	0
2-W.03.02	CMPPS1300	Monitor Final Integration - SIX - Management	0%	64	12-Oct-16	13-Jan-17	04-May-15	20-Jul-16	-121	$1,749.06	0
2-W.03.02	CMPPS1320	Purchase cables and conduit for hutch - SIX	100%	10	01-Jul-15 A	15-Jul-15 A	04-May-15	15-May-15	-41	$100.77	
2-W.03.02	CMPPS1330	Cables and Conduits Installed and Tested in Hutch - SIX	0%	0		11-Oct-16		22-Jun-15	-329	$0.00	6
2-W.03.02	CMPPS1340	Install H/W in BL hutches (buttons, HMI, etc) - SIX	0%	20	12-Oct-16	08-Nov-16	23-May-16	20-Jun-16	-98	$60,484.97	6
2-W.03.02	CMPPS1350	Connect interconnects and power - SIX	0%	10	09-Nov-16	24-Nov-16	18-Apr-16	29-Apr-16	-143	$3,893.61	6
2-W.03.02	CMPPS13501	Connect interconnects and power - SIX - ETC	0%	10	09-Nov-16	24-Nov-16				$0.00	34
2-W.03.02	CMPPS1355	PPS related hutch rework - SIX	0%	20	26-Oct-16	24-Nov-16	21-Mar-16	15-Apr-16	-153	$2,318.37	6
2-W.03.02	CMPPS1360	Integrate PLC and components - SIX	0%	10	21-Nov-16	02-Dec-16	15-Jul-16	28-Jul-16	-87	$35,946.80	0
2-W.03.02	CMPPS13601	Integrate PLC and components - SIX - ETC	0%	10	21-Nov-16	02-Dec-16				$0.00	0
2-W.03.02	CMPPS1370	Final system test (without beam) - SIX (constrained due to shutdown)	0%	13	05-Dec-16*	21-Dec-16	06-Sep-16	22-Sep-16	-61	$28,063.31	0
2-W.03.02	CMPPS13701	Final system test (without beam) - SIX - ETC	0%	13	05-Dec-16	21-Dec-16				$0.00	15
2-W.03.02	CMPPS1380	System Complete (except shutter) - SIX	0%	0		21-Dec-16		27-Jun-16	-123	$0.00	15
2-W.03.02	CMPPS1390	Complete documentation - SIX	0%	15	22-Dec-16	13-Jan-17	14-Jun-16	08-Jul-16	-129	$20,590.52	0
2-W.03.02	CMPPS1400	Completion of electrical design drawings - SIX	0%	15	22-Dec-16	13-Jan-17	14-Jun-16	20-Jul-16	-121	$24,438.05	0
2-W.03.02	CMPPS1410	Completion of PPS - SIX	0%	0		13-Jan-17		20-Jul-16	-122	$0.00	0



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

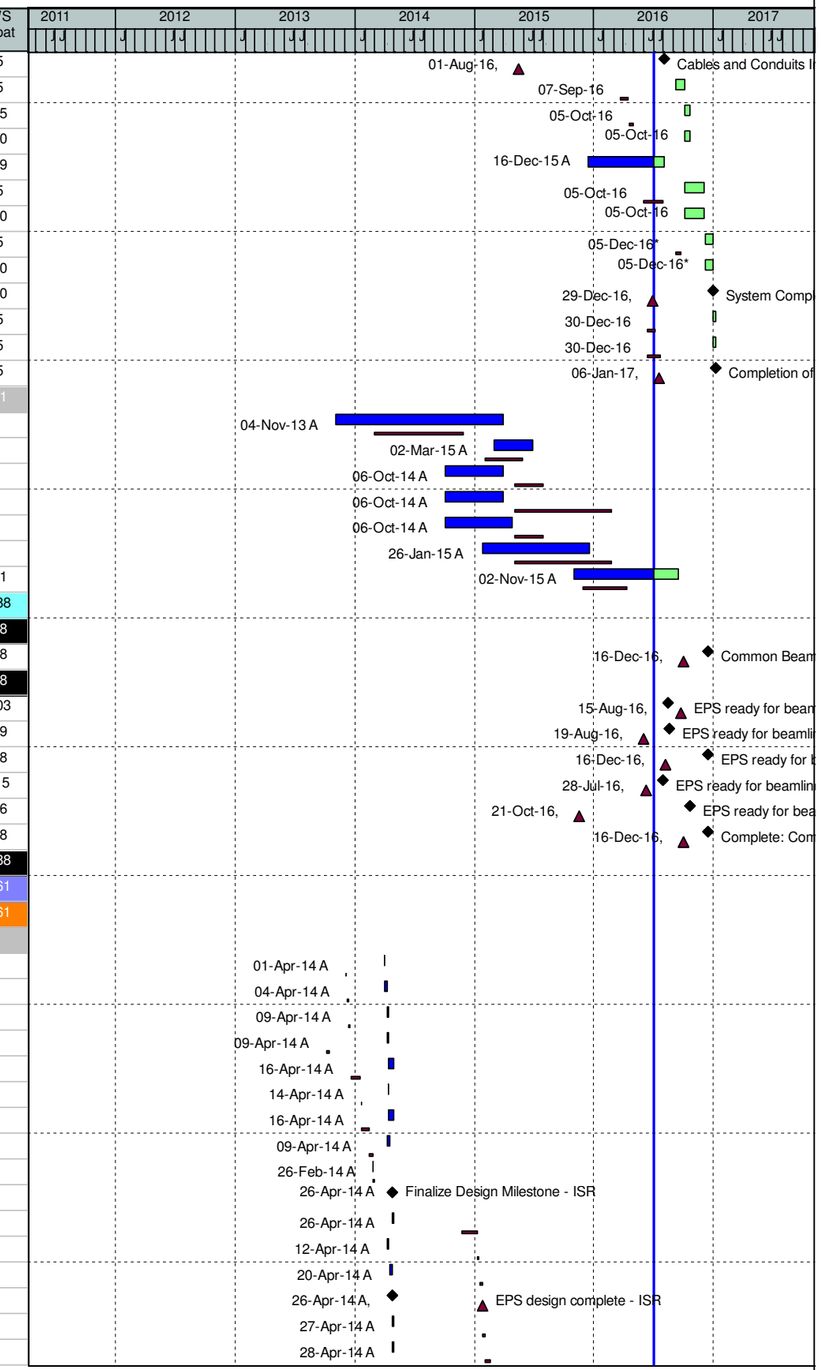
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
SIX PPS Procurement			95.53%	696	04-Nov-13 A	15-Aug-16	29-Aug-14	11-Apr-16	-88	$79,943.41	103
2-W.03.02	CMPPS2300	Proc/Fab Hutch Safety Equipment Hardware - SIX	100%	267	04-Nov-13 A	26-Nov-14 A	29-Aug-14	27-Oct-14	-22	$50,560.87	
2-W.03.02	CMPPS2301	Proc/Fab Custom PLC case, drilled for connectors, lock fitted, mounting hardw	100%	107	06-Oct-14 A	13-Mar-15 A	05-May-15	29-Jul-15	96	$3,687.59	
2-W.03.02	CMPPS2302	Proc/Fab HMI panels (custom fabricated case) - SIX	100%	107	06-Oct-14 A	13-Mar-15 A	05-May-15	22-Feb-16	236	$5,990.83	
2-W.03.02	CMPPS2303	Proc/Fab Other cabling H/W interlocks to EPS, RS485, network connections e	100%	137	06-Oct-14 A	27-Apr-15 A	05-May-15	29-Jul-15	66	$1,770.04	
2-W.03.02	CMPPS2304	Fab Mounting Brackets and cases for sensors Ind. Machining - SIX	100%	329	26-Jan-15 A	16-May-16 A	05-May-15	22-Feb-16	-59	$11,981.66	
2-W.03.02	CMPPS2305	Proc/Fab/Install ARM - SIX - ETC	40%	198	02-Nov-15 A	15-Aug-16	01-Dec-15	11-Apr-16	-88	$5,952.41	103
SMI Common Systems			42.77%	794	04-Nov-13 A	06-Jan-17	03-Jan-14	22-Sep-16	-71	$372,197.32	5
SMI Personnel Protection System (PPS)			42.77%	794	04-Nov-13 A	06-Jan-17	03-Jan-14	22-Sep-16	-71	$372,197.32	5
SMI PPS Refine Requirements			90.14%	678	03-Jan-14 A	15-Sep-16	03-Jan-14	26-Jan-15	-414	$3,065.02	81
2-W.03.02	CMPPS061	Update PPS diagram (PD staff) - SMI	100%	40	03-Jan-14 A	03-Mar-14 A	03-Jan-14	03-Mar-14	0	$630.82	
2-W.03.02	CMPPS0611	Update PPS diagram (PD staff) - SMI	100%	54	01-Oct-14 A	18-Dec-14 A	04-Sep-14	30-Oct-14	-33	$15.77	
2-W.03.02	CMPPS1815	PPS Conduit Walk-Through - SMI	100%	1	26-Jan-15 A	27-Jan-15 A	26-Jan-15	26-Jan-15	0	$0.00	
2-W.03.02	CMPPS1820	Update PPS diagram (PPS staff) - SMI	100%	79	01-Oct-14 A	28-Jan-15 A	31-Oct-14	08-Dec-14	-33	$503.84	
2-W.03.02	CMPPS1830	Tabulate specifications - SMI	100%	99	01-Oct-14 A	26-Feb-15 A	09-Dec-14	08-Jan-15	-33	$1,612.29	
2-W.03.02	CMPPS1840	Review specifications (by IWG) - SMI	0%	53	01-Jul-16	15-Sep-16	09-Jan-15	15-Jan-15	-420	$302.30	81
SMI PPS Hardware Development			100%	440	16-Dec-14 A	15-Sep-16	16-Jan-15	17-Jun-15	-314	$8,466.11	81
2-W.03.02	CMPPS1910	Monitor Hardware Development - SMI	100%	69	16-Dec-14 A	27-Mar-15 A	16-Jan-15	17-Jun-15	57	$0.00	
2-W.03.02	CMPPS1919	Monitor Hardware Development - SMI	100%	69	16-Dec-14 A	27-Mar-15 A	16-Jan-15	17-Jun-15	57	$2,519.20	
2-W.03.02	CMPPS1920	Decide on I/O panel size - SMI	100%	48	16-Dec-14 A	27-Feb-15 A	16-Jan-15	23-Jan-15	-23	$100.77	
2-W.03.02	CMPPS1930	Decide on stack lamp or sign - SMI	100%	48	16-Dec-14 A	27-Feb-15 A	26-Jan-15	30-Jan-15	-18	$0.00	
2-W.03.02	CMPPS1940	Preliminary I/O panel and HMI layout (design) - SMI	100%	69	16-Dec-14 A	27-Mar-15 A	02-Feb-15	02-Mar-15	-19	$554.39	
2-W.03.02	CMPPS1950	Review Preliminary I/O panel and HMI layout - SMI	100%	1	30-Mar-15 A	31-Mar-15 A	03-Mar-15	09-Mar-15	-15	$302.30	
2-W.03.02	CMPPS1960	Design review with IWG - SMI	0%	0		15-Sep-16		10-Mar-15	-384	$0.00	81
2-W.03.02	CMPPS1970	Procure prototype components - SMI	100%	48	19-Jan-15 A	27-Mar-15 A	11-Mar-15	07-Apr-15	7	$1,713.06	
2-W.03.02	CMPPS1980	Finalize I/O panel and HMI layout - SMI	100%	43	30-Mar-15 A	29-May-15 A	08-Apr-15	21-Apr-15	-26	$201.54	
2-W.03.02	CMPPS1990	Assemble Control Cabinet - SMI	100%	20	01-Jul-15 A	29-Jul-15 A	22-Apr-15	19-May-15	-49	$555.66	
2-W.03.02	CMPPS1995	Wire Control Cabinet - SMI	100%	60	01-Sep-15 A	30-Nov-15 A	20-May-15	17-Jun-15	-112	$2,519.20	
SMI PPS Electrical Design			100%	365	19-Jan-15 A	30-Jun-16 A	16-Jan-15	04-Apr-16	-61	$6,243.91	
2-W.03.02	CMPPS1850	Generic electrical design - SMI	100%	38	19-Jan-15 A	13-Mar-15 A	16-Jan-15	13-Feb-15	-19	$604.61	
2-W.03.02	CMPPS1860	Generate schematic diagrams - SMI	100%	34	26-Jan-15 A	13-Mar-15 A	17-Feb-15	16-Mar-15	1	$554.39	
2-W.03.02	CMPPS1870	Create cabling diagram inside hutch - SMI	100%	20	13-Feb-15 A	13-Mar-15 A	17-Mar-15	30-Mar-15	11	$554.39	
2-W.03.02	CMPPS1880	Review and release cabling diagram - SMI	100%	126	01-Apr-15 A	29-Sep-15 A	31-Mar-15	06-Apr-15	-122	$302.30	
2-W.03.02	CMPPS1890	Generate logic Block Diagram for system - SMI	100%	170	25-May-15 A	29-Jan-16 A	07-Apr-15	20-Apr-15	-194	$302.30	
2-W.03.02	CMPPS1891	Generate logic Block Diagram for system - SMI	100%	5	17-Jun-16 A	24-Jun-16 A	01-Apr-16	04-Apr-16	-57	$3,119.78	
2-W.03.02	CMPPS1900	Create Specification for PPS interlock - SMI	100%	3	27-Jun-16 A	30-Jun-16 A	21-Apr-15	04-May-15	-291	$806.14	
SMI PPS Software Development			3.62%	451	11-Dec-14 A	27-Sep-16	27-Apr-15	28-Jul-16	-42	$35,257.17	73
2-W.03.02	CMPPS1610	Monitor Software development - SMI	5%	451	11-Dec-14 A	27-Sep-16	27-Apr-15	09-Sep-15	-264	$2,519.20	50
2-W.03.02	CMPPS1620	Convert requirements into S/W specifications - SMI	100%	241	11-Dec-14 A	30-Nov-15 A	27-Apr-15	01-May-15	-144	$604.61	
2-W.03.02	CMPPS1630	Coding of modules in safety PLC A CHAIN - SMI	10%	421	11-Dec-14 A	15-Aug-16	04-May-15	22-May-15	-309	$2,720.74	45
2-W.03.02	CMPPS1640	Coding of modules in safety PLC B CHAIN - SMI	10%	421	11-Dec-14 A	15-Aug-16	04-May-15	22-May-15	-309	$2,720.74	45
2-W.03.02	CMPPS1650	Coding of modules in industrial PLC - SMI	0%	40	01-Jul-16	26-Aug-16	04-May-15	28-Jan-16	-148	$15,452.55	46
2-W.03.02	CMPPS1660	Test safety PLC code A - SMI	0%	10	16-Aug-16	29-Aug-16	26-May-15	30-Jun-16	-41	$4,072.68	50
2-W.03.02	CMPPS16601	Test safety PLC code A - SMI - ETC	0%	10	16-Aug-16	29-Aug-16				$0.00	93
2-W.03.02	CMPPS1670	Test safety PLC code B - SMI	0%	10	16-Aug-16	29-Aug-16	26-May-15	29-Jun-16	-42	$4,072.67	50
2-W.03.02	CMPPS16701	Test safety PLC code B - SMI - ETC	0%	10	16-Aug-16	29-Aug-16				$0.00	93
2-W.03.02	CMPPS1680	Test industrial PLC code - SMI	0%	31	15-Jul-16	26-Aug-16	26-May-15	01-Mar-16	-126	$2,066.93	51
2-W.03.02	CMPPS1690	Test of completed PLC - SMI	0%	20	30-Aug-16	27-Sep-16	05-Aug-15	28-Jul-16	-42	$1,027.05	50
SMI PPS Final Integration			0.06%	398	08-Jun-15 A	06-Jan-17	04-May-15	22-Sep-16	-71	$175,267.08	5
2-W.03.02	CMPPS1700	Monitor Final Integration - SMI - Management	0%	83	07-Sep-16	06-Jan-17	04-May-15	20-Jul-16	-116	$1,749.06	5
2-W.03.02	CMPPS1720	Purchase cables and conduit for hutch - SMI	100%	12	08-Jun-15 A	24-Jun-15 A	04-May-15	15-May-15	-26	$100.77	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 - Page 27 of 95

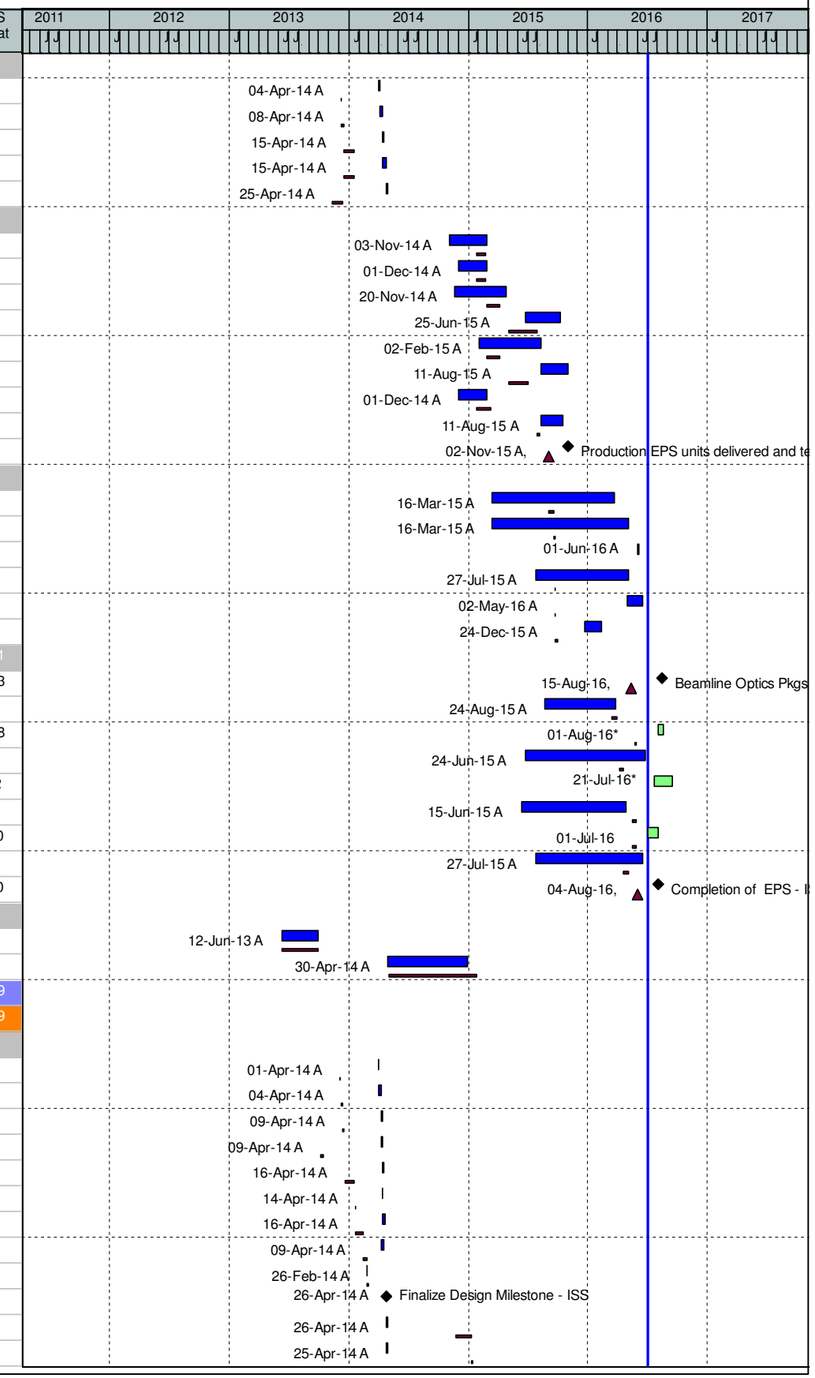
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.02	CMPPS1730	Cables and Conduits Installed and Tested in Hutch - SMI	0%	0		01-Aug-16		15-May-15	-305	$0.00	5
2-W.03.02	CMPPS1740	Install H/W in BL hutches (buttons, HMI, etc) - SMI	0%	20	07-Sep-16	04-Oct-16	21-Mar-16	15-Apr-16	-119	$60,484.97	5
2-W.03.02	CMPPS1750	Connect interconnects and power - SMI	0%	10	05-Oct-16	19-Oct-16	18-Apr-16	29-Apr-16	-119	$3,893.61	35
2-W.03.02	CMPPS17501	Connect interconnects and power - SMI - ETC	0%	10	05-Oct-16	19-Oct-16				$0.00	40
2-W.03.02	CMPPS1755	PPS related hutch rework - SMI - ETC	10%	159	16-Dec-15 A	02-Aug-16				$0.00	89
2-W.03.02	CMPPS1760	Integrate PLC and components - SMI	0%	40	05-Oct-16	02-Dec-16	02-Jun-16	28-Jul-16	-87	$35,946.80	5
2-W.03.02	CMPPS17601	Integrate PLC and components - SMI - ETC	0%	40	05-Oct-16	02-Dec-16				$0.00	10
2-W.03.02	CMPPS1770	Final system test (without beam) - SMI (constrained due to shutdown)	0%	18	05-Dec-16*	29-Dec-16	06-Sep-16	22-Sep-16	-66	$28,063.31	5
2-W.03.02	CMPPS17701	Final system test (without beam) - SMI - ETC	0%	18	05-Dec-16*	29-Dec-16				$0.00	10
2-W.03.02	CMPPS1780	System Complete (except shutter) - SMI	0%	0		29-Dec-16		27-Jun-16	-128	$0.00	10
2-W.03.02	CMPPS1790	Complete documentation - SMI	0%	5	30-Dec-16	06-Jan-17	14-Jun-16	08-Jul-16	-124	$20,590.52	5
2-W.03.02	CMPPS1800	Completion of electrical design drawings - SMI	0%	5	30-Dec-16	06-Jan-17	14-Jun-16	20-Jul-16	-116	$24,438.05	5
2-W.03.02	CMPPS1810	Completion of PPS - SMI	0%	0		06-Jan-17		20-Jul-16	-117	$0.00	5
SMI PPS Procurement			97.52%	718	04-Nov-13 A	15-Sep-16	03-Mar-14	11-Apr-16	-110	$143,898.02	81
2-W.03.02	CMPPS2400	Proc/Fab Hutch Safety Equipment Hardware - SMI	100%	347	04-Nov-13 A	30-Mar-15 A	03-Mar-14	26-Nov-14	-80	$57,362.04	
2-W.03.02	CMPPS24001	Proc/Fab additional Hutch Safety Equipment Hardware - ALL	100%	84	02-Mar-15 A	29-Jun-15 A	02-Feb-15	26-May-15	-23	$57,153.45	
2-W.03.02	CMPPS2401	Proc/Fab Custom PLC case, drilled for connectors, lock fitted, mounting hardw	100%	118	06-Oct-14 A	30-Mar-15 A	05-May-15	29-Jul-15	85	$3,687.59	
2-W.03.02	CMPPS2402	Proc/Fab HMI panels (custom fabricated case) - SMI	100%	118	06-Oct-14 A	30-Mar-15 A	05-May-15	22-Feb-16	225	$5,990.83	
2-W.03.02	CMPPS2403	Proc/Fab Other cabling H/W interlocks to EPS, RS485, network connections e	100%	137	06-Oct-14 A	27-Apr-15 A	05-May-15	29-Jul-15	66	$1,770.04	
2-W.03.02	CMPPS2404	Fab Mounting Brackets and cases for sensors Ind. Machining - SMI	100%	228	26-Jan-15 A	19-Dec-15 A	05-May-15	22-Feb-16	42	$11,981.66	
2-W.03.02	CMPPS2405	Proc/Fab ARM/Install - SMI - ETC	40%	220	02-Nov-15 A	15-Sep-16	01-Dec-15	11-Apr-16	-110	$5,952.41	81
Equipment Protection System (EPS)			83.37%	889	12-Jun-13 A	30-Dec-16	12-Jun-13	30-Sep-16	-61	$680,320.59	188
Top Level Milestones			0%	0	16-Dec-16	16-Dec-16	30-Sep-16	30-Sep-16	-52	$0.00	18
2-W.03.03	M3015	Common Beamline Systems: EPS Installed	0%	0		16-Dec-16		30-Sep-16	-52	$0.00	18
Milestones			0%	97	28-Jul-16	16-Dec-16	18-Nov-15	30-Sep-16	-52	$0.00	18
2-W.03.03	CMNMS03	EPS ready for beamline equipment - ESM	0%	0		15-Aug-16		22-Sep-16	27	$0.00	103
2-W.03.03	CMNMS13	EPS ready for beamline equipment - ISR	0%	0		19-Aug-16		02-Jun-16	-55	$0.00	99
2-W.03.03	CMNMS23	EPS ready for beamline equipment - SIX	0%	0		16-Dec-16		05-Aug-16	-91	$0.00	18
2-W.03.03	CMNMS24	EPS ready for beamline equipment - ISS	0%	0		28-Jul-16		09-Jun-16	-34	$0.00	115
2-W.03.03	CMNMS33	EPS ready for beamline equipment - SMI	0%	0		21-Oct-16		18-Nov-15	-232	$0.00	56
2-W.03.03	MCM270	Complete: Common Beamline Systems EPS Install	0%	0		16-Dec-16		30-Sep-16	-52	$0.00	18
CMN Common Beamline Systems Work Package			80.97%	889	12-Jun-13 A	30-Dec-16	12-Jun-13	08-Sep-16	-77	$594,590.42	188
ISR Common Systems			84.74%	816	12-Jun-13 A	14-Sep-16	12-Jun-13	02-Jun-16	-72	$118,241.31	261
ISR Equipment Protection System (EPS)			84.74%	816	12-Jun-13 A	14-Sep-16	12-Jun-13	02-Jun-16	-72	$118,241.31	261
ISR EPS Specify and Prototype			100%	45	26-Feb-14 A	30-Apr-14 A	09-Oct-13	17-Feb-15	198	$10,829.21	
2-W.03.03	CMEPS021	Gather requirements and document - ISR	100%	3	01-Apr-14 A	03-Apr-14 A	04-Dec-13	06-Dec-13	-80	$390.57	
2-W.03.03	CMEPS410	Specify Std. PLC unit - ISR	100%	3	04-Apr-14 A	08-Apr-14 A	09-Dec-13	11-Dec-13	-80	$195.29	
2-W.03.03	CMEPS420	Document overall design - ISR	100%	5	09-Apr-14 A	15-Apr-14 A	12-Dec-13	18-Dec-13	-80	$781.15	
2-W.03.03	CMEPS425	Purchase Standard PLCs - ISR	100%	5	09-Apr-14 A	15-Apr-14 A	09-Oct-13	16-Oct-13	-123	$0.00	
2-W.03.03	CMEPS440	Produce standard box design - ISR	100%	10	16-Apr-14 A	30-Apr-14 A	19-Dec-13	17-Jan-14	-70	$3,222.23	
2-W.03.03	CMEPS450	Design generic database and display table - ISR	100%	1	14-Apr-14 A	15-Apr-14 A	21-Jan-14	22-Jan-14	-57	$292.93	
2-W.03.03	CMEPS460	Get prototype built, incl wiring etc - ISR	100%	10	16-Apr-14 A	30-Apr-14 A	23-Jan-14	12-Feb-14	-53	$1,682.60	
2-W.03.03	CMEPS470	Test prototype - ISR	100%	7	09-Apr-14 A	18-Apr-14 A	13-Feb-14	25-Feb-14	-37	$1,171.72	
2-W.03.03	CMEPS480	Finalize design - ISR	100%	2	26-Feb-14 A	28-Feb-14 A	26-Feb-14	28-Feb-14	1	$68.30	
2-W.03.03	CMEPS4801	Finalize Design Milestone - ISR	100%	0	26-Apr-14 A					$0.00	
2-W.03.03	CMEPS4802	Finalize design - ISR	100%	2	26-Apr-14 A	30-Apr-14 A	26-Nov-14	09-Jan-15	173	$634.41	
2-W.03.03	CMEPS490	Design Review - ISR	100%	2	12-Apr-14 A	16-Apr-14 A	12-Jan-15	16-Jan-15	188	$0.00	
2-W.03.03	CMEPS500	Document changes required - ISR	100%	5	20-Apr-14 A	26-Apr-14 A	20-Jan-15	26-Jan-15	185	$403.07	
2-W.03.03	CMEPS510	EPS design complete - ISR	100%	0		26-Apr-14 A		26-Jan-15	185	$0.00	
2-W.03.03	CMEPS520	Write test protocol for production units - ISR	100%	2	27-Apr-14 A	30-Apr-14 A	27-Jan-15	02-Feb-15	188	$806.14	
2-W.03.03	CMEPS530	Produce test stand for production PLC units - ISR	100%	2	28-Apr-14 A	30-Apr-14 A	03-Feb-15	17-Feb-15	198	$1,180.78	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

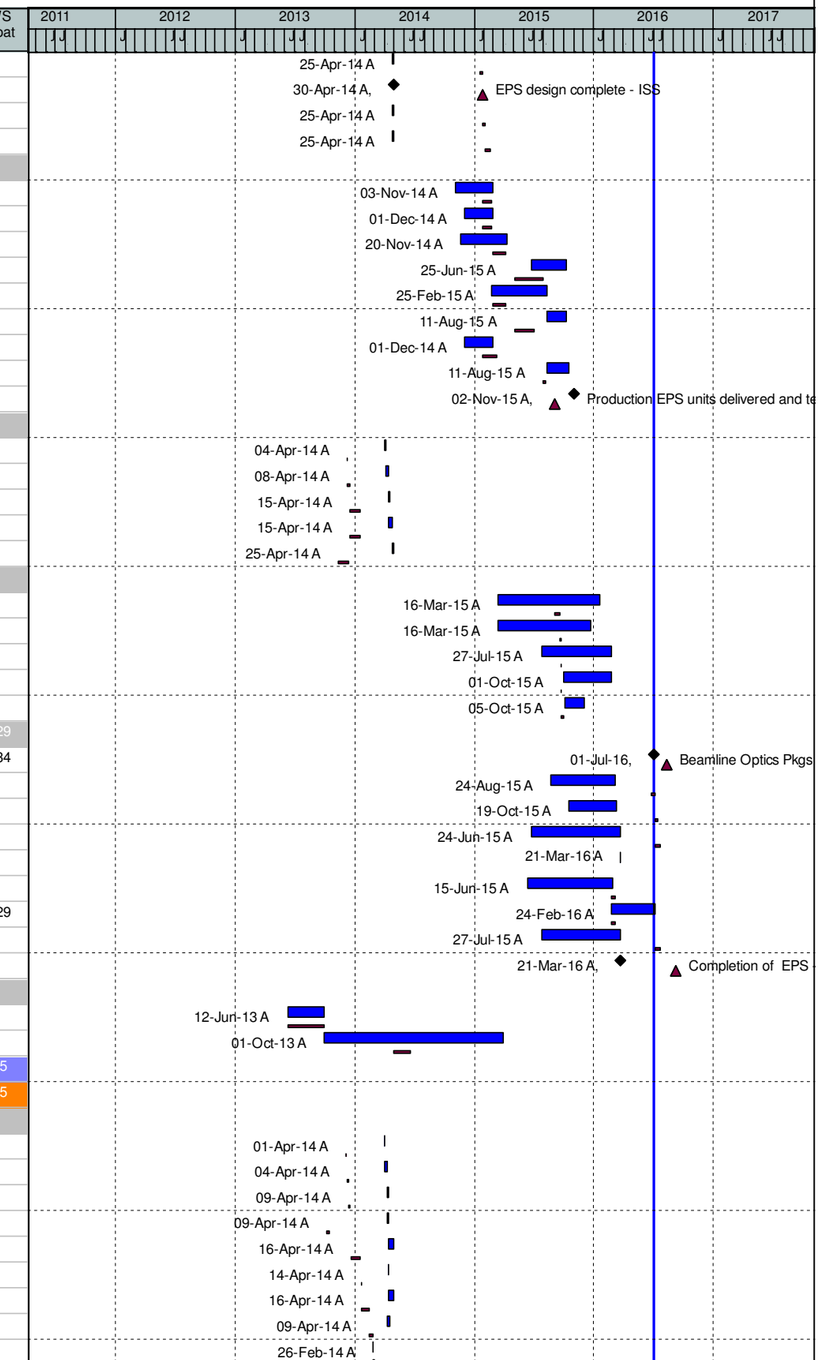
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
ISR EPS Cabling Specification			100%	18	04-Apr-14 A	30-Apr-14 A	13-Nov-13	16-Jan-14	-71	$1,902.44	
2-W.03.03	CMEPS540	Specify cables from I/O modules to PLC - ISR	100%	2	04-Apr-14 A	07-Apr-14 A	09-Dec-13	10-Dec-13	-80	$292.93	
2-W.03.03	CMEPS550	Specify sensor cables - ISR	100%	5	08-Apr-14 A	14-Apr-14 A	11-Dec-13	17-Dec-13	-80	$877.87	
2-W.03.03	CMEPS560	Manufacture prototype cables (supervision) - ISR	100%	4	15-Apr-14 A	19-Apr-14 A	18-Dec-13	16-Jan-14	-64	$292.93	
2-W.03.03	CMEPS570	Manufacture prototype cables - ISR	100%	8	15-Apr-14 A	25-Apr-14 A	18-Dec-13	16-Jan-14	-68	$438.71	
2-W.03.03	CMEPS580	Prototype cable schedule float - ISR	100%	3	25-Apr-14 A	30-Apr-14 A	13-Nov-13	12-Dec-13	-94	$0.00	
ISR EPS Production Units			100%	250	03-Nov-14 A	02-Nov-15 A	27-Jan-15	03-Sep-15	-40	$12,633.21	
2-W.03.03	CMEPS590	Specify production unit (spec & SOW) - ISR	100%	78	03-Nov-14 A	27-Feb-15 A	27-Jan-15	24-Feb-15	-3	$1,713.06	
2-W.03.03	CMEPS600	Procurement drawings - ISR	100%	60	01-Dec-14 A	27-Feb-15 A	27-Jan-15	24-Feb-15	-3	$1,979.96	
2-W.03.03	CMEPS610	Order production units (RFQ) - ISR	100%	106	20-Nov-14 A	27-Apr-15 A	25-Feb-15	07-Apr-15	-14	$3,325.34	
2-W.03.03	CMEPS630	Manufacture of EPS units - ISR	100%	75	25-Jun-15 A	09-Oct-15 A	06-May-15	30-Jul-15	-50	$1,612.29	
2-W.03.03	CMEPS640	Purchase sensor cables - ISR	100%	133	02-Feb-15 A	10-Aug-15 A	25-Feb-15	07-Apr-15	-87	$1,612.29	
2-W.03.03	CMEPS660	Manufacture of sensor cables - ISR	100%	58	11-Aug-15 A	02-Nov-15 A	06-May-15	01-Jul-15	-85	$1,131.86	
2-W.03.03	CMEPS670	Buy I/O modules needed - ISR	100%	60	01-Dec-14 A	27-Feb-15 A	27-Jan-15	10-Mar-15	7	$503.84	
2-W.03.03	CMEPS680	Test production units - ISR	100%	46	11-Aug-15 A	16-Oct-15 A	31-Jul-15	06-Aug-15	-48	$754.58	
2-W.03.03	CMEPS700	Production EPS units delivered and tested - ISR	100%	0		02-Nov-15 A		03-Sep-15	-39	$0.00	
ISR EPS Configure Units			100%	317	16-Mar-15 A	15-Jun-16 A	04-Sep-15	29-Sep-15	-178	$8,059.07	
2-W.03.03	CMEPS710	Program production unit - ISR	100%	256	16-Mar-15 A	21-Mar-16 A	04-Sep-15	18-Sep-15	-124	$5,038.40	
2-W.03.03	CMEPS720	Tailor generic database and display - ISR	100%	290	16-Mar-15 A	06-May-16 A	21-Sep-15	22-Sep-15	-156	$1,007.68	
2-W.03.03	CMEPS7201	Tailor generic database and display - ISR - ETC	100%	4	01-Jun-16 A	06-Jun-16 A				$0.00	
2-W.03.03	CMEPS730	Test supervision for tailored units - ISR	100%	197	27-Jul-15 A	06-May-16 A	23-Sep-15	23-Sep-15	-155	$503.84	
2-W.03.03	CMEPS740	Specific test of tailored unit - ISR	100%	32	02-May-16 A	15-Jun-16 A	23-Sep-15	24-Sep-15	-181	$754.58	
2-W.03.03	CMEPS750	Install tailored units in beamline racks - ISR	100%	34	24-Dec-15 A	12-Feb-16 A	25-Sep-15	29-Sep-15	-92	$754.58	
ISR EPS Installation at Beamline			75.1%	316	15-Jun-15 A	14-Sep-16	16-Mar-16	02-Jun-16	-72	$72,452.58	261
2-W.03.03	CMEPS008	Beamline Optics Pkgs Installation Complete - ISR	0%	0		15-Aug-16		12-May-16	-65	$0.00	103
2-W.03.03	CMEPS760	Wiring of remote I/O modules to equipment - ISR	100%	147	24-Aug-15 A	28-Mar-16 A	16-Mar-16	29-Mar-16	2	$13,627.64	
2-W.03.03	CMEPS770	Electrically Test tailored unit - ISR	0%	15	01-Aug-16*	19-Aug-16	23-May-16	27-May-16	-58	$6,759.51	278
2-W.03.03	CMEPS780	Common EPS system - ISR	100%	253	24-Jun-15 A	24-Jun-16 A	06-Apr-16	19-Apr-16	-47	$21,826.21	
2-W.03.03	CMEPS7801	Common EPS system - ISR - ETC	0%	39	21-Jul-16*	14-Sep-16				$0.00	82
2-W.03.03	CMEPS785	Additional Material for EPS - ISR	100%	216	15-Jun-15 A	25-Apr-16 A	16-May-16	27-May-16	25	$3,384.18	
2-W.03.03	CMEPS787	More Additional Material for EPS - ISR	0%	24	01-Jul-16	04-Aug-16	16-May-16	27-May-16	-47	$11,280.60	110
2-W.03.03	CMEPS790	Test all sensors (2 techs working together) - ISR	100%	224	27-Jul-15 A	15-Jun-16 A	20-Apr-16	03-May-16	-30	$15,574.44	
2-W.03.03	CMEPS800	Completion of EPS - ISR	0%	0		04-Aug-16		02-Jun-16	-44	$0.00	110
ISR EPS Procurement			100%	387	12-Jun-13 A	31-Dec-14 A	12-Jun-13	26-Jan-15	16	$12,364.81	
2-W.03.03	CMEPS2100	Proc/Fab EPS Basic Components - ISR	100%	75	12-Jun-13 A	30-Sep-13 A	12-Jun-13	30-Sep-13	1	$0.00	
2-W.03.03	CMEPS2100	Proc/Fab EPS Basic Components (42%) - ISR	100%	167	30-Apr-14 A	31-Dec-14 A	05-May-14	26-Jan-15	16	$12,364.81	
ISS Common Systems			99.03%	769	12-Jun-13 A	08-Jul-16	12-Jun-13	08-Sep-16	43	$116,376.51	129
ISS Equipment Protection System (EPS)			99.03%	769	12-Jun-13 A	08-Jul-16	12-Jun-13	08-Sep-16	43	$116,376.51	129
ISS EPS Specify and Prototype			100%	45	26-Feb-14 A	30-Apr-14 A	09-Oct-13	17-Feb-15	198	$10,829.21	
2-W.03.03	CMEPS061	Gather requirements and document - ISS	100%	3	01-Apr-14 A	03-Apr-14 A	04-Dec-13	06-Dec-13	-80	$390.57	
2-W.03.03	CMEPS810	Specify Std. PLC unit - ISS	100%	3	04-Apr-14 A	08-Apr-14 A	09-Dec-13	11-Dec-13	-80	$195.29	
2-W.03.03	CMEPS820	Document overall design - ISS	100%	5	09-Apr-14 A	15-Apr-14 A	12-Dec-13	18-Dec-13	-80	$781.15	
2-W.03.03	CMEPS825	Purchase Standard PLCs - ISS	100%	5	09-Apr-14 A	15-Apr-14 A	09-Oct-13	16-Oct-13	-123	$0.00	
2-W.03.03	CMEPS840	Produce standard box design - ISS	100%	1	16-Apr-14 A	17-Apr-14 A	19-Dec-13	17-Jan-14	-61	$3,222.23	
2-W.03.03	CMEPS850	Design generic database and display table - ISS	100%	1	14-Apr-14 A	15-Apr-14 A	21-Jan-14	22-Jan-14	-57	$292.93	
2-W.03.03	CMEPS860	Get prototype built, incl wiring etc - ISS	100%	6	16-Apr-14 A	24-Apr-14 A	23-Jan-14	12-Feb-14	-49	$1,682.60	
2-W.03.03	CMEPS870	Test prototype - ISS	100%	7	09-Apr-14 A	18-Apr-14 A	13-Feb-14	25-Feb-14	-37	$1,171.72	
2-W.03.03	CMEPS880	Finalize design - ISS	100%	2	26-Feb-14 A	28-Feb-14 A	26-Feb-14	28-Feb-14	1	$68.30	
2-W.03.03	CMEPS8801	Finalize Design Milestone - ISS	100%	0	26-Apr-14 A					$0.00	
2-W.03.03	CMEPS8802	Finalize design - ISS	100%	2	26-Apr-14 A	30-Apr-14 A	26-Nov-14	09-Jan-15	173	$634.41	
2-W.03.03	CMEPS890	Design Review - ISS	100%	3	25-Apr-14 A	30-Apr-14 A	12-Jan-15	16-Jan-15	178	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

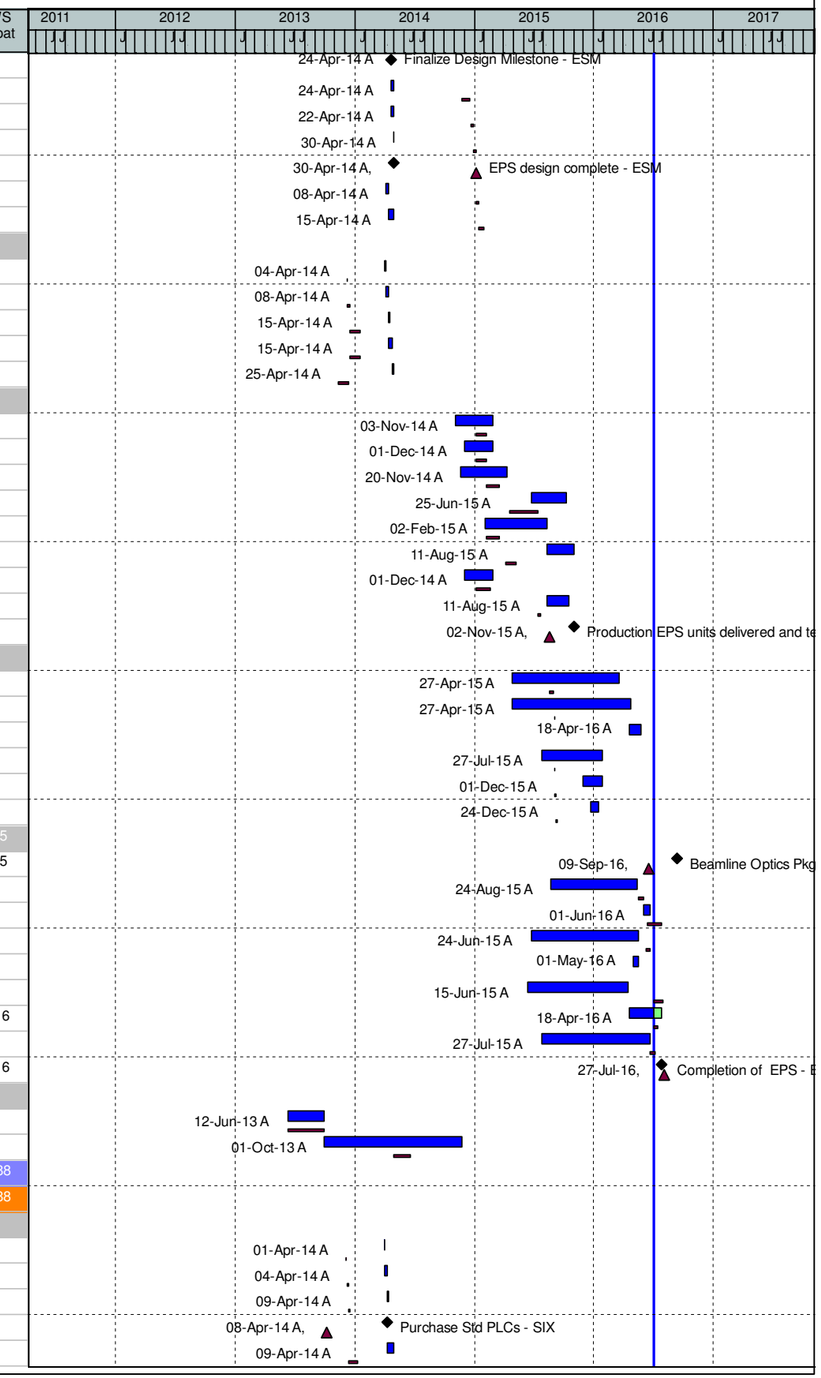
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.03	CMEPS900	Document changes required - ISS	100%	3	25-Apr-14 A	30-Apr-14 A	20-Jan-15	26-Jan-15	183	$403.07	
2-W.03.03	CMEPS910	EPS design complete - ISS	100%	0		30-Apr-14 A		26-Jan-15	183	$0.00	
2-W.03.03	CMEPS920	Write test protocol for production units - ISS	100%	3	25-Apr-14 A	30-Apr-14 A	27-Jan-15	02-Feb-15	188	$806.14	
2-W.03.03	CMEPS930	Produce test stand for production PLC units - ISS	100%	3	25-Apr-14 A	30-Apr-14 A	03-Feb-15	17-Feb-15	198	$1,180.78	
ISS EPS Production Units			100%	249	03-Nov-14 A	02-Nov-15 A	27-Jan-15	03-Sep-15	-39	$12,633.21	
2-W.03.03	CMEPS0990	Specify production unit (spec & SOW) - ISS	100%	78	03-Nov-14 A	27-Feb-15 A	27-Jan-15	24-Feb-15	-3	$1,713.06	
2-W.03.03	CMEPS1000	Procurement drawings - ISS	100%	60	01-Dec-14 A	27-Feb-15 A	27-Jan-15	24-Feb-15	-3	$1,979.96	
2-W.03.03	CMEPS1010	Order production units (RFQ) - ISS	100%	95	20-Nov-14 A	10-Apr-15 A	25-Feb-15	07-Apr-15	-3	$3,325.34	
2-W.03.03	CMEPS1030	Manufacture of EPS units - ISS	100%	75	25-Jun-15 A	09-Oct-15 A	06-May-15	30-Jul-15	-50	$1,612.29	
2-W.03.03	CMEPS1040	Purchase sensor cables - ISS	100%	117	25-Feb-15 A	10-Aug-15 A	25-Feb-15	07-Apr-15	-87	$1,612.29	
2-W.03.03	CMEPS1060	Manufacture of sensor cables - ISS	100%	43	11-Aug-15 A	09-Oct-15 A	06-May-15	01-Jul-15	-70	$1,131.86	
2-W.03.03	CMEPS1070	Buy I/O modules needed - ISS	100%	60	01-Dec-14 A	27-Feb-15 A	27-Jan-15	10-Mar-15	7	$503.84	
2-W.03.03	CMEPS1080	Test production units - ISS	100%	47	11-Aug-15 A	16-Oct-15 A	31-Jul-15	06-Aug-15	-49	$754.58	
2-W.03.03	CMEPS1100	Production EPS units delivered and tested - ISS	100%	0		02-Nov-15 A		03-Sep-15	-39	$0.00	
ISS EPS Cabling Specification			100%	18	04-Apr-14 A	30-Apr-14 A	13-Nov-13	16-Jan-14	-71	$1,902.44	
2-W.03.03	CMEPS940	Specify cables from I/O modules to PLC - ISS	100%	2	04-Apr-14 A	07-Apr-14 A	09-Dec-13	10-Dec-13	-80	$292.93	
2-W.03.03	CMEPS950	Specify sensor cables - ISS	100%	5	08-Apr-14 A	14-Apr-14 A	11-Dec-13	17-Dec-13	-80	$877.87	
2-W.03.03	CMEPS960	Manufacture prototype cables (supervision) - ISS	100%	3	15-Apr-14 A	18-Apr-14 A	18-Dec-13	16-Jan-14	-63	$292.93	
2-W.03.03	CMEPS970	Manufacture prototype cables - ISS	100%	8	15-Apr-14 A	25-Apr-14 A	18-Dec-13	16-Jan-14	-68	$438.71	
2-W.03.03	CMEPS980	Prototype cable schedule float - ISS	100%	3	25-Apr-14 A	30-Apr-14 A	13-Nov-13	12-Dec-13	-94	$0.00	
ISS EPS Configure Units			100%	237	16-Mar-15 A	23-Feb-16 A	04-Sep-15	29-Sep-15	-98	$8,059.07	
2-W.03.03	CMEPS1110	Program production unit - ISS	100%	214	16-Mar-15 A	20-Jan-16 A	04-Sep-15	18-Sep-15	-82	$5,038.40	
2-W.03.03	CMEPS1120	Tailor generic database and display - ISS	100%	197	16-Mar-15 A	23-Dec-15 A	21-Sep-15	22-Sep-15	-63	$1,007.68	
2-W.03.03	CMEPS1130	Test supervision for tailored units - ISS	100%	144	27-Jul-15 A	23-Feb-16 A	23-Sep-15	23-Sep-15	-102	$503.84	
2-W.03.03	CMEPS1140	Specific test of tailored unit - ISS	100%	97	01-Oct-15 A	23-Feb-16 A	23-Sep-15	24-Sep-15	-101	$754.58	
2-W.03.03	CMEPS1150	Install tailored units in beamline racks - ISS	100%	40	05-Oct-15 A	02-Dec-15 A	25-Sep-15	29-Sep-15	-43	$754.58	
ISS EPS Installation at Beamline			98.41%	269	15-Jun-15 A	08-Jul-16	24-Feb-16	08-Sep-16	43	$70,754.76	129
2-W.03.03	CMEPS1159	Beamline Optics Pkgs Installation Complete (except for Collimating Mirror) - IS	0%	0		01-Jul-16		10-Aug-16	28	$0.00	134
2-W.03.03	CMEPS1160	Wiring of remote I/O modules to equipment - ISS	100%	134	24-Aug-15 A	08-Mar-16 A	23-Jun-16	07-Jul-16	85	$13,627.64	
2-W.03.03	CMEPS1170	Electrically Test tailored unit - ISS	100%	97	19-Oct-15 A	09-Mar-16 A	08-Jul-16	14-Jul-16	90	$5,061.69	
2-W.03.03	CMEPS1180	Common EPS system - ISS	100%	185	24-Jun-15 A	21-Mar-16 A	08-Jul-16	21-Jul-16	86	$21,826.21	
2-W.03.03	CMEPS11801	Common EPS system - ISS - ETC	100%	1	21-Mar-16 A	21-Mar-16 A				$0.00	
2-W.03.03	CMEPS1185	Additional Material for EPS - ISS	100%	176	15-Jun-15 A	29-Feb-16 A	24-Feb-16	08-Mar-16	7	$3,384.18	
2-W.03.03	CMEPS1187	More Additional Material for EPS - ISS	90%	96	24-Feb-16 A	08-Jul-16	24-Feb-16	08-Mar-16	-86	$11,280.60	129
2-W.03.03	CMEPS1190	Test all sensors - ISS	100%	163	27-Jul-15 A	21-Mar-16 A	08-Jul-16	21-Jul-16	86	$15,574.44	
2-W.03.03	CMEPS1200	Completion of EPS - ISS	100%	0		21-Mar-16 A		08-Sep-16	120	$0.00	
ISS EPS Procurement			100%	448	12-Jun-13 A	01-Apr-15 A	12-Jun-13	19-Jun-14	-192	$12,197.83	
2-W.03.03	CMEPS2200	Proc/Fab EPS Basic Components - ISS	100%	75	12-Jun-13 A	30-Sep-13 A	12-Jun-13	30-Sep-13	1	$0.00	
2-W.03.03	CMEPS2200	Proc/Fab EPS Basic Components (42%) - ISS	100%	372	01-Oct-13 A	01-Apr-15 A	01-May-14	19-Jun-14	-192	$12,197.83	
ESM Common Systems			96.25%	813	12-Jun-13 A	09-Sep-16	12-Jun-13	03-Aug-16	-26	$120,330.45	85
ESM Equipment Protection System (EPS)			96.25%	813	12-Jun-13 A	09-Sep-16	12-Jun-13	03-Aug-16	-26	$120,330.45	85
ESM EPS Specify and Prototype			100%	45	26-Feb-14 A	30-Apr-14 A	09-Oct-13	29-Jan-15	186	$10,829.21	
2-W.03.03	CMEPS001	Gather requirements and document - ESM	100%	3	01-Apr-14 A	03-Apr-14 A	04-Dec-13	06-Dec-13	-80	$390.57	
2-W.03.03	CMEPS010	Specify Std. PLC unit - ESM	100%	3	04-Apr-14 A	08-Apr-14 A	09-Dec-13	11-Dec-13	-80	$195.29	
2-W.03.03	CMEPS020	Document overall design - ESM	100%	5	09-Apr-14 A	15-Apr-14 A	12-Dec-13	18-Dec-13	-80	$781.15	
2-W.03.03	CMEPS022	Purchase Standard PLCs - ESM	100%	5	09-Apr-14 A	15-Apr-14 A	09-Oct-13	16-Oct-13	-123	$0.00	
2-W.03.03	CMEPS040	Produce standard box design - ESM	100%	10	16-Apr-14 A	30-Apr-14 A	19-Dec-13	17-Jan-14	-70	$3,222.23	
2-W.03.03	CMEPS050	Design generic database and display table - ESM	100%	1	14-Apr-14 A	15-Apr-14 A	21-Jan-14	22-Jan-14	-57	$292.93	
2-W.03.03	CMEPS060	Get prototype built, incl wiring etc - ESM	100%	10	16-Apr-14 A	30-Apr-14 A	23-Jan-14	12-Feb-14	-53	$1,682.60	
2-W.03.03	CMEPS070	Test prototype - ESM	100%	7	09-Apr-14 A	18-Apr-14 A	13-Feb-14	25-Feb-14	-37	$1,171.72	
2-W.03.03	CMEPS080	Finalize design - ESM	100%	2	26-Feb-14 A	28-Feb-14 A	26-Feb-14	28-Feb-14	1	$68.30	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

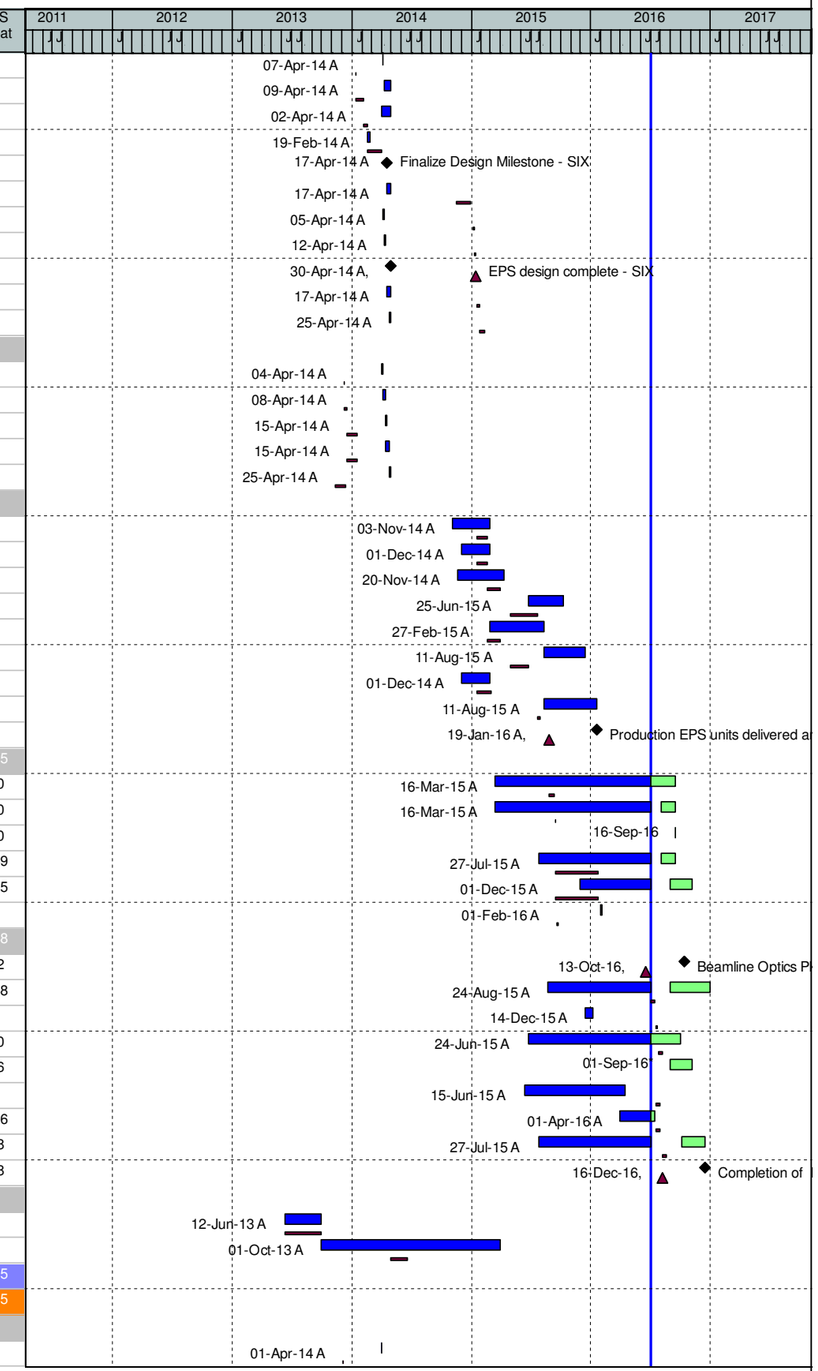
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.03	CMEPS0801	Finalize Design Milestone - ESM	100%	0	24-Apr-14 A					$0.00	
2-W.03.03	CMEPS0802	Finalize design - ESM	100%	4	24-Apr-14 A	30-Apr-14 A	24-Nov-14	19-Dec-14	161	$634.41	
2-W.03.03	CMEPS090	Design Review - ESM	100%	5	22-Apr-14 A	29-Apr-14 A	22-Dec-14	29-Dec-14	167	$0.00	
2-W.03.03	CMEPS100	Document changes required - ESM	100%	0	30-Apr-14 A	30-Apr-14 A	30-Dec-14	07-Jan-15	171	$403.07	
2-W.03.03	CMEPS110	EPS design complete - ESM	100%	0		30-Apr-14 A		07-Jan-15	171	$0.00	
2-W.03.03	CMEPS120	Write test protocol for production units - ESM	100%	4	08-Apr-14 A	14-Apr-14 A	08-Jan-15	14-Jan-15	188	$806.14	
2-W.03.03	CMEPS130	Produce test stand for production PLC units - ESM	100%	10	15-Apr-14 A	29-Apr-14 A	15-Jan-15	29-Jan-15	187	$1,180.78	
ESM EPS Cabling Specification			100%	18	04-Apr-14 A	30-Apr-14 A	13-Nov-13	16-Jan-14	-71	$1,902.44	
2-W.03.03	CMEPS140	Specify cables from I/O modules to PLC - ESM	100%	2	04-Apr-14 A	07-Apr-14 A	09-Dec-13	10-Dec-13	-80	$292.93	
2-W.03.03	CMEPS150	Specify sensor cables - ESM	100%	5	08-Apr-14 A	14-Apr-14 A	11-Dec-13	17-Dec-13	-80	$877.87	
2-W.03.03	CMEPS160	Manufacture prototype cables (supervision) - ESM	100%	3	15-Apr-14 A	18-Apr-14 A	18-Dec-13	16-Jan-14	-63	$292.93	
2-W.03.03	CMEPS170	Manufacture prototype cables - ESM	100%	8	15-Apr-14 A	25-Apr-14 A	18-Dec-13	16-Jan-14	-68	$438.71	
2-W.03.03	CMEPS180	Prototype cable schedule float - ESM	100%	3	25-Apr-14 A	30-Apr-14 A	13-Nov-13	12-Dec-13	-94	$0.00	
ESM EPS Production Units			100%	250	03-Nov-14 A	02-Nov-15 A	08-Jan-15	18-Aug-15	-52	$12,633.21	
2-W.03.03	CMEPS190	Specify production unit (spec & SOW) - ESM	100%	78	03-Nov-14 A	27-Feb-15 A	08-Jan-15	05-Feb-15	-15	$1,713.06	
2-W.03.03	CMEPS200	Procurement drawings - ESM	100%	60	01-Dec-14 A	27-Feb-15 A	08-Jan-15	05-Feb-15	-15	$1,979.96	
2-W.03.03	CMEPS210	Order production units (RFQ) - ESM	100%	95	20-Nov-14 A	10-Apr-15 A	06-Feb-15	20-Mar-15	-15	$3,325.34	
2-W.03.03	CMEPS230	Manufacture of EPS units - ESM	100%	75	25-Jun-15 A	09-Oct-15 A	20-Apr-15	14-Jul-15	-62	$1,612.29	
2-W.03.03	CMEPS240	Purchase sensor cables - ESM	100%	133	02-Feb-15 A	10-Aug-15 A	06-Feb-15	20-Mar-15	-99	$1,612.29	
2-W.03.03	CMEPS260	Manufacture of sensor cables - ESM	100%	58	11-Aug-15 A	02-Nov-15 A	06-Apr-15	08-May-15	-122	$1,131.86	
2-W.03.03	CMEPS270	Buy I/O modules needed - ESM	100%	60	01-Dec-14 A	27-Feb-15 A	08-Jan-15	20-Feb-15	-5	$503.84	
2-W.03.03	CMEPS280	Test production units - ESM	100%	46	11-Aug-15 A	16-Oct-15 A	15-Jul-15	21-Jul-15	-60	$754.58	
2-W.03.03	CMEPS300	Production EPS units delivered and tested - ESM	100%	0		02-Nov-15 A		18-Aug-15	-51	$0.00	
ESM EPS Configure Units			100%	271	27-Apr-15 A	23-May-16 A	19-Aug-15	11-Sep-15	-174	$8,059.07	
2-W.03.03	CMEPS310	Program production unit - ESM	100%	223	27-Apr-15 A	16-Mar-16 A	19-Aug-15	01-Sep-15	-133	$5,038.40	
2-W.03.03	CMEPS320	Tailor generic database and display - ESM	100%	250	27-Apr-15 A	22-Apr-16 A	02-Sep-15	03-Sep-15	-158	$1,007.68	
2-W.03.03	CMEPS3201	Tailor generic database and display - ESM - ETC	100%	26	18-Apr-16 A	23-May-16 A				$0.00	
2-W.03.03	CMEPS330	Test supervision for tailored units - ESM	100%	126	27-Jul-15 A	27-Jan-16 A	04-Sep-15	04-Sep-15	-96	$503.84	
2-W.03.03	CMEPS340	Specific test of tailored unit - ESM	100%	39	01-Dec-15 A	27-Jan-16 A	04-Sep-15	08-Sep-15	-95	$754.58	
2-W.03.03	CMEPS350	Install tailored units in beamline racks - ESM	100%	14	24-Dec-15 A	14-Jan-16 A	09-Sep-15	11-Sep-15	-84	$754.58	
ESM EPS Installation at Beamline			93.96%	313	15-Jun-15 A	09-Sep-16	17-May-16	03-Aug-16	-26	$74,708.70	85
2-W.03.03	CMEPS359	Beamline Optics Pkgs Installation Complete - ESM	0%	0		09-Sep-16		15-Jun-16	-60	$0.00	85
2-W.03.03	CMEPS360	Wiring of remote I/O modules to equipment - ESM	100%	180	24-Aug-15 A	12-May-16 A	17-May-16	31-May-16	13	$13,627.64	
2-W.03.03	CMEPS370	Electrically Test tailored unit - ESM	100%	14	01-Jun-16 A	20-Jun-16 A	14-Jun-16	26-Jul-16	25	$6,759.51	
2-W.03.03	CMEPS380	Common EPS system - ESM	100%	225	24-Jun-15 A	17-May-16 A	08-Jun-16	21-Jun-16	25	$21,826.21	
2-W.03.03	CMEPS3801	Common EPS system - ESM - ETC	100%	11	01-May-16 A	17-May-16 A				$0.00	
2-W.03.03	CMEPS385	Additional Material for EPS - ESM	100%	210	15-Jun-15 A	15-Apr-16 A	01-Jul-16	29-Jul-16	74	$5,640.30	
2-W.03.03	CMEPS387	More Additional Material for EPS - ESM	60%	71	18-Apr-16 A	27-Jul-16	01-Jul-16	15-Jul-16	-8	$11,280.60	116
2-W.03.03	CMEPS390	Test all sensors - ESM	100%	227	27-Jul-15 A	20-Jun-16 A	22-Jun-16	06-Jul-16	11	$15,574.44	
2-W.03.03	CMEPS400	Completion of EPS - ESM	0%	0		27-Jul-16		03-Aug-16	5	$0.00	116
ESM EPS Procurement			100%	365	12-Jun-13 A	26-Nov-14 A	12-Jun-13	19-Jun-14	-109	$12,197.83	
2-W.03.03	CMEPS2000	Proc/Fab EPS Basic Components - ESM	100%	75	12-Jun-13 A	30-Sep-13 A	12-Jun-13	30-Sep-13	1	$0.00	
2-W.03.03	CMEPS2000	Proc/Fab EPS Basic Components (42%) - ESM	100%	289	01-Oct-13 A	26-Nov-14 A	01-May-14	19-Jun-14	-109	$12,197.83	
SIX Common Systems			57.16%	889	12-Jun-13 A	30-Dec-16	12-Jun-13	19-Aug-16	-90	$123,265.63	188
SIX Equipment Protection System (EPS)			57.16%	889	12-Jun-13 A	30-Dec-16	12-Jun-13	19-Aug-16	-90	$123,265.63	188
SIX EPS Specify and Prototype			100%	50	19-Feb-14 A	30-Apr-14 A	08-Oct-13	09-Feb-15	193	$10,825.55	
2-W.03.03	CMEPS031	Gather requirements and document - SIX	100%	3	01-Apr-14 A	03-Apr-14 A	04-Dec-13	06-Dec-13	-80	$390.57	
2-W.03.03	CMEPS1210	Specify Std. PLC unit - SIX	100%	3	04-Apr-14 A	08-Apr-14 A	09-Dec-13	11-Dec-13	-80	$195.29	
2-W.03.03	CMEPS1220	Document overall design - SIX	100%	5	09-Apr-14 A	15-Apr-14 A	12-Dec-13	18-Dec-13	-80	$781.15	
2-W.03.03	CMEPS1230	Purchase Std PLCs - SIX	100%	0		08-Apr-14 A		08-Oct-13	-123	$0.00	
2-W.03.03	CMEPS1240	Produce standard box design - SIX	100%	15	09-Apr-14 A	30-Apr-14 A	12-Dec-13	10-Jan-14	-75	$3,222.23	



(O) NEXT - Detail Schedule

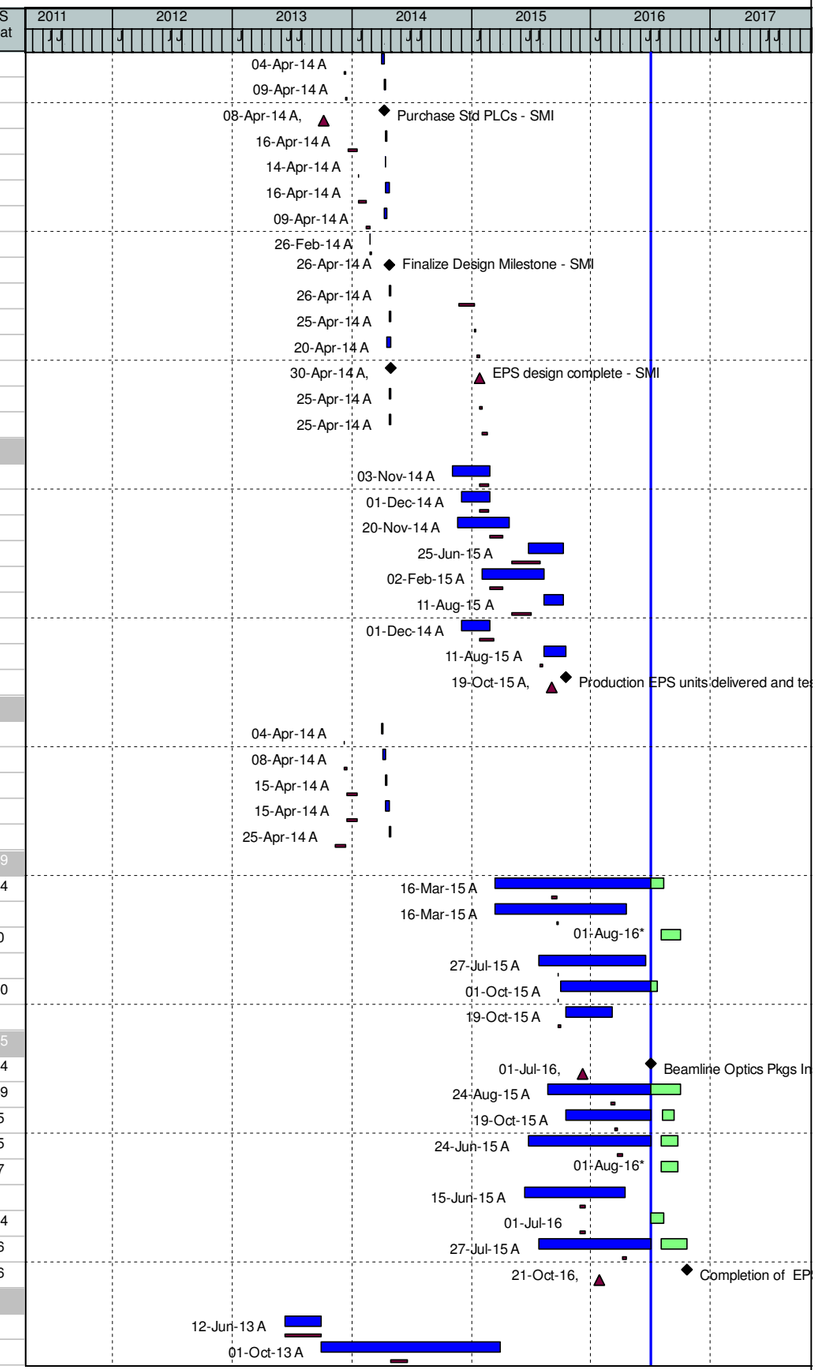
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.03	CMEPS1250	Design generic database and display table - SIX	100%	1	07-Apr-14 A	08-Apr-14 A	13-Jan-14	14-Jan-14	-57	$292.93	
2-W.03.03	CMEPS1260	Get prototype built, incl wiring etc - SIX	100%	15	09-Apr-14 A	30-Apr-14 A	15-Jan-14	05-Feb-14	-58	$1,682.60	
2-W.03.03	CMEPS1270	Test prototype - SIX	100%	20	02-Apr-14 A	30-Apr-14 A	06-Feb-14	18-Feb-14	-50	$1,171.72	
2-W.03.03	CMEPS1280	Finalize design - SIX	100%	7	19-Feb-14 A	28-Feb-14 A	19-Feb-14	01-Apr-14	23	$182.71	
2-W.03.03	CMEPS12801	Finalize Design Milestone - SIX	100%	0	17-Apr-14 A					$0.00	
2-W.03.03	CMEPS12802	Finalize design - SIX	100%	9	17-Apr-14 A	30-Apr-14 A	17-Nov-14	31-Dec-14	168	$516.34	
2-W.03.03	CMEPS1290	Design Review - SIX	100%	2	05-Apr-14 A	09-Apr-14 A	05-Jan-15	09-Jan-15	188	$0.00	
2-W.03.03	CMEPS1300	Document changes required - SIX	100%	2	12-Apr-14 A	16-Apr-14 A	12-Jan-15	16-Jan-15	188	$403.07	
2-W.03.03	CMEPS1310	EPS design complete - SIX	100%	0		30-Apr-14 A		16-Jan-15	178	$0.00	
2-W.03.03	CMEPS1320	Write test protocol for production units - SIX	100%	9	17-Apr-14 A	30-Apr-14 A	20-Jan-15	26-Jan-15	183	$806.14	
2-W.03.03	CMEPS1330	Produce test stand for production PLC units - SIX	100%	3	25-Apr-14 A	30-Apr-14 A	27-Jan-15	09-Feb-15	193	$1,180.78	
SIX EPS Cabling Specification			100%	18	04-Apr-14 A	30-Apr-14 A	13-Nov-13	16-Jan-14	-71	$1,902.44	
2-W.03.03	CMEPS1340	Specify cables from I/O modules to PLC - SIX	100%	2	04-Apr-14 A	07-Apr-14 A	09-Dec-13	10-Dec-13	-80	$292.93	
2-W.03.03	CMEPS1350	Specify sensor cables - SIX	100%	5	08-Apr-14 A	14-Apr-14 A	11-Dec-13	17-Dec-13	-80	$877.87	
2-W.03.03	CMEPS1360	Manufacture prototype cables (supervision) - SIX	100%	3	15-Apr-14 A	18-Apr-14 A	18-Dec-13	16-Jan-14	-63	$292.93	
2-W.03.03	CMEPS1370	Manufacture prototype cables - SIX	100%	8	15-Apr-14 A	25-Apr-14 A	18-Dec-13	16-Jan-14	-68	$438.71	
2-W.03.03	CMEPS1380	Prototype cable schedule float - SIX	100%	3	25-Apr-14 A	30-Apr-14 A	13-Nov-13	12-Dec-13	-94	$0.00	
SIX EPS Production Units			100%	301	03-Nov-14 A	19-Jan-16 A	20-Jan-15	27-Aug-15	-96	$12,633.21	
2-W.03.03	CMEPS1390	Specify production unit (spec & SOW) - SIX	100%	78	03-Nov-14 A	27-Feb-15 A	20-Jan-15	17-Feb-15	-8	$1,713.06	
2-W.03.03	CMEPS1400	Procurement drawings - SIX	100%	60	01-Dec-14 A	27-Feb-15 A	20-Jan-15	17-Feb-15	-8	$1,979.96	
2-W.03.03	CMEPS1410	Order production units (RFQ) - SIX	100%	95	20-Nov-14 A	10-Apr-15 A	18-Feb-15	31-Mar-15	-8	$3,325.34	
2-W.03.03	CMEPS1430	Manufacture of EPS units - SIX	100%	75	25-Jun-15 A	09-Oct-15 A	29-Apr-15	23-Jul-15	-55	$1,612.29	
2-W.03.03	CMEPS1440	Purchase sensor cables - SIX	100%	115	27-Feb-15 A	10-Aug-15 A	18-Feb-15	31-Mar-15	-92	$1,612.29	
2-W.03.03	CMEPS1460	Manufacture of sensor cables - SIX	100%	87	11-Aug-15 A	15-Dec-15 A	29-Apr-15	24-Jun-15	-119	$1,131.86	
2-W.03.03	CMEPS1470	Buy I/O modules needed - SIX	100%	60	01-Dec-14 A	27-Feb-15 A	20-Jan-15	03-Mar-15	2	$503.84	
2-W.03.03	CMEPS1480	Test production units - SIX	100%	109	11-Aug-15 A	19-Jan-16 A	24-Jul-15	30-Jul-15	-116	$754.58	
2-W.03.03	CMEPS1500	Production EPS units delivered and tested - SIX	100%	0		19-Jan-16 A		27-Aug-15	-96	$0.00	
SIX EPS Configure Units			57.81%	416	16-Mar-15 A	04-Nov-16	28-Aug-15	22-Jan-16	-200	$10,997.91	225
2-W.03.03	CMEPS1510	Program production unit - SIX	70%	382	16-Mar-15 A	16-Sep-16	28-Aug-15	11-Sep-15	-255	$5,038.40	80
2-W.03.03	CMEPS1520	Tailor generic database and display - SIX	60%	382	16-Mar-15 A	16-Sep-16	14-Sep-15	15-Sep-15	-253	$1,007.68	80
2-W.03.03	CMEPS15201	Tailor generic database and display - SIX - ETC	0%	1	16-Sep-16	16-Sep-16				$0.00	80
2-W.03.03	CMEPS1530	Test supervision for tailored units - SIX	40%	289	27-Jul-15 A	16-Sep-16	16-Sep-15	22-Jan-16	-166	$2,125.56	259
2-W.03.03	CMEPS1540	Specific test of tailored unit - SIX	30%	235	01-Dec-15 A	04-Nov-16	16-Sep-15	22-Jan-16	-200	$2,071.70	225
2-W.03.03	CMEPS1550	Install tailored units in beamline racks - SIX	100%	2	01-Feb-16 A	03-Feb-16 A	18-Sep-15	22-Sep-15	-89	$754.58	
SIX EPS Installation at Beamline			35.53%	389	15-Jun-15 A	30-Dec-16	16-Jun-16	19-Aug-16	-90	$74,708.70	188
2-W.03.03	CMEPS1559	Beamline Optics Pkgs Installation Complete - SIX	0%	0		13-Oct-16		16-Jun-16	-82	$0.00	62
2-W.03.03	CMEPS1560	Wiring of remote I/O modules to equipment - SIX	20%	292	24-Aug-15 A	30-Dec-16	01-Jul-16	15-Jul-16	-115	$13,627.64	188
2-W.03.03	CMEPS1570	Electrically Test tailored unit - SIX	100%	18	14-Dec-15 A	08-Jan-16 A	18-Jul-16	22-Jul-16	136	$6,759.51	
2-W.03.03	CMEPS1580	Install of EPS Components - SIX	40%	288	24-Jun-15 A	30-Sep-16	25-Jul-16	05-Aug-16	-39	$21,826.21	70
2-W.03.03	CMEPS15801	Install of EPS Components - SIX - ETC	0%	45	01-Sep-16*	04-Nov-16				$0.00	46
2-W.03.03	CMEPS1585	Additional Material for EPS - SIX	100%	209	15-Jun-15 A	13-Apr-16 A	18-Jul-16	29-Jul-16	75	$5,640.30	
2-W.03.03	CMEPS1587	More Additional Material for EPS - SIX	10%	72	01-Apr-16 A	13-Jul-16	18-Jul-16	29-Jul-16	12	$11,280.60	126
2-W.03.03	CMEPS1590	Test all sensors - SIX	10%	282	27-Jul-15 A	16-Dec-16	08-Aug-16	19-Aug-16	-81	$15,574.44	18
2-W.03.03	CMEPS1600	Completion of EPS - SIX	0%	0		16-Dec-16		05-Aug-16	-91	$0.00	18
SIX EPS Procurement			100%	448	12-Jun-13 A	01-Apr-15 A	12-Jun-13	19-Jun-14	-192	$12,197.83	
2-W.03.03	CMEPS2300	Proc/Fab EPS Basic Components - SIX	100%	75	12-Jun-13 A	30-Sep-13 A	12-Jun-13	30-Sep-13	1	$0.00	
2-W.03.03	CMEPS2300	Proc/Fab EPS Basic Components (42%) - SIX	100%	372	01-Oct-13 A	01-Apr-15 A	01-May-14	19-Jun-14	-192	$12,197.83	
SMI Common Systems			68.51%	842	12-Jun-13 A	21-Oct-16	12-Jun-13	19-Apr-16	-129	$116,376.51	235
SMI Equipment Protection System (EPS)			68.51%	842	12-Jun-13 A	21-Oct-16	12-Jun-13	19-Apr-16	-129	$116,376.51	235
SMI EPS Specify and Prototype			100%	45	26-Feb-14 A	30-Apr-14 A	08-Oct-13	17-Feb-15	198	$10,829.21	
2-W.03.03	CMEPS041	Gather requirements and document - SMI	100%	3	01-Apr-14 A	03-Apr-14 A	04-Dec-13	06-Dec-13	-80	$390.57	



(O) NEXT - Detail Schedule

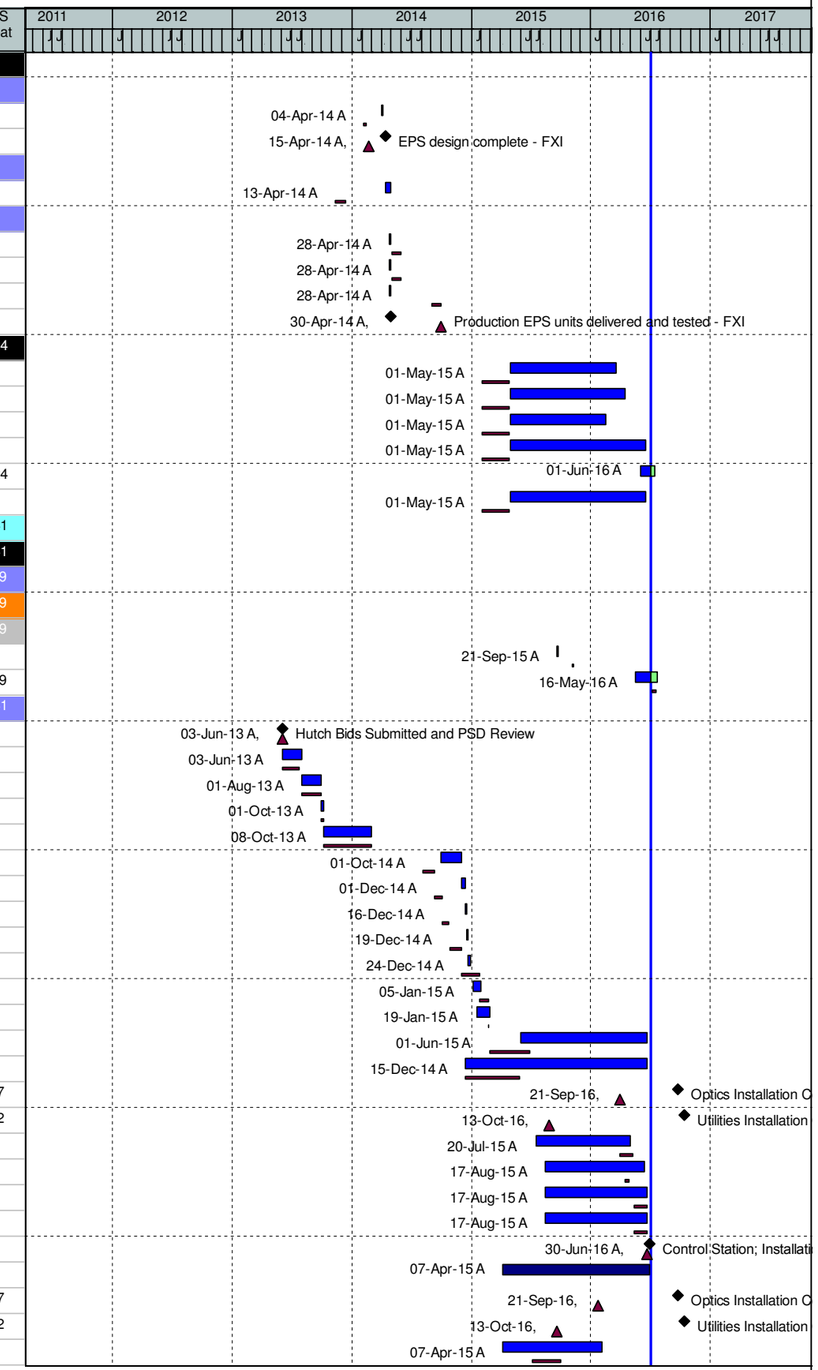
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.03	CMEPS1610	Specify Std. PLC unit - SMI	100%	3	04-Apr-14 A	08-Apr-14 A	09-Dec-13	11-Dec-13	-80	$195.29	
2-W.03.03	CMEPS1620	Document overall design - SMI	100%	5	09-Apr-14 A	15-Apr-14 A	12-Dec-13	18-Dec-13	-80	$781.15	
2-W.03.03	CMEPS1630	Purchase Std PLCs - SMI	100%	0		08-Apr-14 A		08-Oct-13	-123	$0.00	
2-W.03.03	CMEPS1640	Produce standard box design - SMI	100%	2	16-Apr-14 A	18-Apr-14 A	19-Dec-13	17-Jan-14	-62	$3,222.23	
2-W.03.03	CMEPS1650	Design generic database and display table - SMI	100%	1	14-Apr-14 A	15-Apr-14 A	21-Jan-14	22-Jan-14	-57	$292.93	
2-W.03.03	CMEPS1660	Get prototype built, incl wiring etc - SMI	100%	7	16-Apr-14 A	25-Apr-14 A	23-Jan-14	12-Feb-14	-50	$1,682.60	
2-W.03.03	CMEPS1670	Test prototype - SMI	100%	7	09-Apr-14 A	18-Apr-14 A	13-Feb-14	25-Feb-14	-37	$1,171.72	
2-W.03.03	CMEPS1680	Finalize design - SMI	100%	2	26-Feb-14 A	28-Feb-14 A	26-Feb-14	28-Feb-14	1	$68.30	
2-W.03.03	CMEPS16801	Finalize Design Milestone - SMI	100%	0	26-Apr-14 A					$0.00	
2-W.03.03	CMEPS16802	Finalize design - SMI	100%	2	26-Apr-14 A	30-Apr-14 A	26-Nov-14	09-Jan-15	173	$634.41	
2-W.03.03	CMEPS1690	Design Review - SMI	100%	3	25-Apr-14 A	30-Apr-14 A	12-Jan-15	16-Jan-15	178	$0.00	
2-W.03.03	CMEPS1700	Document changes required - SMI	100%	7	20-Apr-14 A	30-Apr-14 A	20-Jan-15	26-Jan-15	183	$403.07	
2-W.03.03	CMEPS1710	EPS design complete - SMI	100%	0		30-Apr-14 A		26-Jan-15	183	$0.00	
2-W.03.03	CMEPS1720	Write test protocol for production units - SMI	100%	3	25-Apr-14 A	30-Apr-14 A	27-Jan-15	02-Feb-15	188	$806.14	
2-W.03.03	CMEPS1730	Produce test stand for production PLC units - SMI	100%	3	25-Apr-14 A	30-Apr-14 A	03-Feb-15	17-Feb-15	198	$1,180.78	
SMI EPS Production Units			100%	239	03-Nov-14 A	19-Oct-15 A	27-Jan-15	03-Sep-15	-29	$12,633.21	
2-W.03.03	CMEPS1790	Specify production unit (spec & SOW) - SMI	100%	78	03-Nov-14 A	27-Feb-15 A	27-Jan-15	24-Feb-15	-3	$1,713.06	
2-W.03.03	CMEPS1800	Procurement drawings - SMI	100%	60	01-Dec-14 A	27-Feb-15 A	27-Jan-15	24-Feb-15	-3	$1,979.96	
2-W.03.03	CMEPS1810	Order production units (RFQ) - SMI	100%	106	20-Nov-14 A	27-Apr-15 A	25-Feb-15	07-Apr-15	-14	$3,325.34	
2-W.03.03	CMEPS1830	Manufacture of EPS units - SMI	100%	75	25-Jun-15 A	09-Oct-15 A	06-May-15	30-Jul-15	-50	$1,612.29	
2-W.03.03	CMEPS1840	Purchase sensor cables - SMI	100%	133	02-Feb-15 A	10-Aug-15 A	25-Feb-15	07-Apr-15	-87	$1,612.29	
2-W.03.03	CMEPS1860	Manufacture of sensor cables - SMI	100%	43	11-Aug-15 A	09-Oct-15 A	06-May-15	01-Jul-15	-70	$1,131.86	
2-W.03.03	CMEPS1870	Buy I/O modules needed - SMI	100%	60	01-Dec-14 A	27-Feb-15 A	27-Jan-15	10-Mar-15	7	$503.84	
2-W.03.03	CMEPS1880	Test production units - SMI	100%	47	11-Aug-15 A	16-Oct-15 A	31-Jul-15	06-Aug-15	-49	$754.58	
2-W.03.03	CMEPS1900	Production EPS units delivered and tested - SMI	100%	0		19-Oct-15 A		03-Sep-15	-29	$0.00	
SMI EPS Cabling Specification			100%	18	04-Apr-14 A	30-Apr-14 A	13-Nov-13	16-Jan-14	-71	$1,902.44	
2-W.03.03	CMEPS1740	Specify cables from I/O modules to PLC - SMI	100%	2	04-Apr-14 A	07-Apr-14 A	09-Dec-13	10-Dec-13	-80	$292.93	
2-W.03.03	CMEPS1750	Specify sensor cables - SMI	100%	5	08-Apr-14 A	14-Apr-14 A	11-Dec-13	17-Dec-13	-80	$877.87	
2-W.03.03	CMEPS1760	Manufacture prototype cables (supervision) - SMI	100%	3	15-Apr-14 A	18-Apr-14 A	18-Dec-13	16-Jan-14	-63	$292.93	
2-W.03.03	CMEPS1770	Manufacture prototype cables - SMI	100%	8	15-Apr-14 A	25-Apr-14 A	18-Dec-13	16-Jan-14	-68	$438.71	
2-W.03.03	CMEPS1780	Prototype cable schedule float - SMI	100%	3	25-Apr-14 A	30-Apr-14 A	13-Nov-13	12-Dec-13	-94	$0.00	
SMI EPS Configure Units			85.16%	392	16-Mar-15 A	30-Sep-16	04-Sep-15	29-Sep-15	-253	$8,059.07	249
2-W.03.03	CMEPS1910	Program production unit - SMI	80%	357	16-Mar-15 A	11-Aug-16	04-Sep-15	18-Sep-15	-225	$5,038.40	284
2-W.03.03	CMEPS1920	Tailor generic database and display - SMI	100%	276	16-Mar-15 A	18-Apr-16 A	21-Sep-15	22-Sep-15	-142	$1,007.68	
2-W.03.03	CMEPS19201	Tailor generic database and display - SMI - ETC	0%	44	01-Aug-16*	30-Sep-16				$0.00	70
2-W.03.03	CMEPS1930	Test supervision for tailored units - SMI	100%	226	27-Jul-15 A	17-Jun-16 A	23-Sep-15	23-Sep-15	-184	$503.84	
2-W.03.03	CMEPS1940	Specific test of tailored unit - SMI	75%	201	01-Oct-15 A	20-Jul-16	23-Sep-15	24-Sep-15	-205	$754.58	300
2-W.03.03	CMEPS1950	Install tailored units in beamline racks - SMI	100%	95	19-Oct-15 A	07-Mar-16 A	25-Sep-15	29-Sep-15	-107	$754.58	
SMI EPS Installation at Beamline			49.9%	342	15-Jun-15 A	21-Oct-16	01-Dec-15	19-Apr-16	-129	$70,754.76	235
2-W.03.03	CMEPS1959	Beamline Optics Pkgs Installation Complete - SMI	0%	0		01-Jul-16		07-Dec-15	-143	$0.00	134
2-W.03.03	CMEPS1960	Wiring of remote I/O modules to equipment - SMI	75%	279	24-Aug-15 A	30-Sep-16	02-Mar-16	15-Mar-16	-140	$13,627.64	249
2-W.03.03	CMEPS1970	Electrically Test tailored unit - SMI	50%	200	19-Oct-15 A	09-Sep-16	16-Mar-16	22-Mar-16	-120	$5,061.69	85
2-W.03.03	CMEPS1980	Common EPS system - SMI	70%	291	24-Jun-15 A	23-Sep-16	23-Mar-16	05-Apr-16	-120	$21,826.21	75
2-W.03.03	CMEPS19801	Common EPS system - SMI - ETC	0%	37	01-Aug-16*	21-Sep-16				$0.00	77
2-W.03.03	CMEPS1985	Additional Material for EPS - SMI	100%	209	15-Jun-15 A	13-Apr-16 A	01-Dec-15	14-Dec-15	-83	$3,384.18	
2-W.03.03	CMEPS1987	More Additional Material for EPS - SMI	0%	30	01-Jul-16	12-Aug-16	01-Dec-15	14-Dec-15	-168	$11,280.60	104
2-W.03.03	CMEPS1990	Test all sensors - SMI	25%	288	27-Jul-15 A	21-Oct-16	06-Apr-16	19-Apr-16	-129	$15,574.44	56
2-W.03.03	CMEPS1991	Completion of EPS - SMI	0%	0		21-Oct-16		28-Jan-16	-186	$0.00	56
SMI EPS Procurement			100%	448	12-Jun-13 A	01-Apr-15 A	12-Jun-13	19-Jun-14	-192	$12,197.83	
2-W.03.03	CMEPS2400	Procure/Fab EPS Basic Components - SMI	100%	75	12-Jun-13 A	30-Sep-13 A	12-Jun-13	30-Sep-13	1	$0.00	
2-W.03.03	CMEPS2400	Proc/Fab EPS Basic Components (42%) - SMI	100%	372	01-Oct-13 A	01-Apr-15 A	01-May-14	19-Jun-14	-192	$12,197.83	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

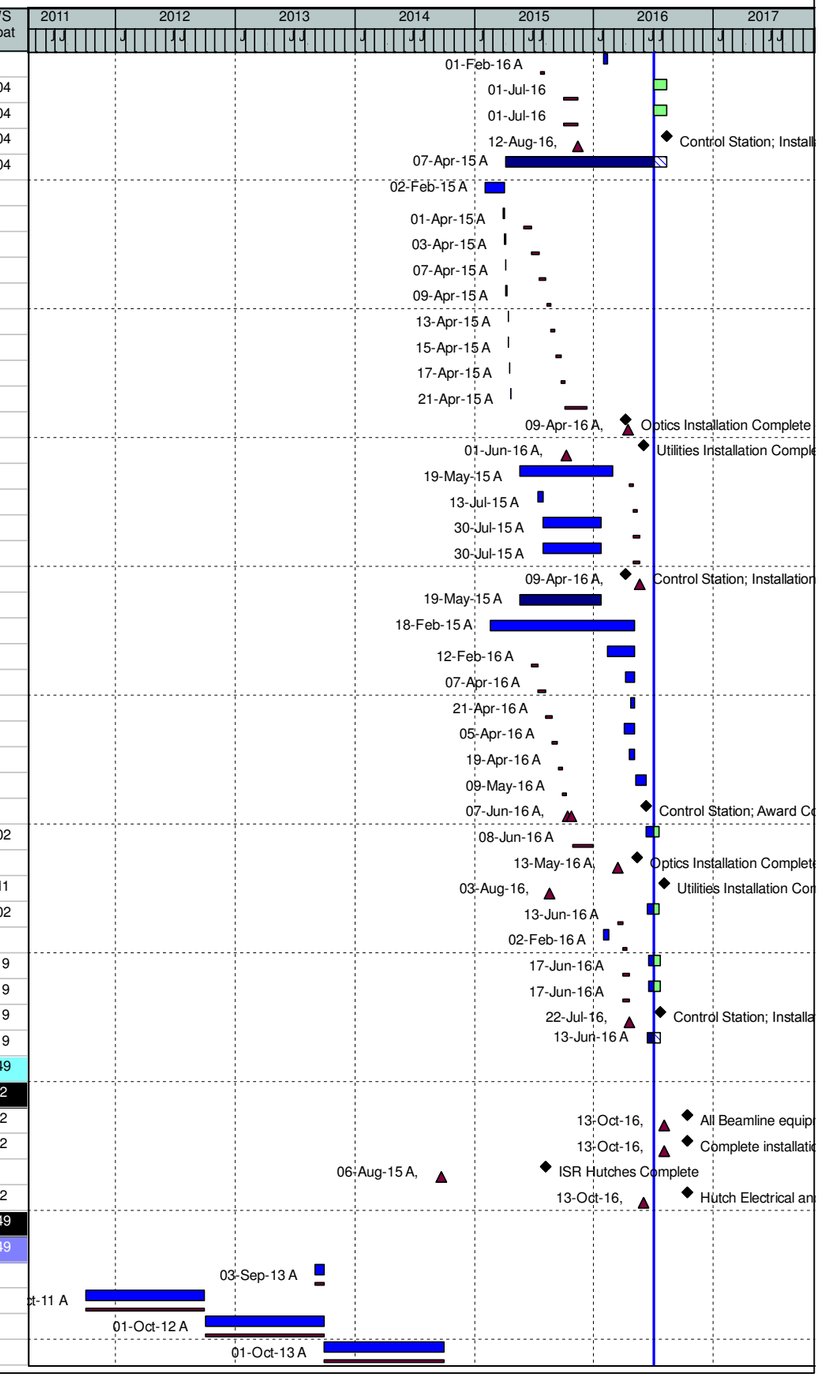
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
FXI Equipment Protection System (EPS)			0%	18	04-Apr-14 A	30-Apr-14 A	13-Nov-13	01-Oct-14	107	$0.00	
FXI EPS Specify and Prototype			0%	7	04-Apr-14 A	15-Apr-14 A	06-Feb-14	20-Feb-14	-37	$0.00	
2-W.03.03	CMEPS2070	Design Review - FXI	100%	2	04-Apr-14 A	08-Apr-14 A	06-Feb-14	12-Feb-14	-37	$0.00	
2-W.03.03	CMEPS2090	EPS design complete - FXI	100%	0		15-Apr-14 A		20-Feb-14	-37	$0.00	
FXI EPS Cabling Specification			0%	12	13-Apr-14 A	30-Apr-14 A	13-Nov-13	12-Dec-13	-94	$0.00	
2-W.03.03	CMEPS2170	Prototype cable schedule float - FXI	100%	12	13-Apr-14 A	30-Apr-14 A	13-Nov-13	12-Dec-13	-94	$0.00	
FXI EPS Production Units			0%	2	28-Apr-14 A	30-Apr-14 A	02-May-14	01-Oct-14	107	$0.00	
2-W.03.03	CMEPS2230	Procurement contingency - FXI	100%	2	28-Apr-14 A	30-Apr-14 A	02-May-14	30-May-14	22	$0.00	
2-W.03.03	CMEPS2260	Procurement contingency - FXI	100%	2	28-Apr-14 A	30-Apr-14 A	02-May-14	30-May-14	22	$0.00	
2-W.03.03	CMEPS2310	EPS production contingency - FXI	100%	2	28-Apr-14 A	30-Apr-14 A	04-Sep-14	01-Oct-14	107	$0.00	
2-W.03.03	CMEPS2320	Production EPS units delivered and tested - FXI	100%	0		30-Apr-14 A		01-Oct-14	107	$0.00	
No Procurement Work Packages - Glb			100%	304	01-May-15 A	15-Jul-16	02-Feb-15	27-Apr-15	-307	$85,730.17	124
2-W.03.03	CMEPS2000	Proc/Fab EPS Basic Components (58%) - ESM	100%	221	01-May-15 A	18-Mar-16 A	02-Feb-15	27-Apr-15	-224	$17,146.03	
2-W.03.03	CMEPS2100	Proc/Fab EPS Basic Components (58%)- ISR	100%	241	01-May-15 A	15-Apr-16 A	02-Feb-15	27-Apr-15	-244	$17,146.03	
2-W.03.03	CMEPS2200	Proc/Fab EPS Basic Components (58%)- ISS	100%	199	01-May-15 A	17-Feb-16 A	02-Feb-15	27-Apr-15	-202	$17,146.03	
2-W.03.03	CMEPS2300	Proc/Fab EPS Basic Components - SIX	100%	283	01-May-15 A	15-Jun-16 A	02-Feb-15	27-Apr-15	-286	$17,146.03	
2-W.03.03	CMEPS2301	Proc/Fab EPS Basic Components - SIX - ETC	25%	32	01-Jun-16 A	15-Jul-16				$0.00	124
2-W.03.03	CMEPS2400	Proc/Fab EPS Basic Components (58%)- SMI	100%	283	01-May-15 A	15-Jun-16 A	02-Feb-15	27-Apr-15	-286	$17,146.03	
Control Station			81.87%	843	03-Jun-13 A	13-Oct-16	03-Jun-13	18-Jul-16	-61	$306,744.48	241
CMN Common Beamline Systems Work Package			81.87%	843	03-Jun-13 A	13-Oct-16	03-Jun-13	18-Jul-16	-61	$306,744.48	241
ISR Common Systems			90.92%	211	21-Sep-15 A	22-Jul-16	05-Nov-15	18-Jul-16	-4	$11,350.48	119
ISR Personnel Protection System (PPS)			90.92%	211	21-Sep-15 A	22-Jul-16	05-Nov-15	18-Jul-16	-4	$11,350.48	119
ISR PPS Final Integration			90.92%	211	21-Sep-15 A	22-Jul-16	05-Nov-15	18-Jul-16	-4	$11,350.48	119
2-W.03.04	CMCS0270	Receive delivery of beamline status monitors - 5 BLs	100%	4	21-Sep-15 A	25-Sep-15 A	05-Nov-15	11-Nov-15	33	$8,773.80	
2-W.03.04	CMCS0275	Install beamline status monitors - 5 BLs	60%	48	16-May-16 A	22-Jul-16	05-Jul-16	18-Jul-16	-4	$2,576.68	119
Common Beamline Systems Control Station			81.53%	843	03-Jun-13 A	13-Oct-16	03-Jun-13	22-Jun-16	-78	$295,394.00	241
2-W.03.04	CM0557	Hutch Bids Submitted and PSD Review	100%	0		03-Jun-13 A		03-Jun-13	0	$0.00	
2-W.03.04	CM0558	DOE Review and Hutch Contract Award	100%	41	03-Jun-13 A	01-Aug-13 A	03-Jun-13	25-Jul-13	-4	$0.00	
2-W.03.04	CM0559	Vendor Prepare & Submit Hutch Preliminary Design Report (PDR)	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.03.04	CM0559FA	Vendor Prepare & Submit Hutch Preliminary Design Report (PDR)	100%	5	01-Oct-13 A	07-Oct-13 A	01-Oct-13	07-Oct-13	0	$0.00	
2-W.03.04	CM0560	Control Station; Gather Requirements - ESM,SMI,SIX	100%	98	08-Oct-13 A	03-Mar-14 A	08-Oct-13	03-Mar-14	0	$0.00	
2-W.03.04	CM0561	Control Station; Write Spec/SOW & Submit to PPM - ESM,SMI,SIX	100%	40	01-Oct-14 A	01-Dec-14 A	05-Aug-14	09-Sep-14	-55	$0.00	
2-W.03.04	CM0562	Control Station; PPM Accepts Req - ESM,SMI,SIX	100%	10	01-Dec-14 A	15-Dec-14 A	10-Sep-14	02-Oct-14	-48	$0.00	
2-W.03.04	CM0563	Control Station; Prepare RFP/RFQ - ESM,SMI,SIX	100%	2	16-Dec-14 A	18-Dec-14 A	03-Oct-14	24-Oct-14	-36	$0.00	
2-W.03.04	CM0564	Control Station; Receive Vendor Proposals - ESM,SMI,SIX	100%	2	19-Dec-14 A	23-Dec-14 A	27-Oct-14	02-Dec-14	-14	$0.00	
2-W.03.04	CM0565	Control Station; Evaluate Vendor Proposals - ESM,SMI,SIX	100%	4	24-Dec-14 A	31-Dec-14 A	03-Dec-14	26-Jan-15	16	$0.00	
2-W.03.04	CM0566	Control Station; Contract Negotiations - ESM,SMI,SIX	100%	18	05-Jan-15 A	30-Jan-15 A	27-Jan-15	24-Feb-15	17	$0.00	
2-W.03.04	CM0567	Control Station; Award Contract - ESM,SMI,SIX	100%	27	19-Jan-15 A	27-Feb-15 A	24-Feb-15	24-Feb-15	-2	$0.00	
2-W.03.04	CM0570	Control Station; Vendor Fabrication - ESM,SMI,SIX	100%	267	01-Jun-15 A	22-Jun-16 A	25-Feb-15	30-Jun-15	-245	$0.00	
2-W.03.04	CM0575	Control Station; Support Procurement through Contract Award - ESM,SMI,SIX	100%	381	15-Dec-14 A	22-Jun-16 A	15-Dec-14	29-May-15	-267	$27,019.07	
2-W.03.04	CM0579	Optics Installation Complete - ESM,SMI,SIX	0%	0		21-Sep-16		29-Mar-16	-123	$0.00	77
2-W.03.04	CM0581	Utilities Installation Complete - ESM,SMI,SIX	0%	0		13-Oct-16		25-Aug-15	-285	$0.00	62
2-W.03.04	CM0585	Control Station; Vendor Assemble & Install Furniture - ESM,SMI	100%	196	20-Jul-15 A	29-Apr-16 A	30-Mar-16	10-May-16	8	$27,126.08	
2-W.03.04	CM0590	Control Station; Receive Computer Equipment - ESM,SMI	100%	208	17-Aug-15 A	14-Jun-16 A	13-Apr-16	26-Apr-16	-34	$28,725.42	
2-W.03.04	CM0595	Control Station; Electrical Installation (labor) - ESM,SMI	100%	213	17-Aug-15 A	22-Jun-16 A	11-May-16	22-Jun-16	1	$35,044.49	
2-W.03.04	CM0598	Control Station; Electrical Installation (material) - ESM,SMI	100%	213	17-Aug-15 A	22-Jun-16 A	11-May-16	22-Jun-16	1	$7,395.06	
2-W.03.04	CM0600	Control Station; Installation complete - ESM,SMI	100%	0		30-Jun-16 A		22-Jun-16	-5	$0.00	
2-W.03.04	CM0605	Control Station; Support Vendor at BNL - ESM,SMI	100%	310	07-Apr-15 A	30-Jun-16 A	01-Apr-16	22-Jun-16	-5	$9,865.40	
2-W.03.04	CM0700	Optics Installation Complete - SIX	0%	0		21-Sep-16		22-Jan-16	-169	$0.00	77
2-W.03.04	CM0710	Utilities Installation Complete - SIX	0%	0		13-Oct-16		18-Sep-15	-268	$0.00	62
2-W.03.04	CM0720	Control Station; Vendor Assemble & Install Furniture - SIX	100%	209	07-Apr-15 A	04-Feb-16 A	08-Jul-15	30-Sep-15	-85	$13,143.01	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

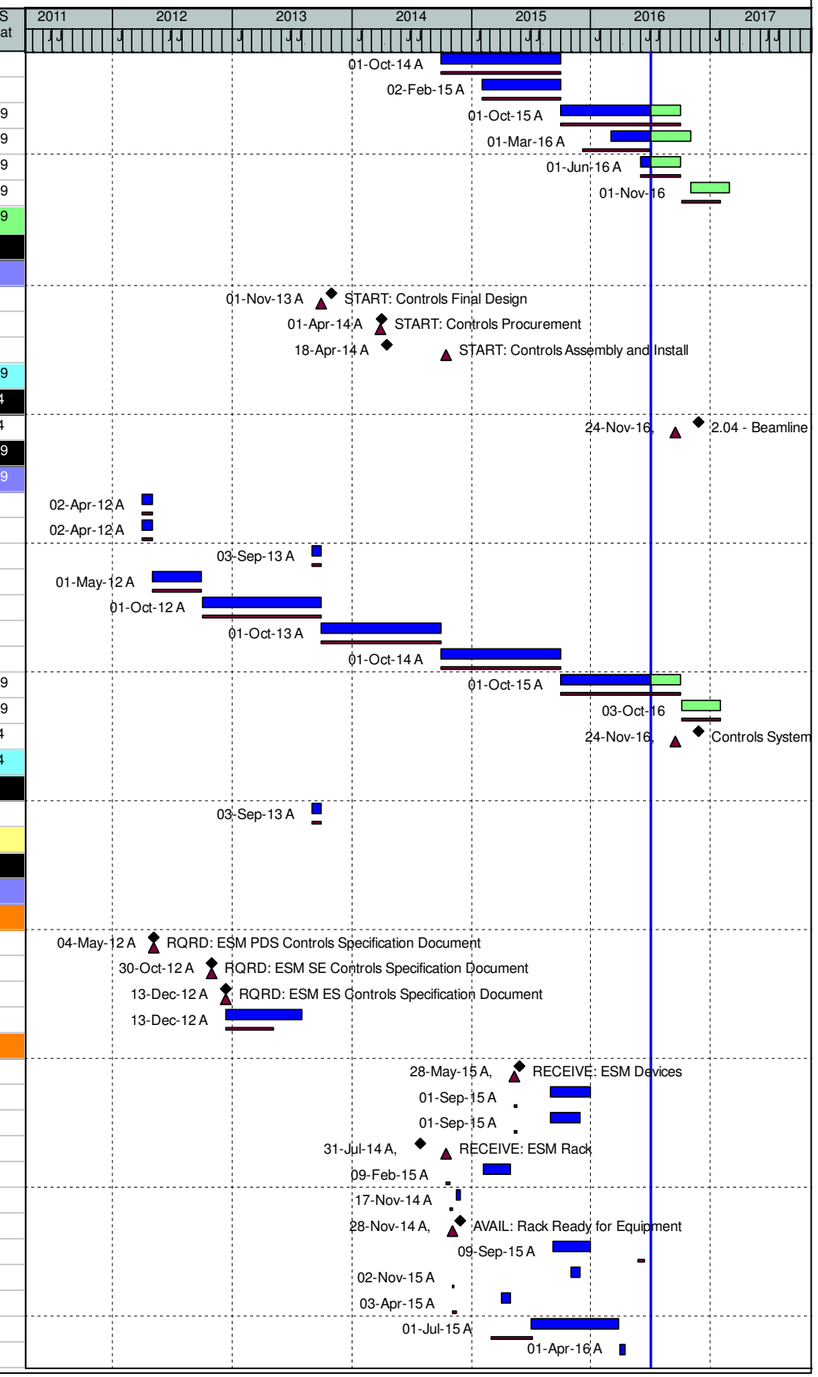
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.04	CM0730	Control Station; Receive Computer Equipment - SIX	100%	10	01-Feb-16 A	12-Feb-16 A	22-Jul-15	04-Aug-15	-131	$13,917.08	
2-W.03.04	CM0740	Control Station; Electrical Installation (labor) - SIX	0%	30	01-Jul-16	12-Aug-16	01-Oct-15	12-Nov-15	-188	$17,522.24	104
2-W.03.04	CM0750	Control Station; Electrical Installation (material) - SIX	0%	30	01-Jul-16	12-Aug-16	01-Oct-15	12-Nov-15	-188	$3,697.53	104
2-W.03.04	CM0760	Control Station; Installation complete - SIX	0%	0		12-Aug-16		12-Nov-15	-188	$0.00	104
2-W.03.04	CM0770	Control Station; Support Vendor at BNL - SIX	10%	342	07-Apr-15 A	12-Aug-16	10-Jul-15	08-Jan-16	-151	$4,552.63	104
2-W.03.04	CMCS0100	Control Station; Gather Requirements - ISS	100%	42	02-Feb-15 A	02-Apr-15 A				$0.00	
2-W.03.04	CMCS0105	Control Station; Write Spec/SOW & Submit to PPM - ISS	100%	2	01-Apr-15 A	02-Apr-15 A	03-Jun-15	23-Jun-15	57	$1,118.97	
2-W.03.04	CMCS0110	Control Station; PPM Accepts Req - ISS	100%	2	03-Apr-15 A	06-Apr-15 A	24-Jun-15	17-Jul-15	72	$0.00	
2-W.03.04	CMCS0115	Control Station; Prepare RFP/RFQ - ISS	100%	2	07-Apr-15 A	08-Apr-15 A	20-Jul-15	07-Aug-15	85	$0.00	
2-W.03.04	CMCS0120	Control Station; Receive Vendor Proposals - ISS	100%	2	09-Apr-15 A	10-Apr-15 A	10-Aug-15	21-Aug-15	93	$0.00	
2-W.03.04	CMCS0125	Control Station; Evaluate Vendor Proposals - ISS	100%	2	13-Apr-15 A	14-Apr-15 A	24-Aug-15	04-Sep-15	101	$1,118.97	
2-W.03.04	CMCS0130	Control Station; Contract Negotiations - ISS	100%	2	15-Apr-15 A	16-Apr-15 A	08-Sep-15	21-Sep-15	109	$0.00	
2-W.03.04	CMCS0135	Control Station; Award Contract - ISS	100%	2	17-Apr-15 A	20-Apr-15 A	22-Sep-15	05-Oct-15	117	$0.00	
2-W.03.04	CMCS0140	Control Station; Vendor Fabrication - ISS	100%	2	21-Apr-15 A	22-Apr-15 A	06-Oct-15	10-Dec-15	160	$0.00	
2-W.03.04	CMCS0143	Optics Installation Complete - ISS	100%	0		09-Apr-16 A		15-Apr-16	5	$0.00	
2-W.03.04	CMCS0144	Utilities Installation Complete - ISS	100%	0		01-Jun-16 A		09-Oct-15	-159	$0.00	
2-W.03.04	CMCS0145	Control Station; Vendor Assemble & Install Furniture - ISS	100%	194	19-May-15 A	29-Feb-16 A	18-Apr-16	29-Apr-16	45	$13,563.04	
2-W.03.04	CMCS0150	Control Station; Receive Computer Equipment - ISS	100%	12	13-Jul-15 A	29-Jul-15 A	02-May-16	13-May-16	200	$14,362.71	
2-W.03.04	CMCS0155	Control Station; Electrical Installation (labor) - ISS	100%	120	30-Jul-15 A	25-Jan-16 A	02-May-16	20-May-16	84	$17,522.24	
2-W.03.04	CMCS0158	Control Station; Electrical Installation (material) - ISS	100%	120	30-Jul-15 A	25-Jan-16 A	02-May-16	20-May-16	84	$3,697.53	
2-W.03.04	CMCS0160	Control Station; Installation Complete - ISS	100%	0		09-Apr-16 A		20-May-16	30	$0.00	
2-W.03.04	CMCS0165	Control Station; Support Vendor at BNL - ISS	100%	170	19-May-15 A	25-Jan-16 A	18-Apr-16	20-May-16	84	$2,309.54	
2-W.03.04	CMCS0200	Control Station; Gather Requirements - ISR	100%	307	18-Feb-15 A	06-May-16 A				$0.00	
2-W.03.04	CMCS0205	Control Station; Write Spec/SOW & Submit to PPM - ISR	100%	59	12-Feb-16 A	06-May-16 A	23-Jun-15	14-Jul-15	-204	$1,118.97	
2-W.03.04	CMCS0210	Control Station; PPM Accepts Req - ISR	100%	21	07-Apr-16 A	06-May-16 A	15-Jul-15	06-Aug-15	-187	$0.00	
2-W.03.04	CMCS0215	Control Station; Prepare RFP/RFQ - ISR	100%	11	21-Apr-16 A	06-May-16 A	07-Aug-15	27-Aug-15	-172	$0.00	
2-W.03.04	CMCS0220	Control Station; Receive Vendor Proposals - ISR	100%	23	05-Apr-16 A	06-May-16 A	28-Aug-15	11-Sep-15	-162	$0.00	
2-W.03.04	CMCS0225	Control Station; Evaluate Vendor Proposals - ISR	100%	13	19-Apr-16 A	06-May-16 A	14-Sep-15	25-Sep-15	-152	$1,118.97	
2-W.03.04	CMCS0230	Control Station; Contract Negotiations - ISR	100%	21	09-May-16 A	07-Jun-16 A	28-Sep-15	09-Oct-15	-164	$0.00	
2-W.03.04	CMCS0235	Control Station; Award Contract - ISR	100%	0		07-Jun-16 A		26-Oct-15	-154	$0.00	
2-W.03.04	CMCS0240	Control Station; Vendor Fabrication - ISR	50%	28	08-Jun-16 A	18-Jul-16	27-Oct-15	31-Dec-15	-137	$0.00	302
2-W.03.04	CMCS0243	Optics Installation Complete - ISR	100%	0		13-May-16 A		15-Mar-16	-42	$0.00	
2-W.03.04	CMCS0244	Utilities Installation Complete - ISR	0%	0		03-Aug-16		18-Aug-15	-241	$0.00	111
2-W.03.04	CMCS0245	Control Station; Vendor Assemble & Install Furniture - ISR	50%	25	13-Jun-16 A	18-Jul-16	16-Mar-16	29-Mar-16	-77	$13,563.04	302
2-W.03.04	CMCS0250	Control Station; Receive Computer Equipment - ISR	100%	9	02-Feb-16 A	16-Feb-16 A	30-Mar-16	12-Apr-16	41	$14,362.71	
2-W.03.04	CMCS0255	Control Station; Electrical Installation (labor) - ISR	5%	25	17-Jun-16 A	22-Jul-16	30-Mar-16	19-Apr-16	-66	$17,522.24	119
2-W.03.04	CMCS0258	Control Station; Electrical Installation (material) - ISR	5%	25	17-Jun-16 A	22-Jul-16	30-Mar-16	19-Apr-16	-66	$3,697.53	119
2-W.03.04	CMCS0260	Control Station; Installation Complete - ISR	0%	0		22-Jul-16		19-Apr-16	-66	$0.00	119
2-W.03.04	CMCS0265	Control Station; Support Vendor at BNL - ISR	0%	29	13-Jun-16 A	22-Jul-16	16-Mar-16	19-Apr-16	-66	$2,309.54	119
Common Beamline Systems Management			89.74%	1350	03-Oct-11 A	28-Feb-17	03-Oct-11	30-Jan-17	-20	$522,537.88	149
Milestones			0%	299	06-Aug-15 A	13-Oct-16	22-Sep-14	03-Aug-16	-49	$0.00	62
2-W.03.05	CMNMS11	All Beamline equipment delivery complete	0%	0		13-Oct-16		03-Aug-16	-49	$0.00	62
2-W.03.05	MCM040	Complete installation of common beamline system components	0%	0		13-Oct-16		03-Aug-16	-49	$0.00	62
2-W.03.05	MCM052	ISR Hutches Complete	100%	0		06-Aug-15 A		22-Sep-14	-217	$0.00	
2-W.03.05	MCM060	Hutch Electrical and Mechanical Utilities Complete	0%	0		13-Oct-16		31-May-16	-94	$0.00	62
CMN Common Beamline Systems Work Package			89.74%	1350	03-Oct-11 A	28-Feb-17	03-Oct-11	30-Jan-17	-20	$522,537.88	149
Common Beamline Systems Management			89.74%	1350	03-Oct-11 A	28-Feb-17	03-Oct-11	30-Jan-17	-20	$522,537.88	149
2-W.03.05	CBMFY1350	Common Beamline Systems Management FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$130,555.10	
2-W.03.05	CM0610	Common Beamline Systems Management FY12	100%	249	03-Oct-11 A	28-Sep-12 A	03-Oct-11	28-Sep-12	0	$0.00	
2-W.03.05	CM0620	Common Beamline Systems Management FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.03.05	CM0630	Common Beamline Systems Management FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$165,619.71	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

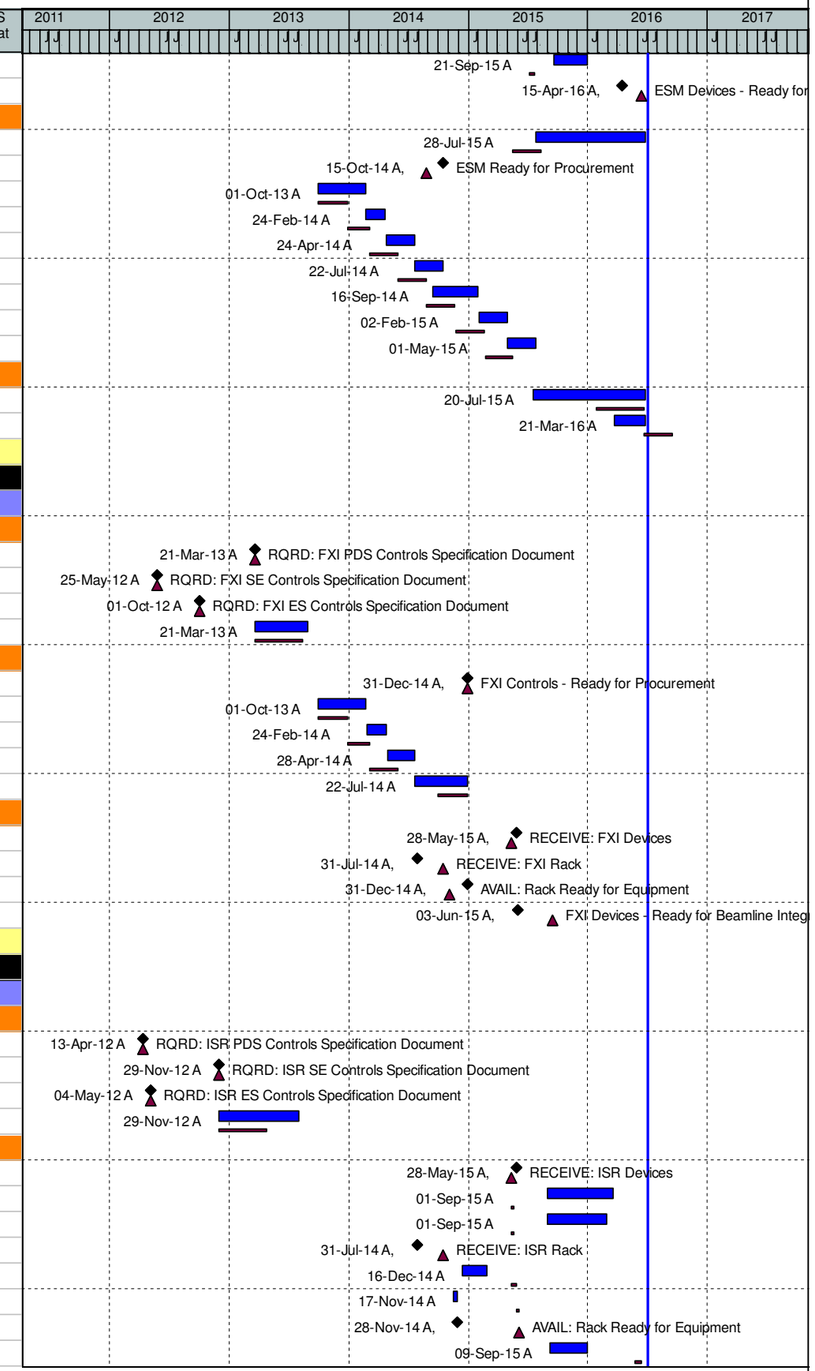
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.03.05	CM0640	Common Beamline Systems Management FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$88,496.07	
2-W.03.05	CM06401	Common Beamline Systems Management FY15; extra support	100%	169	02-Feb-15 A	30-Sep-15 A	02-Feb-15	29-Sep-15	-1	$11,239.57	
2-W.03.05	CM0650	Common Beamline Systems Management FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$85,112.38	169
2-W.03.05	CM06501	Troubleshoot hutch door operators	85%	171	01-Mar-16 A	31-Oct-16	07-Dec-15	30-Jun-16	-84	$6,229.78	149
2-W.03.05	CM06502	Installation Coordination Jun-16 through Sep-16	25.58%	86	01-Jun-16 A	30-Sep-16	01-Jun-16	30-Sep-16	0	$16,518.98	169
2-W.03.05	CM0655	Common Beamline Systems Management FY17	0%	80	01-Nov-16	28-Feb-17	03-Oct-16	30-Jan-17	-20	$18,766.30	149
Control System			95.2%	1208	02-Apr-12 A	30-Jan-17	02-Apr-12	31-Jan-17	1	$4,558,236.56	169
Controls Installation Work Package			0%	114	01-Nov-13 A	18-Apr-14 A	01-Oct-13	14-Oct-14	122	$0.00	
Controls Management			0%	114	01-Nov-13 A	18-Apr-14 A	01-Oct-13	14-Oct-14	122	$0.00	
2-W.04	MCON001	START: Controls Final Design	100%	0	01-Nov-13 A		01-Oct-13		-22	$0.00	
2-W.04	MCON005	START: Controls Procurement	100%	0	01-Apr-14 A		31-Mar-14		-1	$0.00	
2-W.04	MCON010	START: Controls Assembly and Install	100%	0	18-Apr-14 A		14-Oct-14		122	$0.00	
Control System Management			91.26%	1208	02-Apr-12 A	30-Jan-17	02-Apr-12	31-Jan-17	1	$294,427.67	169
Top Level Milestones			0%	0	24-Nov-16	24-Nov-16	14-Sep-16	14-Sep-16	-48	$0.00	34
2-W.04.01	M3020	2.04 - Beamline Control Systems Complete	0%	0		24-Nov-16		14-Sep-16	-48	$0.00	34
Controls Installation Work Package			91.26%	1208	02-Apr-12 A	30-Jan-17	02-Apr-12	31-Jan-17	1	$294,427.67	169
Controls Management			91.26%	1208	02-Apr-12 A	30-Jan-17	02-Apr-12	31-Jan-17	1	$294,427.67	169
2-W.04.01	CNFY12125(	Controls Management FY12	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$15,515.25	
2-W.04.01	CNFY12501(	Controls Management FY12	100%	21	02-Apr-12 A	30-Apr-12 A	02-Apr-12	30-Apr-12	0	$11,766.04	
2-W.04.01	CNFY13501(	Controls Management FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$37,794.59	
2-W.04.01	CON0010	Control System Management - FY12	100%	106	01-May-12 A	28-Sep-12 A	01-May-12	28-Sep-12	0	$0.00	
2-W.04.01	CON0020	Control System Management - FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.04.01	CON0030	Control System Management - FY14	100%	250	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	0	$80,798.10	
2-W.04.01	CON0040	Control System Management - FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$77,311.09	
2-W.04.01	CON0050	Control System Management - FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$60,985.03	169
2-W.04.01	CON0055	Control System Management - FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	31-Jan-17	1	$10,257.57	169
2-W.04.01	MCON020	Controls System Complete	0%	0		24-Nov-16		14-Sep-16	-48	$0.00	34
Control System Design & Implementation			93.37%	1155	13-Apr-12 A	24-Nov-16	13-Apr-12	14-Sep-16	-48	$2,913,585.64	34
No Procurement Work Packages - Glb			100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$173,163.12	
2-W.04.02	CSDFY1350	Controls System Design and Implementation FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$173,163.12	
ESM Control System Design & Implementation			100%	1036	04-May-12 A	24-Jun-16 A	04-May-12	14-Sep-16	56	$496,264.11	
Controls Installation Work Package			100%	1036	04-May-12 A	24-Jun-16 A	04-May-12	14-Sep-16	56	$496,264.11	
Controls ESM			100%	1036	04-May-12 A	24-Jun-16 A	04-May-12	14-Sep-16	56	$496,264.11	
Controls ESM - Preliminary Design			0%	310	04-May-12 A	31-Jul-13 A	04-May-12	08-May-13	-57	$0.00	
2-W.04.02.01	CON0060	RQRD: ESM PDS Controls Specification Document	100%	0	04-May-12 A		04-May-12		0	$0.00	
2-W.04.02.01	CON0070	RQRD: ESM SE Controls Specification Document	100%	0	30-Oct-12 A		30-Oct-12		0	$0.00	
2-W.04.02.01	CON0080	RQRD: ESM ES Controls Specification Document	100%	0	13-Dec-12 A		13-Dec-12		0	$0.00	
2-W.04.02.01	CON0090	Develop ESM Device Drivers	100%	157	13-Dec-12 A	31-Jul-13 A	13-Dec-12	08-May-13	-57	$0.00	
Controls ESM - Installation			100%	428	31-Jul-14 A	15-Apr-16 A	14-Oct-14	13-Jun-16	40	$84,194.28	
2-W.04.02.01	CON0160	RECEIVE: ESM Devices	100%	0		28-May-15 A		13-May-15	-9	$0.00	
2-W.04.02.01	CON0170	ESM Devices - Configure Servers (EAC Adj)	100%	82	01-Sep-15 A	31-Dec-15 A	14-May-15	20-May-15	-153	$3,596.34	
2-W.04.02.01	CON0180	ESM Devices - Configure ESM IOCs (EAC Adj)	100%	60	01-Sep-15 A	30-Nov-15 A	14-May-15	20-May-15	-131	$3,596.34	
2-W.04.02.01	CON0190	RECEIVE: ESM Rack	100%	0		31-Jul-14 A		14-Oct-14	51	$0.00	
2-W.04.02.01	CON0200	ESM Rack - Install Internal Wiring	100%	58	09-Feb-15 A	30-Apr-15 A	14-Oct-14	27-Oct-14	-126	$6,940.99	
2-W.04.02.01	CON0210	ESM Rack - Lift Into Position	100%	8	17-Nov-14 A	28-Nov-14 A	28-Oct-14	03-Nov-14	-17	$3,596.34	
2-W.04.02.01	CON0220	AVAIL: Rack Ready for Equipment	100%	0		28-Nov-14 A		03-Nov-14	-17	$0.00	
2-W.04.02.01	CON0230	ESM Devices - Install ESM Servers (EAC Adj)	100%	77	09-Sep-15 A	31-Dec-15 A	23-May-16	13-Jun-16	114	$3,711.42	
2-W.04.02.01	CON0240	ESM Rack - Test Network Connectivity to Instrumentation (EAC Adj)	100%	18	02-Nov-15 A	30-Nov-15 A	04-Nov-14	10-Nov-14	-261	$3,596.34	
2-W.04.02.01	CON0250	ESM Rack - Install Controller Cables	100%	20	03-Apr-15 A	30-Apr-15 A	04-Nov-14	17-Nov-14	-111	$6,940.99	
2-W.04.02.01	CON0255	ESM Rack - Terminate Controller Cables	100%	184	01-Jul-15 A	28-Mar-16 A	02-Mar-15	07-Jul-15	-180	$45,274.54	
2-W.04.02.01	CON0257	ESM Rack - Terminate Frontend Controller Cables - EAC Activity	100%	11	01-Apr-16 A	15-Apr-16 A				$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

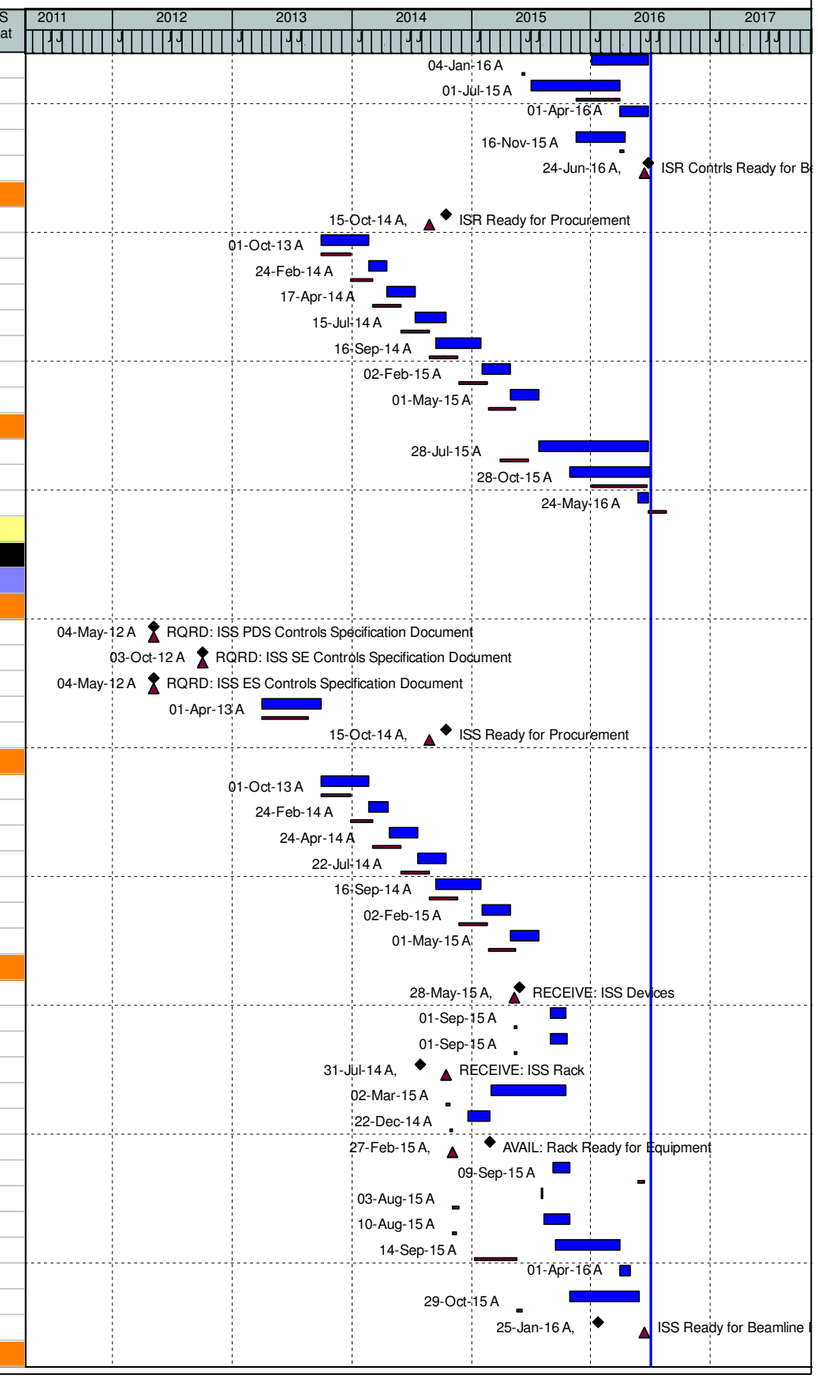
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.04.02.01	CON0260	ESM Devices - Test ESM Motors (EAC Adj)	100%	69	21-Sep-15 A	31-Dec-15 A	08-Jul-15	21-Jul-15	-111	$6,940.99	
2-W.04.02.01	CON0270	ESM Devices - Ready for Beamline Integrated Testing	100%	0		15-Apr-16 A		13-Jun-16	40	$0.00	
Controls ESM - Final Design			100%	684	01-Oct-13 A	24-Jun-16 A	01-Oct-13	11-Aug-15	-219	$295,471.72	
2-W.04.02.01	CON0100	ESM Device Engineering Screen (EAC Adj)	100%	230	28-Jul-15 A	24-Jun-16 A	18-May-15	11-Aug-15	-219	$49,537.95	
2-W.04.02.01	CON0120	ESM Ready for Procurement	100%	0		15-Oct-14 A		25-Aug-14	-35	$0.00	
2-W.04.02.01	CON0130	Review Beamline Final Design	100%	96	01-Oct-13 A	21-Feb-14 A	01-Oct-13	27-Dec-13	-36	$16,382.11	
2-W.04.02.01	CON0131	Final Design Document Draft	100%	43	24-Feb-14 A	23-Apr-14 A	30-Dec-13	05-Mar-14	-35	$16,382.11	
2-W.04.02.01	CON0132	Final Design Document	100%	60	24-Apr-14 A	21-Jul-14 A	06-Mar-14	29-May-14	-35	$33,459.29	
2-W.04.02.01	CON0133	Design Rack Layout	100%	60	22-Jul-14 A	15-Oct-14 A	30-May-14	25-Aug-14	-35	$43,815.19	
2-W.04.02.01	CON0140	Develop EPICS Database	100%	92	16-Sep-14 A	30-Jan-15 A	26-Aug-14	19-Nov-14	-46	$44,906.50	
2-W.04.02.01	CON0150	Develop IOC Application	100%	62	02-Feb-15 A	30-Apr-15 A	24-Nov-14	20-Feb-15	-48	$45,494.28	
2-W.04.02.01	CON0151	Test IOC Application (EAC Adj)	100%	60	01-May-15 A	27-Jul-15 A	23-Feb-15	15-May-15	-49	$45,494.28	
Controls ESM - Integration & Test			100%	236	20-Jul-15 A	24-Jun-16 A	29-Jan-16	14-Sep-16	56	$116,598.11	
2-W.04.02.01	CON0280	ESM Controls Component Testing (EAC Adj)	100%	236	20-Jul-15 A	24-Jun-16 A	29-Jan-16	20-Jun-16	-4	$77,732.07	
2-W.04.02.01	CON0290	ESM Controls Integrated Testing (EAC Adj)	100%	69	21-Mar-16 A	24-Jun-16 A	21-Jun-16	14-Sep-16	56	$38,866.04	
FXI Control System Design			100%	753	25-May-12 A	03-Jun-15 A	25-May-12	16-Sep-15	74	$111,717.80	
Controls Installation Work Package			100%	753	25-May-12 A	03-Jun-15 A	25-May-12	16-Sep-15	74	$111,717.80	
Controls FXI			100%	753	25-May-12 A	03-Jun-15 A	25-May-12	16-Sep-15	74	$111,717.80	
Controls FXI - Preliminary Design			0%	317	25-May-12 A	30-Aug-13 A	25-May-12	12-Aug-13	-14	$0.00	
2-W.04.02.02	CON0300	RQRD: FXI PDS Controls Specification Document	100%	0	21-Mar-13 A		21-Mar-13		0	$0.00	
2-W.04.02.02	CON0310	RQRD: FXI SE Controls Specification Document	100%	0	25-May-12 A		25-May-12		0	$0.00	
2-W.04.02.02	CON0320	RQRD: FXI ES Controls Specification Document	100%	0	01-Oct-12 A		01-Oct-12		0	$0.00	
2-W.04.02.02	CON0330	Develop FXI Device Drivers	100%	114	21-Mar-13 A	30-Aug-13 A	21-Mar-13	12-Aug-13	-14	$0.00	
Controls FXI - Final Design			100%	311	01-Oct-13 A	31-Dec-14 A	01-Oct-13	29-Dec-14	-1	$111,717.80	
2-W.04.02.02	CON0360	FXI Controls - Ready for Procurement	100%	0		31-Dec-14 A		29-Dec-14	-1	$0.00	
2-W.04.02.02	CON0369	Review Beamline Final Design	100%	96	01-Oct-13 A	21-Feb-14 A	01-Oct-13	27-Dec-13	-36	$16,382.11	
2-W.04.02.02	CON0370	Final Design Document Draft	100%	45	24-Feb-14 A	25-Apr-14 A	30-Dec-13	05-Mar-14	-37	$16,382.11	
2-W.04.02.02	CON0371	Final Design Document	100%	60	28-Apr-14 A	23-Jul-14 A	06-Mar-14	29-May-14	-37	$33,459.29	
2-W.04.02.02	CON0373	FXI Controls - Design Rack Layout	100%	111	22-Jul-14 A	31-Dec-14 A	01-Oct-14	29-Dec-14	-1	$45,494.28	
Controls FXI - Installation			0%	209	31-Jul-14 A	03-Jun-15 A	14-Oct-14	16-Sep-15	74	$0.00	
2-W.04.02.02	CON0400	RECEIVE: FXI Devices	100%	0		28-May-15 A		13-May-15	-9	$0.00	
2-W.04.02.02	CON0430	RECEIVE: FXI Rack	100%	0		31-Jul-14 A		14-Oct-14	51	$0.00	
2-W.04.02.02	CON0460	AVAIL: Rack Ready for Equipment	100%	0		31-Dec-14 A		03-Nov-14	-38	$0.00	
2-W.04.02.02	CON0510	FXI Devices - Ready for Beamline Integrated Testing	100%	0		03-Jun-15 A		16-Sep-15	74	$0.00	
ISR Control System Design & Implementation			100%	1054	13-Apr-12 A	30-Jun-16 A	13-Apr-12	18-Aug-16	35	$520,986.11	
Controls Installation Work Package			100%	1054	13-Apr-12 A	30-Jun-16 A	13-Apr-12	18-Aug-16	35	$520,986.11	
Controls ISR			100%	1054	13-Apr-12 A	30-Jun-16 A	13-Apr-12	18-Aug-16	35	$520,986.11	
Controls ISR - Preliminary Design			0%	325	13-Apr-12 A	31-Jul-13 A	13-Apr-12	24-Apr-13	-67	$0.00	
2-W.04.02.03	CON0540	RQRD: ISR PDS Controls Specification Document	100%	0	13-Apr-12 A		13-Apr-12		0	$0.00	
2-W.04.02.03	CON0550	RQRD: ISR SE Controls Specification Document	100%	0	29-Nov-12 A		29-Nov-12		0	$0.00	
2-W.04.02.03	CON0560	RQRD: ISR ES Controls Specification Document	100%	0	04-May-12 A		04-May-12		0	$0.00	
2-W.04.02.03	CON0570	Develop ISR Device Drivers	100%	167	29-Nov-12 A	31-Jul-13 A	29-Nov-12	24-Apr-13	-67	$0.00	
Controls ISR - Installation			100%	477	31-Jul-14 A	24-Jun-16 A	14-Oct-14	13-Jun-16	-9	$89,455.70	
2-W.04.02.03	CON0640	RECEIVE: ISR Devices	100%	0		28-May-15 A		13-May-15	-9	$0.00	
2-W.04.02.03	CON0650	ISR Configure Servers (EAC Adj)	100%	134	01-Sep-15 A	17-Mar-16 A	14-May-15	20-May-15	-205	$3,898.17	
2-W.04.02.03	CON0660	Configure ISR IOCs (EAC Adj)	100%	121	01-Sep-15 A	29-Feb-16 A	14-May-15	20-May-15	-192	$3,898.17	
2-W.04.02.03	CON0670	RECEIVE: ISR Rack	100%	0		31-Jul-14 A		14-Oct-14	51	$0.00	
2-W.04.02.03	CON0680	Install Rack Internal Wiring	100%	47	16-Dec-14 A	26-Feb-15 A	14-May-15	28-May-15	65	$7,544.65	
2-W.04.02.03	CON0690	Lift Rack to Into Position	100%	8	17-Nov-14 A	28-Nov-14 A	29-May-15	04-Jun-15	128	$3,898.17	
2-W.04.02.03	CON0700	AVAIL: Rack Ready for Equipment	100%	0		28-Nov-14 A		04-Jun-15	128	$0.00	
2-W.04.02.03	CON0710	Install ISR Servers (EAC Adj)	100%	76	09-Sep-15 A	30-Dec-15 A	23-May-16	13-Jun-16	115	$4,022.91	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 - Page 37 of 95

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.04.02.03	CON0720	ISR Test Network Connectivity to Rack Instrumentation (EAC Adj)	100%	122	04-Jan-16 A	24-Jun-16 A	05-Jun-15	11-Jun-15	-261	$3,898.17	
2-W.04.02.03	CON0730	ISR Install & Terminate Controller Cables (EAC Adj)	100%	185	01-Jul-15 A	29-Mar-16 A	17-Nov-15	29-Mar-16	1	$54,509.40	
2-W.04.02.03	CON0732	ISR Install & Terminate Endstation Controller Cables - EAC Activity	100%	59	01-Apr-16 A	24-Jun-16 A				$0.00	
2-W.04.02.03	CON0740	ISR Test Motor (EAC Adj)	100%	103	16-Nov-15 A	14-Apr-16 A	30-Mar-16	12-Apr-16	-2	$7,786.08	
2-W.04.02.03	CON0750	ISR Contrls Ready for Beamline Integrated Testing	100%	0		24-Jun-16 A		13-Jun-16	-8	$0.00	
Controls ISR - Final Design			100%	454	01-Oct-13 A	27-Jul-15 A	01-Oct-13	15-May-15	-49	$246,202.17	
2-W.04.02.03	CON0600	ISR Ready for Procurement	100%	0		15-Oct-14 A		25-Aug-14	-35	$0.00	
2-W.04.02.03	CON0609	Review Beamline Final Design	100%	96	01-Oct-13 A	21-Feb-14 A	01-Oct-13	27-Dec-13	-36	$16,382.11	
2-W.04.02.03	CON0610	Final Design Document Draft	100%	38	24-Feb-14 A	16-Apr-14 A	30-Dec-13	05-Mar-14	-30	$16,382.11	
2-W.04.02.03	CON0611	Final Design Document	100%	60	17-Apr-14 A	14-Jul-14 A	06-Mar-14	29-May-14	-30	$33,459.29	
2-W.04.02.03	CON0613	Design Rack Layout	100%	65	15-Jul-14 A	15-Oct-14 A	30-May-14	25-Aug-14	-35	$44,083.60	
2-W.04.02.03	CON0620	Develop EPICS Database	100%	92	16-Sep-14 A	30-Jan-15 A	26-Aug-14	19-Nov-14	-46	$44,906.50	
2-W.04.02.03	CON0630	Develop IOC Application	100%	62	02-Feb-15 A	30-Apr-15 A	24-Nov-14	20-Feb-15	-48	$45,494.28	
2-W.04.02.03	CON0631	Test IOC Application (EAC Adj)	100%	60	01-May-15 A	27-Jul-15 A	23-Feb-15	15-May-15	-49	$45,494.28	
Controls ISR - Integration & Test			100%	233	28-Jul-15 A	30-Jun-16 A	01-Apr-15	18-Aug-16	35	$185,328.24	
2-W.04.02.03	CON0580	ISR Device Engineering Screen (EAC Adj)	100%	229	28-Jul-15 A	24-Jun-16 A	01-Apr-15	24-Jun-15	-251	$55,725.47	
2-W.04.02.03	CON0760	ISR Controls Component Testing (EAC Adj)	100%	169	28-Oct-15 A	30-Jun-16 A	04-Jan-16	22-Jun-16	-5	$86,375.89	
2-W.04.02.03	CON0770	ISR Controls Integrated Testing (EAC Adj)	100%	22	24-May-16 A	24-Jun-16 A	23-Jun-16	18-Aug-16	39	$43,226.88	
ISS Control System Design & Implementation			100%	1016	04-May-12 A	27-May-16 A	04-May-12	01-Sep-16	68	$539,086.14	
Controls Installation Work Package			100%	1016	04-May-12 A	27-May-16 A	04-May-12	01-Sep-16	68	$539,086.14	
Controls ISS			100%	1016	04-May-12 A	27-May-16 A	04-May-12	01-Sep-16	68	$539,086.14	
Controls ISS - Preliminary Design			0%	612	04-May-12 A	15-Oct-14 A	04-May-12	25-Aug-14	-35	$0.00	
2-W.04.02.04	CON0780	RQRD: ISS PDS Controls Specification Document	100%	0	04-May-12 A		04-May-12		0	$0.00	
2-W.04.02.04	CON0790	RQRD: ISS SE Controls Specification Document	100%	0	03-Oct-12 A		03-Oct-12		0	$0.00	
2-W.04.02.04	CON0800	RQRD: ISS ES Controls Specification Document	100%	0	04-May-12 A		04-May-12		0	$0.00	
2-W.04.02.04	CON0810	Develop ISS Device Drivers	100%	127	01-Apr-13 A	30-Sep-13 A	01-Apr-13	21-Aug-13	-27	$0.00	
2-W.04.02.04	CON0840	ISS Ready for Procurement	100%	0		15-Oct-14 A		25-Aug-14	-35	$0.00	
Controls ISS - Final Design			100%	454	01-Oct-13 A	27-Jul-15 A	01-Oct-13	15-May-15	-49	$246,202.17	
2-W.04.02.04	CON0849	Review Beamline Final Design	100%	96	01-Oct-13 A	21-Feb-14 A	01-Oct-13	27-Dec-13	-36	$16,382.11	
2-W.04.02.04	CON0850	Final Design Document Draft	100%	43	24-Feb-14 A	23-Apr-14 A	30-Dec-13	05-Mar-14	-35	$16,382.11	
2-W.04.02.04	CON0851	Final Design Document	100%	60	24-Apr-14 A	21-Jul-14 A	06-Mar-14	29-May-14	-35	$33,459.29	
2-W.04.02.04	CON0853	Design Rack Layout	100%	60	22-Jul-14 A	15-Oct-14 A	30-May-14	25-Aug-14	-35	$44,083.60	
2-W.04.02.04	CON0860	Develop EPICS Database	100%	92	16-Sep-14 A	30-Jan-15 A	26-Aug-14	19-Nov-14	-46	$44,906.50	
2-W.04.02.04	CON0870	Develop IOC Application	100%	62	02-Feb-15 A	30-Apr-15 A	24-Nov-14	20-Feb-15	-48	$45,494.28	
2-W.04.02.04	CON0871	Test IOC Application (EAC Adj)	100%	60	01-May-15 A	27-Jul-15 A	23-Feb-15	15-May-15	-49	$45,494.28	
Controls ISS - Installation			100%	457	31-Jul-14 A	27-May-16 A	14-Oct-14	13-Jun-16	11	$85,206.41	
2-W.04.02.04	CON0880	RECEIVE: ISS Devices	100%	0		28-May-15 A		13-May-15	-9	$0.00	
2-W.04.02.04	CON0890	Configure ISS Servers (EAC Adj)	100%	31	01-Sep-15 A	15-Oct-15 A	14-May-15	20-May-15	-102	$3,898.17	
2-W.04.02.04	CON0900	Configure ISS IOCs (EAC Adj)	100%	36	01-Sep-15 A	22-Oct-15 A	14-May-15	20-May-15	-107	$3,898.17	
2-W.04.02.04	CON0910	RECEIVE: ISS Rack	100%	0		31-Jul-14 A		14-Oct-14	51	$0.00	
2-W.04.02.04	CON0920	Install Rack Internal Wiring	100%	160	02-Mar-15 A	15-Oct-15 A	14-Oct-14	27-Oct-14	-242	$5,226.99	
2-W.04.02.04	CON0930	Lift Rack to Into Position	100%	45	22-Dec-14 A	27-Feb-15 A	28-Oct-14	03-Nov-14	-77	$3,898.17	
2-W.04.02.04	CON0940	AVAIL: Rack Ready for Equipment	100%	0		27-Feb-15 A		03-Nov-14	-77	$0.00	
2-W.04.02.04	CON0950	Install ISS Servers (EAC Adj)	100%	37	09-Sep-15 A	30-Oct-15 A	23-May-16	13-Jun-16	154	$4,022.91	
2-W.04.02.04	CON0960	Test Network Connectivity to Rack Instrumentation (EAC Adj)	100%	5	03-Aug-15 A	07-Aug-15 A	04-Nov-14	24-Nov-14	-175	$3,898.17	
2-W.04.02.04	CON0970	Install Controller Cables (EAC Adj)	100%	58	10-Aug-15 A	30-Oct-15 A	04-Nov-14	17-Nov-14	-238	$7,544.65	
2-W.04.02.04	CON0975	ISS Terminate Controller Cables	100%	135	14-Sep-15 A	30-Mar-16 A	12-Jan-15	19-May-15	-215	$45,274.54	
2-W.04.02.04	CON0977	ISS Terminate Endstation Controller Cables	100%	20	01-Apr-16 A	29-Apr-16 A				$0.00	
2-W.04.02.04	CON0980	ISS Test Motor (EAC Adj)	100%	145	29-Oct-15 A	27-May-16 A	21-May-15	04-Jun-15	-246	$7,544.65	
2-W.04.02.04	CON0990	ISS Ready for Beamline Integrated Testing	100%	0		25-Jan-16 A		13-Jun-16	99	$0.00	
Controls ISS - Integration & Test			100%	270	01-May-15 A	27-May-16 A	01-Apr-15	01-Sep-16	68	$207,677.56	



(O) NEXT - Detail Schedule

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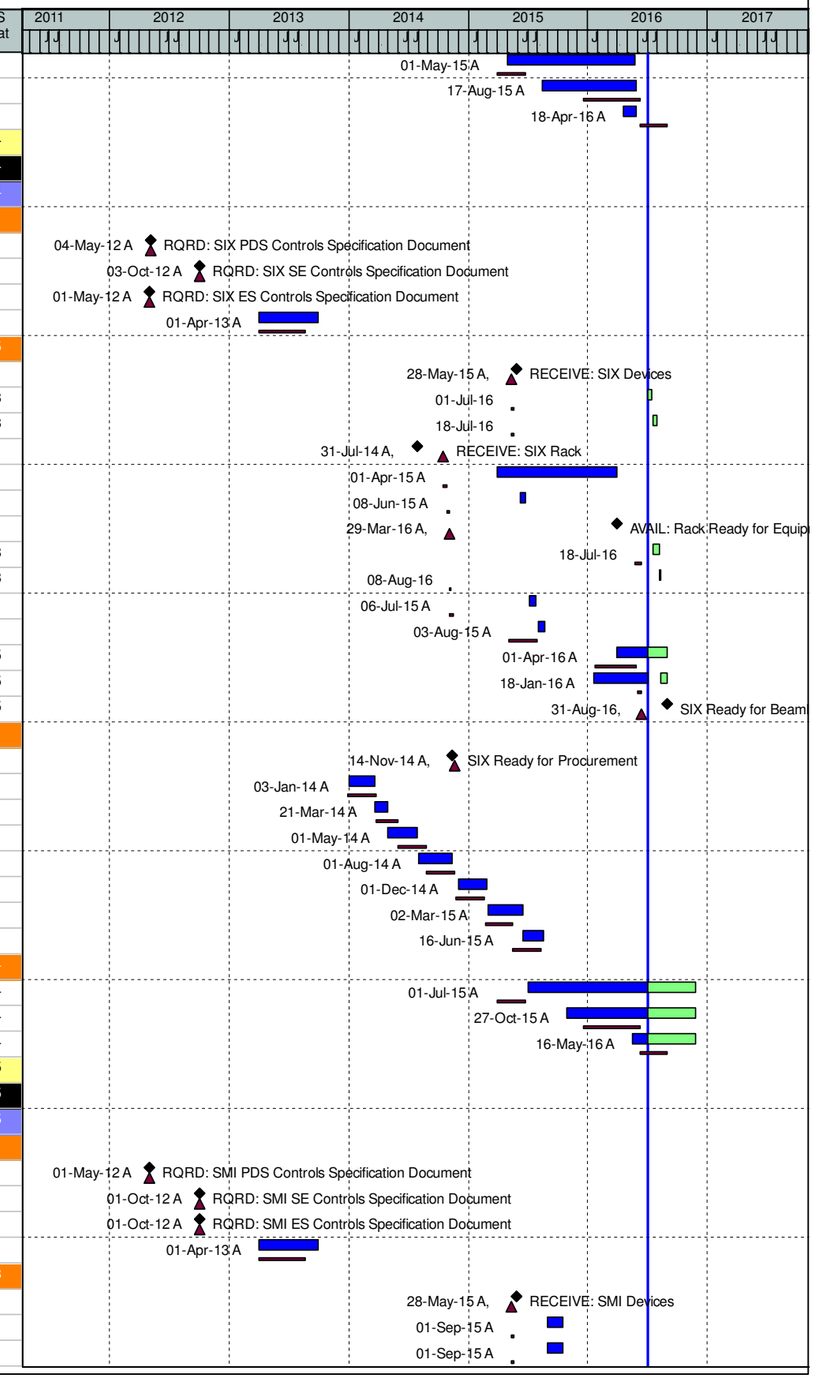
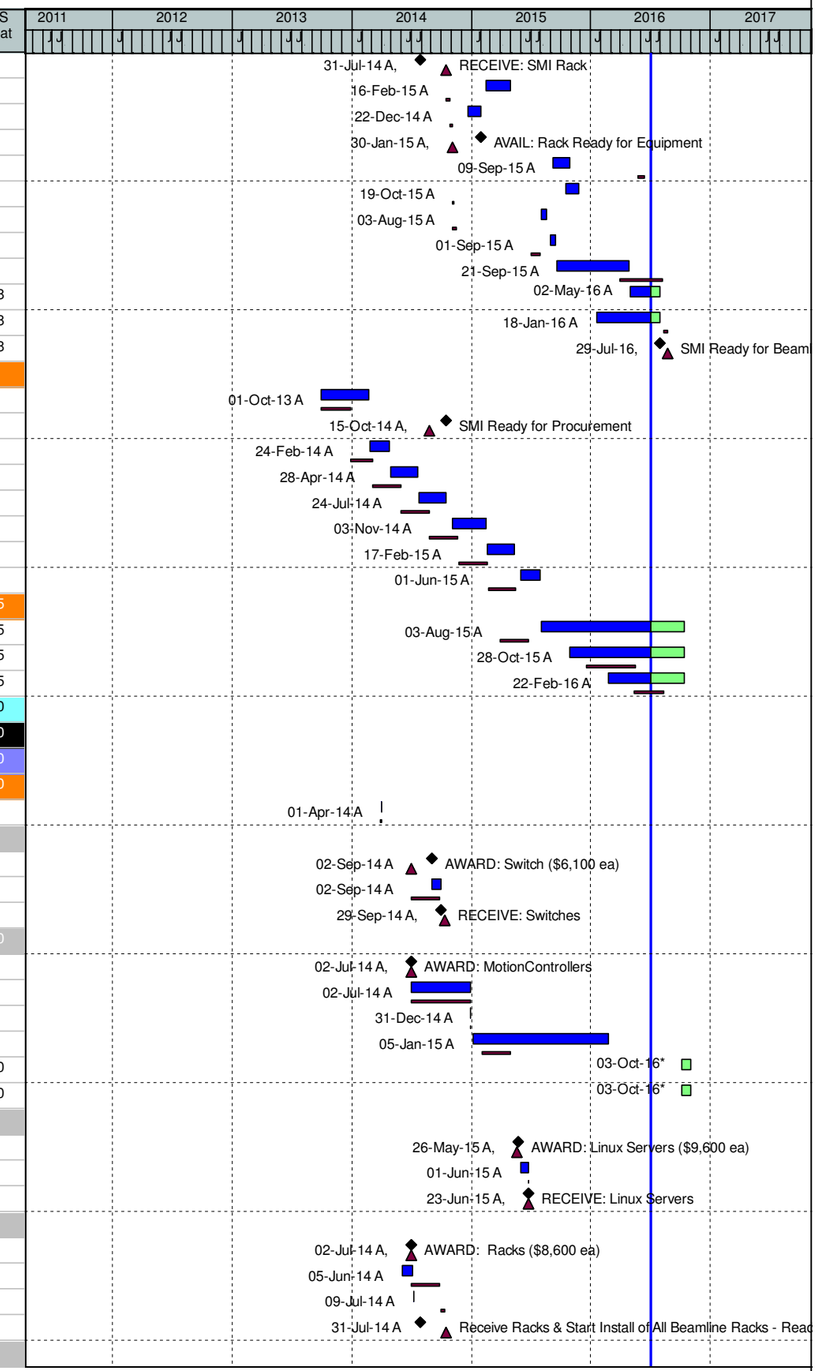
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.04.02.04	CON0820	ISS Device Engineering Screen (EAC Adj)	100%	268	01-May-15 A	25-May-16 A	01-Apr-15	24-Jun-15	-230	$55,725.47	
2-W.04.02.04	CON1000	ISS Controls Individual Component Testing (EAC Adj)	100%	196	17-Aug-15 A	27-May-16 A	17-Dec-15	08-Jun-16	8	$101,015.86	
2-W.04.02.04	CON1010	ISS Controls Integrated Testing (EAC Adj)	100%	29	18-Apr-16 A	27-May-16 A	09-Jun-16	01-Sep-16	68	$50,936.23	
SIX Control System Design & Implementation			75.14%	1143	01-May-12 A	24-Nov-16	01-May-12	01-Sep-16	-56	$528,850.57	34
Controls Installation Work Package			75.14%	1143	01-May-12 A	24-Nov-16	01-May-12	01-Sep-16	-56	$528,850.57	34
Controls SIX			75.14%	1143	01-May-12 A	24-Nov-16	01-May-12	01-Sep-16	-56	$528,850.57	34
Controls SIX - Preliminary Design			0%	355	01-May-12 A	30-Sep-13 A	01-May-12	21-Aug-13	-27	$0.00	
2-W.04.02.05	CON1020	RQRD: SIX PDS Controls Specification Document	100%	0	04-May-12 A		04-May-12		0	$0.00	
2-W.04.02.05	CON1030	RQRD: SIX SE Controls Specification Document	100%	0	03-Oct-12 A		03-Oct-12		0	$0.00	
2-W.04.02.05	CON1040	RQRD: SIX ES Controls Specification Document	100%	0	01-May-12 A		01-May-12		0	$0.00	
2-W.04.02.05	CON1050	Develop SIX Device Drivers	100%	127	01-Apr-13 A	30-Sep-13 A	01-Apr-13	21-Aug-13	-27	$0.00	
Controls SIX - Installation			66.82%	524	31-Jul-14 A	31-Aug-16	14-Oct-14	13-Jun-16	-56	$88,200.13	55
2-W.04.02.05	CON1120	RECEIVE: SIX Devices	100%	0		28-May-15 A		13-May-15	-9	$0.00	
2-W.04.02.05	CON1130	SIX Configure Servers (EAC Adj)	0%	10	01-Jul-16	15-Jul-16	14-May-15	20-May-15	-290	$3,898.17	68
2-W.04.02.05	CON1140	SIX Configure IOCs (EAC Adj)	0%	10	18-Jul-16	29-Jul-16	14-May-15	20-May-15	-300	$3,898.17	78
2-W.04.02.05	CON1150	RECEIVE: SIX Rack	100%	0		31-Jul-14 A		14-Oct-14	51	$0.00	
2-W.04.02.05	CON1160	SIX Install Rack Internal Wiring (EAC Adj)	100%	250	01-Apr-15 A	29-Mar-16 A	14-Oct-14	27-Oct-14	-354	$7,544.65	
2-W.04.02.05	CON1170	Lift Rack to Into Position	100%	12	08-Jun-15 A	24-Jun-15 A	28-Oct-14	03-Nov-14	-158	$3,898.17	
2-W.04.02.05	CON1180	AVAIL: Rack Ready for Equipment	100%	0		29-Mar-16 A		03-Nov-14	-349	$0.00	
2-W.04.02.05	CON1190	SIX Install Servers (EAC Adj)	0%	15	18-Jul-16	05-Aug-16	23-May-16	13-Jun-16	-38	$4,022.91	68
2-W.04.02.05	CON1200	SIX Test Network Connectivity to Rack Instrumentation (EAC Adj)	0%	5	08-Aug-16	12-Aug-16	04-Nov-14	10-Nov-14	-440	$3,898.17	68
2-W.04.02.05	CON1210	Install Controller Cables (EAC Adj)	100%	15	06-Jul-15 A	27-Jul-15 A	04-Nov-14	17-Nov-14	-170	$7,544.65	
2-W.04.02.05	CON1215	Additional Controller Cables	100%	15	03-Aug-15 A	24-Aug-15 A	04-May-15	31-Jul-15	-15	$31,692.18	
2-W.04.02.05	CON1217	SIX Terminate Controller Cables - EAC Hrs Added	20%	107	01-Apr-16 A	31-Aug-16	22-Jan-16	27-May-16	-66	$14,017.00	55
2-W.04.02.05	CON1220	SIX Test Motor (EAC Adj)	70%	159	18-Jan-16 A	31-Aug-16	31-May-16	13-Jun-16	-56	$7,786.08	55
2-W.04.02.05	CON1230	SIX Ready for Beamline Integrated Testing	0%	0		31-Aug-16		13-Jun-16	-56	$0.00	55
Controls SIX - Final Design			100%	409	03-Jan-14 A	20-Aug-15 A	30-Dec-13	11-Aug-15	-7	$247,612.86	
2-W.04.02.05	CON1080	SIX Ready for Procurement	100%	0		14-Nov-14 A		19-Nov-14	3	$0.00	
2-W.04.02.05	CON1090	Review Beamline Final Design	100%	53	03-Jan-14 A	20-Mar-14 A	30-Dec-13	26-Mar-14	4	$16,382.11	
2-W.04.02.05	CON1091	Final Design Document Draft	100%	28	21-Mar-14 A	29-Apr-14 A	27-Mar-14	29-May-14	21	$16,382.11	
2-W.04.02.05	CON1092	Final Design Document	100%	60	01-May-14 A	28-Jul-14 A	30-May-14	25-Aug-14	20	$33,459.29	
2-W.04.02.05	CON1093	Design Rack Layout	100%	74	01-Aug-14 A	14-Nov-14 A	26-Aug-14	19-Nov-14	3	$44,906.50	
2-W.04.02.05	CON1100	Develop EPICS Database	100%	60	01-Dec-14 A	27-Feb-15 A	24-Nov-14	20-Feb-15	-5	$45,494.28	
2-W.04.02.05	CON1110	Develop IOC Application	100%	75	02-Mar-15 A	15-Jun-15 A	23-Feb-15	15-May-15	-20	$45,494.28	
2-W.04.02.05	CON1111	Test IOC Application (EAC Adj)	100%	47	16-Jun-15 A	20-Aug-15 A	18-May-15	11-Aug-15	-7	$45,494.28	
Controls SIX - Integration & Test			47.05%	352	01-Jul-15 A	24-Nov-16	01-Apr-15	01-Sep-16	-56	$193,037.58	34
2-W.04.02.05	CON1060	SIX Develop Device Engineering Screen (EAC Adj)	70%	352	01-Jul-15 A	24-Nov-16	01-Apr-15	24-Jun-15	-356	$55,725.47	34
2-W.04.02.05	CON1240	SIX Controls Individual Component Testing (EAC Adj)	60%	271	27-Oct-15 A	24-Nov-16	17-Dec-15	08-Jun-16	-116	$86,375.89	34
2-W.04.02.05	CON1250	SIX Controls Integrated Testing (EAC Adj)	0%	133	16-May-16 A	24-Nov-16	09-Jun-16	01-Sep-16	-56	$50,936.23	34
SMI Control System Design & Implementation			88.66%	1116	01-May-12 A	14-Oct-16	01-May-12	22-Aug-16	-37	$543,517.80	25
Controls Installation Work Package			88.66%	1116	01-May-12 A	14-Oct-16	01-May-12	22-Aug-16	-37	$543,517.80	25
Controls SMI			88.66%	1116	01-May-12 A	14-Oct-16	01-May-12	22-Aug-16	-37	$543,517.80	25
Controls SMI - Preliminary Design			0%	355	01-May-12 A	30-Sep-13 A	01-May-12	21-Aug-13	-27	$0.00	
2-W.04.02.06	CON1260	RQRD: SMI PDS Controls Specification Document	100%	0	01-May-12 A		01-May-12		0	$0.00	
2-W.04.02.06	CON1270	RQRD: SMI SE Controls Specification Document	100%	0	01-Oct-12 A		01-Oct-12		0	$0.00	
2-W.04.02.06	CON1280	RQRD: SMI ES Controls Specification Document	100%	0	01-Oct-12 A		01-Oct-12		0	$0.00	
2-W.04.02.06	CON1290	Develop SMI Device Drivers	100%	127	01-Apr-13 A	30-Sep-13 A	01-Apr-13	21-Aug-13	-27	$0.00	
Controls SMI - Installation			97.37%	501	31-Jul-14 A	29-Jul-16	14-Oct-14	22-Aug-16	16	$88,859.34	78
2-W.04.02.06	CON1360	RECEIVE: SMI Devices	100%	0		28-May-15 A		13-May-15	-9	$0.00	
2-W.04.02.06	CON1370	Configure SMI Servers (EAC Adj)	100%	31	01-Sep-15 A	15-Oct-15 A	14-May-15	20-May-15	-102	$3,898.17	
2-W.04.02.06	CON1380	Configure SMI IOCs (EAC Adj)	100%	31	01-Sep-15 A	15-Oct-15 A	14-May-15	20-May-15	-102	$3,898.17	



(O) NEXT - Detail Schedule

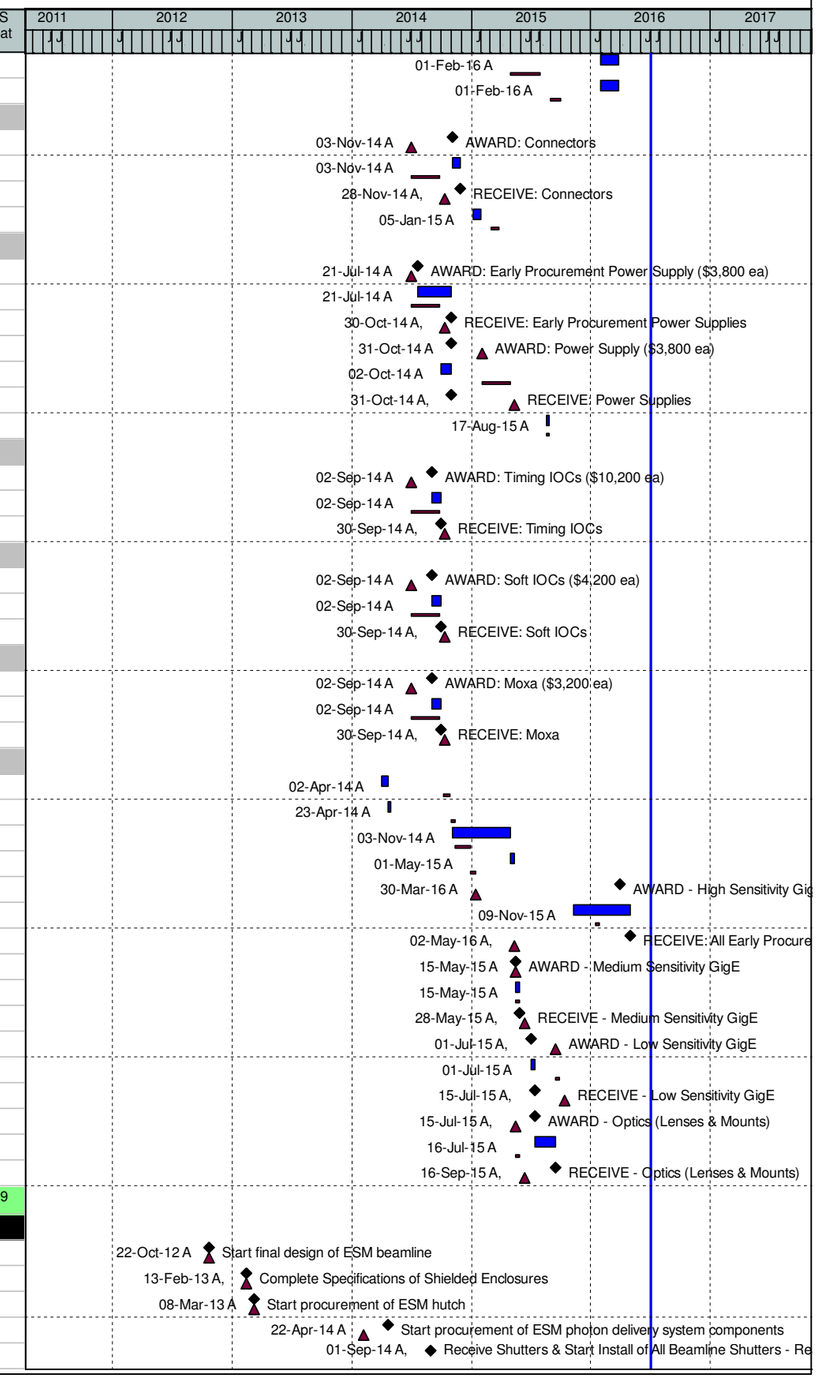
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.04.02.06	CON1390	RECEIVE: SMI Rack	100%	0		31-Jul-14 A		14-Oct-14	51	$0.00	
2-W.04.02.06	CON1400	Install Rack Internal Wiring	100%	52	16-Feb-15 A	30-Apr-15 A	14-Oct-14	27-Oct-14	-125	$7,544.65	
2-W.04.02.06	CON1410	Lift Rack to Into Position	100%	26	22-Dec-14 A	30-Jan-15 A	28-Oct-14	03-Nov-14	-58	$3,898.17	
2-W.04.02.06	CON1420	AVAIL: Rack Ready for Equipment	100%	0		30-Jan-15 A		03-Nov-14	-58	$0.00	
2-W.04.02.06	CON1430	Install SMI Servers (EAC Adj)	100%	37	09-Sep-15 A	30-Oct-15 A	23-May-16	13-Jun-16	154	$4,022.91	
2-W.04.02.06	CON1440	Test Network Connectivity to Rack Instrumentation (EAC Adj)	100%	27	19-Oct-15 A	27-Nov-15 A	04-Nov-14	10-Nov-14	-260	$3,898.17	
2-W.04.02.06	CON1450	Install Controller Cables (EAC Adj)	100%	14	03-Aug-15 A	20-Aug-15 A	04-Nov-14	17-Nov-14	-189	$7,544.65	
2-W.04.02.06	CON1455	Additional Cable Labor	100%	11	01-Sep-15 A	17-Sep-15 A	01-Jul-15	31-Jul-15	-32	$11,067.36	
2-W.04.02.06	CON1457	SMI Terminate Controller Cables	100%	151	21-Sep-15 A	28-Apr-16 A	01-Apr-16	08-Aug-16	71	$35,301.03	
2-W.04.02.06	CON1459	SMI Terminate Endstation Controller Cables - EAC Activity	30%	63	02-May-16 A	29-Jul-16				$0.00	78
2-W.04.02.06	CON1460	SMI Test Motor (EAC Adj)	70%	136	18-Jan-16 A	29-Jul-16	09-Aug-16	22-Aug-16	16	$7,786.08	78
2-W.04.02.06	CON1470	SMI Ready for Beamline Integrated Testing	0%	0		29-Jul-16		22-Aug-16	16	$0.00	78
Controls SMI - Final Design			100%	456	01-Oct-13 A	30-Jul-15 A	01-Oct-13	15-May-15	-51	$246,202.17	
2-W.04.02.06	CON0329	Review Beamline Final Design	100%	96	01-Oct-13 A	21-Feb-14 A	01-Oct-13	27-Dec-13	-36	$16,382.11	
2-W.04.02.06	CON1320	SMI Ready for Procurement	100%	0		15-Oct-14 A		25-Aug-14	-35	$0.00	
2-W.04.02.06	CON1330	Final Design Document Draft	100%	45	24-Feb-14 A	25-Apr-14 A	30-Dec-13	05-Mar-14	-37	$16,382.11	
2-W.04.02.06	CON1331	Final Design Document	100%	60	28-Apr-14 A	23-Jul-14 A	06-Mar-14	29-May-14	-37	$33,459.29	
2-W.04.02.06	CON1333	Design Rack Layout	100%	58	24-Jul-14 A	15-Oct-14 A	30-May-14	25-Aug-14	-35	$44,083.60	
2-W.04.02.06	CON1340	Develop EPICS Database	100%	69	03-Nov-14 A	13-Feb-15 A	26-Aug-14	19-Nov-14	-56	$44,906.50	
2-W.04.02.06	CON1345	Develop IOC Application	100%	60	17-Feb-15 A	11-May-15 A	24-Nov-14	20-Feb-15	-56	$45,494.28	
2-W.04.02.06	CON1350	Test IOC Application (EAC Adj)	100%	42	01-Jun-15 A	30-Jul-15 A	23-Feb-15	15-May-15	-51	$45,494.28	
Controls SMI - Integration & Test			71.56%	303	03-Aug-15 A	14-Oct-16	01-Apr-15	11-Aug-16	-44	$208,456.28	25
2-W.04.02.06	CON1300	SMI Develop Device Engineering Screen (EAC Adj)	85%	303	03-Aug-15 A	14-Oct-16	01-Apr-15	24-Jun-15	-329	$55,725.47	25
2-W.04.02.06	CON1480	SMI Controls Individual Component Testing (EAC Adj)	85%	243	28-Oct-15 A	14-Oct-16	17-Dec-15	17-May-16	-104	$101,794.58	25
2-W.04.02.06	CON1490	SMI Controls Integrated Testing (EAC Adj)	30%	166	22-Feb-16 A	14-Oct-16	11-May-16	11-Aug-16	-44	$50,936.23	25
Control System Equipment			100%	649	01-Apr-14 A	31-Oct-16	31-Mar-14	28-Jan-16	-192	$1,350,223.25	50
Controls Installation Work Package			100%	649	01-Apr-14 A	31-Oct-16	31-Mar-14	28-Jan-16	-192	$1,350,223.25	50
Controls Baseline			100%	649	01-Apr-14 A	31-Oct-16	31-Mar-14	28-Jan-16	-192	$1,350,223.25	50
ALL PROCUREMENT OF CONTROLS EQUIPMENT			100%	649	01-Apr-14 A	31-Oct-16	31-Mar-14	28-Jan-16	-192	$1,350,223.25	50
2-W.04.03	CON1500	Authorization to Procure Controls Equipment	100%	1	01-Apr-14 A	01-Apr-14 A	31-Mar-14	31-Mar-14	-1	$0.00	
Swtches			100%	20	02-Sep-14 A	29-Sep-14 A	02-Jul-14	10-Oct-14	9	$94,092.75	
2-W.04.03	CON1760	AWARD: Switch ($6,100 ea)	100%	0	02-Sep-14 A		02-Jul-14		-41	$0.00	
2-W.04.03	CON1770	Fabricate Switches	100%	20	02-Sep-14 A	29-Sep-14 A	02-Jul-14	26-Sep-14	-1	$94,092.75	
2-W.04.03	CON1800	RECEIVE: Switches	100%	0		29-Sep-14 A		10-Oct-14	9	$0.00	
Motor Controllers			100%	584	02-Jul-14 A	31-Oct-16	02-Jul-14	29-Apr-15	-379	$605,121.01	50
2-W.04.03	CON1610	AWARD: MotionControllers	100%	0		02-Jul-14 A		02-Jul-14	0	$0.00	
2-W.04.03	CON1630	Procure: Motion Controllers	100%	123	02-Jul-14 A	30-Dec-14 A	02-Jul-14	30-Dec-14	0	$0.00	
2-W.04.03	CON1650	Receipt & Acceptance Motion Controllers	100%	1	31-Dec-14 A	31-Dec-14 A	31-Dec-14	31-Dec-14	0	$510,474.90	
2-W.04.03	CON1655	Additional Enhanced Mode Motion Controllers	100%	284	05-Jan-15 A	23-Feb-16 A	04-Feb-15	29-Apr-15	-203	$94,646.11	
2-W.04.03	CON2407	Additional Motion Controls and PS - EAC Activity	0%	20	03-Oct-16*	31-Oct-16				$0.00	50
2-W.04.03	CON2413	Misc Cables - EAC Activity	0%	20	03-Oct-16*	31-Oct-16				$0.00	50
Servers			100%	21	26-May-15 A	23-Jun-15 A	19-May-15	23-Jun-15	0	$90,220.00	
2-W.04.03	CON1810	AWARD: Linux Servers ($9,600 ea)	100%	0		26-May-15 A		19-May-15	-4	$0.00	
2-W.04.03	CON1820	Procure Linux Servers	100%	17	01-Jun-15 A	23-Jun-15 A	23-Jun-15	23-Jun-15	0	$90,220.00	
2-W.04.03	CON1850	RECEIVE: Linux Servers	100%	0		23-Jun-15 A		23-Jun-15	0	$0.00	
Racks			0%	38	05-Jun-14 A	31-Jul-14 A	01-Jul-14	14-Oct-14	51	$0.00	
2-W.04.03	CON1560	AWARD: Racks ($8,600 ea)	100%	0		02-Jul-14 A		01-Jul-14	-1	$0.00	
2-W.04.03	CON1570	Procure Racks	100%	20	05-Jun-14 A	07-Jul-14 A	02-Jul-14	26-Sep-14	59	$0.00	
2-W.04.03	CON1590	Vendor Ship Racks	100%	1	09-Jul-14 A	10-Jul-14 A	29-Sep-14	10-Oct-14	66	$0.00	
2-W.04.03	CON1600	Receive Racks & Start Install of All Beamline Racks - Ready For NEXT Install -	100%	0	31-Jul-14 A		14-Oct-14		51	$0.00	
Cables			100%	39	01-Feb-16 A	28-Mar-16 A	01-May-15	30-Sep-15	-120	$94,588.95	



(O) NEXT - Detail Schedule

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.04.03	CON2405	Extra Motor Cable (EAC Adj)	100%	39	01-Feb-16 A	28-Mar-16 A	01-May-15	31-Jul-15	-162	$39,191.26	
2-W.04.03	CON2415	Encoder Cable (EAC Adj)	100%	39	01-Feb-16 A	28-Mar-16 A	01-Sep-15	30-Sep-15	-120	$55,397.69	
Connectors			100%	58	03-Nov-14 A	30-Jan-15 A	02-Jul-14	27-Mar-15	40	$61,732.38	
2-W.04.03	CON2360	AWARD: Connectors	100%	0	03-Nov-14 A		02-Jul-14		-84	$0.00	
2-W.04.03	CON2370	Procure Connectors	100%	18	03-Nov-14 A	27-Nov-14 A	02-Jul-14	26-Sep-14	-42	$48,015.55	
2-W.04.03	CON2390	RECEIVE: Connectors	100%	0		28-Nov-14 A		10-Oct-14	-32	$0.00	
2-W.04.03	CON2395	Procure Additional Connectors - Second Vendor	100%	18	05-Jan-15 A	30-Jan-15 A	02-Mar-15	27-Mar-15	40	$13,716.83	
Power Supplies			100%	279	21-Jul-14 A	28-Aug-15 A	02-Jul-14	28-Aug-15	0	$113,304.83	
2-W.04.03	CON1710	AWARD: Early Procurement Power Supply ($3,800 ea)	100%	0	21-Jul-14 A		02-Jul-14		-11	$0.00	
2-W.04.03	CON1720	Procure: Early Procurement Power Supplies	100%	72	21-Jul-14 A	30-Oct-14 A	02-Jul-14	26-Sep-14	-23	$77,037.54	
2-W.04.03	CON1750	RECEIVE: Early Procurement Power Supplies	100%	0		30-Oct-14 A		10-Oct-14	-13	$0.00	
2-W.04.03	CON2170	AWARD: Power Supply ($3,800 ea)	100%	0	31-Oct-14 A		04-Feb-15		62	$0.00	
2-W.04.03	CON2180	Procure Power Supplies	100%	20	02-Oct-14 A	30-Oct-14 A	04-Feb-15	29-Apr-15	122	$8,833.64	
2-W.04.03	CON2210	RECEIVE: Power Supplies	100%	0		31-Oct-14 A		13-May-15	131	$0.00	
2-W.04.03	CON2220	Fabricate: Additional Power Supplies	100%	10	17-Aug-15 A	28-Aug-15 A	17-Aug-15	28-Aug-15	0	$27,433.65	
Timing IOCs			100%	20	02-Sep-14 A	30-Sep-14 A	02-Jul-14	10-Oct-14	9	$58,000.79	
2-W.04.03	CON1910	AWARD: Timing IOCs ($10,200 ea)	100%	0	02-Sep-14 A		02-Jul-14		-41	$0.00	
2-W.04.03	CON1920	Procure Timing IOCs	100%	20	02-Sep-14 A	29-Sep-14 A	02-Jul-14	26-Sep-14	-1	$58,000.79	
2-W.04.03	CON1950	RECEIVE: Timing IOCs	100%	0		30-Sep-14 A		10-Oct-14	9	$0.00	
Soft IOCs			100%	20	02-Sep-14 A	30-Sep-14 A	02-Jul-14	10-Oct-14	9	$40,836.74	
2-W.04.03	CON1860	AWARD: Soft IOCs ($4,200 ea)	100%	0	02-Sep-14 A		02-Jul-14		-41	$0.00	
2-W.04.03	CON1870	Procure Soft IOCs	100%	20	02-Sep-14 A	29-Sep-14 A	02-Jul-14	26-Sep-14	-1	$40,836.74	
2-W.04.03	CON1900	RECEIVE: Soft IOCs	100%	0		30-Sep-14 A		10-Oct-14	9	$0.00	
Moxa			100%	20	02-Sep-14 A	30-Sep-14 A	02-Jul-14	10-Oct-14	9	$22,562.32	
2-W.04.03	CON1960	AWARD: Moxa ($3,200 ea)	100%	0	02-Sep-14 A		02-Jul-14		-41	$0.00	
2-W.04.03	CON1970	Procure Moxa	100%	20	02-Sep-14 A	29-Sep-14 A	02-Jul-14	26-Sep-14	-1	$22,562.32	
2-W.04.03	CON2000	RECEIVE: Moxa	100%	0		30-Sep-14 A		10-Oct-14	9	$0.00	
Camera			100%	522	02-Apr-14 A	02-May-16 A	08-Oct-14	28-Jan-16	-66	$169,763.46	
2-W.04.03	CON1510	PPM Accept Requisition - High Sensitivity GigE	100%	15	02-Apr-14 A	22-Apr-14 A	08-Oct-14	29-Oct-14	131	$0.00	
2-W.04.03	CON1520	Prepare RFQ - High Sensitivity GigE	100%	5	23-Apr-14 A	30-Apr-14 A	30-Oct-14	12-Nov-14	136	$0.00	
2-W.04.03	CON1540	Evaluate Vendor Quotes - High Sensitivity GigE	100%	122	03-Nov-14 A	01-May-15 A	13-Nov-14	29-Dec-14	-84	$0.00	
2-W.04.03	CON1550	Place Purchase Order - High Sensitivity GigE	100%	10	01-May-15 A	14-May-15 A	30-Dec-14	14-Jan-15	-84	$0.00	
2-W.04.03	CON2010	AWARD - High Sensitivity GigE	100%	0	30-Mar-16 A		15-Jan-15		-302	$0.00	
2-W.04.03	CON2020	Fabrication - High Sensitivity GigE	100%	120	09-Nov-15 A	02-May-16 A	15-Jan-16	28-Jan-16	-66	$70,888.00	
2-W.04.03	CON2050	RECEIVE: All Early Procurement Optics Cameras Components	100%	0		02-May-16 A		13-May-15	-243	$0.00	
2-W.04.03	CON2270	AWARD - Medium Sensitivity GigE	100%	0	15-May-15 A		15-May-15		0	$0.00	
2-W.04.03	CON2280	Fabrication - Medium Sensitivity GigE	100%	8	15-May-15 A	28-May-15 A	15-May-15	29-May-15	2	$33,434.77	
2-W.04.03	CON2310	RECEIVE - Medium Sensitivity GigE	100%	0		28-May-15 A		12-Jun-15	12	$0.00	
2-W.04.03	CON232005	AWARD - Low Sensitivity GigE	100%	0		01-Jul-15 A		15-Sep-15	52	$0.00	
2-W.04.03	CON232006	Fabrication - Low Sensitivity GigE	100%	10	01-Jul-15 A	15-Jul-15 A	15-Sep-15	28-Sep-15	52	$12,859.53	
2-W.04.03	CON232008	RECEIVE - Low Sensitivity GigE	100%	0		15-Jul-15 A		13-Oct-15	62	$0.00	
2-W.04.03	CON232505	AWARD - Optics (Lenses & Mounts)	100%	0		15-Jul-15 A		15-May-15	-42	$0.00	
2-W.04.03	CON232506	Fabrication - Optics (Lenses & Mounts)	100%	43	16-Jul-15 A	16-Sep-15 A	15-May-15	29-May-15	-75	$52,581.17	
2-W.04.03	CON232508	RECEIVE - Optics (Lenses & Mounts)	100%	0		16-Sep-15 A		12-Jun-15	-65	$0.00	
ESM Beamline			96.35%	1124	03-May-12 A	31-Oct-16	03-May-12	30-Sep-16	-20	$9,422,431.72	229
Milestones			0%	464	22-Oct-12 A	01-Sep-14 A	22-Oct-12	06-Feb-14	-143	$0.00	
2-W.05	MESM001	Start final design of ESM beamline	100%	0	22-Oct-12 A		22-Oct-12		0	$0.00	
2-W.05	MESM004	Complete Specifications of Shielded Enclosures	100%	0		13-Feb-13 A		13-Feb-13	0	$0.00	
2-W.05	MESM005	Start procurement of ESM hutch	100%	0	08-Mar-13 A		08-Mar-13		0	$0.00	
2-W.05	MESM010	Start procurement of ESM photon delivery system components	100%	0	22-Apr-14 A		06-Feb-14		-52	$0.00	
2-W.05	MESM015	Receive Shutters & Start Install of All Beamline Shutters - Ready For NEXT Ins	100%	0		01-Sep-14 A				$0.00	



(O) NEXT - Detail Schedule

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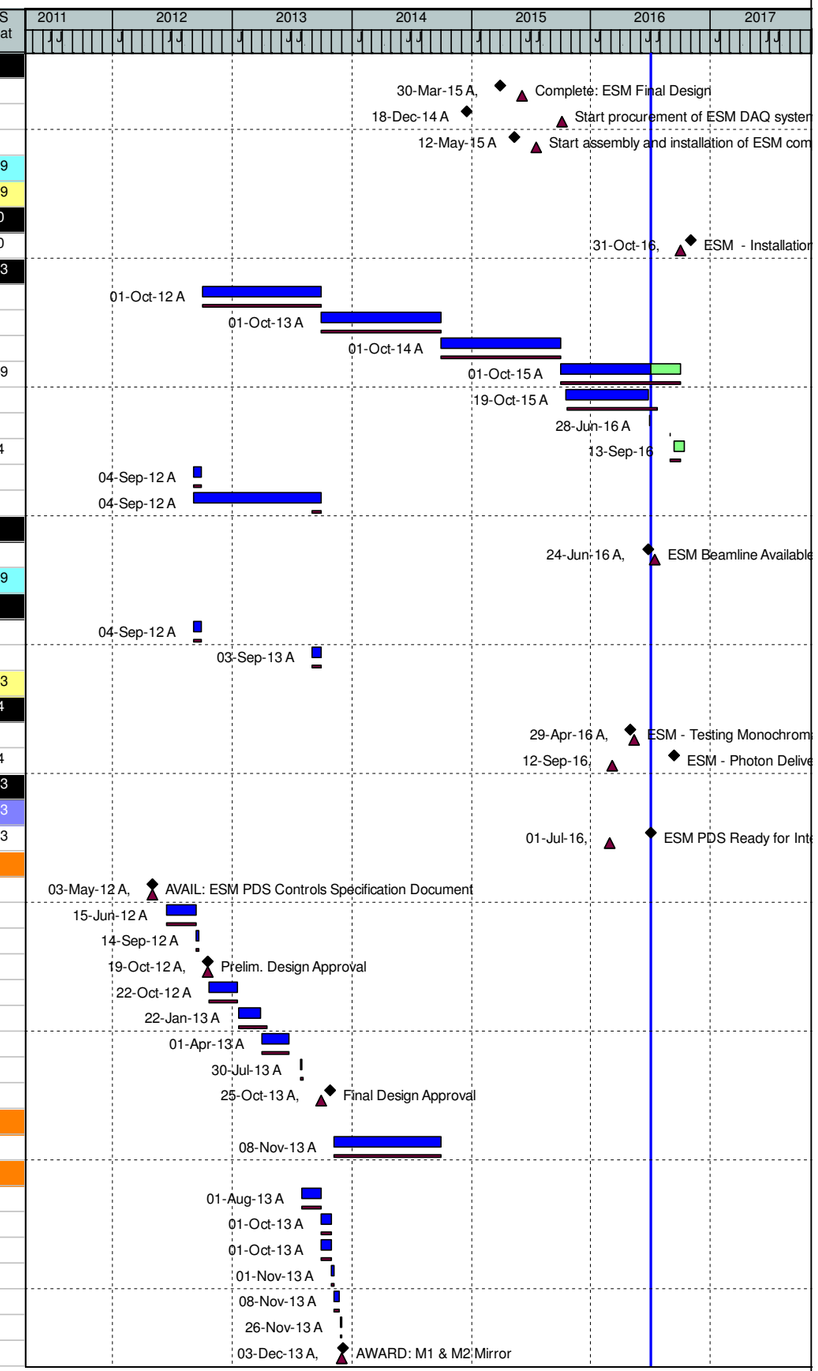
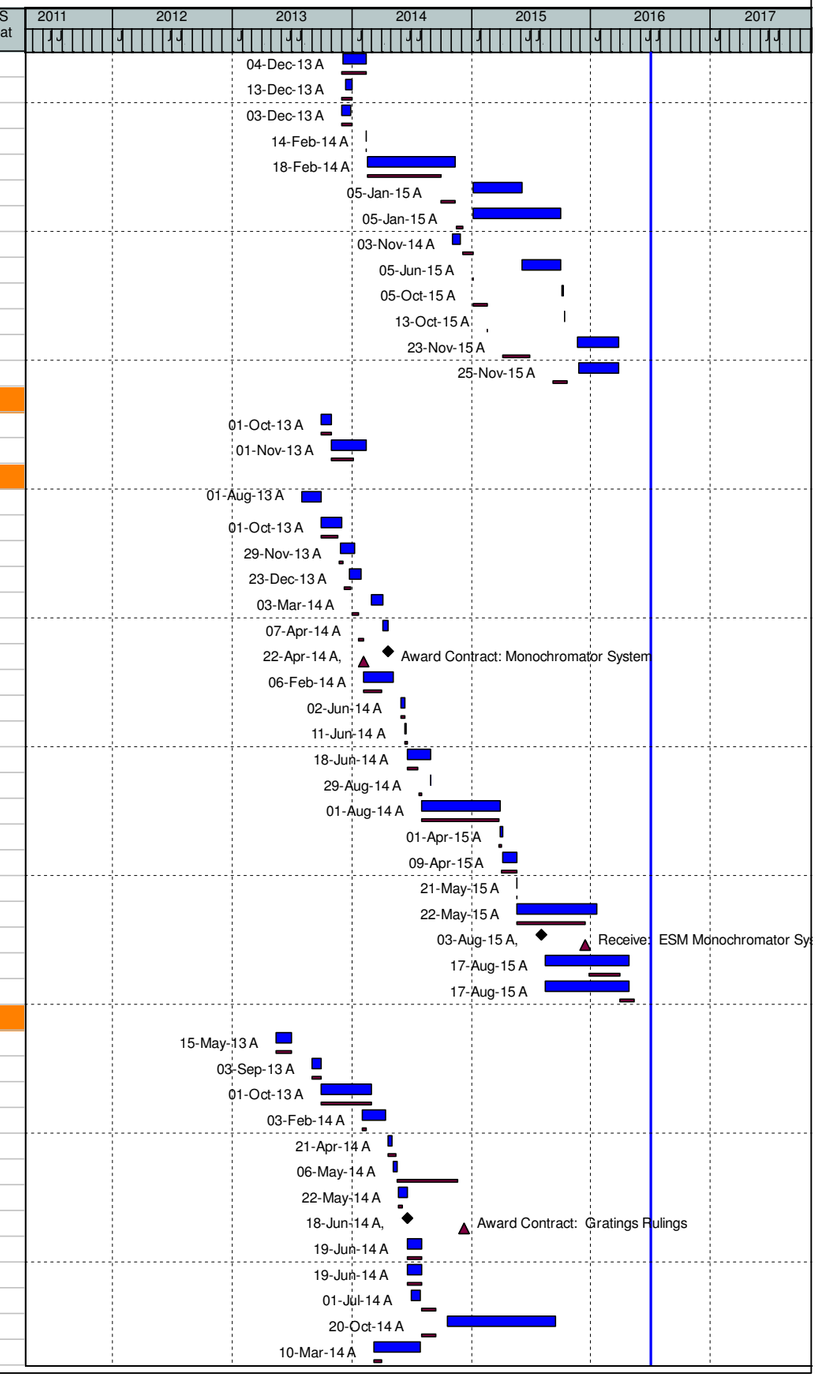
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
Milestones			0%	98	18-Dec-14 A	12-May-15 A	04-Jun-15	05-Oct-15	101	$0.00	
2-W.05	MESM003	Complete: ESM Final Design	100%	0		30-Mar-15 A		04-Jun-15	47	$0.00	
2-W.05	MESM020	Start procurement of ESM DAQ system	100%	0	18-Dec-14 A		05-Oct-15		199	$0.00	
2-W.05	MESM022	Start assembly and installation of ESM components	100%	0	12-May-15 A		20-Jul-15		47	$0.00	
ESM Management			91.63%	1040	04-Sep-12 A	31-Oct-16	04-Sep-12	30-Sep-16	-20	$610,745.30	229
ESM Beamline Management			91.63%	1040	04-Sep-12 A	31-Oct-16	04-Sep-12	30-Sep-16	-20	$610,745.30	229
Top Level Milestones			0%	0	31-Oct-16	31-Oct-16	29-Sep-16	29-Sep-16	-21	$0.00	50
2-W.05.01.01	M3055	ESM - Installation of Beamline Components Complete	0%	0		31-Oct-16		29-Sep-16	-21	$0.00	50
Management			91.63%	1026	04-Sep-12 A	11-Oct-16	04-Sep-12	30-Sep-16	-6	$610,745.30	243
2-W.05.01.01	ESM0002	ESM BL Management FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.05.01.01	ESM0003	ESM BL Management FY14	100%	250	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	0	$126,726.00	
2-W.05.01.01	ESM0004	ESM BL Management FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$130,781.25	
2-W.05.01.01	ESM0005	ESM BL Management FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$122,361.66	249
2-W.05.01.01	ESM4835	ESM - Preparation of Beamline IRR Documentation	100%	172	19-Oct-15 A	24-Jun-16 A	19-Oct-15	22-Jul-16	20	$30,571.34	
2-W.05.01.01	ESM4840	ESM - Beamline IRR	100%	2	28-Jun-16 A	30-Jun-16 A	29-Aug-16	31-Aug-16	44	$3,812.06	
2-W.05.01.01	ESM4845	ESM - Closeout of Beamline Pre-start Items	0%	20	13-Sep-16	11-Oct-16	01-Sep-16	29-Sep-16	-7	$20,051.37	64
2-W.05.01.01	ESMFY1250	ESM Management FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$18,886.52	
2-W.05.01.01	ESMFY1350	ESM Management FY13	100%	268	04-Sep-12 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$157,555.11	
Milestones			0%	0	24-Jun-16 A	24-Jun-16 A	15-Jul-16	15-Jul-16	15	$0.00	
2-W.05.01.01	MESM030	ESM Beamline Available & Ready For IRR	100%	0		24-Jun-16 A		15-Jul-16	15	$0.00	
ESM Beamline Systems			96.68%	1124	03-May-12 A	31-Oct-16	03-May-12	26-Aug-16	-44	$8,811,686.41	229
Management			100%	268	04-Sep-12 A	30-Sep-13 A	04-Sep-12	30-Sep-13	0	$329,598.26	
2-W.05.02	ESMFY1250	ESM Systems FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$19,211.40	
2-W.05.02	ESMFY1350	ESM Systems FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$310,386.86	
Photon Delivery System			96.88%	1090	03-May-12 A	12-Sep-16	03-May-12	26-Aug-16	-10	$6,089,224.67	263
Top Level Milestones			0%	94	29-Apr-16 A	12-Sep-16	07-Mar-16	12-May-16	-84	$0.00	64
2-W.05.02.01	M3045	ESM - Testing Monochromator and Slits complete	100%	0		29-Apr-16 A		12-May-16	10	$0.00	
2-W.05.02.01	M3050	ESM - Photon Delivery System Ready for Integration	0%	0		12-Sep-16		07-Mar-16	-132	$0.00	64
ESM Procurement Work Package			98.3%	1090	03-May-12 A	12-Sep-16	03-May-12	13-May-16	-83	$5,025,069.46	263
ESM Photon Delivery System			98.3%	1090	03-May-12 A	12-Sep-16	03-May-12	13-May-16	-83	$5,025,069.46	263
2-W.05.02.01	ESM1790	ESM PDS Ready for Integration	0%	0		01-Jul-16		29-Feb-16	-88	$0.00	313
Design			0%	370	03-May-12 A	25-Oct-13 A	03-May-12	30-Sep-13	-19	$0.00	
2-W.05.02.01	ESM0010	AVAIL: ESM PDS Controls Specification Document	100%	0		03-May-12 A		03-May-12	0	$0.00	
2-W.05.02.01	ESM0030	Preliminary Design	100%	63	15-Jun-12 A	13-Sep-12 A	15-Jun-12	13-Sep-12	0	$0.00	
2-W.05.02.01	ESM0040	Prelim. Design Review	100%	5	14-Sep-12 A	20-Sep-12 A	14-Sep-12	20-Sep-12	0	$0.00	
2-W.05.02.01	ESM0050	Prelim. Design Approval	100%	0		19-Oct-12 A		19-Oct-12	0	$0.00	
2-W.05.02.01	ESM0060	30 % Final Design	100%	60	22-Oct-12 A	18-Jan-13 A	22-Oct-12	18-Jan-13	0	$0.00	
2-W.05.02.01	ESM0070	60 % Final Design	100%	48	22-Jan-13 A	29-Mar-13 A	22-Jan-13	16-Apr-13	12	$0.00	
2-W.05.02.01	ESM0080	90% Final Design	100%	60	01-Apr-13 A	24-Jun-13 A	01-Apr-13	24-Jun-13	0	$0.00	
2-W.05.02.01	ESM0090	Final Design Review	100%	2	30-Jul-13 A	31-Jul-13 A	30-Jul-13	05-Aug-13	3	$0.00	
2-W.05.02.01	ESM0100	Final Design Approval	100%	0		25-Oct-13 A		30-Sep-13	-19	$0.00	
PDS Procurement Support			100%	223	08-Nov-13 A	30-Sep-14 A	08-Nov-13	30-Sep-14	0	$124,317.84	
2-W.05.02.01	ESM0380	PDS Procurement Support FY14	100%	223	08-Nov-13 A	30-Sep-14 A	08-Nov-13	30-Sep-14	0	$124,317.84	
M1 & M2 Mirror Package			100%	661	01-Aug-13 A	25-Mar-16 A	01-Aug-13	20-Oct-15	-106	$240,101.28	
2-W.05.02.01	ESM0110	Write Specification and SOW - M1 & M2 Mirror	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.05.02.01	ESM01101	Write Specification and SOW M2 Mirror	100%	21	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	1	$9,497.60	
2-W.05.02.01	ESM0110FA	Write Specification and SOW - M1 & M2 Mirror	100%	21	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	1	$4,807.06	
2-W.05.02.01	ESM0120	PPM Accept Requisition	100%	4	01-Nov-13 A	07-Nov-13 A	01-Nov-13	07-Nov-13	1	$0.00	
2-W.05.02.01	ESM0130	Call for Bids	100%	10	08-Nov-13 A	25-Nov-13 A	08-Nov-13	25-Nov-13	0	$0.00	
2-W.05.02.01	ESM0140	Receive and Evaluate Vendor Proposals	100%	5	26-Nov-13 A	02-Dec-13 A	26-Nov-13	02-Dec-13	0	$0.00	
2-W.05.02.01	ESM0160	AWARD: M1 & M2 Mirror	100%	0		03-Dec-13 A		03-Dec-13	-1	$0.00	



(O) NEXT - Detail Schedule

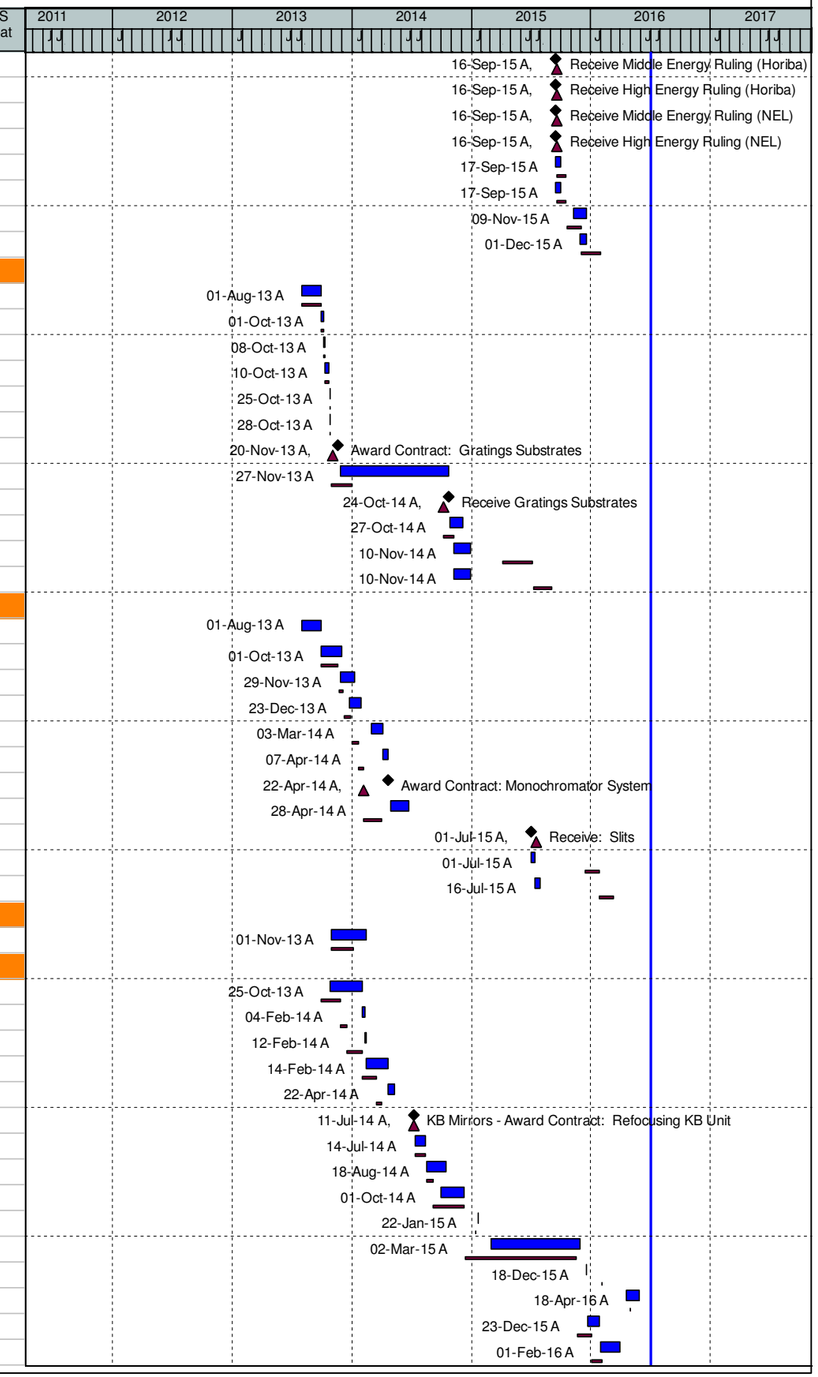
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.05.02.01	ESM0161	Vendor Submittal of Drawings to BNL	100%	49	04-Dec-13 A	13-Feb-14 A	03-Dec-13	13-Feb-14	0	$0.00	
2-W.05.02.01	ESM0170	Procure/Fab M1 & M2 Mirror	100%	12	13-Dec-13 A	31-Dec-13 A	03-Dec-13	31-Dec-13	0	$6,202.70	
2-W.05.02.01	ESM01701	Procure/Fab M2	100%	19	03-Dec-13 A	31-Dec-13 A	03-Dec-13	31-Dec-13	1	$6,202.70	
2-W.05.02.01	ESM0171	BNL Approval & Acceptance of Drawings	100%	1	14-Feb-14 A	14-Feb-14 A	14-Feb-14	14-Feb-14	0	$56,810.00	
2-W.05.02.01	ESM0190	SIX M2 Mirror Delivered	100%	189	18-Feb-14 A	14-Nov-14 A	18-Feb-14	01-Oct-14	-31	$0.00	
2-W.05.02.01	ESM0200	ESM M1 Delivered	100%	107	05-Jan-15 A	05-Jun-15 A	02-Oct-14	14-Nov-14	-137	$0.00	
2-W.05.02.01	ESM0210	ESM M2 Delivered	100%	190	05-Jan-15 A	02-Oct-15 A	17-Nov-14	05-Dec-14	-207	$0.00	
2-W.05.02.01	ESM02101	SIX M1 Mirror Delivered	100%	18	03-Nov-14 A	28-Nov-14 A	08-Dec-14	06-Jan-15	24	$0.00	
2-W.05.02.01	ESM0215A	All Mirrors Delivered to BNL	100%	84	05-Jun-15 A	02-Oct-15 A	07-Jan-15	07-Jan-15	-187	$94,682.64	
2-W.05.02.01	ESM0220	Acceptance Testing by BNL	100%	5	05-Oct-15 A	09-Oct-15 A	08-Jan-15	17-Feb-15	-165	$0.00	
2-W.05.02.01	ESM0220A	Final Approval and Acceptance by BNL	100%	1	13-Oct-15 A	13-Oct-15 A	18-Feb-15	18-Feb-15	-165	$37,872.64	
2-W.05.02.01	ESM0370	Assembly & Install M1 & M2 Mirror	100%	85	23-Nov-15 A	25-Mar-16 A	07-Apr-15	30-Jun-15	-183	$13,696.86	
2-W.05.02.01	ESM0372	Test M1 & M2 Mirror	100%	83	25-Nov-15 A	25-Mar-16 A	08-Sep-15	20-Oct-15	-106	$10,329.07	
Chamber			100%	93	01-Oct-13 A	14-Feb-14 A	01-Oct-13	06-Jan-14	-28	$18,668.16	
2-W.05.02.01	ESM0155A	Chamber Lag Activity	100%	21	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	1	$0.00	
2-W.05.02.01	ESM0155FA	Write Specification and SOW - Chamber	100%	71	01-Nov-13 A	14-Feb-14 A	01-Nov-13	06-Jan-14	-28	$18,668.16	
PGM Chamber (LONG LEAD PROCUREMENT)			100%	685	01-Aug-13 A	28-Apr-16 A	01-Oct-13	12-May-16	11	$733,014.13	
2-W.05.02.01	ESM0335	Write Specification and SOW - PGM Chamber	100%	41	01-Aug-13 A	30-Sep-13 A				$0.00	
2-W.05.02.01	ESM0335FA	Write Specification and SOW - PGM Chamber	100%	41	01-Oct-13 A	29-Nov-13 A	01-Oct-13	20-Nov-13	-5	$40,255.12	
2-W.05.02.01	ESM0345	PPM Accept Requisition	100%	28	29-Nov-13 A	10-Jan-14 A	25-Nov-13	06-Dec-13	-22	$0.00	
2-W.05.02.01	ESM0355	Call for Bids	100%	23	23-Dec-13 A	28-Jan-14 A	09-Dec-13	30-Dec-13	-18	$0.00	
2-W.05.02.01	ESM0365	Receive and Evaluate Vendor Proposals	100%	25	03-Mar-14 A	04-Apr-14 A	31-Dec-13	22-Jan-14	-51	$0.00	
2-W.05.02.01	ESM0375	Vendor Negotiations	100%	10	07-Apr-14 A	21-Apr-14 A	23-Jan-14	05-Feb-14	-51	$0.00	
2-W.05.02.01	ESM0385	Award Contract: Monochromator System	100%	0		22-Apr-14 A		06-Feb-14	-53	$0.00	
2-W.05.02.01	ESM0400	ESM Monochromator System - Reciept and Approval of Program Plan	100%	65	06-Feb-14 A	09-May-14 A	06-Feb-14	31-Mar-14	-28	$60,871.47	
2-W.05.02.01	ESM0400105	ESM Monochromator System - Recieve Preliminary Design Report and Minute	100%	7	02-Jun-14 A	10-Jun-14 A	02-Jun-14	11-Jun-14	1	$0.00	
2-W.05.02.01	ESM0400110	ESM Monochromator System - Approval of PDR - Portion 2	100%	5	11-Jun-14 A	17-Jun-14 A	12-Jun-14	18-Jun-14	1	$91,925.66	
2-W.05.02.01	ESM0400115	ESM Monochromator System - Reciept Final Design Report and Minutes	100%	51	18-Jun-14 A	29-Aug-14 A	19-Jun-14	23-Jul-14	-27	$0.00	
2-W.05.02.01	ESM0400120	ESM Monochromator System - Approval of FDR	100%	1	29-Aug-14 A	29-Aug-14 A	24-Jul-14	01-Aug-14	-20	$187,033.60	
2-W.05.02.01	ESM0400125	ESM Monochromator System - Fabrication	100%	164	01-Aug-14 A	01-Apr-15 A	04-Aug-14	25-Mar-15	-4	$0.00	
2-W.05.02.01	ESM0400130	ESM Monochromator System - Factory Acceptance Test	100%	6	01-Apr-15 A	08-Apr-15 A	26-Mar-15	02-Apr-15	-4	$0.00	
2-W.05.02.01	ESM0400135	ESM Monochromator System - Reciept of all Equipment	100%	31	09-Apr-15 A	21-May-15 A	03-Apr-15	21-May-15	0	$0.00	
2-W.05.02.01	ESM0400140	ESM Monochromator System - Acceptance by BNL	100%	1	21-May-15 A	21-May-15 A	21-May-15	21-May-15	0	$240,437.37	
2-W.05.02.01	ESM0400150	ESM Monochromator System - Install & Commissioning	100%	165	22-May-15 A	21-Jan-16 A	21-May-15	14-Dec-15	-24	$65,811.20	
2-W.05.02.01	ESM0410	Receive: ESM Monochromator System	100%	0		03-Aug-15 A		14-Dec-15	92	$0.00	
2-W.05.02.01	ESM0420	ESM Monochromator System - Assembly/ Install	100%	175	17-Aug-15 A	28-Apr-16 A	28-Dec-15	31-Mar-16	-19	$27,319.22	
2-W.05.02.01	ESM0425	ESM Monochromator System - Test M2-W & PGM Tank	100%	175	17-Aug-15 A	28-Apr-16 A	01-Apr-16	12-May-16	11	$19,360.49	
Gratings Rulings (LONG LEAD PROCUREMENT)			100%	649	15-May-13 A	21-Dec-15 A	15-May-13	29-Jan-16	27	$280,360.29	
2-W.05.02.01	ESM0490	Write Specification and SOW Gratings Rulings	100%	33	15-May-13 A	01-Jul-13 A	15-May-13	01-Jul-13	0	$0.00	
2-W.05.02.01	ESM0500	PPM Accept Requisition	100%	19	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	1	$0.00	
2-W.05.02.01	ESM0500F	PPM Lag Activity	100%	102	01-Oct-13 A	03-Mar-14 A	01-Oct-13	03-Mar-14	1	$0.00	
2-W.05.02.01	ESM0500FA	PPM Accept Requisition	100%	50	03-Feb-14 A	14-Apr-14 A	03-Feb-14	12-Feb-14	-42	$0.00	
2-W.05.02.01	ESM0510	Call for Bids	100%	11	21-Apr-14 A	05-May-14 A	21-Apr-14	16-May-14	9	$0.00	
2-W.05.02.01	ESM0520	Receive and Evaluate Vendor Proposals	100%	12	06-May-14 A	21-May-14 A	19-May-14	21-Nov-14	127	$0.00	
2-W.05.02.01	ESM0530	Vendor Negotiations	100%	21	22-May-14 A	20-Jun-14 A	22-May-14	05-Jun-14	-11	$0.00	
2-W.05.02.01	ESM0540	Award Contract: Gratings Rulings	100%	0		18-Jun-14 A		10-Dec-14	118	$0.00	
2-W.05.02.01	ESM0551	Receipt & Acceptance of Horiba PDR	100%	29	19-Jun-14 A	31-Jul-14 A	19-Jun-14	31-Jul-14	0	$0.00	
2-W.05.02.01	ESM0552	Receipt & Acceptance of NEL PDR	100%	29	19-Jun-14 A	31-Jul-14 A	19-Jun-14	31-Jul-14	0	$0.00	
2-W.05.02.01	ESM0553	Receipt & Acceptance of Horiba FDR	100%	20	01-Jul-14 A	31-Jul-14 A	01-Aug-14	16-Sep-14	33	$0.00	
2-W.05.02.01	ESM0554	Rulings Fabrication	100%	228	20-Oct-14 A	16-Sep-15 A	01-Aug-14	16-Sep-14	-250	$0.00	
2-W.05.02.01	ESM0560	Vendor Fabrication - Gratings Rulings	100%	100	10-Mar-14 A	31-Jul-14 A	10-Mar-14	31-Mar-14	-84	$25,776.95	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

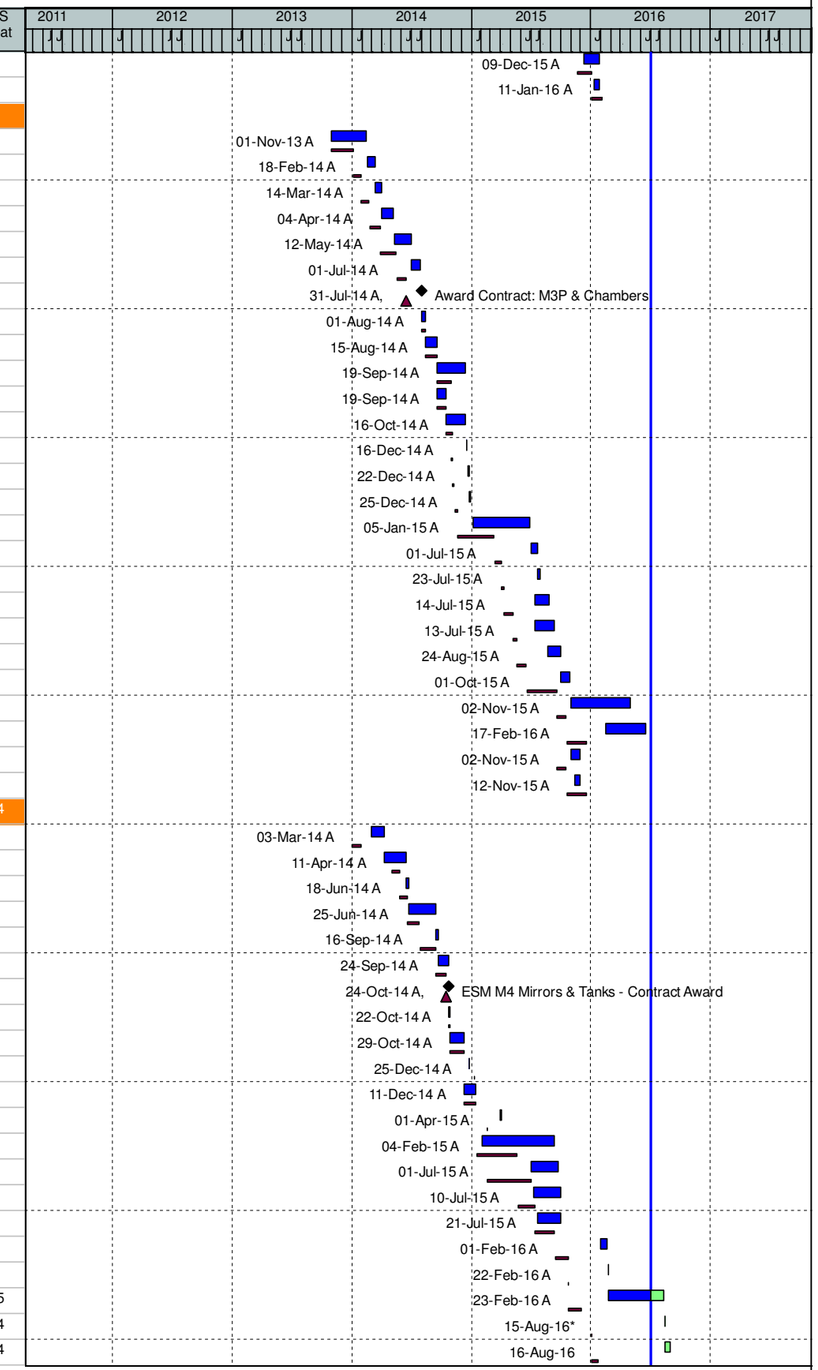
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.05.02.01	ESM0562	Receive Middle Energy Ruling (Horiba)	100%	0		16-Sep-15 A		17-Sep-15	1	$0.00	
2-W.05.02.01	ESM0563	Receive High Energy Ruling (Horiba)	100%	0		16-Sep-15 A		17-Sep-15	1	$0.00	
2-W.05.02.01	ESM0570	Receive Middle Energy Ruling (NEL)	100%	0		16-Sep-15 A		17-Sep-15	1	$0.00	
2-W.05.02.01	ESM0580	Receive High Energy Ruling (NEL)	100%	0		16-Sep-15 A		17-Sep-15	1	$0.00	
2-W.05.02.01	ESM0581	Acceptance of Horiba Gratings Rulings	100%	9	17-Sep-15 A	30-Sep-15 A	18-Sep-15	16-Oct-15	12	$151,600.80	
2-W.05.02.01	ESM0582	Acceptance of NEL Gratings Rulings	100%	9	17-Sep-15 A	30-Sep-15 A	18-Sep-15	16-Oct-15	12	$85,900.88	
2-W.05.02.01	ESM0590	Assembly Gratings Rulings	100%	28	09-Nov-15 A	21-Dec-15 A	19-Oct-15	01-Dec-15	-13	$8,664.95	
2-W.05.02.01	ESM0600	Test Gratings Rulings	100%	14	01-Dec-15 A	21-Dec-15 A	02-Dec-15	29-Jan-16	27	$8,416.71	
Gratings Substrates (LONG LEAD PROCUREMENT)			100%	353	01-Aug-13 A	31-Dec-14 A	01-Aug-13	02-Sep-15	170	$271,072.34	
2-W.05.02.01	ESM0495	Write Specification and SOW Gratings Substrates	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.05.02.01	ESM0495FA	Write Specification and SOW Gratings Substrates	100%	5	01-Oct-13 A	07-Oct-13 A	01-Oct-13	07-Oct-13	0	$12,617.79	
2-W.05.02.01	ESM0505	PPM Accept Requisition	100%	2	08-Oct-13 A	09-Oct-13 A	08-Oct-13	09-Oct-13	0	$0.00	
2-W.05.02.01	ESM0515	Call for Bids	100%	10	10-Oct-13 A	24-Oct-13 A	10-Oct-13	24-Oct-13	0	$0.00	
2-W.05.02.01	ESM0525	Receive and Evaluate Vendor Proposals	100%	1	25-Oct-13 A	25-Oct-13 A	25-Oct-13	25-Oct-13	0	$0.00	
2-W.05.02.01	ESM0535	Vendor Negotiations	100%	1	28-Oct-13 A	28-Oct-13 A	28-Oct-13	28-Oct-13	0	$0.00	
2-W.05.02.01	ESM0545	Award Contract: Gratings Substrates	100%	0		20-Nov-13 A		04-Nov-13	-13	$0.00	
2-W.05.02.01	ESM0556	Procure/Fab - Gratings Substrates	100%	228	27-Nov-13 A	24-Oct-14 A	29-Oct-13	31-Dec-13	-204	$37,598.32	
2-W.05.02.01	ESM0565	Receive Gratings Substrates	100%	0		24-Oct-14 A		08-Oct-14	-10	$0.00	
2-W.05.02.01	ESM0585	BNL Acceptance of Gratings Substrates ($203,328)	100%	28	27-Oct-14 A	05-Dec-14 A	09-Oct-14	07-Nov-14	-18	$211,461.12	
2-W.05.02.01	ESM0595	Assembly Gratings Substrates	100%	34	10-Nov-14 A	31-Dec-14 A	06-Apr-15	08-Jul-15	130	$4,765.82	
2-W.05.02.01	ESM0615	Test Gratings Substrates	100%	34	10-Nov-14 A	31-Dec-14 A	09-Jul-15	02-Sep-15	170	$4,629.28	
Slits (LONG LEAD PROCUREMENT)			100%	498	01-Aug-13 A	29-Jul-15 A	01-Oct-13	10-Mar-16	153	$130,774.04	
2-W.05.02.01	ESM1260	Write Specification and SOW Slits	100%	41	01-Aug-13 A	30-Sep-13 A				$0.00	
2-W.05.02.01	ESM1260FA	Write Specification and SOW Slits	100%	41	01-Oct-13 A	29-Nov-13 A	01-Oct-13	20-Nov-13	-5	$16,643.22	
2-W.05.02.01	ESM1270	PPM Accept Requisition	100%	28	29-Nov-13 A	10-Jan-14 A	25-Nov-13	06-Dec-13	-22	$0.00	
2-W.05.02.01	ESM1280	Call for Bids	100%	23	23-Dec-13 A	28-Jan-14 A	09-Dec-13	30-Dec-13	-18	$0.00	
2-W.05.02.01	ESM1290	Receive and Evaluate Vendor Proposals	100%	25	03-Mar-14 A	04-Apr-14 A	31-Dec-13	22-Jan-14	-51	$0.00	
2-W.05.02.01	ESM1300	Vendor Negotiations	100%	10	07-Apr-14 A	21-Apr-14 A	23-Jan-14	05-Feb-14	-51	$0.00	
2-W.05.02.01	ESM1310	Award Contract: Monochromator System	100%	0		22-Apr-14 A		06-Feb-14	-53	$0.00	
2-W.05.02.01	ESM1330	ESM Monochromator System - Approve PDR - Portion 1	100%	40	28-Apr-14 A	24-Jun-14 A	06-Feb-14	31-Mar-14	-59	$42,277.98	
2-W.05.02.01	ESM1350	Receive: Slits	100%	0		01-Jul-15 A		17-Jul-15	12	$0.00	
2-W.05.02.01	ESM1360	Assembly Slits	100%	10	01-Jul-15 A	15-Jul-15 A	14-Dec-15	27-Jan-16	133	$45,368.54	
2-W.05.02.01	ESM1370	Test Slits	100%	10	16-Jul-15 A	29-Jul-15 A	28-Jan-16	10-Mar-16	153	$26,484.29	
Horizontal Focusing M3A & Chamber			100%	71	01-Nov-13 A	14-Feb-14 A	01-Nov-13	06-Jan-14	-28	$42,001.69	
2-W.05.02.01	ESM0610	Write Specification and SOW: Horizontal Focusing M3A & Chamber	100%	71	01-Nov-13 A	14-Feb-14 A	01-Nov-13	06-Jan-14	-28	$42,001.69	
Refocusing KB Unit			100%	648	25-Oct-13 A	27-May-16 A	01-Oct-13	02-May-16	-19	$784,221.34	
2-W.05.02.01	ESM0740	KB Mirrors - Write Specification and SOW Refocusing KB Unit	100%	67	25-Oct-13 A	03-Feb-14 A	01-Oct-13	26-Nov-13	-46	$42,863.38	
2-W.05.02.01	ESM0750	KB Mirrors - PPM Accept Requisition	100%	6	04-Feb-14 A	11-Feb-14 A	27-Nov-13	17-Dec-13	-37	$0.00	
2-W.05.02.01	ESM0760	KB Mirrors - Call for Bids	100%	2	12-Feb-14 A	13-Feb-14 A	18-Dec-13	31-Jan-14	-9	$0.00	
2-W.05.02.01	ESM0770	KB Mirrors - Receive and Evaluate Vendor Proposals	100%	46	14-Feb-14 A	21-Apr-14 A	03-Feb-14	17-Mar-14	-25	$0.00	
2-W.05.02.01	ESM0780	KB Mirrors - Vendor Negotiations	100%	16	22-Apr-14 A	13-May-14 A	18-Mar-14	31-Mar-14	-31	$0.00	
2-W.05.02.01	ESM0790	KB Mirrors - Award Contract: Refocusing KB Unit	100%	0		11-Jul-14 A		11-Jul-14	0	$0.00	
2-W.05.02.01	ESM0795	KB Mirrors - Program Plan	100%	25	14-Jul-14 A	15-Aug-14 A	14-Jul-14	15-Aug-14	0	$94,903.12	
2-W.05.02.01	ESM0810	KB Mirrors - Preliminary Design	100%	43	18-Aug-14 A	17-Oct-14 A	18-Aug-14	05-Sep-14	-29	$94,903.12	
2-W.05.02.01	ESM0820	KB Mirrors - Final Design	100%	49	01-Oct-14 A	11-Dec-14 A	08-Sep-14	11-Dec-14	0	$151,844.16	
2-W.05.02.01	ESM0825	KB Mirrors - Final Design Report Acceptance	100%	1	22-Jan-15 A	22-Jan-15 A	16-Jan-15	16-Jan-15	-3	$37,961.04	
2-W.05.02.01	ESM0830	KB Mirrors - Fabrication	100%	189	02-Mar-15 A	30-Nov-15 A	12-Dec-14	16-Nov-15	-7	$169,370.85	
2-W.05.02.01	ESM0835	KB Mirrors - Acceptance of KB Mirror System	100%	1	18-Dec-15 A	21-Dec-15 A	05-Feb-16	05-Feb-16	32	$18,980.00	
2-W.05.02.01	ESM0837	KB Mirrors - Amendment No. 2	100%	30	18-Apr-16 A	27-May-16 A	02-May-16	02-May-16	-19	$73,056.27	
2-W.05.02.01	ESM0840	KB Mirrors - Installation Vendor	100%	24	23-Dec-15 A	29-Jan-16 A	23-Nov-15	04-Jan-16	-17	$31,634.72	
2-W.05.02.01	ESM0845	KB Mirrors - Commissioning Vendor	100%	42	01-Feb-16 A	30-Mar-16 A	05-Jan-16	05-Feb-16	-37	$31,634.72	



(O) NEXT - Detail Schedule

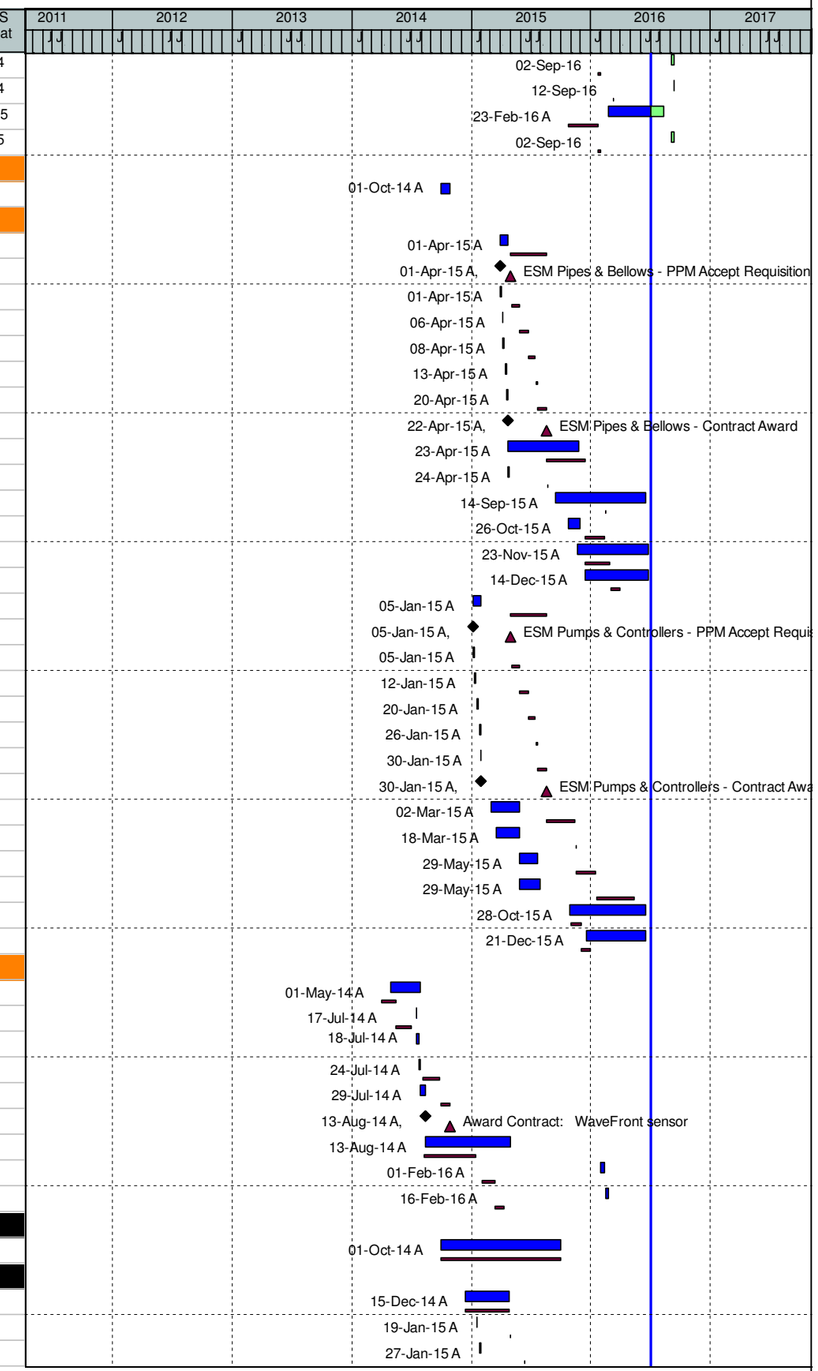
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.05.02.01	ESM0850	KB Mirrors - Install Support BNL	100%	34	09-Dec-15 A	29-Jan-16 A	23-Nov-15	04-Jan-16	-17	$23,279.78	
2-W.05.02.01	ESM0860	KB Mirrors - Testing and Commissioning BNL	100%	13	11-Jan-16 A	29-Jan-16 A	05-Jan-16	05-Feb-16	6	$13,790.18	
M3P & Chambers			100%	655	01-Nov-13 A	15-Jun-16 A	01-Nov-13	18-Dec-15	-123	$987,857.61	
2-W.05.02.01	ESM0870	Write Specification and SOW: M3P & Chambers	100%	71	01-Nov-13 A	14-Feb-14 A	01-Nov-13	06-Jan-14	-28	$20,051.11	
2-W.05.02.01	ESM0880	PPM Accept Requisition	100%	18	18-Feb-14 A	13-Mar-14 A	07-Jan-14	30-Jan-14	-29	$0.00	
2-W.05.02.01	ESM0881	Prepare RFP	100%	15	14-Mar-14 A	03-Apr-14 A	31-Jan-14	21-Feb-14	-29	$0.00	
2-W.05.02.01	ESM0890	Call for Bids	100%	26	04-Apr-14 A	09-May-14 A	24-Feb-14	28-Mar-14	-30	$0.00	
2-W.05.02.01	ESM0900	Receive and Evaluate Vendor Proposals	100%	35	12-May-14 A	01-Jul-14 A	31-Mar-14	16-May-14	-30	$0.00	
2-W.05.02.01	ESM0910	Vendor Negotiations	100%	20	01-Jul-14 A	30-Jul-14 A	19-May-14	16-Jun-14	-30	$0.00	
2-W.05.02.01	ESM0920	Award Contract: M3P & Chambers	100%	0		31-Jul-14 A		17-Jun-14	-31	$0.00	
2-W.05.02.01	ESM0930210	ESM - Program Plan	100%	10	01-Aug-14 A	14-Aug-14 A	01-Aug-14	14-Aug-14	0	$28,792.40	
2-W.05.02.01	ESM0930215	ESM - M3 Mirrors - Preliminary Design	100%	24	15-Aug-14 A	18-Sep-14 A	15-Aug-14	18-Sep-14	0	$87,212.32	
2-W.05.02.01	ESM0930225	ESM - M3 Mirrors - Final Design	100%	59	19-Sep-14 A	15-Dec-14 A	19-Sep-14	30-Oct-14	-30	$130,818.48	
2-W.05.02.01	ESM0930235	ESM - M1 Mirrors - Preliminary Design	100%	18	19-Sep-14 A	15-Oct-14 A	19-Sep-14	15-Oct-14	0	$87,212.32	
2-W.05.02.01	ESM0930245	ESM - M1 Mirrors - Final Design	100%	41	16-Oct-14 A	15-Dec-14 A	16-Oct-14	05-Nov-14	-26	$130,818.48	
2-W.05.02.01	ESM0930255	ESM - Long leads ordered	100%	4	16-Dec-14 A	19-Dec-14 A	31-Oct-14	05-Nov-14	-30	$6,085.04	
2-W.05.02.01	ESM0930260	ESM - Manufacturing Drawings finished	100%	3	22-Dec-14 A	24-Dec-14 A	06-Nov-14	10-Nov-14	-30	$4,868.24	
2-W.05.02.01	ESM0930265	ESM - Procurement finished	100%	3	25-Dec-14 A	31-Dec-14 A	11-Nov-14	20-Nov-14	-25	$10,952.24	
2-W.05.02.01	ESM0930270	ESM - All parts delivered incl. Free issue items	100%	124	05-Jan-15 A	30-Jun-15 A	21-Nov-14	12-Mar-15	-77	$135,080.40	
2-W.05.02.01	ESM0930275	ESM - Mechanical Assembly finished	100%	15	01-Jul-15 A	22-Jul-15 A	13-Mar-15	02-Apr-15	-77	$24,339.12	
2-W.05.02.01	ESM0930280	ESM - Electrical Assembly finished - ready for performance tests	100%	5	23-Jul-15 A	29-Jul-15 A	03-Apr-15	09-Apr-15	-77	$7,301.84	
2-W.05.02.01	ESM0930285	ESM - Performance tests finished	100%	32	14-Jul-15 A	26-Aug-15 A	10-Apr-15	07-May-15	-77	$32,857.76	
2-W.05.02.01	ESM0930290	ESM - Vacuum performance test finished (mass spec after bakeout)	100%	43	13-Jul-15 A	10-Sep-15 A	08-May-15	21-May-15	-77	$15,820.48	
2-W.05.02.01	ESM0930295	ESM - Factory acceptance test of the system (FAT)	100%	26	24-Aug-15 A	30-Sep-15 A	22-May-15	18-Jun-15	-71	$32,857.76	
2-W.05.02.01	ESM0930300	ESM - Shipping	100%	19	01-Oct-15 A	29-Oct-15 A	19-Jun-15	18-Sep-15	-27	$49,895.04	
2-W.05.02.01	ESM0930310	ESM - Installation	100%	124	02-Nov-15 A	29-Apr-16 A	21-Sep-15	16-Oct-15	-134	$43,606.16	
2-W.05.02.01	ESM0930315	ESM - Approval of the Commissioning Report	100%	85	17-Feb-16 A	15-Jun-16 A	19-Oct-15	18-Dec-15	-123	$43,606.16	
2-W.05.02.01	ESM0980	ESM - BNL Assembly: M3P & Chambers	100%	18	02-Nov-15 A	27-Nov-15 A	21-Sep-15	16-Oct-15	-28	$58,705.01	
2-W.05.02.01	ESM0990	ESM - Test: M3P & Chambers	100%	10	12-Nov-15 A	27-Nov-15 A	19-Oct-15	18-Dec-15	15	$36,977.25	
M4P			86.56%	636	03-Mar-14 A	12-Sep-16	02-Jan-14	10-Mar-16	-129	$633,939.06	84
2-W.05.02.01	ESM0875	ESM M4 Mirrors & Tanks - Write Specification and SOW	100%	29	03-Mar-14 A	10-Apr-14 A	02-Jan-14	30-Jan-14	-49	$39,512.30	
2-W.05.02.01	ESM0885	ESM M4 Mirrors & Tanks - PPM Accept Requisition	100%	46	11-Apr-14 A	17-Jun-14 A	05-May-14	28-May-14	-13	$0.00	
2-W.05.02.01	ESM0887	ESM M4 Mirrors & Tanks - Prepare RFP	100%	5	18-Jun-14 A	24-Jun-14 A	29-May-14	18-Jun-14	-4	$0.00	
2-W.05.02.01	ESM0895	ESM M4 Mirrors & Tanks - Call for Bids	100%	56	25-Jun-14 A	15-Sep-14 A	19-Jun-14	25-Jul-14	-35	$0.00	
2-W.05.02.01	ESM0905	ESM M4 Mirrors & Tanks - Receive and Evaluate Vendor Proposals	100%	6	16-Sep-14 A	23-Sep-14 A	28-Jul-14	15-Sep-14	-6	$0.00	
2-W.05.02.01	ESM0915	ESM M4 Mirrors & Tanks - Vendor Negotiations	100%	21	24-Sep-14 A	23-Oct-14 A	16-Sep-14	14-Oct-14	-7	$0.00	
2-W.05.02.01	ESM0925	ESM M4 Mirrors & Tanks - Contract Award	100%	0		24-Oct-14 A		15-Oct-14	-8	$0.00	
2-W.05.02.01	ESM0927	ESM M4 Mirrors & Tanks - Program Plan	100%	5	22-Oct-14 A	28-Oct-14 A	22-Oct-14	28-Oct-14	0	$27,300.00	
2-W.05.02.01	ESM0929	ESM M4 Mirrors & Tanks - Preliminary Design Through PDR	100%	29	29-Oct-14 A	10-Dec-14 A	29-Oct-14	10-Dec-14	0	$87,202.96	
2-W.05.02.01	ESM0931	ESM M4 Mirrors & Tanks - Preliminary Design Review Acceptance	100%	1	25-Dec-14 A	25-Dec-14 A	09-Jan-15	09-Jan-15	8	$21,800.48	
2-W.05.02.01	ESM0933	ESM M4 Mirrors & Tanks - Final Design Through FDR	100%	24	11-Dec-14 A	16-Jan-15 A	11-Dec-14	16-Jan-15	0	$130,803.92	
2-W.05.02.01	ESM0936	ESM M4 Mirrors & Tanks - Final Design Review Acceptance	100%	1	01-Apr-15 A	01-Apr-15 A	17-Feb-15	17-Feb-15	-31	$32,700.72	
2-W.05.02.01	ESM0939	ESM M4 Mirrors & Tanks - Production	100%	153	04-Feb-15 A	10-Sep-15 A	20-Jan-15	21-May-15	-77	$39,554.32	
2-W.05.02.01	ESM0941	ESM M4 Mirrors & Tanks - Assembly	100%	57	01-Jul-15 A	22-Sep-15 A	17-Feb-15	01-Jul-15	-56	$40,495.52	
2-W.05.02.01	ESM0943	ESM M4 Mirrors & Tanks - Factory Test Set Up	100%	57	10-Jul-15 A	30-Sep-15 A	26-May-15	14-Jul-15	-54	$16,637.92	
2-W.05.02.01	ESM0946	ESM M4 Mirrors & Tanks - Testing	100%	50	21-Jul-15 A	30-Sep-15 A	15-Jul-15	11-Sep-15	-12	$24,485.76	
2-W.05.02.01	ESM0948	ESM M4 Mirrors & Tanks - Shipping & Delivery	100%	14	01-Feb-16 A	19-Feb-16 A	14-Sep-15	23-Oct-15	-79	$31,392.40	
2-W.05.02.01	ESM0951	ESM M4 Mirrors & Tanks - Receipt of Mechanical System	100%	1	22-Feb-16 A	22-Feb-16 A	23-Oct-15	23-Oct-15	-80	$19,070.48	
2-W.05.02.01	ESM0953	ESM M4 Mirrors & Tanks - Installation of Mechanical System	90%	121	23-Feb-16 A	11-Aug-16	26-Oct-15	04-Dec-15	-173	$13,625.04	65
2-W.05.02.01	ESM0956	ESM M4 Mirrors & Tanks - Receipt of Equipment at BNL (optics)	0%	1	15-Aug-16*	15-Aug-16	04-Jan-16	04-Jan-16	-156	$19,070.48	64
2-W.05.02.01	ESM0958	ESM M4 Mirrors & Tanks - Installation Phase II	0%	13	16-Aug-16	01-Sep-16	05-Jan-16	22-Jan-16	-156	$13,625.04	64



(O) NEXT - Detail Schedule

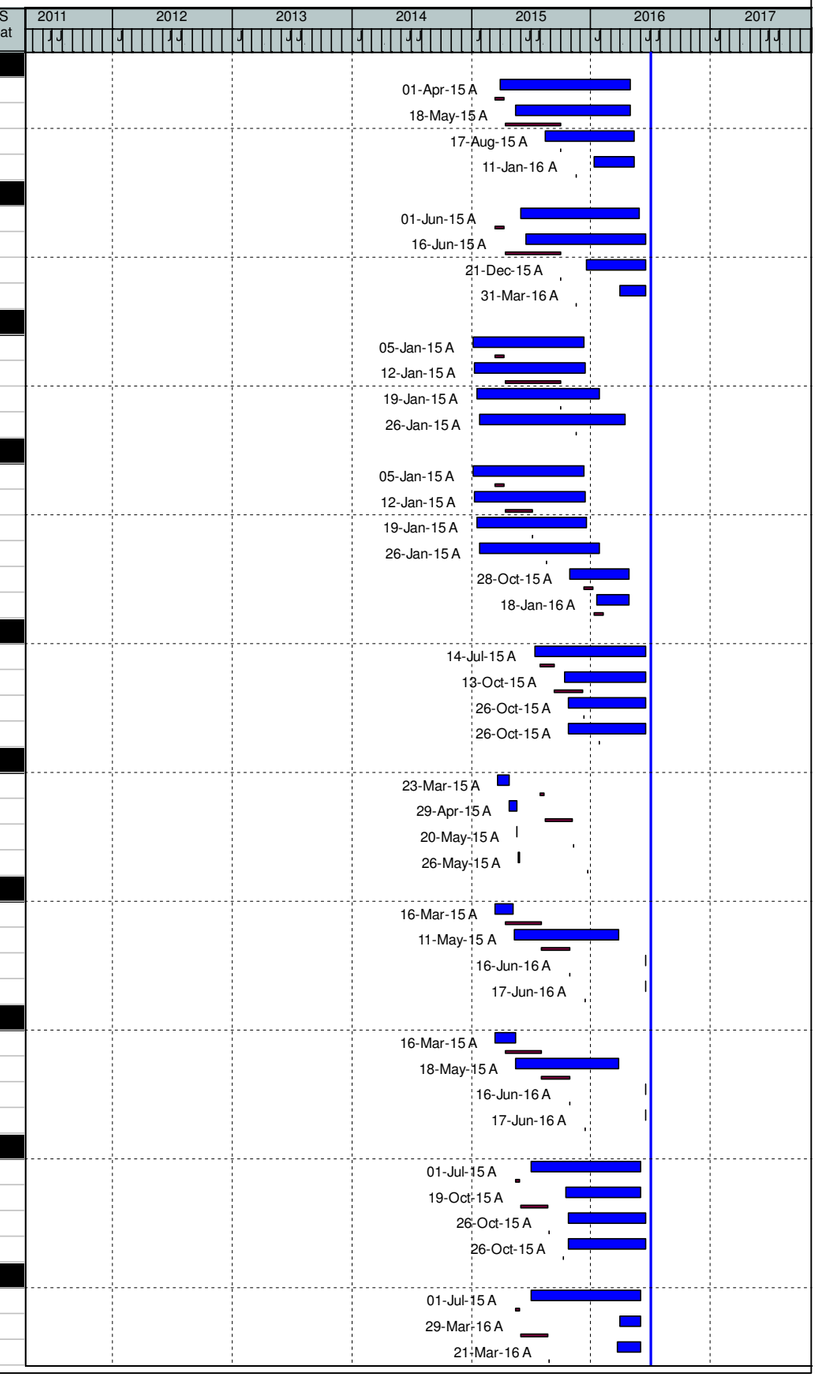
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.05.02.01	ESM0961	ESM M4 Mirrors & Tanks - Commissioning of Equipment	0%	5	02-Sep-16	09-Sep-16	25-Jan-16	29-Jan-16	-156	$21,800.48	64
2-W.05.02.01	ESM0963	ESM M4 Mirrors & Tanks - Commissioning Acceptance Report	0%	1	12-Sep-16	12-Sep-16	10-Mar-16	10-Mar-16	-129	$5,450.64	64
2-W.05.02.01	ESM0985	ESM M4 Mirrors & Tanks - Install & Assembly Support BNL	85%	121	23-Feb-16 A	11-Aug-16	26-Oct-15	22-Jan-16	-141	$30,019.78	105
2-W.05.02.01	ESM1000	ESM M4 Mirrors & Tanks - Test & Commissioning Support BNL	0%	5	02-Sep-16	09-Sep-16	25-Jan-16	29-Jan-16	-156	$19,390.82	85
Cooled Apertures with Differential Pump			0%	20	01-Oct-14 A	30-Oct-14 A				$0.00	
2-W.05.02.01	ESM2040	Write Specification and SOW Cooled Apertures	100%	20	01-Oct-14 A	30-Oct-14 A				$0.00	
Non Optics Beamline Components			100%	372	05-Jan-15 A	24-Jun-16 A	01-May-15	13-May-16	-29	$496,387.85	
2-W.05.02.01	ESM4230	ESM Pipes & Bellows - Procurement Support	100%	16	01-Apr-15 A	23-Apr-15 A	01-May-15	19-Aug-15	83	$24,201.72	
2-W.05.02.01	ESM4230100	ESM Pipes & Bellows - PPM Accept Requisition	100%	0		01-Apr-15 A		01-May-15	23	$0.00	
2-W.05.02.01	ESM4230105	ESM Pipes & Bellows - Prepare & Submit RFQ	100%	3	01-Apr-15 A	03-Apr-15 A	04-May-15	27-May-15	37	$0.00	
2-W.05.02.01	ESM4230110	ESM Pipes & Bellows - Offerors Prepare & Submit Proposals	100%	2	06-Apr-15 A	07-Apr-15 A	28-May-15	24-Jun-15	55	$0.00	
2-W.05.02.01	ESM4230115	ESM Pipes & Bellows - Evaluate Offeror Proposals	100%	3	08-Apr-15 A	10-Apr-15 A	25-Jun-15	16-Jul-15	67	$0.00	
2-W.05.02.01	ESM4230120	ESM Pipes & Bellows - Negotiation	100%	5	13-Apr-15 A	17-Apr-15 A	17-Jul-15	23-Jul-15	67	$0.00	
2-W.05.02.01	ESM4230125	ESM Pipes & Bellows - Prepare and Approve Contract Package	100%	3	20-Apr-15 A	22-Apr-15 A	24-Jul-15	20-Aug-15	84	$0.00	
2-W.05.02.01	ESM4230130	ESM Pipes & Bellows - Contract Award	100%	0		22-Apr-15 A		20-Aug-15	84	$0.00	
2-W.05.02.01	ESM4240	ESM Pipes & Bellows - Fabrication Support	100%	150	23-Apr-15 A	27-Nov-15 A	20-Aug-15	14-Dec-15	12	$2,690.55	
2-W.05.02.01	ESM4250	ESM Bellows & UHV	100%	1	24-Apr-15 A	27-Apr-15 A	21-Aug-15	21-Aug-15	83	$55,172.54	
2-W.05.02.01	ESM4255	ESM Pipes	100%	191	14-Sep-15 A	16-Jun-16 A	16-Feb-16	16-Feb-16	-86	$82,572.00	
2-W.05.02.01	ESM4257	ESM Pipes & Ion Pumps Support System	100%	23	26-Oct-15 A	30-Nov-15 A	15-Dec-15	12-Feb-16	52	$47,708.33	
2-W.05.02.01	ESM4260	ESM Pipes & Bellows - Assembly	100%	150	23-Nov-15 A	24-Jun-16 A	15-Dec-15	29-Feb-16	-83	$6,707.10	
2-W.05.02.01	ESM4270	ESM Pipes & Bellows - Test	100%	134	14-Dec-15 A	24-Jun-16 A	01-Mar-16	31-Mar-16	-59	$9,298.64	
2-W.05.02.01	ESM4280	ESM Pumps & Controllers - Procurement Support	100%	19	05-Jan-15 A	30-Jan-15 A	01-May-15	19-Aug-15	140	$24,518.33	
2-W.05.02.01	ESM4280100	ESM Pumps & Controllers - PPM Accept Requisition	100%	0		05-Jan-15 A		01-May-15	83	$0.00	
2-W.05.02.01	ESM4280105	ESM Pumps & Controllers - Prepare & Submit RFQ	100%	5	05-Jan-15 A	09-Jan-15 A	04-May-15	27-May-15	95	$0.00	
2-W.05.02.01	ESM4280110	ESM Pumps & Controllers - Offerors Prepare & Submit Proposals	100%	5	12-Jan-15 A	16-Jan-15 A	28-May-15	24-Jun-15	110	$0.00	
2-W.05.02.01	ESM4280115	ESM Pumps & Controllers - Evaluate Offeror Proposals	100%	4	20-Jan-15 A	23-Jan-15 A	25-Jun-15	16-Jul-15	121	$0.00	
2-W.05.02.01	ESM4280120	ESM Pumps & Controllers - Negotiation	100%	4	26-Jan-15 A	29-Jan-15 A	17-Jul-15	23-Jul-15	122	$0.00	
2-W.05.02.01	ESM4280125	ESM Pumps & Controllers - Prepare and Approve Contract Package	100%	1	30-Jan-15 A	30-Jan-15 A	24-Jul-15	20-Aug-15	141	$0.00	
2-W.05.02.01	ESM4280130	ESM Pumps & Controllers - Contract Award	100%	0		30-Jan-15 A		20-Aug-15	142	$0.00	
2-W.05.02.01	ESM4290	ESM Pumps & Controllers - Fabrication Support	100%	62	02-Mar-15 A	28-May-15 A	20-Aug-15	13-Nov-15	119	$2,680.74	
2-W.05.02.01	ESM4300	ESM Pumps & Controllers - Delivery	100%	50	18-Mar-15 A	28-May-15 A	16-Nov-15	16-Nov-15	120	$158,066.40	
2-W.05.02.01	ESM4310	ESM Pumps & Controllers - Assembly	100%	39	29-May-15 A	24-Jul-15 A	17-Nov-15	15-Jan-16	120	$6,707.10	
2-W.05.02.01	ESM4320	ESM Pumps & Controllers - Test	100%	44	29-May-15 A	31-Jul-15 A	19-Jan-16	13-May-16	198	$8,085.77	
2-W.05.02.01	ESM4530	Install & Assembly - Non-Optics Beamline Components	100%	160	28-Oct-15 A	17-Jun-16 A	03-Nov-15	02-Dec-15	-136	$36,911.47	
2-W.05.02.01	ESM4540	Test & Commissioning - Non-Optics Beamline Components	100%	124	21-Dec-15 A	17-Jun-16 A	03-Dec-15	31-Dec-15	-116	$31,067.15	
Wavefront Sensor			100%	451	01-May-14 A	22-Feb-16 A	01-Apr-14	10-Apr-15	-216	$282,353.85	
2-W.05.02.01	ESM1130	Write Specification and SOW WaveFront sensor	100%	62	01-May-14 A	31-Jul-14 A	01-Apr-14	15-May-14	-51	$18,868.60	
2-W.05.02.01	ESM1140	PPM Accept Requisition & Prepare RFP	100%	1	17-Jul-14 A	17-Jul-14 A	16-May-14	01-Jul-14	-10	$0.00	
2-W.05.02.01	ESM1150	Call for Bids	100%	4	18-Jul-14 A	24-Jul-14 A				$0.00	
2-W.05.02.01	ESM1160	Receive and Evaluate Vendor Proposals	100%	2	24-Jul-14 A	28-Jul-14 A	08-Aug-14	26-Sep-14	44	$0.00	
2-W.05.02.01	ESM1170	Vendor Negotiations	100%	11	29-Jul-14 A	13-Aug-14 A	29-Sep-14	27-Oct-14	52	$0.00	
2-W.05.02.01	ESM1180	Award Contract: WaveFront sensor	100%	0		13-Aug-14 A		28-Oct-14	52	$0.00	
2-W.05.02.01	ESM1200	Vendor Fab Hartmann Wavefront Analyzers	100%	177	13-Aug-14 A	30-Apr-15 A	11-Aug-14	15-Jan-15	-72	$223,027.17	
2-W.05.02.01	ESM1240	Assembly WaveFront sensor	100%	10	01-Feb-16 A	12-Feb-16 A	02-Feb-15	13-Mar-15	-231	$21,618.20	
2-W.05.02.01	ESM1250	Test WaveFront sensor	100%	5	16-Feb-16 A	22-Feb-16 A	16-Mar-15	10-Apr-15	-216	$18,839.88	
Management			100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$118,216.13	
2-W.05.02.01	ESM0390	PDS Procurement Support FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$118,216.13	
Diagon			100%	92	15-Dec-14 A	28-Apr-15 A	15-Dec-14	12-Jun-15	32	$59,790.59	
2-W.05.02.01	ESM4550	Fabrication Support - Diagon	100%	92	15-Dec-14 A	28-Apr-15 A	15-Dec-14	28-Apr-15	0	$2,637.14	
2-W.05.02.01	ESM4560	Delivery - Diagon	100%	0	19-Jan-15 A	20-Jan-15 A	29-Apr-15	29-Apr-15	71	$45,722.76	
2-W.05.02.01	ESM4570	Acceptance - Diagon	100%	2	27-Jan-15 A	29-Jan-15 A	12-Jun-15	12-Jun-15	95	$11,430.69	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
Baffle Slits - Water Cooled			100%	283	01-Apr-15 A	13-May-16 A	16-Mar-15	16-Nov-15	-123	$51,746.87	
2-W.05.02.01	ESM4580	PO Prep and Submittal - Baffle Slits - water cooled	100%	273	01-Apr-15 A	29-Apr-16 A	16-Mar-15	10-Apr-15	-265	$1,925.73	
2-W.05.02.01	ESM4590	Fabrication Support - Baffle Slits - water cooled	100%	240	18-May-15 A	29-Apr-16 A	13-Apr-15	30-Sep-15	-145	$2,637.14	
2-W.05.02.01	ESM4600	Delivery - Baffle Slits - water cooled	100%	187	17-Aug-15 A	13-May-16 A	01-Oct-15	01-Oct-15	-154	$37,747.20	
2-W.05.02.01	ESM4610	Acceptance - Baffle Slits - water cooled	100%	88	11-Jan-16 A	13-May-16 A	16-Nov-15	16-Nov-15	-123	$9,436.80	
Diagn. Unit - Water Cooled			100%	265	01-Jun-15 A	17-Jun-16 A	16-Mar-15	16-Nov-15	-147	$41,130.47	
2-W.05.02.01	ESM4620	PO Prep and Submittal - Diagn. Unit - water cooled	100%	251	01-Jun-15 A	30-May-16 A	16-Mar-15	10-Apr-15	-285	$1,925.73	
2-W.05.02.01	ESM4630	Fabrication Support - Diagn. Unit - water cooled	100%	254	16-Jun-15 A	17-Jun-16 A	13-Apr-15	30-Sep-15	-179	$2,637.14	
2-W.05.02.01	ESM4640	Delivery - Diagn. Unit - water cooled	100%	125	21-Dec-15 A	17-Jun-16 A	01-Oct-15	01-Oct-15	-178	$29,254.08	
2-W.05.02.01	ESM4650	Acceptance - Diagn. Unit - water cooled	100%	56	31-Mar-16 A	17-Jun-16 A	16-Nov-15	16-Nov-15	-147	$7,313.52	
Baffle Slits			100%	323	05-Jan-15 A	15-Apr-16 A	16-Mar-15	16-Nov-15	-103	$39,950.87	
2-W.05.02.01	ESM4660	PO Prep and Submittal - Baffle slits	100%	235	05-Jan-15 A	10-Dec-15 A	16-Mar-15	10-Apr-15	-167	$1,925.73	
2-W.05.02.01	ESM4670	Fabrication Support - Baffle slits	100%	235	12-Jan-15 A	17-Dec-15 A	13-Apr-15	30-Sep-15	-52	$2,637.14	
2-W.05.02.01	ESM4680	Delivery - Baffle slits	100%	258	19-Jan-15 A	29-Jan-16 A	01-Oct-15	01-Oct-15	-79	$28,310.40	
2-W.05.02.01	ESM4690	Acceptance - Baffle slits	100%	309	26-Jan-15 A	15-Apr-16 A	16-Nov-15	16-Nov-15	-103	$7,077.60	
Diagnostic Units			100%	331	05-Jan-15 A	28-Apr-16 A	16-Mar-15	08-Feb-16	-56	$118,977.77	
2-W.05.02.01	ESM4700	PO Prep and Submittal - Diagnostic Units	100%	235	05-Jan-15 A	10-Dec-15 A	16-Mar-15	10-Apr-15	-167	$1,925.73	
2-W.05.02.01	ESM4710	Fabrication Support - Diagnostic Units	100%	233	12-Jan-15 A	15-Dec-15 A	13-Apr-15	07-Jul-15	-110	$2,637.14	
2-W.05.02.01	ESM4720	Delivery - Diagnostic Units	100%	231	19-Jan-15 A	18-Dec-15 A	08-Jul-15	08-Jul-15	-112	$41,150.48	
2-W.05.02.01	ESM4730	Acceptance - Diagnostic Units	100%	254	26-Jan-15 A	29-Jan-16 A	20-Aug-15	20-Aug-15	-108	$10,287.62	
2-W.05.02.01	ESM4820	Install & Assembly - Diagnostic Units	100%	125	28-Oct-15 A	28-Apr-16 A	10-Dec-15	08-Jan-16	-76	$34,708.74	
2-W.05.02.01	ESM4830	Test & Commissioning - Diagnostic Units	100%	71	18-Jan-16 A	28-Apr-16 A	11-Jan-16	08-Feb-16	-56	$28,268.06	
Gas Cell			100%	235	14-Jul-15 A	17-Jun-16 A	30-Jul-15	26-Jan-16	-101	$71,864.77	
2-W.05.02.01	ESM4740	PO Prep and Submittal - Gas cell	100%	235	14-Jul-15 A	17-Jun-16 A	30-Jul-15	10-Sep-15	-193	$1,925.73	
2-W.05.02.01	ESM4750	Fabrication Support - Gas cell	100%	172	13-Oct-15 A	17-Jun-16 A	11-Sep-15	08-Dec-15	-133	$2,701.84	
2-W.05.02.01	ESM4760	Delivery - Gas cell	100%	163	26-Oct-15 A	17-Jun-16 A	09-Dec-15	09-Dec-15	-132	$53,789.76	
2-W.05.02.01	ESM4770	Acceptance - Gas cell	100%	163	26-Oct-15 A	17-Jun-16 A	26-Jan-16	26-Jan-16	-101	$13,447.44	
Laser Alignment			100%	46	23-Mar-15 A	26-May-15 A	30-Jul-15	24-Dec-15	147	$10,866.44	
2-W.05.02.01	ESM4780	PO Prep and Submittal - laser alignment	100%	26	23-Mar-15 A	28-Apr-15 A	30-Jul-15	12-Aug-15	75	$1,925.73	
2-W.05.02.01	ESM4790	Fabrication Support - laser alignment	100%	14	29-Apr-15 A	19-May-15 A	13-Aug-15	06-Nov-15	120	$2,673.71	
2-W.05.02.01	ESM4800	Delivery - laser alignment	100%	1	20-May-15 A	20-May-15 A	09-Nov-15	09-Nov-15	119	$5,013.60	
2-W.05.02.01	ESM4810	Acceptance - laser alignment	100%	1	26-May-15 A	26-May-15 A	24-Dec-15	24-Dec-15	147	$1,253.40	
White Beam Mask			100%	319	16-Mar-15 A	17-Jun-16 A	15-Apr-15	15-Dec-15	-128	$51,773.59	
2-W.05.02.01	ESM4010	RFQ Prep and Submittal - White beam Mask	100%	40	16-Mar-15 A	08-May-15 A	15-Apr-15	03-Aug-15	59	$1,925.73	
2-W.05.02.01	ESM4020	Fabrication Support - White beam Mask	100%	220	11-May-15 A	25-Mar-16 A	04-Aug-15	28-Oct-15	-101	$2,663.86	
2-W.05.02.01	ESM4030	Delivery - White beam Mask	100%	1	16-Jun-16 A	16-Jun-16 A	29-Oct-15	29-Oct-15	-158	$37,747.20	
2-W.05.02.01	ESM4040	White beam Mask purchase of Support System	100%	1	17-Jun-16 A	17-Jun-16 A	15-Dec-15	15-Dec-15	-128	$9,436.80	
Pink Beam Mask			100%	319	16-Mar-15 A	17-Jun-16 A	15-Apr-15	15-Dec-15	-128	$63,569.59	
2-W.05.02.01	ESM4050	RFQ Prep and Submittal - Pink beam mask	100%	45	16-Mar-15 A	15-May-15 A	15-Apr-15	03-Aug-15	54	$1,925.73	
2-W.05.02.01	ESM4060	Fabrication Support - Pink beam mask	100%	215	18-May-15 A	25-Mar-16 A	04-Aug-15	28-Oct-15	-101	$2,663.86	
2-W.05.02.01	ESM4070	Delivery - Pink beam mask	100%	1	16-Jun-16 A	16-Jun-16 A	29-Oct-15	29-Oct-15	-158	$47,184.00	
2-W.05.02.01	ESM4080	Pink beam mask purchase of Support System	100%	1	17-Jun-16 A	17-Jun-16 A	15-Dec-15	15-Dec-15	-128	$11,796.00	
BS Collimator			100%	243	01-Jul-15 A	17-Jun-16 A	15-May-15	08-Oct-15	-173	$39,074.12	
2-W.05.02.01	ESM4090	PO Prep and Submittal - BS collimator	100%	229	01-Jul-15 A	31-May-16 A	15-May-15	29-May-15	-251	$1,925.73	
2-W.05.02.01	ESM4100	Fabrication Support - BS collimator	100%	154	19-Oct-15 A	31-May-16 A	01-Jun-15	24-Aug-15	-191	$2,637.14	
2-W.05.02.01	ESM4110	Delivery - BS collimator	100%	163	26-Oct-15 A	17-Jun-16 A	25-Aug-15	25-Aug-15	-204	$27,433.65	
2-W.05.02.01	ESM4120	Acceptance - BS collimator	100%	163	26-Oct-15 A	17-Jun-16 A	08-Oct-15	08-Oct-15	-173	$7,077.60	
BS Schielding Wall			100%	244	01-Jul-15 A	20-Jun-16 A	15-May-15	08-Oct-15	-174	$29,008.64	
2-W.05.02.01	ESM4130	PO Prep and Submittal - BS schielding wall	100%	229	01-Jul-15 A	31-May-16 A	15-May-15	29-May-15	-251	$1,925.73	
2-W.05.02.01	ESM4140	Fabrication Support - BS schielding wall	100%	44	29-Mar-16 A	31-May-16 A	01-Jun-15	24-Aug-15	-191	$2,637.14	
2-W.05.02.01	ESM4150	Delivery - BS schielding wall	100%	50	21-Mar-16 A	31-May-16 A	25-Aug-15	25-Aug-15	-190	$19,432.17	



(O) NEXT - Detail Schedule

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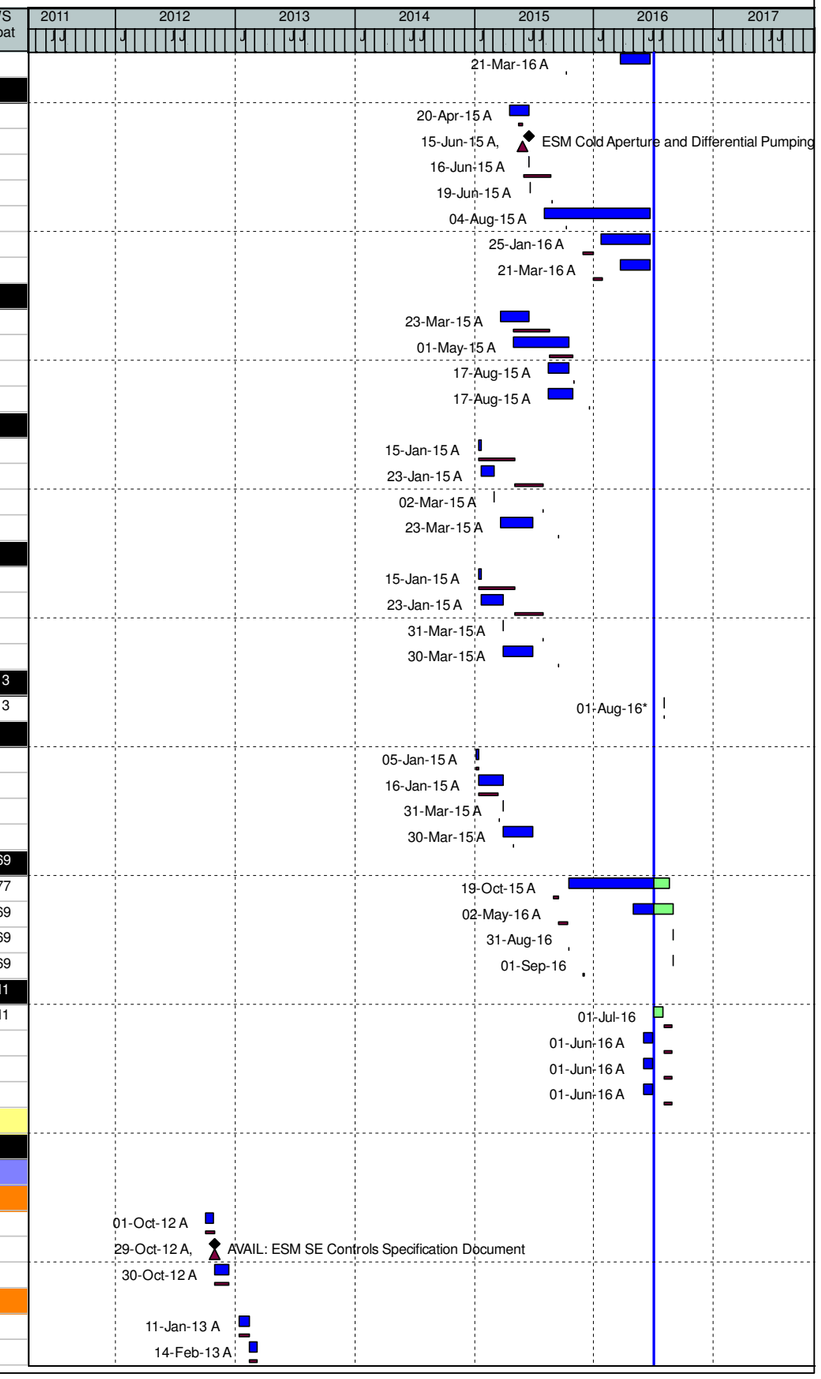
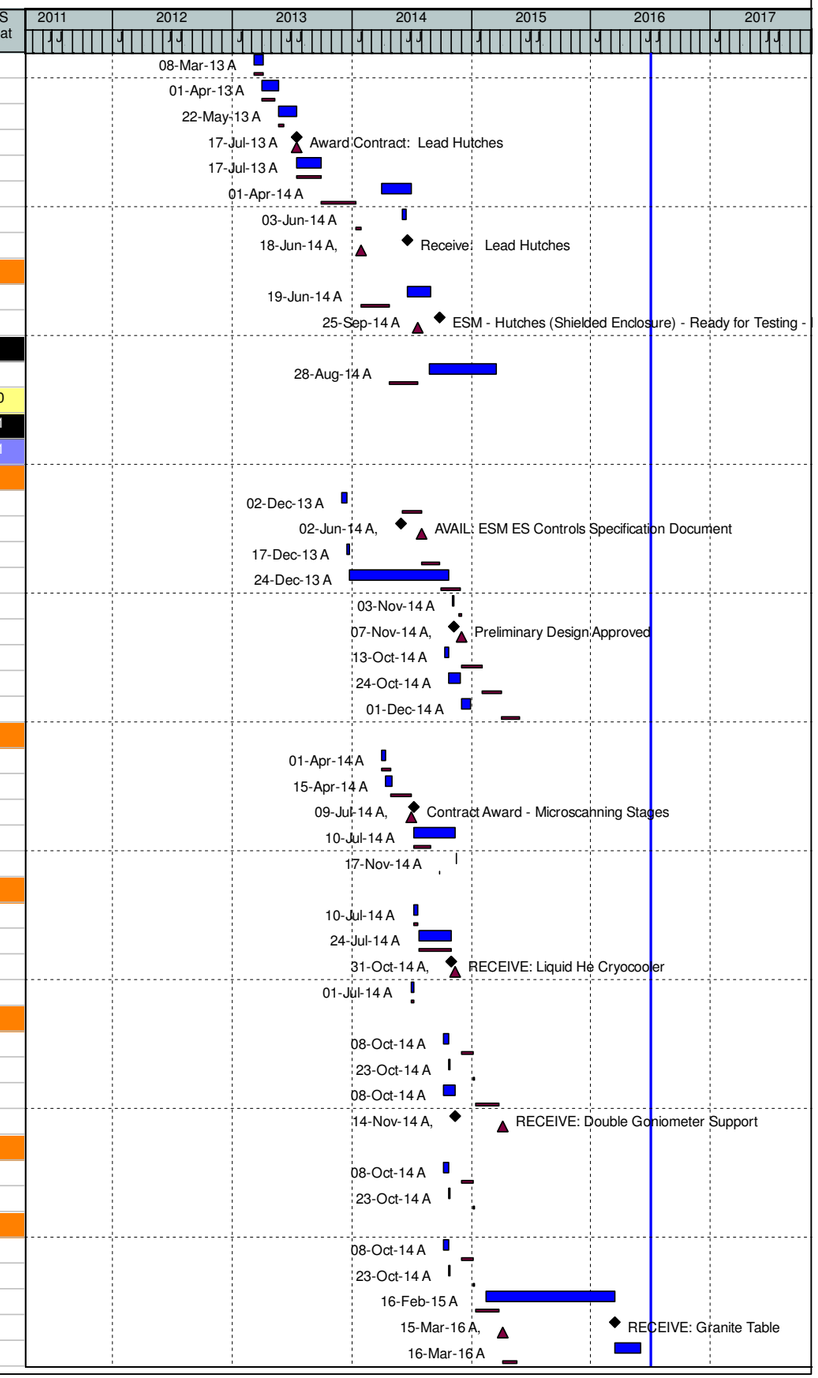
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.05.02.01	ESM4160	Acceptance - BS schielding wall	100%	65	21-Mar-16 A	20-Jun-16 A	08-Oct-15	08-Oct-15	-174	$5,013.60	
Cold Aperture & Differetial Pumping			100%	295	20-Apr-15 A	20-Jun-16 A	15-May-15	28-Jan-16	-100	$78,208.70	
2-W.05.02.01	ESM4170	ESM Cold Aperture and Differential Pumping - PO Prep and Submittal	100%	40	20-Apr-15 A	15-Jun-15 A	15-May-15	29-May-15	-11	$1,925.73	
2-W.05.02.01	ESM4175	ESM Cold Aperture and Differential Pumping - Contract Award	100%	0		15-Jun-15 A		29-May-15	-11	$0.00	
2-W.05.02.01	ESM4180	ESM Cold Aperture and Differential Pumping - Fabrication Support	100%	3	16-Jun-15 A	18-Jun-15 A	01-Jun-15	24-Aug-15	46	$2,637.14	
2-W.05.02.01	ESM4190	ESM Cold Aperture and Differential Pumping - Delivery	100%	1	19-Jun-15 A	19-Jun-15 A	25-Aug-15	25-Aug-15	46	$19,432.17	
2-W.05.02.01	ESM4200	ESM Differential Pumping - Acceptance	100%	221	04-Aug-15 A	20-Jun-16 A	08-Oct-15	08-Oct-15	-174	$5,013.60	
2-W.05.02.01	ESM4210	ESM Differential Pumping - Install & Assembly	100%	104	25-Jan-16 A	20-Jun-16 A	01-Dec-15	29-Dec-15	-120	$27,522.19	
2-W.05.02.01	ESM4220	ESM Differential Pumping - Test & Commissioning	100%	65	21-Mar-16 A	20-Jun-16 A	30-Dec-15	28-Jan-16	-100	$21,677.87	
Stands			100%	156	23-Mar-15 A	30-Oct-15 A	01-May-15	17-Dec-15	32	$39,986.31	
2-W.05.02.01	ESM4330	RFQ Prep and Submittal - stands	100%	63	23-Mar-15 A	18-Jun-15 A	01-May-15	19-Aug-15	43	$1,925.73	
2-W.05.02.01	ESM4340	Fabrication Support - stands	100%	116	01-May-15 A	15-Oct-15 A	20-Aug-15	30-Oct-15	11	$2,672.58	
2-W.05.02.01	ESM4350	Delivery - stands	100%	43	17-Aug-15 A	16-Oct-15 A	02-Nov-15	02-Nov-15	11	$28,310.40	
2-W.05.02.01	ESM4360	Acceptance - stands	100%	53	17-Aug-15 A	30-Oct-15 A	17-Dec-15	17-Dec-15	32	$7,077.60	
Gauges & Controllers			100%	116	15-Jan-15 A	30-Jun-15 A	15-Jan-15	15-Sep-15	53	$59,430.18	
2-W.05.02.01	ESM4370	RFQ Prep and Submittal - gauges & controlles	100%	4	15-Jan-15 A	22-Jan-15 A	15-Jan-15	05-May-15	73	$1,925.73	
2-W.05.02.01	ESM4380	Fabrication Support - gauges &controlles	100%	25	23-Jan-15 A	02-Mar-15 A	06-May-15	30-Jul-15	107	$2,637.14	
2-W.05.02.01	ESM4390	Delivery - gauges &controlles	100%	1	02-Mar-15 A	02-Mar-15 A	31-Jul-15	31-Jul-15	107	$43,893.85	
2-W.05.02.01	ESM4400	Acceptance - gauges & controlles	100%	71	23-Mar-15 A	30-Jun-15 A	15-Sep-15	15-Sep-15	53	$10,973.46	
RGA			100%	116	15-Jan-15 A	30-Jun-15 A	15-Jan-15	15-Sep-15	53	$49,142.56	
2-W.05.02.01	ESM4410	RFQ Prep and Submittal - RGA	100%	5	15-Jan-15 A	22-Jan-15 A	15-Jan-15	05-May-15	72	$1,925.73	
2-W.05.02.01	ESM4420	Fabrication Support - RGA	100%	47	23-Jan-15 A	31-Mar-15 A	06-May-15	30-Jul-15	85	$2,637.14	
2-W.05.02.01	ESM4430	Delivery - RGA	100%	1	31-Mar-15 A	31-Mar-15 A	31-Jul-15	31-Jul-15	86	$35,663.75	
2-W.05.02.01	ESM4440	Acceptance - RGA	100%	66	30-Mar-15 A	30-Jun-15 A	15-Sep-15	15-Sep-15	53	$8,915.94	
Photon Shutters			0%	1	01-Aug-16	01-Aug-16	01-Aug-16	01-Aug-16	0	$32,240.00	113
2-W.05.02.01	ESM9500	ESM - Photon Shutters	0%	1	01-Aug-16*	01-Aug-16	01-Aug-16	01-Aug-16	0	$32,240.00	113
Valves (90 Degrees)			100%	124	05-Jan-15 A	30-Jun-15 A	05-Jan-15	01-May-15	-41	$11,849.93	
2-W.05.02.01	ESM4450	PO Prep and Submittal - valves (90 degr)	100%	9	05-Jan-15 A	15-Jan-15 A	05-Jan-15	15-Jan-15	0	$1,925.73	
2-W.05.02.01	ESM4460	Fabrication Support - valves (90 degr)	100%	51	16-Jan-15 A	31-Mar-15 A	16-Jan-15	16-Mar-15	-11	$2,637.14	
2-W.05.02.01	ESM4470	Delivery - valves (90 degr)	100%	1	31-Mar-15 A	31-Mar-15 A	17-Mar-15	17-Mar-15	-10	$5,829.65	
2-W.05.02.01	ESM4480	Acceptance - valves (90 degr)	100%	66	30-Mar-15 A	30-Jun-15 A	01-May-15	01-May-15	-41	$1,457.41	
Chiller & Beamline Interconnection Hardware			5.43%	221	19-Oct-15 A	01-Sep-16	01-Sep-15	01-Dec-15	-191	$63,580.84	269
2-W.05.02.01	ESM4490	PO Prep and Submittal - Water Temp Control (25%) and NEG Pump (75%)	75%	211	19-Oct-15 A	18-Aug-16	01-Sep-15	15-Sep-15	-233	$1,925.73	277
2-W.05.02.01	ESM4500	Fabrication Support - Water Temp Control (25%) and NEG Pump (75%)	75%	85	02-May-16 A	30-Aug-16	16-Sep-15	14-Oct-15	-221	$2,675.11	269
2-W.05.02.01	ESM4510	Delivery - Water Temp Control (25%) and NEG Pump (75%)	0%	1	31-Aug-16	31-Aug-16	15-Oct-15	15-Oct-15	-221	$47,184.00	269
2-W.05.02.01	ESM4520	Acceptance - Water Temp Control (25%) and NEG Pump (75%)	0%	1	01-Sep-16	01-Sep-16	01-Dec-15	01-Dec-15	-191	$11,796.00	269
Additional Small Procurements & ETC Tasks			63.02%	42	01-Jun-16 A	29-Jul-16	01-Aug-16	26-Aug-16	20	$33,746.84	111
2-W.05.02.01	ESM8070	Air-guard Pumping System - purchase	0%	20	01-Jul-16	29-Jul-16	01-Aug-16	26-Aug-16	20	$12,480.00	111
2-W.05.02.01	ESM8080	White beam Mask fabrication central shops (1xquote)	100%	20	01-Jun-16 A	28-Jun-16 A	01-Aug-16	26-Aug-16	42	$6,900.40	
2-W.05.02.01	ESM8090	Mask material ($42/lb)	100%	20	01-Jun-16 A	28-Jun-16 A	01-Aug-16	26-Aug-16	42	$8,632.00	
2-W.05.02.01	ESM8100	Pink beam Mask fabrication additional labor support	100%	20	01-Jun-16 A	28-Jun-16 A	01-Aug-16	26-Aug-16	42	$5,734.44	
Shielded Enclosures			100%	612	01-Oct-12 A	18-Mar-15 A	01-Oct-12	23-Jul-14	-162	$54,345.00	
ESM Procurement Work Package			100%	495	01-Oct-12 A	25-Sep-14 A	01-Oct-12	23-Jul-14	-45	$36,682.81	
ESM Shielded Enclosures			100%	495	01-Oct-12 A	25-Sep-14 A	01-Oct-12	23-Jul-14	-45	$36,682.81	
Design			0%	50	01-Oct-12 A	12-Dec-12 A	01-Oct-12	12-Dec-12	0	$0.00	
2-W.05.02.02	ESM1630	Preliminary Design	100%	18	01-Oct-12 A	26-Oct-12 A	01-Oct-12	29-Oct-12	2	$0.00	
2-W.05.02.02	ESM1640	AVAIL: ESM SE Controls Specification Document	100%	0		29-Oct-12 A		29-Oct-12	0	$0.00	
2-W.05.02.02	ESM1650	Final Design & Spec	100%	30	30-Oct-12 A	12-Dec-12 A	30-Oct-12	12-Dec-12	0	$0.00	
Lead Hutch			0%	369	11-Jan-13 A	01-Jul-14 A	11-Jan-13	29-Jan-14	-107	$0.00	
2-W.05.02.02	ESM1660	Write Specification and SOW: Lead Hutches	100%	23	11-Jan-13 A	13-Feb-13 A	11-Jan-13	13-Feb-13	0	$0.00	
2-W.05.02.02	ESM1670	PPM Accept Requisition	100%	15	14-Feb-13 A	07-Mar-13 A	14-Feb-13	07-Mar-13	0	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

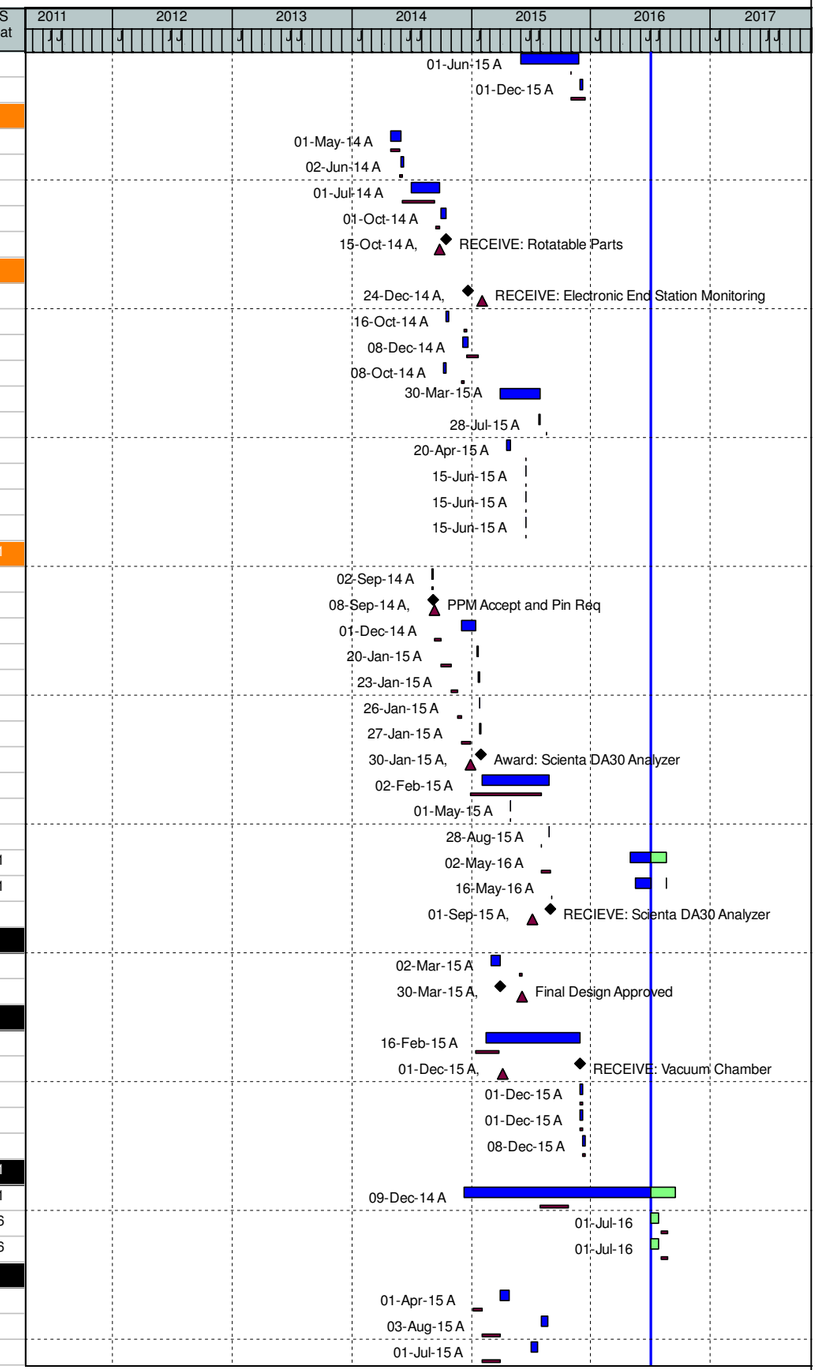
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.05.02.02	ESM1680	Call for Bids	100%	20	08-Mar-13 A	04-Apr-13 A	08-Mar-13	04-Apr-13	0	$0.00	
2-W.05.02.02	ESM1690	Receive and Evaluate Vendor Proposals	100%	37	01-Apr-13 A	21-May-13 A	01-Apr-13	10-May-13	-7	$0.00	
2-W.05.02.02	ESM1700	Vendor Negotiations	100%	37	22-May-13 A	16-Jul-13 A	22-May-13	05-Jun-13	-27	$0.00	
2-W.05.02.02	ESM1710	Award Contract: Lead Hutches	100%	0	17-Jul-13 A		17-Jul-13		0	$0.00	
2-W.05.02.02	ESM1730	Procure/Fab - Lead Hutches	100%	52	17-Jul-13 A	30-Sep-13 A	17-Jul-13	30-Sep-13	1	$0.00	
2-W.05.02.02	ESM1730FA	Procure/Fab - Lead Hutches	100%	65	01-Apr-14 A	01-Jul-14 A	01-Oct-13	14-Jan-14	-117	$0.00	
2-W.05.02.02	ESM1740	Vendor Shipping	100%	10	03-Jun-14 A	16-Jun-14 A	15-Jan-14	29-Jan-14	-96	$0.00	
2-W.05.02.02	ESM1750	Receive: Lead Hutches	100%	0		18-Jun-14 A		29-Jan-14	-98	$0.00	
Install & Test			100%	67	19-Jun-14 A	25-Sep-14 A	30-Jan-14	23-Jul-14	-45	$36,682.81	
2-W.05.02.02	ESM1760	Assembly and Installation	100%	50	19-Jun-14 A	29-Aug-14 A	30-Jan-14	24-Apr-14	-88	$36,682.81	
2-W.05.02.02	ESM1780	ESM - Hutches (Shielded Enclosure) - Ready for Testing - INTER-PROJECT I	100%	0	25-Sep-14 A		23-Jul-14		-45	$0.00	
Endstation Equipment - Assembly & Install			100%	136	28-Aug-14 A	18-Mar-15 A	25-Apr-14	22-Jul-14	-162	$17,662.19	
2-W.05.02.02	ESM1770	Test	100%	136	28-Aug-14 A	18-Mar-15 A	25-Apr-14	22-Jul-14	-162	$17,662.19	
Endstation Equipment			95.37%	731	02-Dec-13 A	31-Oct-16	01-Apr-14	24-Aug-16	-46	$2,210,911.07	50
ESM Procurement Work Package			97.96%	680	02-Dec-13 A	17-Aug-16	01-Apr-14	16-Dec-15	-169	$1,452,052.21	81
ESM Endstation			97.96%	680	02-Dec-13 A	17-Aug-16	01-Apr-14	16-Dec-15	-169	$1,452,052.21	81
Design			100%	270	02-Dec-13 A	31-Dec-14 A	04-Jun-14	28-May-15	102	$303,721.31	
2-W.05.02.03	ESM1800	30% Preliminary Design	100%	10	02-Dec-13 A	16-Dec-13 A	04-Jun-14	31-Jul-14	157	$55,182.09	
2-W.05.02.03	ESM1810	AVAIL: ESM ES Controls Specification Document	100%	0		02-Jun-14 A		31-Jul-14	42	$0.00	
2-W.05.02.03	ESM1820	60% Preliminary Design	100%	5	17-Dec-13 A	23-Dec-13 A	01-Aug-14	26-Sep-14	191	$55,182.09	
2-W.05.02.03	ESM1830	90% Preliminary Design	100%	208	24-Dec-13 A	23-Oct-14 A	29-Sep-14	26-Nov-14	25	$39,960.02	
2-W.05.02.03	ESM1840	Preliminary Design Review	100%	5	03-Nov-14 A	07-Nov-14 A	25-Nov-14	03-Dec-14	16	$0.00	
2-W.05.02.03	ESM1850	Preliminary Design Approved	100%	0		07-Nov-14 A		03-Dec-14	16	$0.00	
2-W.05.02.03	ESM1860	30% Final Design	100%	7	13-Oct-14 A	23-Oct-14 A	04-Dec-14	03-Feb-15	68	$51,132.37	
2-W.05.02.03	ESM1870	60% Final Design	100%	24	24-Oct-14 A	26-Nov-14 A	04-Feb-15	01-Apr-15	83	$51,132.37	
2-W.05.02.03	ESM1880	90% Final Design	100%	21	01-Dec-14 A	31-Dec-14 A	02-Apr-15	28-May-15	102	$51,132.37	
Microscanning Stages			100%	160	01-Apr-14 A	17-Nov-14 A	01-Apr-14	25-Sep-14	-36	$137,644.00	
2-W.05.02.03	ESM0215	Write Specification and SOW - Microscanning Stages	100%	11	01-Apr-14 A	15-Apr-14 A	01-Apr-14	28-Apr-14	9	$0.00	
2-W.05.02.03	ESM0216	PPM Accept Requisition	100%	14	15-Apr-14 A	02-May-14 A	29-Apr-14	01-Jul-14	41	$0.00	
2-W.05.02.03	ESM021610	Contract Award - Microscanning Stages	100%	0		09-Jul-14 A		01-Jul-14	-3	$0.00	
2-W.05.02.03	ESM0218	Procure/Fab - Microscanning Stages	100%	90	10-Jul-14 A	14-Nov-14 A	10-Jul-14	28-Aug-14	-54	$0.00	
2-W.05.02.03	ESM0221	Receipt & Acceptance of Microscanning Stages	100%	1	17-Nov-14 A	17-Nov-14 A	25-Sep-14	25-Sep-14	-36	$137,644.00	
Liquid He Cryocooler			100%	84	01-Jul-14 A	31-Oct-14 A	01-Jul-14	14-Nov-14	11	$80,606.99	
2-W.05.02.03	ESM0212	PPM Accept Requisition	100%	10	10-Jul-14 A	23-Jul-14 A	10-Jul-14	23-Jul-14	0	$0.00	
2-W.05.02.03	ESM0222	Procure/Fab - Liquid He Cryocooler	100%	69	24-Jul-14 A	31-Oct-14 A	24-Jul-14	31-Oct-14	1	$80,606.99	
2-W.05.02.03	ESM0228	RECEIVE: Liquid He Cryocooler	100%	0		31-Oct-14 A		14-Nov-14	11	$0.00	
2-W.05.02.03	ESM0280	Write Specification and SOW - Liquid He Cryocooler	100%	5	01-Jul-14 A	09-Jul-14 A	01-Jul-14	09-Jul-14	0	$0.00	
Double Goniometer Support			100%	27	08-Oct-14 A	14-Nov-14 A	04-Dec-14	08-Apr-15	96	$57,153.45	
2-W.05.02.03	ESM0125	Write Specification and SOW - Double Goniometer Support	100%	10	08-Oct-14 A	22-Oct-14 A	04-Dec-14	05-Jan-15	48	$0.00	
2-W.05.02.03	ESM0135	PPM Accept Requisition	100%	5	23-Oct-14 A	29-Oct-14 A	06-Jan-15	12-Jan-15	48	$0.00	
2-W.05.02.03	ESM0145	Procure/Fab - Double Goniometer Support	100%	27	08-Oct-14 A	14-Nov-14 A	13-Jan-15	25-Mar-15	86	$57,153.45	
2-W.05.02.03	ESM0176	RECEIVE: Double Goniometer Support	100%	0		14-Nov-14 A		08-Apr-15	96	$0.00	
Vacuum Chamber			0%	15	08-Oct-14 A	29-Oct-14 A	04-Dec-14	12-Jan-15	48	$0.00	
2-W.05.02.03	ESM0185	Write Specification and SOW - Vacuum Chamber	100%	10	08-Oct-14 A	22-Oct-14 A	04-Dec-14	05-Jan-15	48	$0.00	
2-W.05.02.03	ESM0187	PPM Accept Requisition	100%	5	23-Oct-14 A	29-Oct-14 A	06-Jan-15	12-Jan-15	48	$0.00	
Granite Table			100%	411	08-Oct-14 A	31-May-16 A	04-Dec-14	16-Dec-15	-114	$115,492.02	
2-W.05.02.03	ESM0195	Write Specification and SOW - Granite Table	100%	10	08-Oct-14 A	22-Oct-14 A	04-Dec-14	05-Jan-15	48	$0.00	
2-W.05.02.03	ESM0197	PPM Accept Requisition	100%	5	23-Oct-14 A	29-Oct-14 A	06-Jan-15	12-Jan-15	48	$0.00	
2-W.05.02.03	ESM0201	Fabricate - Granite Table	100%	271	16-Feb-15 A	15-Mar-16 A	13-Jan-15	25-Mar-15	-244	$40,350.33	
2-W.05.02.03	ESM0203	RECEIVE: Granite Table	100%	0		15-Mar-16 A		08-Apr-15	-234	$0.00	
2-W.05.02.03	ESM0204	Installation - Granite Table	100%	54	16-Mar-16 A	31-May-16 A	09-Apr-15	20-May-15	-258	$19,563.83	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.05.02.03	ESM0207	Fabricate - Bakeout System	100%	124	01-Jun-15 A	27-Nov-15 A	02-Nov-15	03-Nov-15	-15	$35,388.00	
2-W.05.02.03	ESM4855	Installation - Bakeout System	100%	5	01-Dec-15 A	07-Dec-15 A	03-Nov-15	16-Dec-15	7	$20,189.86	
Rotatable Parts			100%	115	01-May-14 A	15-Oct-14 A	29-Apr-14	26-Sep-14	-12	$58,261.08	
2-W.05.02.03	ESM0205	Write Specification and SOW - Rotatable Parts	100%	21	01-May-14 A	02-Jun-14 A	29-Apr-14	27-May-14	-3	$0.00	
2-W.05.02.03	ESM0206	PPM Accept Requisition	100%	5	02-Jun-14 A	06-Jun-14 A	28-May-14	03-Jun-14	-3	$0.00	
2-W.05.02.03	ESM0208	Procure/Fab - Rotatable Parts	100%	59	01-Jul-14 A	25-Sep-14 A	04-Jun-14	12-Sep-14	-8	$58,261.08	
2-W.05.02.03	ESM0209	Vendor Shipping	100%	10	01-Oct-14 A	15-Oct-14 A	15-Sep-14	26-Sep-14	-12	$0.00	
2-W.05.02.03	ESM0211	RECEIVE: Rotatable Parts	100%	0		15-Oct-14 A		26-Sep-14	-12	$0.00	
Electronic End Station Monitoring			100%	202	08-Oct-14 A	31-Jul-15 A	04-Dec-14	18-Aug-15	13	$197,750.93	
2-W.05.02.03	ESM0223	RECEIVE: Electronic End Station Monitoring	100%	0		24-Dec-14 A		03-Feb-15	26	$0.00	
2-W.05.02.03	ESM0227	PPM Accept Requisition	100%	5	16-Oct-14 A	22-Oct-14 A	11-Dec-14	17-Dec-14	38	$0.00	
2-W.05.02.03	ESM0231	Procure/Fab - Electronic End Station Monitoring	100%	12	08-Dec-14 A	24-Dec-14 A	18-Dec-14	20-Jan-15	16	$38,864.34	
2-W.05.02.03	ESM0325	Write Specification and SOW - Electronic End Station Monitoring	100%	5	08-Oct-14 A	15-Oct-14 A	04-Dec-14	10-Dec-14	38	$0.00	
2-W.05.02.03	ESM4856	Procurement - Small Purchases	100%	87	30-Mar-15 A	30-Jul-15 A				$0.00	
2-W.05.02.03	ESM4860	Delivery - Film Growth System	100%	3	28-Jul-15 A	31-Jul-15 A	17-Aug-15	18-Aug-15	13	$62,868.79	
2-W.05.02.03	ESM4865	Delivery - Patch Panels for End Station	100%	8	20-Apr-15 A	30-Apr-15 A	15-Jun-15	16-Jun-15	33	$13,716.83	
2-W.05.02.03	ESM4870	Delivery - Sample Alignment System	100%	2	15-Jun-15 A	16-Jun-15 A	15-Jun-15	16-Jun-15	0	$35,435.14	
2-W.05.02.03	ESM4875	Delivery - Surface Sample Preparation	100%	2	15-Jun-15 A	16-Jun-15 A	15-Jun-15	16-Jun-15	0	$35,435.14	
2-W.05.02.03	ESM4880	Delivery - Film Growth Power Supplies	100%	2	15-Jun-15 A	16-Jun-15 A	15-Jun-15	16-Jun-15	0	$11,430.69	
Scienta DA30 Analyzer			94.1%	492	02-Sep-14 A	17-Aug-16	02-Sep-14	02-Sep-15	-240	$501,422.43	81
2-W.05.02.03	ESM0230	Write Specification and SOW - Scienta DA30 Analyzer	100%	5	02-Sep-14 A	08-Sep-14 A	02-Sep-14	08-Sep-14	0	$8,816.03	
2-W.05.02.03	ESM0240	PPM Accept and Pin Req	100%	0		08-Sep-14 A		09-Sep-14	2	$0.00	
2-W.05.02.03	ESM0250	Prepare and Submit RFQ	100%	32	01-Dec-14 A	16-Jan-15 A	09-Sep-14	01-Oct-14	-71	$0.00	
2-W.05.02.03	ESM0260	Offerors Prepare & Submit Proposals	100%	4	20-Jan-15 A	23-Jan-15 A	02-Oct-14	30-Oct-14	-55	$0.00	
2-W.05.02.03	ESM0261	Evaluate Proposals	100%	1	23-Jan-15 A	26-Jan-15 A	31-Oct-14	20-Nov-14	-40	$0.00	
2-W.05.02.03	ESM0262	Negotiate with Offerors	100%	1	26-Jan-15 A	27-Jan-15 A	21-Nov-14	01-Dec-14	-36	$0.00	
2-W.05.02.03	ESM0263	Prepare and Approve Contract Package	100%	3	27-Jan-15 A	30-Jan-15 A	02-Dec-14	30-Dec-14	-19	$0.00	
2-W.05.02.03	ESM0270	Award: Scienta DA30 Analyzer	100%	0		30-Jan-15 A		31-Dec-14	-19	$0.00	
2-W.05.02.03	ESM0275	Scienta DA30 Analyzer - Fabrication	100%	146	02-Feb-15 A	27-Aug-15 A	31-Dec-14	04-Aug-15	-17	$0.00	
2-W.05.02.03	ESM0285	Scienta DA30 Analyzer - Interface Drawing & CAD files delivered to BSA	100%	1	01-May-15 A	01-May-15 A	01-May-15	01-May-15	0	$122,917.60	
2-W.05.02.03	ESM0290	Scienta DA30 Analyzer - Delivery of Electron Measurement Analyzer	100%	1	28-Aug-15 A	28-Aug-15 A	04-Aug-15	04-Aug-15	-18	$295,751.04	
2-W.05.02.03	ESM0295	Scienta DA30 Analyzer - Install	70%	76	02-May-16 A	17-Aug-16	05-Aug-15	01-Sep-15	-241	$59,150.21	81
2-W.05.02.03	ESM0305	Scienta DA30 Analyzer - Reciept of Software Updates	20%	66	16-May-16 A	17-Aug-16	02-Sep-15	02-Sep-15	-240	$14,787.55	81
2-W.05.02.03	ESM0310	RECIEVE: Scienta DA30 Analyzer	100%	0		01-Sep-15 A		08-Jul-15	-38	$0.00	
Design			0%	21	02-Mar-15 A	30-Mar-15 A	29-May-15	04-Jun-15	47	$0.00	
2-W.05.02.03	ESM1890	Final Design Review	100%	21	02-Mar-15 A	30-Mar-15 A	29-May-15	04-Jun-15	47	$0.00	
2-W.05.02.03	ESM1900	Final Design Approved	100%	0		30-Mar-15 A		04-Jun-15	47	$0.00	
Vacuum Chamber			100%	209	16-Feb-15 A	14-Dec-15 A	13-Jan-15	14-Dec-15	0	$222,378.93	
2-W.05.02.03	ESM0192	Fabricate - Vacuum Chamber	100%	199	16-Feb-15 A	01-Dec-15 A	13-Jan-15	25-Mar-15	-172	$65,492.13	
2-W.05.02.03	ESM0198	RECEIVE: Vacuum Chamber	100%	0		01-Dec-15 A		08-Apr-15	-162	$0.00	
2-W.05.02.03	ESM2500	Vacuum Chamber Additional Valves	100%	5	01-Dec-15 A	07-Dec-15 A	01-Dec-15	07-Dec-15	0	$27,130.80	
2-W.05.02.03	ESM2505	Vacuum Chamber Turbo & Getter Pump	100%	5	01-Dec-15 A	07-Dec-15 A	01-Dec-15	07-Dec-15	0	$94,368.00	
2-W.05.02.03	ESM2510	Vacuum Chamber End-station Protecting Enclosure	100%	5	08-Dec-15 A	14-Dec-15 A	08-Dec-15	14-Dec-15	0	$35,388.00	
Endstation Equipment Testing			74.69%	445	09-Dec-14 A	15-Sep-16	31-Jul-15	24-Aug-16	-15	$84,515.49	61
2-W.05.02.03	ESM1910	Testing & Install of the Endstation Equipment	85%	445	09-Dec-14 A	15-Sep-16	31-Jul-15	26-Oct-15	-224	$74,268.56	61
2-W.05.02.03	ESM8050	Endstation Finishing Items - Material Purchases	0%	18	01-Jul-16	27-Jul-16	01-Aug-16	24-Aug-16	20	$7,077.60	96
2-W.05.02.03	ESM8060	Endstation Finishing Items - Labor Support	0%	18	01-Jul-16	27-Jul-16	01-Aug-16	24-Aug-16	20	$3,169.33	96
Low Temperature Equipment			100%	143	01-Apr-15 A	22-Oct-15 A	05-Jan-15	31-Mar-15	-143	$88,656.85	
2-W.05.02.03	ESM0320	Prepare Purchase Orders for Pressure Temperature Equipment	100%	20	01-Apr-15 A	28-Apr-15 A	05-Jan-15	02-Feb-15	-60	$0.00	
2-W.05.02.03	ESM0330	Fabrication Closed Cycle Cryostat ($41,276)	100%	15	03-Aug-15 A	21-Aug-15 A	03-Feb-15	31-Mar-15	-101	$47,181.31	
2-W.05.02.03	ESM0340	Fabrication XYZ Manipulator ($23,675)	100%	15	01-Jul-15 A	22-Jul-15 A	03-Feb-15	31-Mar-15	-79	$28,753.54	



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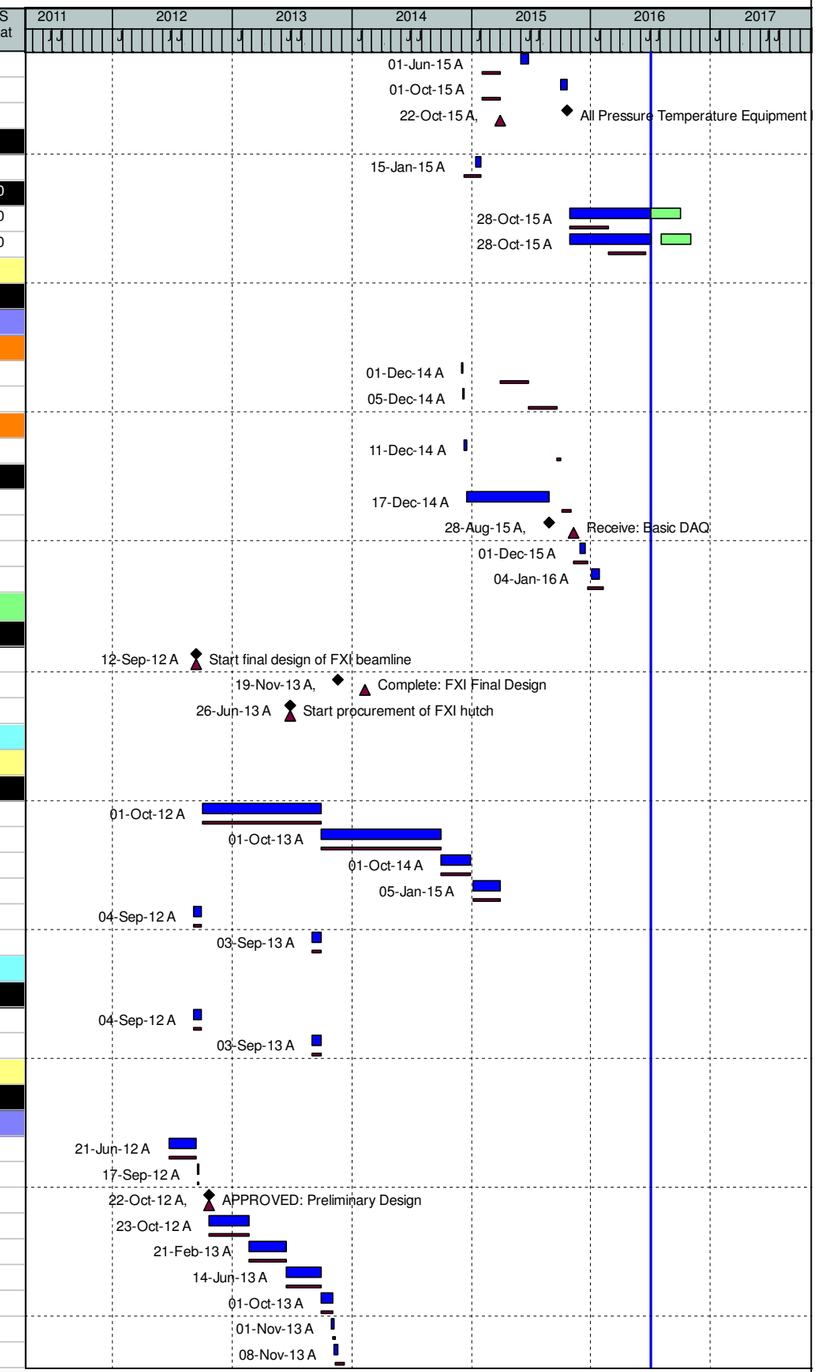
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.05.02.03	ESM0341	Fabrication Octagon Chamber ($3,100)	100%	18	01-Jun-15 A	25-Jun-15 A	03-Feb-15	31-Mar-15	-60	$3,764.98	
2-W.05.02.03	ESM0350	Fabrication Valves ($7,375)	100%	15	01-Oct-15 A	22-Oct-15 A	03-Feb-15	31-Mar-15	-143	$8,957.02	
2-W.05.02.03	ESM0360	All Pressure Temperature Equipment Recieved	100%	0		22-Oct-15 A		31-Mar-15	-144	$0.00	
Cold Aperture & Differetial Pumping			100%	10	15-Jan-15 A	30-Jan-15 A	11-Dec-14	30-Jan-15	1	$21,835.74	
2-W.05.02.03	ESM2025	Write Specification and SOW Cooled Apertures	100%	10	15-Jan-15 A	30-Jan-15 A	11-Dec-14	30-Jan-15	1	$21,835.74	
Endstation Equipment - Assembly & Install			84.93%	254	28-Oct-15 A	31-Oct-16	27-Oct-15	15-Jun-16	-95	$341,471.84	50
2-W.05.02.03	ESM1920	Endstation Equipment - Assembly and Installation	90%	234	28-Oct-15 A	30-Sep-16	27-Oct-15	23-Feb-16	-155	$168,359.35	50
2-W.05.02.03	ESM1930	Endstation Equipment - Test	80%	254	28-Oct-15 A	31-Oct-16	24-Feb-16	15-Jun-16	-95	$173,112.49	50
Data Acquisition			100%	290	01-Dec-14 A	29-Jan-16 A	01-Apr-15	08-Feb-16	7	$127,607.41	
ESM Procurement Work Package			100%	12	01-Dec-14 A	16-Dec-14 A	01-Apr-15	02-Oct-15	200	$27,352.66	
ESM Data Acquisition			100%	12	01-Dec-14 A	16-Dec-14 A	01-Apr-15	02-Oct-15	200	$27,352.66	
Design			100%	8	01-Dec-14 A	10-Dec-14 A	01-Apr-15	18-Sep-15	194	$18,196.29	
2-W.05.02.04	ESM1940	Preliminary Design	100%	4	01-Dec-14 A	04-Dec-14 A	01-Apr-15	24-Jun-15	138	$9,098.14	
2-W.05.02.04	ESM1950	Final Design & Spec	100%	4	05-Dec-14 A	10-Dec-14 A	25-Jun-15	18-Sep-15	194	$9,098.14	
Basic DAQ			100%	4	11-Dec-14 A	16-Dec-14 A	21-Sep-15	02-Oct-15	200	$9,156.37	
2-W.05.02.04	ESM1960	Procurement and Vendor Support	100%	4	11-Dec-14 A	16-Dec-14 A	21-Sep-15	02-Oct-15	200	$9,156.37	
Data Acquisition System			100%	278	17-Dec-14 A	29-Jan-16 A	05-Oct-15	08-Feb-16	7	$100,254.75	
2-W.05.02.04	ESM1980	Fabricate - Basic DAQ	100%	176	17-Dec-14 A	28-Aug-15 A	05-Oct-15	02-Nov-15	44	$41,967.81	
2-W.05.02.04	ESM2000	Receive: Basic DAQ	100%	0		28-Aug-15 A		09-Nov-15	49	$0.00	
2-W.05.02.04	ESM2010	Assembly and Installation	100%	12	01-Dec-15 A	17-Dec-15 A	10-Nov-15	23-Dec-15	5	$29,143.47	
2-W.05.02.04	ESM2020	Test	100%	18	04-Jan-16 A	29-Jan-16 A	24-Dec-15	08-Feb-16	7	$29,143.47	
FXI Beamline			100%	1038	04-Jan-12 A	29-Feb-16 A	04-Jan-12	31-Dec-15	-39	$1,818,324.02	
Milestones			0%	296	12-Sep-12 A	19-Nov-13 A	12-Sep-12	11-Feb-14	56	$0.00	
2-W.06	MFXI001	Start final design of FXI beamline	100%	0	12-Sep-12 A		12-Sep-12		0	$0.00	
2-W.06	MFXI003	Complete: FXI Final Design	100%	0		19-Nov-13 A		11-Feb-14	56	$0.00	
2-W.06	MFXI005	Start procurement of FXI hutch	100%	0	26-Jun-13 A		26-Jun-13		0	$0.00	
FXI Management			100%	640	04-Sep-12 A	31-Mar-15 A	04-Sep-12	31-Mar-15	0	$409,359.19	
FXI Beamline Management			100%	640	04-Sep-12 A	31-Mar-15 A	04-Sep-12	31-Mar-15	0	$409,359.19	
Management			100%	640	04-Sep-12 A	31-Mar-15 A	04-Sep-12	31-Mar-15	0	$409,359.19	
2-W.06.01.01	FXI0002	FXI BL Management FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.06.01.01	FXI0003	FXI BL Management FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$168,561.07	
2-W.06.01.01	FXI0005	FXI BL Management FY15 1Q	100%	61	01-Oct-14 A	31-Dec-14 A	01-Oct-14	31-Dec-14	1	$57,401.21	
2-W.06.01.01	FXI0006	FXI BL Management FY15 2Q	100%	60	05-Jan-15 A	31-Mar-15 A	05-Jan-15	31-Mar-15	0	$43,271.57	
2-W.06.01.01	FXIFY12501!	FXI Management FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$15,302.92	
2-W.06.01.01	FXIFY13501!	FXI Management FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$124,822.42	
FXI Beamline Systems			100%	1038	04-Jan-12 A	29-Feb-16 A	04-Jan-12	31-Dec-15	-39	$1,408,964.84	
Management			100%	268	04-Sep-12 A	30-Sep-13 A	04-Sep-12	30-Sep-13	0	$296,162.76	
2-W.06.02	FXIFY12501!	FXI Systems FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$23,632.77	
2-W.06.02	FXIFY13501!	FXI Systems FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$272,529.99	
Photon Delivery System			100%	683	21-Jun-12 A	20-Mar-15 A	21-Jun-12	12-Nov-14	-85	$220,296.02	
FXI Photon Delivery System			100%	683	21-Jun-12 A	20-Mar-15 A	21-Jun-12	12-Nov-14	-85	$220,296.02	
Design			100%	354	21-Jun-12 A	19-Nov-13 A	21-Jun-12	10-Dec-13	13	$1,592.76	
2-W.06.02.01	FXI0013	90% Preliminary Design	100%	60	21-Jun-12 A	14-Sep-12 A	21-Jun-12	14-Sep-12	0	$0.00	
2-W.06.02.01	FXI0014	Preliminary Design Review	100%	5	17-Sep-12 A	21-Sep-12 A	17-Sep-12	21-Sep-12	0	$0.00	
2-W.06.02.01	FXI0015	APPROVED: Preliminary Design	100%	0		22-Oct-12 A		22-Oct-12	0	$0.00	
2-W.06.02.01	FXI0035	30% Final Design	100%	80	23-Oct-12 A	20-Feb-13 A	23-Oct-12	20-Feb-13	0	$0.00	
2-W.06.02.01	FXI0045	60% Final Design	100%	80	21-Feb-13 A	13-Jun-13 A	21-Feb-13	13-Jun-13	0	$0.00	
2-W.06.02.01	FXI0055	90% Final Design	100%	73	14-Jun-13 A	30-Sep-13 A	14-Jun-13	30-Sep-13	1	$0.00	
2-W.06.02.01	FXI0055FA	90% Final Design	100%	24	01-Oct-13 A	04-Nov-13 A	01-Oct-13	04-Nov-13	0	$1,592.76	
2-W.06.02.01	FXI0065	Final Design Review	100%	5	01-Nov-13 A	07-Nov-13 A	05-Nov-13	11-Nov-13	2	$0.00	
2-W.06.02.01	FXI0067	Waiting for FDR Approval	100%	7	08-Nov-13 A	18-Nov-13 A	12-Nov-13	10-Dec-13	14	$0.00	



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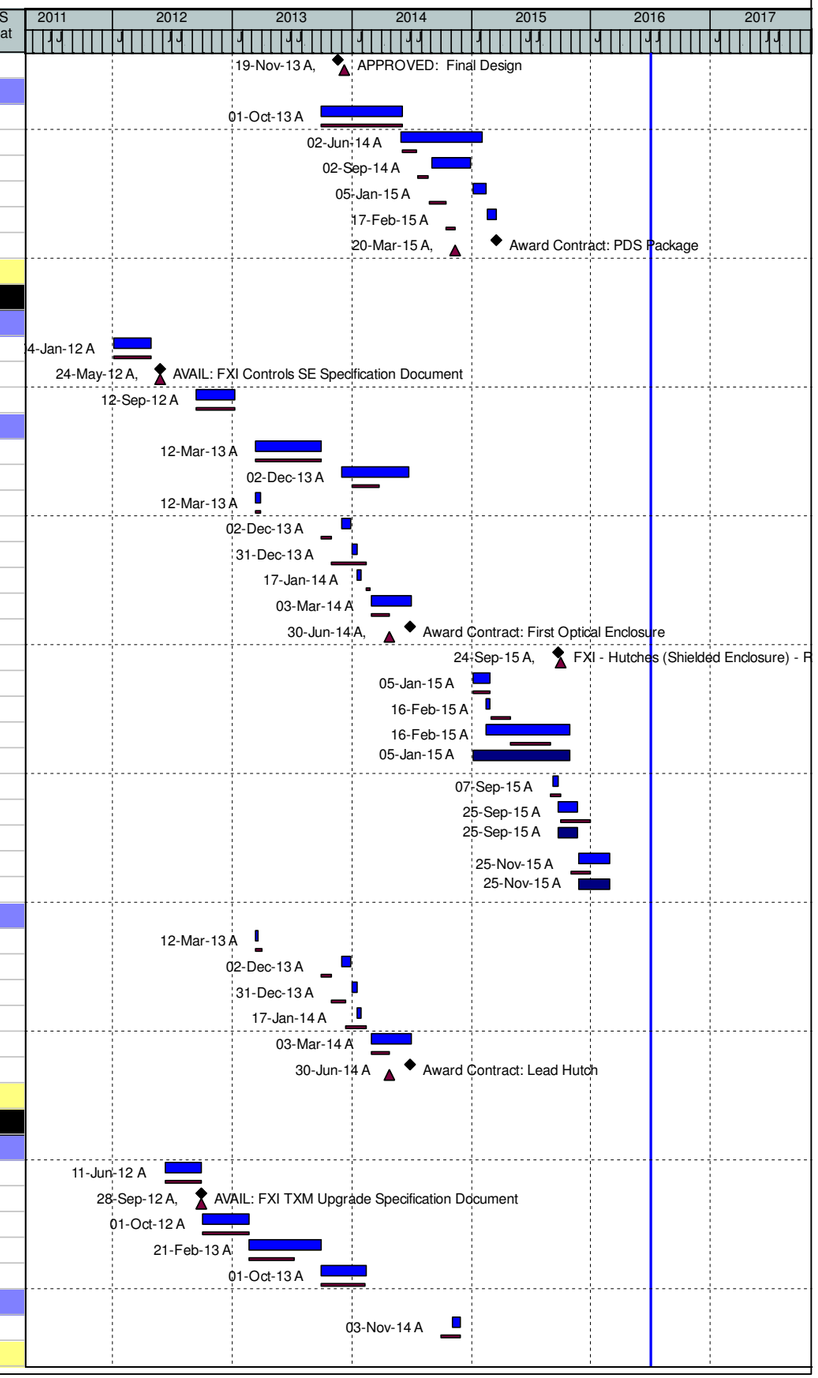
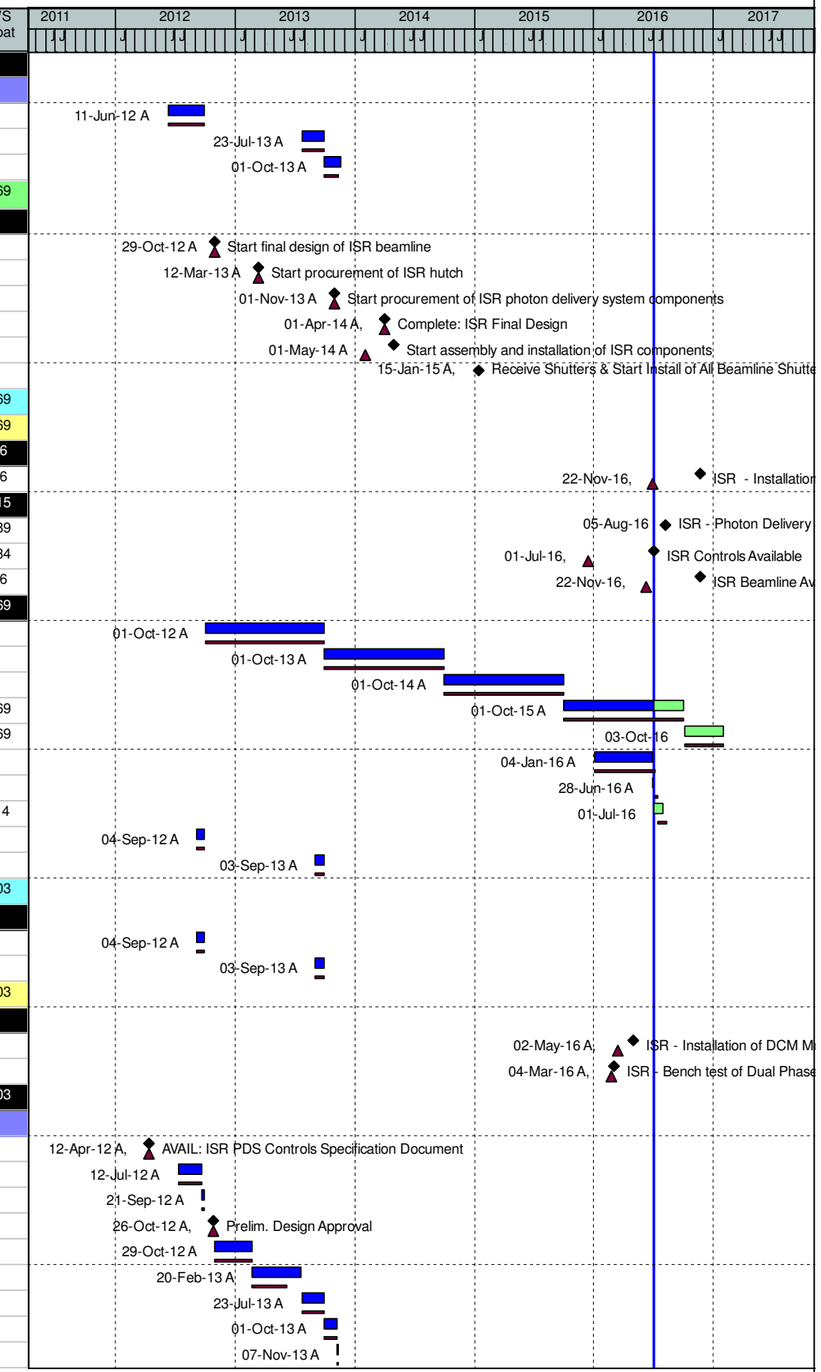
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.06.02.01	FXI0075	APPROVED: Final Design	100%	0		19-Nov-13 A		10-Dec-13	13	$0.00	
Photon Delivery System Package			100%	364	01-Oct-13 A	20-Mar-15 A	01-Oct-13	12-Nov-14	-85	$218,703.26	
2-W.06.02.01	FXI0040	Write Specification and SOW - PDS Package ($2,913,247 direct)	100%	167	01-Oct-13 A	02-Jun-14 A	01-Oct-13	02-Jun-14	0	$218,703.26	
2-W.06.02.01	FXI0050	PPM Accept Requisition	100%	165	02-Jun-14 A	02-Feb-15 A	03-Jun-14	18-Jul-14	-132	$0.00	
2-W.06.02.01	FXI0060	Call for Bids	100%	82	02-Sep-14 A	31-Dec-14 A	21-Jul-14	22-Aug-14	-87	$0.00	
2-W.06.02.01	FXI0070	Receive and Evaluate Vendor Proposal	100%	29	05-Jan-15 A	13-Feb-15 A	25-Aug-14	14-Oct-14	-82	$0.00	
2-W.06.02.01	FXI0080	Vendor Negotiations	100%	21	17-Feb-15 A	17-Mar-15 A	15-Oct-14	11-Nov-14	-83	$0.00	
2-W.06.02.01	FXI0090	Award Contract: PDS Package	100%	0		20-Mar-15 A		12-Nov-14	-85	$0.00	
Shielded Enclosures			100%	1038	04-Jan-12 A	29-Feb-16 A	04-Jan-12	31-Dec-15	-39	$837,535.49	
FXI Shielded Enclosures			100%	1038	04-Jan-12 A	29-Feb-16 A	04-Jan-12	31-Dec-15	-39	$837,535.49	
Design			0%	255	04-Jan-12 A	09-Jan-13 A	04-Jan-12	09-Jan-13	0	$0.00	
2-W.06.02.02	FXI0590	Preliminary Design	100%	80	04-Jan-12 A	26-Apr-12 A	04-Jan-12	26-Apr-12	0	$0.00	
2-W.06.02.02	FXI0600	AVAIL: FXI Controls SE Specification Document	100%	0		24-May-12 A		24-May-12	0	$0.00	
2-W.06.02.02	FXI0610	Final Design & Spec	100%	80	12-Sep-12 A	09-Jan-13 A	12-Sep-12	09-Jan-13	0	$0.00	
First Optical Enclosure			100%	742	12-Mar-13 A	29-Feb-16 A	12-Mar-13	31-Dec-15	-39	$811,535.49	
2-W.06.02.02	FXI0621	Shielded Enclosure Procurement Support	100%	140	12-Mar-13 A	30-Sep-13 A	12-Mar-13	30-Sep-13	1	$0.00	
2-W.06.02.02	FXI0621FA	Shielded Enclosure Procurement Support	100%	143	02-Dec-13 A	25-Jun-14 A	02-Jan-14	26-Mar-14	-64	$1,723.48	
2-W.06.02.02	FXI0630	PPM Accept Requisition	100%	11	12-Mar-13 A	27-Mar-13 A	12-Mar-13	27-Mar-13	1	$0.00	
2-W.06.02.02	FXI0640	Call for Bids	100%	20	02-Dec-13 A	30-Dec-13 A	01-Oct-13	29-Oct-13	-41	$0.00	
2-W.06.02.02	FXI0650	Receive and Evaluate Vendor Proposals	100%	11	31-Dec-13 A	16-Jan-14 A	30-Oct-13	12-Feb-14	19	$0.00	
2-W.06.02.02	FXI0660	Vendor Negotiations	100%	9	17-Jan-14 A	31-Jan-14 A	13-Feb-14	27-Feb-14	19	$0.00	
2-W.06.02.02	FXI0665	Vendor Detailed Design	100%	85	03-Mar-14 A	30-Jun-14 A	28-Feb-14	24-Apr-14	-46	$26,000.00	
2-W.06.02.02	FXI0670	Award Contract: First Optical Enclosure	100%	0		30-Jun-14 A		25-Apr-14	-45	$0.00	
2-W.06.02.02	FXI0860	FXI - Hutches (Shielded Enclosure) - Ready for Testing	100%	0		24-Sep-15 A		01-Oct-15	6	$0.00	
2-W.06.02.02	FXI1090	Shielded Enclosures - Vendor Final Design	100%	38	05-Jan-15 A	27-Feb-15 A	05-Jan-15	27-Feb-15	0	$250,451.76	
2-W.06.02.02	FXI1100	Shielded Enclosures - Vendor Lead & Steel Procurement and Delivery	100%	8	16-Feb-15 A	27-Feb-15 A	02-Mar-15	30-Apr-15	45	$73,465.60	
2-W.06.02.02	FXI1110	Shielded Enclosures - Fabrication	100%	179	16-Feb-15 A	30-Oct-15 A	01-May-15	31-Aug-15	-41	$141,921.52	
2-W.06.02.02	FXI1115	Shielded Enclosures - BNL Design & Fabrication Support	100%	208	05-Jan-15 A	30-Oct-15 A	05-Jan-15	30-Sep-15	-20	$4,446.57	
2-W.06.02.02	FXI1120	Shielded Enclosures - Shipping	100%	12	07-Sep-15 A	24-Sep-15 A	01-Sep-15	30-Sep-15	5	$35,062.56	
2-W.06.02.02	FXI1130	Shielded Enclosures - Assembly & Install	100%	38	25-Sep-15 A	23-Nov-15 A	01-Oct-15	31-Dec-15	28	$150,756.32	
2-W.06.02.02	FXI1135	Shielded Enclosures - BNL Assembly & Install Support	100%	38	25-Sep-15 A	23-Nov-15 A	01-Oct-15	31-Dec-15	28	$21,590.03	
2-W.06.02.02	FXI1140	Shielded Enclosures - Test	100%	65	25-Nov-15 A	29-Feb-16 A	02-Nov-15	31-Dec-15	-39	$99,693.36	
2-W.06.02.02	FXI1145	Shielded Enclosures - BNL Test Support	100%	65	25-Nov-15 A	29-Feb-16 A	02-Nov-15	31-Dec-15	-39	$6,424.30	
Lead Hutch			100%	328	12-Mar-13 A	30-Jun-14 A	12-Mar-13	25-Apr-14	-46	$26,000.00	
2-W.06.02.02	FXI0740	PPM Accept Requisition	100%	6	12-Mar-13 A	20-Mar-13 A	12-Mar-13	01-Apr-13	9	$0.00	
2-W.06.02.02	FXI0750	Call for Bids	100%	20	02-Dec-13 A	30-Dec-13 A	01-Oct-13	29-Oct-13	-41	$0.00	
2-W.06.02.02	FXI0760	Receive and Evaluate Vendor Proposals	100%	11	31-Dec-13 A	16-Jan-14 A	30-Oct-13	12-Dec-13	-22	$0.00	
2-W.06.02.02	FXI0770	Vendor Negotiations	100%	9	17-Jan-14 A	31-Jan-14 A	13-Dec-13	14-Feb-14	11	$0.00	
2-W.06.02.02	FXI0775	Vendor Detailed Design	100%	85	03-Mar-14 A	30-Jun-14 A	28-Feb-14	24-Apr-14	-46	$26,000.00	
2-W.06.02.02	FXI0780	Award Contract: Lead Hutch	100%	0	30-Jun-14 A		25-Apr-14		-45	$0.00	
Endstation Equipment			100%	617	11-Jun-12 A	26-Nov-14 A	11-Jun-12	26-Nov-14	0	$52,385.26	
FXI Endstation Equipment			100%	617	11-Jun-12 A	26-Nov-14 A	11-Jun-12	26-Nov-14	0	$52,385.26	
Design			100%	419	11-Jun-12 A	14-Feb-14 A	11-Jun-12	11-Feb-14	-2	$5,842.77	
2-W.06.02.03	FXI0870	Preliminary Design	100%	78	11-Jun-12 A	28-Sep-12 A	11-Jun-12	28-Sep-12	0	$0.00	
2-W.06.02.03	FXI0880	AVAIL: FXI TXM Upgrade Specification Document	100%	0		28-Sep-12 A		28-Sep-12	0	$0.00	
2-W.06.02.03	FXI0890	30% Final Design	100%	95	01-Oct-12 A	20-Feb-13 A	01-Oct-12	20-Feb-13	0	$0.00	
2-W.06.02.03	FXI0970	60% Final Design	100%	154	21-Feb-13 A	30-Sep-13 A	21-Feb-13	08-Jul-13	-59	$0.00	
2-W.06.02.03	FXI1060	90% Final Design	100%	92	01-Oct-13 A	14-Feb-14 A	01-Oct-13	11-Feb-14	-2	$5,842.77	
TXM Upgrade			100%	18	03-Nov-14 A	26-Nov-14 A	01-Oct-14	26-Nov-14	0	$46,542.49	
2-W.06.02.03	FXI0900	Write Specification and SOW - TXM Upgrade ($420K direct)	100%	18	03-Nov-14 A	26-Nov-14 A	01-Oct-14	26-Nov-14	0	$46,542.49	
Data Acquisition			100%	363	11-Jun-12 A	20-Nov-13 A	11-Jun-12	13-Nov-13	-5	$2,585.31	



(O) NEXT - Detail Schedule

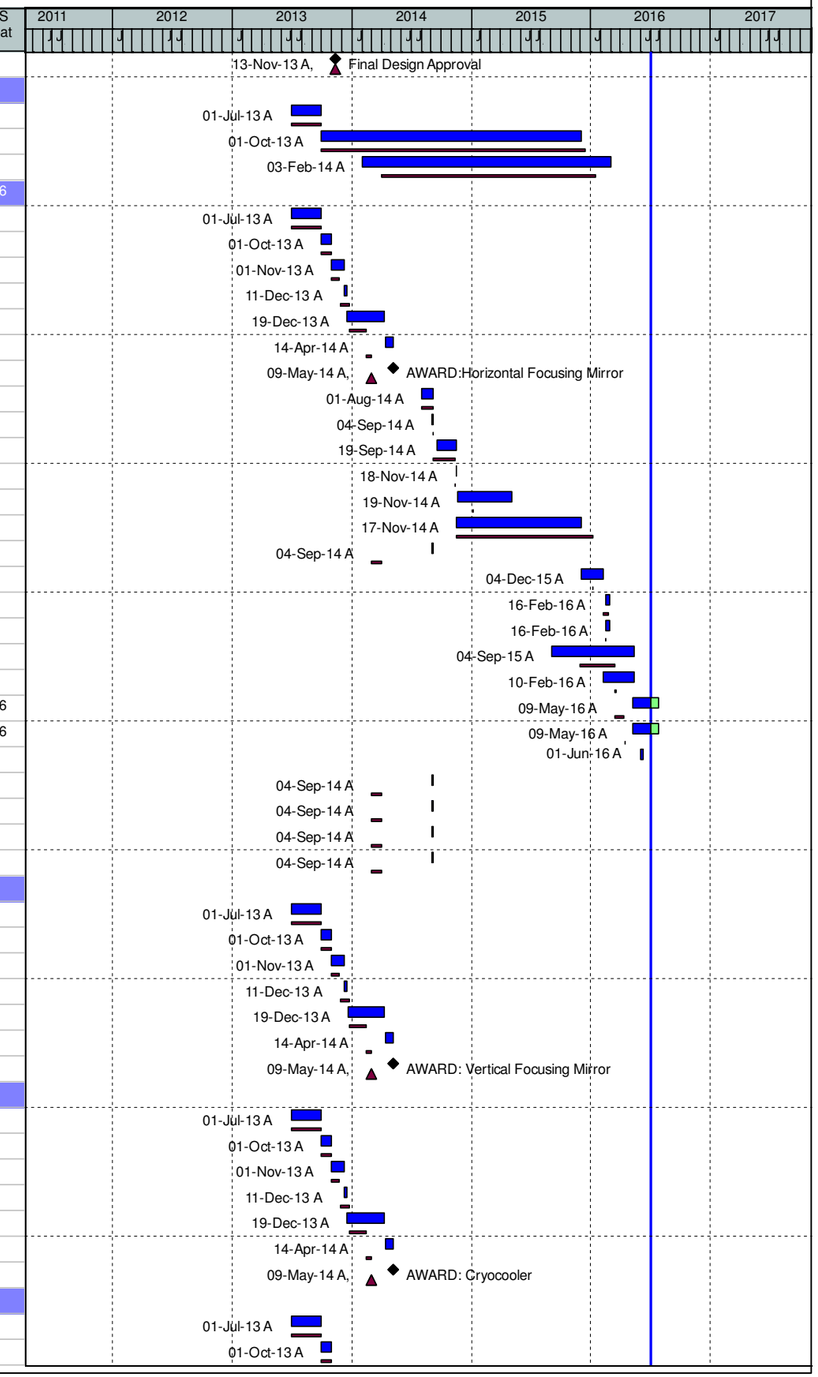
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
FXI Data Acquisition			100%	363	11-Jun-12 A	20-Nov-13 A	11-Jun-12	13-Nov-13	-5	$2,585.31	
Design			100%	363	11-Jun-12 A	20-Nov-13 A	11-Jun-12	13-Nov-13	-5	$2,585.31	
2-W.06.02.04	FXI1020	Preliminary Design	100%	78	11-Jun-12 A	28-Sep-12 A	11-Jun-12	28-Sep-12	0	$0.00	
2-W.06.02.04	FXI1030	Final Design & Spec	100%	48	23-Jul-13 A	30-Sep-13 A	23-Jul-13	30-Sep-13	1	$0.00	
2-W.06.02.04	FXI1030FA	Final Design & Spec	100%	36	01-Oct-13 A	20-Nov-13 A	01-Oct-13	13-Nov-13	-5	$2,585.31	
ISR Beamline			82.54%	1279	19-Dec-11 A	30-Jan-17	19-Dec-11	31-Jan-17	1	$10,361,356.14	169
Milestones			0%	550	29-Oct-12 A	15-Jan-15 A	29-Oct-12	02-Apr-14	-195	$0.00	
2-W.07	MISR001	Start final design of ISR beamline	100%	0	29-Oct-12 A		29-Oct-12		0	$0.00	
2-W.07	MISR002	Start procurement of ISR hutch	100%	0	12-Mar-13 A		12-Mar-13		0	$0.00	
2-W.07	MISR003	Start procurement of ISR photon delivery system components	100%	0	01-Nov-13 A		01-Nov-13		0	$0.00	
2-W.07	MISR004	Complete: ISR Final Design	100%	0		01-Apr-14 A		02-Apr-14	2	$0.00	
2-W.07	MISR005	Start assembly and installation of ISR components	100%	0	01-May-14 A		04-Feb-14		-61	$0.00	
2-W.07	MISR010	Receive Shutters & Start Install of All Beamline Shutters - Ready For NEXT Ins	100%	0		15-Jan-15 A				$0.00	
ISR Management			90.31%	1100	04-Sep-12 A	30-Jan-17	04-Sep-12	31-Jan-17	1	$1,105,395.25	169
ISR Beamline Management			90.31%	1100	04-Sep-12 A	30-Jan-17	04-Sep-12	31-Jan-17	1	$1,105,395.25	169
Top Level Milestones			0%	0	22-Nov-16	22-Nov-16	29-Jun-16	29-Jun-16	-99	$0.00	36
2-W.07.01.01	M3110	ISR - Installation of Beamline Components Complete	0%	0		22-Nov-16		29-Jun-16	-99	$0.00	36
Milestones			0%	98	01-Jul-16	22-Nov-16	16-Dec-15	07-Jun-16	-115	$0.00	215
2-W.07.01.01	MISR013	ISR - Photon Delivery System Ready for IRR	0%	0	05-Aug-16					$0.00	289
2-W.07.01.01	MSIR006	ISR Controls Available	0%	0		01-Jul-16		16-Dec-15	-136	$0.00	134
2-W.07.01.01	MSIR008	ISR Beamline Available	0%	0		22-Nov-16		07-Jun-16	-115	$0.00	36
Management			90.31%	1100	04-Sep-12 A	30-Jan-17	04-Sep-12	31-Jan-17	1	$1,105,395.25	169
2-W.07.01.01	ISR0002	ISR BL Management FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.07.01.01	ISR0003	ISR BL Management FY14	100%	249	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	1	$248,621.43	
2-W.07.01.01	ISR0004	ISR BL Management FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$313,016.68	
2-W.07.01.01	ISR0005	ISR BL Management FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$197,223.43	169
2-W.07.01.01	ISR0007	ISR BL Management FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	31-Jan-17	1	$8,382.50	169
2-W.07.01.01	ISR4855	ISR - Preparation of Beamline IRR Documentation	100%	124	04-Jan-16 A	28-Jun-16 A	04-Jan-16	07-Jul-16	6	$75,713.49	
2-W.07.01.01	ISR4860	ISR - Beamline IRR	100%	1	28-Jun-16 A	29-Jun-16 A	08-Jul-16	12-Jul-16	9	$12,553.30	
2-W.07.01.01	ISR4865	ISR - Closeout of Beamline Pre-start Items	0%	20	01-Jul-16	29-Jul-16	13-Jul-16	09-Aug-16	7	$48,673.03	114
2-W.07.01.01	ISRFY12501	ISR Management FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$14,174.91	
2-W.07.01.01	ISRFY13501	ISR Management FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$187,036.48	
ISR Beamline Systems			81.62%	1245	19-Dec-11 A	08-Dec-16	19-Dec-11	11-Nov-16	-17	$9,255,960.89	203
Management			100%	268	04-Sep-12 A	30-Sep-13 A	04-Sep-12	30-Sep-13	0	$303,806.75	
2-W.07.02	ISRFY12501	ISR Systems FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$31,063.86	
2-W.07.02	ISRFY13501	ISR Systems FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$272,742.89	
Photon Delivery System			87.54%	1165	12-Apr-12 A	08-Dec-16	12-Apr-12	20-Jul-16	-97	$4,738,637.15	203
Top Level Milestones			0%	42	04-Mar-16 A	02-May-16 A	24-Feb-16	15-Mar-16	-34	$0.00	
2-W.07.02.01	M3100	ISR - Installation of DCM Monochromator complete	100%	0		02-May-16 A		15-Mar-16	-34	$0.00	
2-W.07.02.01	M3105	ISR - Bench test of Dual Phase Plate Assembly complete	100%	0		04-Mar-16 A		24-Feb-16	-6	$0.00	
ISR Photo Delivery Systems			87.54%	1165	12-Apr-12 A	08-Dec-16	12-Apr-12	20-Jul-16	-97	$4,738,637.15	203
Design			100%	398	12-Apr-12 A	13-Nov-13 A	12-Apr-12	13-Nov-13	0	$41,007.91	
2-W.07.02.01	ISR0020	AVAIL: ISR PDS Controls Specification Document	100%	0		12-Apr-12 A		12-Apr-12	0	$0.00	
2-W.07.02.01	ISR0050	90% Preliminary Design	100%	50	12-Jul-12 A	20-Sep-12 A	12-Jul-12	20-Sep-12	0	$0.00	
2-W.07.02.01	ISR0060	Prelim. Design Review	100%	5	21-Sep-12 A	27-Sep-12 A	21-Sep-12	27-Sep-12	0	$0.00	
2-W.07.02.01	ISR0070	Prelim. Design Approval	100%	0		26-Oct-12 A		26-Oct-12	0	$0.00	
2-W.07.02.01	ISR0090	30 % Final Design	100%	75	29-Oct-12 A	19-Feb-13 A	29-Oct-12	19-Feb-13	0	$0.00	
2-W.07.02.01	ISR0100	60 % Final Design	100%	105	20-Feb-13 A	22-Jul-13 A	20-Feb-13	05-Jun-13	-30	$0.00	
2-W.07.02.01	ISR0110	90% Final Design	100%	48	23-Jul-13 A	30-Sep-13 A	23-Jul-13	30-Sep-13	1	$0.00	
2-W.07.02.01	ISR0110FA	90% Final Design	100%	26	01-Oct-13 A	06-Nov-13 A	01-Oct-13	06-Nov-13	0	$30,468.50	
2-W.07.02.01	ISR0120	Final Design Review	100%	5	07-Nov-13 A	13-Nov-13 A	07-Nov-13	13-Nov-13	0	$10,539.41	



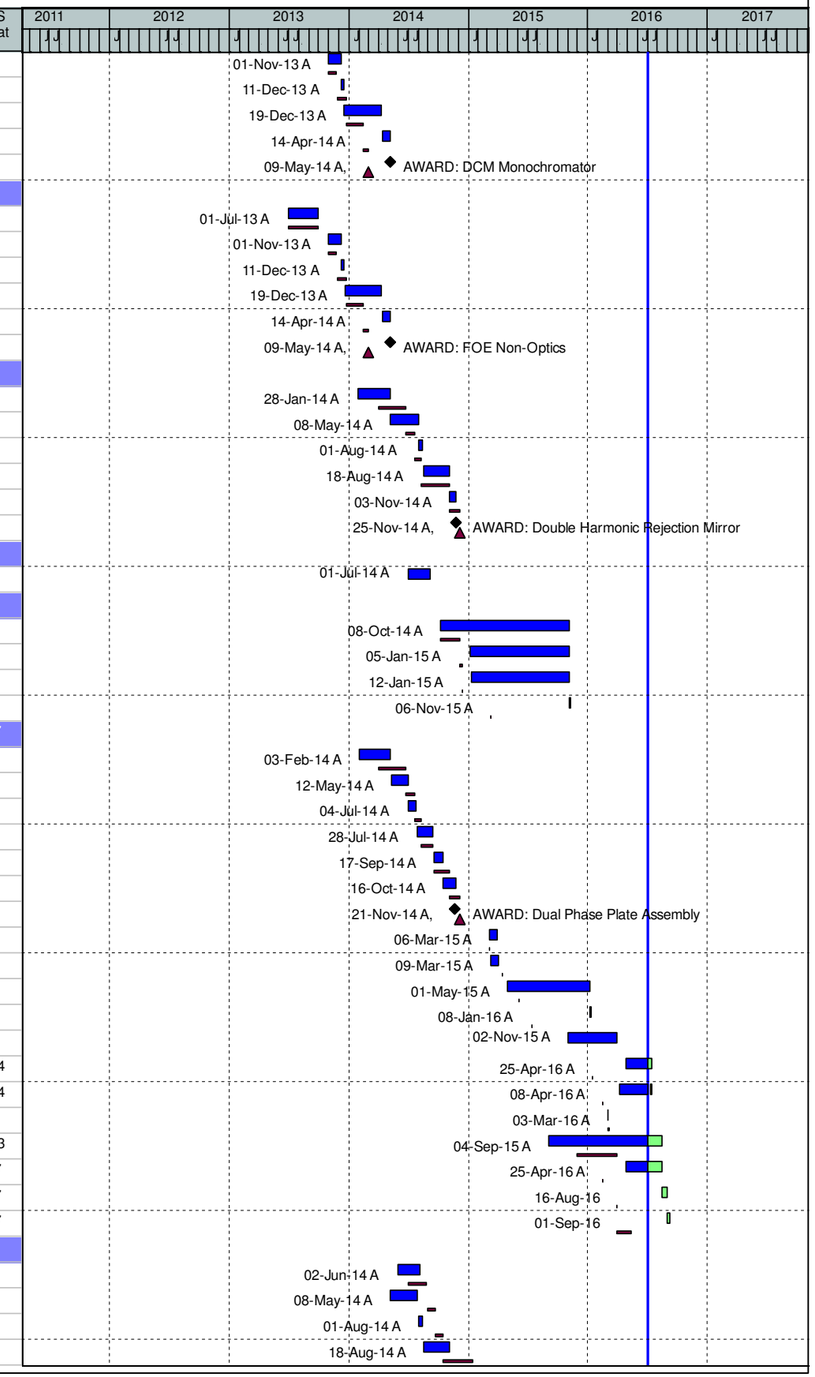
(O) NEXT - Detail Schedule

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.07.02.01	ISR0130	Final Design Approval	100%	0		13-Nov-13 A		13-Nov-13	0	$0.00	
PDS Vendor Support			100%	667	01-Jul-13 A	04-Mar-16 A	01-Jul-13	15-Jan-16	-32	$187,804.15	
2-W.07.02.01	ISR0131	Vendor support: Mirrors, DCM and cryocooler	100%	62	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	1	$0.00	
2-W.07.02.01	ISR0131FA	Vendor support: Mirrors, DCM and cryocooler	100%	543	01-Oct-13 A	04-Dec-15 A	01-Oct-13	15-Dec-15	8	$113,869.62	
2-W.07.02.01	ISR0133	Vendor support: dual phase plate assembly	100%	521	03-Feb-14 A	04-Mar-16 A	01-Apr-14	15-Jan-16	-32	$73,934.53	
Horizontal Focusing Mirror			98.14%	769	01-Jul-13 A	27-Jul-16	01-Jul-13	13-Apr-16	-73	$2,429,473.89	116
2-W.07.02.01	ISR0140	Write Specification and SOW for Horizontal Focusing Mirror	100%	62	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	1	$0.00	
2-W.07.02.01	ISR0140FA	Write Specification and SOW for Horizontal Focusing Mirror	100%	22	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	0	$8,680.80	
2-W.07.02.01	ISR0150	PPM Accept Requisition	100%	26	01-Nov-13 A	10-Dec-13 A	01-Nov-13	25-Nov-13	-11	$0.00	
2-W.07.02.01	ISR0160	Prepare RFP	100%	6	11-Dec-13 A	18-Dec-13 A	26-Nov-13	23-Dec-13	3	$0.00	
2-W.07.02.01	ISR0180	Receive and Evaluate Vendor Proposal	100%	78	19-Dec-13 A	11-Apr-14 A	24-Dec-13	13-Feb-14	-40	$0.00	
2-W.07.02.01	ISR0190	Vendor Negotiations	100%	19	14-Apr-14 A	08-May-14 A	14-Feb-14	28-Feb-14	-49	$0.00	
2-W.07.02.01	ISR0200	AWARD:Horizontal Focusing Mirror	100%	0		09-May-14 A		03-Mar-14	-49	$0.00	
2-W.07.02.01	ISR0200010	Horizontal Focusing Mirror - Preliminary Design	100%	25	01-Aug-14 A	05-Sep-14 A	01-Aug-14	05-Sep-14	0	$0.00	
2-W.07.02.01	ISR0200015	Horizontal Focusing Mirror - Preliminary Design Payment (6/6) (status all 6 at	100%	2	04-Sep-14 A	05-Sep-14 A	05-Sep-14	05-Sep-14	0	$108,199.21	
2-W.07.02.01	ISR0200020	Horizontal Focusing Mirror - Final Design	100%	40	19-Sep-14 A	17-Nov-14 A	08-Sep-14	14-Nov-14	0	$0.00	
2-W.07.02.01	ISR0200025	Horizontal Focusing Mirror - Receive Final Design Report	100%	1	18-Nov-14 A	18-Nov-14 A	14-Nov-14	14-Nov-14	-2	$172,889.60	
2-W.07.02.01	ISR0200026	Horizontal Focusing Mirror - Approve Final Design Report	100%	112	19-Nov-14 A	05-May-15 A	05-Jan-15	05-Jan-15	-83	$43,222.40	
2-W.07.02.01	ISR0200030	Horizontal Focusing Mirror - Vendor Fabrication	100%	261	17-Nov-14 A	04-Dec-15 A	17-Nov-14	08-Jan-16	24	$0.00	
2-W.07.02.01	ISR0210	Horizontal Focusing Mirror - Preliminary Design Payment (5/6)	100%	2	04-Sep-14 A	05-Sep-14 A	03-Mar-14	31-Mar-14	-110	$26,621.71	
2-W.07.02.01	ISR0240	RECEIVE: Horizontal Focusing Mirror	100%	44	04-Dec-15 A	08-Feb-16 A	08-Jan-16	08-Jan-16	-20	$533,249.60	
2-W.07.02.01	ISR0250	Horizontal Focusing Mirror - Bench Test	100%	8	16-Feb-16 A	26-Feb-16 A	09-Feb-16	24-Feb-16	-1	$13,491.43	
2-W.07.02.01	ISR0255	Horizontal Focusing Mirror - Acceptance of the Equipment Payment	100%	8	16-Feb-16 A	26-Feb-16 A	16-Feb-16	16-Feb-16	-7	$46,030.40	
2-W.07.02.01	ISR0260	Horizontal Focusing Mirror - Installation of the Equipment	100%	172	04-Sep-15 A	13-May-16 A	01-Dec-15	15-Mar-16	-42	$72,897.10	
2-W.07.02.01	ISR0265	Horizontal Focusing Mirror - Installation of the Equipment Payment	100%	67	10-Feb-16 A	13-May-16 A	16-Mar-16	16-Mar-16	-42	$864,448.00	
2-W.07.02.01	ISR0270	Horizontal Focusing Mirror - Commission of the Equipment without X-Ray Bea	90%	56	09-May-16 A	27-Jul-16	16-Mar-16	12-Apr-16	-74	$71,211.63	116
2-W.07.02.01	ISR0275	Horizontal Focusing Mirror - Commission of the Equipment without X-Ray Bea	90%	56	09-May-16 A	27-Jul-16	13-Apr-16	13-Apr-16	-73	$380,224.00	116
2-W.07.02.01	ISR0285	Procure HFM Cooling Line Pump - EAC	100%	6	01-Jun-16 A	08-Jun-16 A				$0.00	
2-W.07.02.01	ISR0350	Horizontal Focusing Mirror - Preliminary Design Payment (1/6)	100%	2	04-Sep-14 A	05-Sep-14 A	03-Mar-14	31-Mar-14	-110	$20,094.76	
2-W.07.02.01	ISR0500	Horizontal Focusing Mirror - Preliminary Design Payment (2/6)	100%	2	04-Sep-14 A	05-Sep-14 A	03-Mar-14	31-Mar-14	-110	$12,183.88	
2-W.07.02.01	ISR0770	Horizontal Focusing Mirror - Preliminary Design Payment (3/6)	100%	2	04-Sep-14 A	05-Sep-14 A	03-Mar-14	31-Mar-14	-110	$29,681.92	
2-W.07.02.01	ISR0780	Horizontal Focusing Mirror - Preliminary Design Payment (4/6)	100%	2	04-Sep-14 A	05-Sep-14 A	03-Mar-14	31-Mar-14	-110	$26,347.47	
Vertical Focusing Mirror			100%	215	01-Jul-13 A	09-May-14 A	01-Jul-13	03-Mar-14	-50	$7,248.69	
2-W.07.02.01	ISR0280	Write Specification and SOW - Vertical Focusing Mirror	100%	62	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	1	$0.00	
2-W.07.02.01	ISR0280FA	Write Specification and SOW - Vertical Focusing Mirror	100%	22	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	0	$7,248.69	
2-W.07.02.01	ISR0290	PPM Accept Requisition	100%	26	01-Nov-13 A	10-Dec-13 A	01-Nov-13	25-Nov-13	-11	$0.00	
2-W.07.02.01	ISR0300	Prepare RFP	100%	6	11-Dec-13 A	18-Dec-13 A	26-Nov-13	23-Dec-13	3	$0.00	
2-W.07.02.01	ISR0320	Receive and Evaluate Vendor Proposal	100%	78	19-Dec-13 A	11-Apr-14 A	24-Dec-13	13-Feb-14	-40	$0.00	
2-W.07.02.01	ISR0330	Vendor Negotiations	100%	19	14-Apr-14 A	08-May-14 A	14-Feb-14	28-Feb-14	-49	$0.00	
2-W.07.02.01	ISR0340	AWARD: Vertical Focusing Mirror	100%	0		09-May-14 A		03-Mar-14	-50	$0.00	
Cryocooler			100%	214	01-Jul-13 A	09-May-14 A	01-Jul-13	03-Mar-14	-49	$5,369.99	
2-W.07.02.01	ISR0420	Write Specification and SOW - Cryocooler	100%	62	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	1	$0.00	
2-W.07.02.01	ISR0420FA	Write Specification and SOW - Cryocooler	100%	22	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	0	$5,369.99	
2-W.07.02.01	ISR0430	PPM Accept Requisition	100%	26	01-Nov-13 A	10-Dec-13 A	01-Nov-13	25-Nov-13	-11	$0.00	
2-W.07.02.01	ISR0440	Prepare RFP	100%	5	11-Dec-13 A	18-Dec-13 A	26-Nov-13	23-Dec-13	4	$0.00	
2-W.07.02.01	ISR0460	Receive and Evaluate Vendor Proposal	100%	78	19-Dec-13 A	11-Apr-14 A	24-Dec-13	13-Feb-14	-40	$0.00	
2-W.07.02.01	ISR0470	Vendor Negotiations	100%	19	14-Apr-14 A	08-May-14 A	14-Feb-14	28-Feb-14	-49	$0.00	
2-W.07.02.01	ISR0480	AWARD: Cryocooler	100%	0		09-May-14 A		03-Mar-14	-49	$0.00	
DCM Monochromator			100%	214	01-Jul-13 A	09-May-14 A	01-Jul-13	03-Mar-14	-49	$5,980.52	
2-W.07.02.01	ISR0700	Write Specification and SOW - DCM Monochromator	100%	62	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	1	$0.00	
2-W.07.02.01	ISR0700FA	Write Specification and SOW - DCM Monochromator	100%	22	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	0	$5,980.52	



(O) NEXT - Detail Schedule

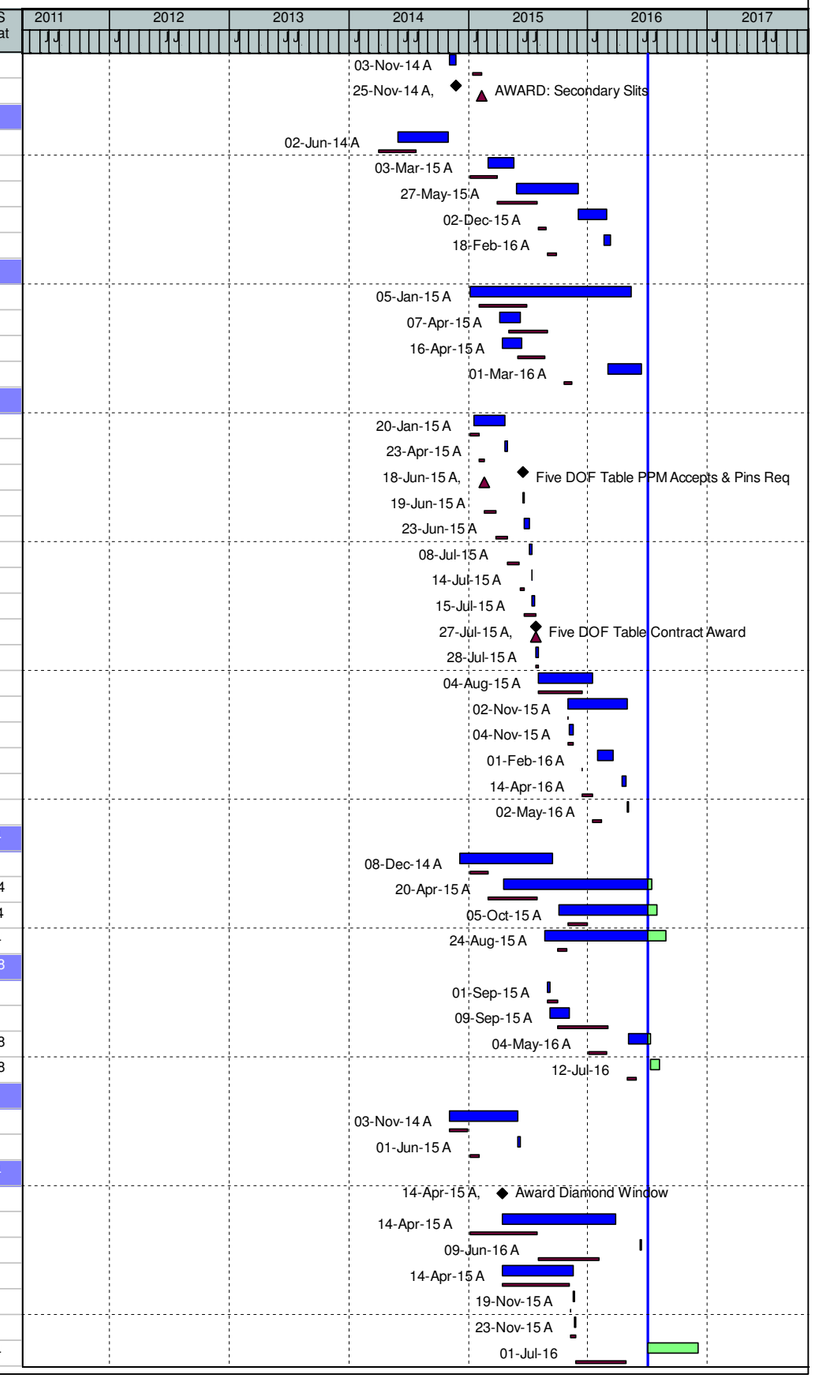
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.07.02.01	ISR0710	PPM Accept Requisition	100%	26	01-Nov-13 A	10-Dec-13 A	01-Nov-13	25-Nov-13	-11	$0.00	
2-W.07.02.01	ISR0720	Prepare RFP	100%	6	11-Dec-13 A	18-Dec-13 A	26-Nov-13	23-Dec-13	3	$0.00	
2-W.07.02.01	ISR0740	Receive and Evaluate Vendor Proposal	100%	78	19-Dec-13 A	11-Apr-14 A	24-Dec-13	13-Feb-14	-40	$0.00	
2-W.07.02.01	ISR0750	Vendor Negotiations	100%	19	14-Apr-14 A	08-May-14 A	14-Feb-14	28-Feb-14	-49	$0.00	
2-W.07.02.01	ISR0760	AWARD: DCM Monochromator	100%	0		09-May-14 A		03-Mar-14	-49	$0.00	
FOE Non-Optics Components			0%	214	01-Jul-13 A	09-May-14 A	01-Jul-13	03-Mar-14	-49	$0.00	
2-W.07.02.01	ISR0705	Write Specification and SOW - FOE Non-Optics	100%	63	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	0	$0.00	
2-W.07.02.01	ISR0715	PPM Accept Requisition	100%	26	01-Nov-13 A	10-Dec-13 A	01-Nov-13	25-Nov-13	-11	$0.00	
2-W.07.02.01	ISR0735	Prepare RFP/RFQ	100%	5	11-Dec-13 A	18-Dec-13 A	26-Nov-13	23-Dec-13	4	$0.00	
2-W.07.02.01	ISR0745	Receive and Evaluate Vendor Proposal	100%	78	19-Dec-13 A	11-Apr-14 A	24-Dec-13	13-Feb-14	-40	$0.00	
2-W.07.02.01	ISR0755	Contract Negotiations	100%	19	14-Apr-14 A	08-May-14 A	14-Feb-14	28-Feb-14	-49	$0.00	
2-W.07.02.01	ISR0775	AWARD: FOE Non-Optics	100%	0		09-May-14 A		03-Mar-14	-49	$0.00	
Double Harmonic Rejection Mirror			100%	209	28-Jan-14 A	25-Nov-14 A	01-Apr-14	08-Dec-14	7	$26,936.34	
2-W.07.02.01	ISR0980	Write Specification and SOW - Double Harmonic Rejection Mirror	100%	71	28-Jan-14 A	07-May-14 A	01-Apr-14	24-Jun-14	33	$26,936.34	
2-W.07.02.01	ISR0990	PPM Accept Requisition	100%	58	08-May-14 A	31-Jul-14 A	25-Jun-14	21-Jul-14	-8	$0.00	
2-W.07.02.01	ISR1000	Prepare RFP	100%	11	01-Aug-14 A	15-Aug-14 A	22-Jul-14	11-Aug-14	-4	$0.00	
2-W.07.02.01	ISR1020	Receive and Evaluate Vendor Proposal	100%	53	18-Aug-14 A	03-Nov-14 A	12-Aug-14	05-Nov-14	3	$0.00	
2-W.07.02.01	ISR1030	Vendor Negotiations	100%	16	03-Nov-14 A	24-Nov-14 A	06-Nov-14	05-Dec-14	7	$0.00	
2-W.07.02.01	ISR1040	AWARD: Double Harmonic Rejection Mirror	100%	0		25-Nov-14 A		08-Dec-14	7	$0.00	
SOE Non-Optics Components			0%	46	01-Jul-14 A	05-Sep-14 A				$0.00	
2-W.07.02.01	ISR0985	Write Specification and SOW - SOE Non-Optics	100%	46	01-Jul-14 A	05-Sep-14 A				$0.00	
BPM3			100%	271	08-Oct-14 A	09-Nov-15 A	08-Oct-14	12-Mar-15	-167	$30,940.00	
2-W.07.02.01	ISR1125	Procure BPM3	100%	269	08-Oct-14 A	05-Nov-15 A	08-Oct-14	05-Dec-14	-229	$0.00	
2-W.07.02.01	ISR1135	Vendor Shipping	100%	212	05-Jan-15 A	05-Nov-15 A	08-Dec-14	12-Dec-14	-224	$0.00	
2-W.07.02.01	ISR1145	RECEIVE BPM3	100%	208	12-Jan-15 A	05-Nov-15 A	12-Dec-14	12-Dec-14	-225	$15,470.00	
2-W.07.02.01	ISR1150	ACCEPT BPM3	100%	1	06-Nov-15 A	09-Nov-15 A	12-Mar-15	12-Mar-15	-167	$15,470.00	
Dual Phase Assembly			66.28%	652	03-Feb-14 A	08-Sep-16	01-Apr-14	12-May-16	-81	$825,863.29	87
2-W.07.02.01	ISR0560	Write Specification and SOW - Dual Phase Plate Assembly	100%	69	03-Feb-14 A	09-May-14 A	01-Apr-14	24-Jun-14	31	$67,436.70	
2-W.07.02.01	ISR0570	PPM Accept Requisition	100%	37	12-May-14 A	04-Jul-14 A	25-Jun-14	21-Jul-14	11	$0.00	
2-W.07.02.01	ISR0580	Prepare RFP	100%	15	04-Jul-14 A	25-Jul-14 A	22-Jul-14	11-Aug-14	11	$0.00	
2-W.07.02.01	ISR0590	Call for Bid	100%	35	28-Jul-14 A	16-Sep-14 A	12-Aug-14	16-Sep-14	1	$0.00	
2-W.07.02.01	ISR0600	Receive and Evaluate Vendor Proposal	100%	20	17-Sep-14 A	15-Oct-14 A	17-Sep-14	05-Nov-14	15	$0.00	
2-W.07.02.01	ISR0610	Vendor Negotiations	100%	27	16-Oct-14 A	24-Nov-14 A	06-Nov-14	05-Dec-14	8	$0.00	
2-W.07.02.01	ISR0620	AWARD: Dual Phase Plate Assembly	100%	0		21-Nov-14 A		08-Dec-14	9	$0.00	
2-W.07.02.01	ISR0630	Dual Phase Plate Assembly Receipt of PDR Report	100%	16	06-Mar-15 A	30-Mar-15 A	06-Mar-15	06-Mar-15	-15	$56,492.80	
2-W.07.02.01	ISR0650	Dual Phase Plate Assembly Approval of PDR Report	100%	18	09-Mar-15 A	02-Apr-15 A	16-Apr-15	16-Apr-15	11	$14,123.20	
2-W.07.02.01	ISR0660	Dual Phase Plate Assembly Receipt of FDR Report	100%	172	01-May-15 A	07-Jan-16 A	04-Jun-15	04-Jun-15	-148	$169,478.40	
2-W.07.02.01	ISR0660010	Dual Phase Plate Assembly Approval of FDR Report	100%	2	08-Jan-16 A	12-Jan-16 A	16-Jul-15	16-Jul-15	-121	$42,369.60	
2-W.07.02.01	ISR0660012	Dual Phase Plate Assembly Fabrication	100%	100	02-Nov-15 A	29-Mar-16 A				$0.00	
2-W.07.02.01	ISR0660015	Dual Phase Plate Assembly Receipt of All Equipment at BNL	50%	58	25-Apr-16 A	15-Jul-16	15-Jan-16	15-Jan-16	-126	$254,217.60	104
2-W.07.02.01	ISR0660020	Dual Phase Plate Assembly Acceptance of all Equipment by BNL	50%	69	08-Apr-16 A	15-Jul-16	16-Feb-16	16-Feb-16	-106	$28,246.40	104
2-W.07.02.01	ISR0660021	Dual Phase Plate Assembly Bench Test	100%	1	03-Mar-16 A	04-Mar-16 A	01-Mar-16	07-Mar-16	2	$11,380.44	
2-W.07.02.01	ISR0660024	Dual Phase Plate Assembly Installation	58%	237	04-Sep-15 A	15-Aug-16	01-Dec-15	31-Mar-16	-95	$40,886.15	103
2-W.07.02.01	ISR0660025	Dual Phase Plate Assembly Installation of Equipment Complete	30%	79	25-Apr-16 A	15-Aug-16	17-Feb-16	17-Feb-16	-126	$70,616.00	87
2-W.07.02.01	ISR0660030	Dual Phase Plate Assembly Receipt of Commissioning Report	0%	12	16-Aug-16	31-Aug-16	31-Mar-16	31-Mar-16	-107	$63,554.40	87
2-W.07.02.01	ISR0660035	Dual Phase Plate Assembly Approval of Commissioning Report	0%	4	01-Sep-16	08-Sep-16	01-Apr-16	12-May-16	-81	$7,061.60	87
Secondary Slits			100%	138	08-May-14 A	25-Nov-14 A	01-Jul-14	12-Feb-15	51	$24,769.45	
2-W.07.02.01	ISR0840	Write Specification and SOW - Secondary Slits	100%	45	02-Jun-14 A	06-Aug-14 A	01-Jul-14	27-Aug-14	16	$24,769.45	
2-W.07.02.01	ISR0850	PPM Accept Requisition	100%	57	08-May-14 A	31-Jul-14 A	28-Aug-14	22-Sep-14	37	$0.00	
2-W.07.02.01	ISR0860	Prepare RFQ	100%	10	01-Aug-14 A	15-Aug-14 A	23-Sep-14	14-Oct-14	41	$0.00	
2-W.07.02.01	ISR0880	Receive and Evaluate Vendor Proposal	100%	54	18-Aug-14 A	03-Nov-14 A	15-Oct-14	13-Jan-15	46	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

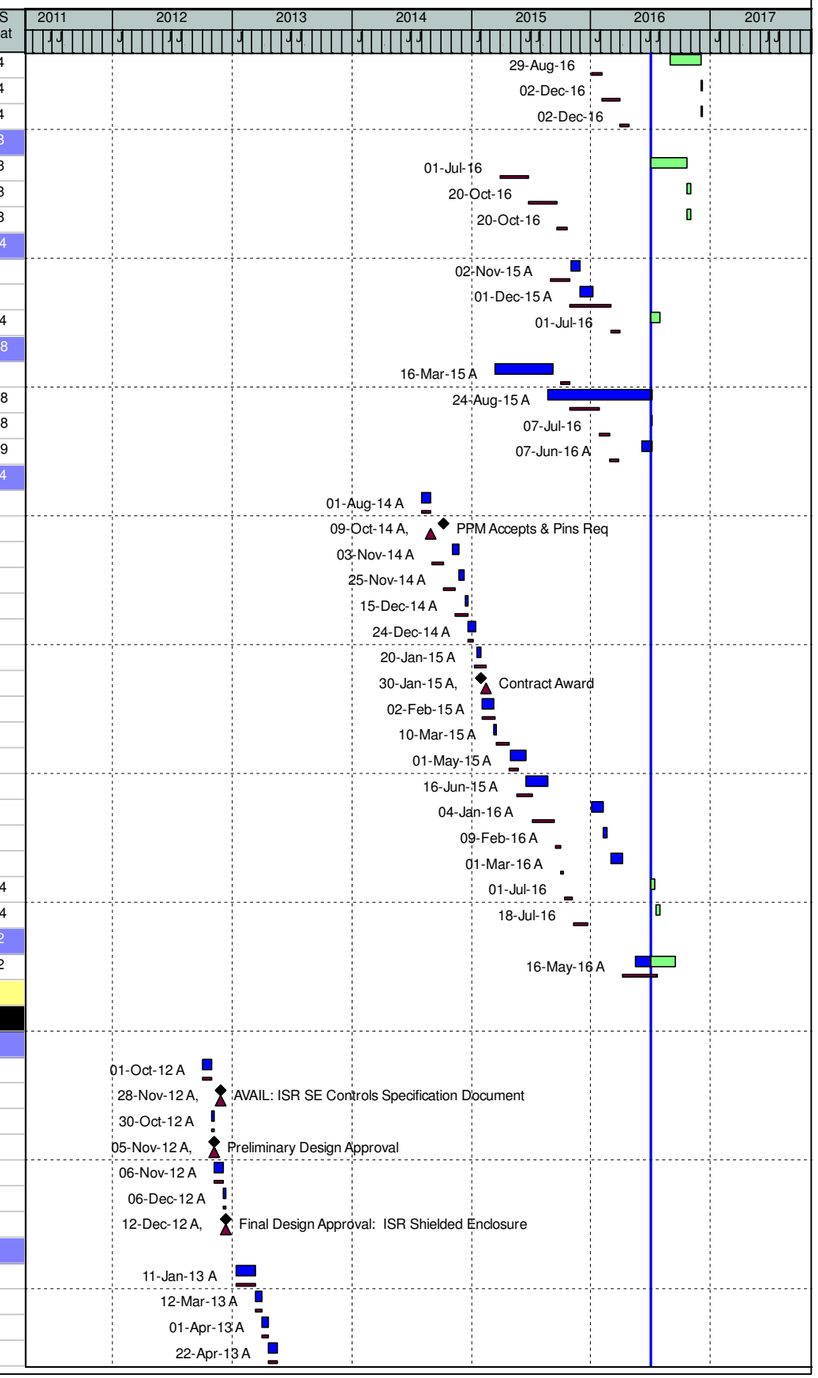
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.07.02.01	ISR0890	Vendor Negotiations	100%	15	03-Nov-14 A	24-Nov-14 A	14-Jan-15	11-Feb-15	52	$0.00	
2-W.07.02.01	ISR0900	AWARD: Secondary Slits	100%	0		25-Nov-14 A		12-Feb-15	51	$0.00	
Pumps			100%	443	02-Jun-14 A	11-Mar-16 A	01-Apr-14	28-Sep-15	-111	$97,733.73	
2-W.07.02.01	ISR1120	Write Specification and SOW - Non-optics Beamline Components	100%	106	02-Jun-14 A	31-Oct-14 A	01-Apr-14	24-Jul-14	-69	$43,873.49	
2-W.07.02.01	ISR1121	Design Differential Pump	100%	58	03-Mar-15 A	22-May-15 A	05-Jan-15	31-Mar-15	-37	$0.00	
2-W.07.02.01	ISR1130	Fabricate Pumps	100%	132	27-May-15 A	04-Dec-15 A	01-Apr-15	30-Jul-15	-86	$35,342.26	
2-W.07.02.01	ISR1140	Test Pumps	100%	60	02-Dec-15 A	29-Feb-16 A	03-Aug-15	28-Aug-15	-123	$0.00	
2-W.07.02.01	ISR1160	Install Pumps	100%	16	18-Feb-16 A	11-Mar-16 A	31-Aug-15	28-Sep-15	-111	$18,517.97	
Standard Vacuum Equipment			100%	362	05-Jan-15 A	13-Jun-16 A	02-Feb-15	13-Nov-15	-143	$196,841.49	
2-W.07.02.01	ISR1180	Fabricate Standard Equipment	100%	342	05-Jan-15 A	13-May-16 A	02-Feb-15	30-Jun-15	-218	$173,632.17	
2-W.07.02.01	ISR1190	Test Equipment	100%	44	07-Apr-15 A	08-Jun-15 A	04-May-15	01-Sep-15	60	$0.00	
2-W.07.02.01	ISR1195	Install Controllers	100%	41	16-Apr-15 A	15-Jun-15 A	01-Jun-15	24-Aug-15	50	$0.00	
2-W.07.02.01	ISR1200	Install Gate Valves	100%	73	01-Mar-16 A	13-Jun-16 A	19-Oct-15	13-Nov-15	-143	$23,209.32	
Five DOF Table			100%	327	20-Jan-15 A	06-May-16 A	05-Jan-15	12-Feb-16	-58	$114,719.37	
2-W.07.02.01	ISR1205	Five DOF Table Design	100%	65	20-Jan-15 A	22-Apr-15 A	05-Jan-15	02-Feb-15	-55	$0.00	
2-W.07.02.01	ISR1210	Five DOF Table Write Spec and SOW	100%	5	23-Apr-15 A	30-Apr-15 A	03-Feb-15	17-Feb-15	-51	$0.00	
2-W.07.02.01	ISR1215	Five DOF Table PPM Accepts & Pins Req	100%	0		18-Jun-15 A		17-Feb-15	-85	$0.00	
2-W.07.02.01	ISR1220	Five DOF Table Prepare and Submit RFQ	100%	1	19-Jun-15 A	22-Jun-15 A	18-Feb-15	26-Mar-15	-60	$0.00	
2-W.07.02.01	ISR1225	Five DOF Table Offerors Prepare & Submit Proposals	100%	10	23-Jun-15 A	07-Jul-15 A	27-Mar-15	30-Apr-15	-46	$0.00	
2-W.07.02.01	ISR1230	Five DOF Table Evaluate Offeror Proposals	100%	4	08-Jul-15 A	13-Jul-15 A	01-May-15	05-Jun-15	-25	$0.00	
2-W.07.02.01	ISR1235	Five DOF Table Negotiate with Offerors	100%	0	14-Jul-15 A	14-Jul-15 A	08-Jun-15	19-Jun-15	-15	$0.00	
2-W.07.02.01	ISR1240	Five DOF Table Prepare & Approve Contract Package	100%	7	15-Jul-15 A	24-Jul-15 A	22-Jun-15	27-Jul-15	2	$0.00	
2-W.07.02.01	ISR1245	Five DOF Table Contract Award	100%	0		27-Jul-15 A		27-Jul-15	1	$0.00	
2-W.07.02.01	ISR1250	Five DOF Table Vendor Fab (history)	100%	5	28-Jul-15 A	03-Aug-15 A	28-Jul-15	03-Aug-15	0	$2,520.47	
2-W.07.02.01	ISR1251	Five DOF Table Vendor Fab	100%	112	04-Aug-15 A	14-Jan-16 A	04-Aug-15	14-Dec-15	-21	$0.00	
2-W.07.02.01	ISR1252	Five DOF Table Receipt & Approval of Conceptual Design	100%	123	02-Nov-15 A	29-Apr-16 A	02-Nov-15	02-Nov-15	-122	$28,126.80	
2-W.07.02.01	ISR1253	Five DOF Table Receipt & Approval of Final Design	100%	10	04-Nov-15 A	17-Nov-15 A	03-Nov-15	16-Nov-15	-1	$40,560.00	
2-W.07.02.01	ISR1254	Five DOF Table Delivery and Acceptance of Equipment	100%	32	01-Feb-16 A	17-Mar-16 A	14-Dec-15	15-Dec-15	-62	$30,420.00	
2-W.07.02.01	ISR1255	Five DOF Table Install	100%	7	14-Apr-16 A	25-Apr-16 A	16-Dec-15	14-Jan-16	-69	$13,092.10	
2-W.07.02.01	ISR1260	Five DOF Table Test	100%	4	02-May-16 A	06-May-16 A	15-Jan-16	12-Feb-16	-58	$0.00	
Changeover Components			69.13%	433	08-Dec-14 A	26-Aug-16	05-Jan-15	30-Dec-15	-167	$76,770.53	94
2-W.07.02.01	ISR1265	Changeover Components Design	100%	192	08-Dec-14 A	14-Sep-15 A	05-Jan-15	03-Mar-15	-135	$0.00	
2-W.07.02.01	ISR1270	Changeover Components Fabricate	77%	313	20-Apr-15 A	15-Jul-16	04-Mar-15	30-Jul-15	-241	$51,616.71	124
2-W.07.02.01	ISR1275	Changeover Components Assembly & Install	55%	206	05-Oct-15 A	29-Jul-16	02-Nov-15	30-Dec-15	-147	$15,045.01	114
2-W.07.02.01	ISR1280	Changeover Components Test	50%	255	24-Aug-15 A	26-Aug-16	30-Sep-15	28-Oct-15	-209	$10,108.82	94
XY Stages			91.59%	235	01-Sep-15 A	08-Aug-16	01-Sep-15	26-May-16	-50	$37,663.18	108
2-W.07.02.01	ISR1285	XY Stages Design	100%	4	01-Sep-15 A	08-Sep-15 A	01-Sep-15	29-Sep-15	16	$0.00	
2-W.07.02.01	ISR1290	XY Stages Fabricate	100%	41	09-Sep-15 A	06-Nov-15 A	30-Sep-15	03-Mar-16	79	$31,325.74	
2-W.07.02.01	ISR1295	XY Stages Install	50%	47	04-May-16 A	11-Jul-16	04-Jan-16	26-Feb-16	-94	$6,337.44	108
2-W.07.02.01	ISR1300	XY Stages Test	0%	20	12-Jul-16	08-Aug-16	29-Apr-16	26-May-16	-50	$0.00	108
Electrometers			100%	147	03-Nov-14 A	08-Jun-15 A	03-Nov-14	02-Feb-15	-87	$4,250.79	
2-W.07.02.01	ISR1305	Electrometers Procure	100%	143	03-Nov-14 A	02-Jun-15 A	03-Nov-14	31-Dec-14	-103	$4,250.79	
2-W.07.02.01	ISR1310	Electrometers Test	100%	5	01-Jun-15 A	08-Jun-15 A	05-Jan-15	02-Feb-15	-87	$0.00	
Diamond Window and Phase Plates			84.17%	417	14-Apr-15 A	08-Dec-16	05-Jan-15	27-Apr-16	-155	$226,176.70	24
2-W.07.02.01	ISR1314	Award Diamond Window	100%	0		14-Apr-15 A				$0.00	
2-W.07.02.01	ISR1315	Fabricate Diamond Window	100%	238	14-Apr-15 A	25-Mar-16 A	05-Jan-15	30-Jul-15	-162	$34,735.01	
2-W.07.02.01	ISR1320	Install Diamond Window	100%	2	09-Jun-16 A	13-Jun-16 A	03-Aug-15	02-Feb-16	-91	$7,068.05	
2-W.07.02.01	ISR1321	Fabricate Phase Plates	100%	152	14-Apr-15 A	18-Nov-15 A	14-Apr-15	06-Nov-15	-7	$0.00	
2-W.07.02.01	ISR1322	Receipt of Phase Plates	100%	0	19-Nov-15 A	20-Nov-15 A	09-Nov-15	09-Nov-15	-7	$133,716.96	
2-W.07.02.01	ISR1323	Acceptance of Phase Plates	100%	1	23-Nov-15 A	24-Nov-15 A	10-Nov-15	25-Nov-15	2	$14,857.44	
2-W.07.02.01	ISR1325	Test Phase Plates	0%	105	01-Jul-16	01-Dec-16	26-Nov-15	26-Apr-16	-151	$16,658.15	24



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 - Page 56 of 95

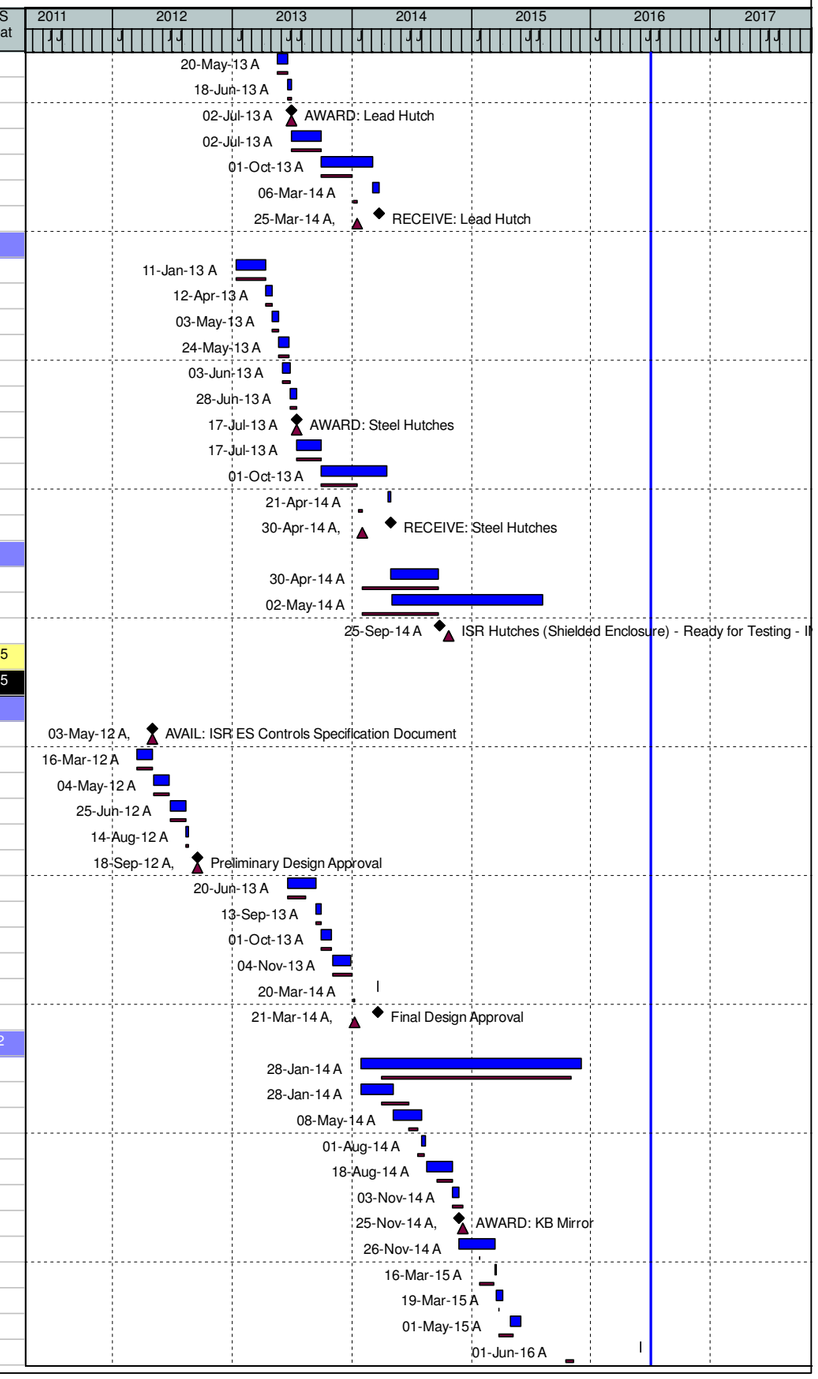
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.07.02.01	ISR1330	Design Phase Plate Holder	0%	65	29-Aug-16	01-Dec-16	05-Jan-16	02-Feb-16	-210	$11,013.66	24
2-W.07.02.01	ISR1335	Fabricate Phase Plate Holder	0%	5	02-Dec-16	08-Dec-16	03-Feb-16	30-Mar-16	-175	$2,506.80	24
2-W.07.02.01	ISR1340	Install Phase Plates	0%	5	02-Dec-16	08-Dec-16	31-Mar-16	27-Apr-16	-155	$5,620.63	24
Magnet Windows and Support			0%	86	01-Jul-16	02-Nov-16	01-Apr-15	19-Oct-15	-262	$16,881.70	48
2-W.07.02.01	ISR1345	Windows and Support Fabricate	0%	76	01-Jul-16	19-Oct-16	01-Apr-15	24-Jun-15	-332	$16,881.70	48
2-W.07.02.01	ISR1350	Windows and Support Install	0%	10	20-Oct-16	02-Nov-16	25-Jun-15	18-Sep-15	-282	$0.00	48
2-W.07.02.01	ISR1355	Windows and Support Test	0%	10	20-Oct-16	02-Nov-16	21-Sep-15	19-Oct-15	-262	$0.00	48
Chiller			62.27%	187	02-Nov-15 A	29-Jul-16	01-Sep-15	31-Mar-16	-84	$22,195.48	114
2-W.07.02.01	ISR1360	Chiller Fabricate	100%	19	02-Nov-15 A	30-Nov-15 A	01-Sep-15	28-Oct-15	-21	$8,630.88	
2-W.07.02.01	ISR1365	Chiller Install	100%	26	01-Dec-15 A	08-Jan-16 A	29-Oct-15	03-Mar-16	38	$5,190.55	
2-W.07.02.01	ISR1370	Chiller Test	0%	20	01-Jul-16	29-Jul-16	04-Mar-16	31-Mar-16	-84	$8,374.05	114
Burn Through and Shielding			62.8%	333	16-Mar-15 A	08-Jul-16	01-Oct-15	25-Mar-16	-73	$82,121.50	308
2-W.07.02.01	ISR1375	Burn Through and Shielding Design	100%	124	16-Mar-15 A	09-Sep-15 A	01-Oct-15	29-Oct-15	36	$6,290.06	
2-W.07.02.01	ISR1380	Burn Through and Shielding Fabricate	67%	218	24-Aug-15 A	06-Jul-16	30-Oct-15	28-Jan-16	-111	$62,670.00	308
2-W.07.02.01	ISR1385	Burn Through and Shielding Test	0%	2	07-Jul-16	08-Jul-16	29-Jan-16	26-Feb-16	-93	$0.00	308
2-W.07.02.01	ISR1515	Burn Through and Shielding Install	25%	23	07-Jun-16 A	08-Jul-16	29-Feb-16	25-Mar-16	-73	$13,161.44	129
Shielded Transport Pipes			90%	500	01-Aug-14 A	29-Jul-16	01-Aug-14	22-Dec-15	-152	$92,352.00	114
2-W.07.02.01	ISR1395	Write Spec/SOW Shielded Transport Pipes	100%	21	01-Aug-14 A	29-Aug-14 A	01-Aug-14	29-Aug-14	0	$0.00	
2-W.07.02.01	ISR1405	PPM Accepts & Pins Req	100%	0		09-Oct-14 A		29-Aug-14	-28	$0.00	
2-W.07.02.01	ISR1415	Prepare and Submit RFP	100%	16	03-Nov-14 A	24-Nov-14 A	02-Sep-14	08-Oct-14	-32	$0.00	
2-W.07.02.01	ISR1425	Offerors Prepare and Submit Proposals	100%	11	25-Nov-14 A	12-Dec-14 A	09-Oct-14	13-Nov-14	-18	$0.00	
2-W.07.02.01	ISR1435	Evaluate Offeror Proposals	100%	6	15-Dec-14 A	23-Dec-14 A	14-Nov-14	22-Dec-14	0	$0.00	
2-W.07.02.01	ISR1445	Negotiate with Offerors	100%	15	24-Dec-14 A	16-Jan-15 A	23-Dec-14	08-Jan-15	-6	$0.00	
2-W.07.02.01	ISR1455	Prepare and Approve Contract Package	100%	8	20-Jan-15 A	30-Jan-15 A	09-Jan-15	13-Feb-15	11	$0.00	
2-W.07.02.01	ISR1465	Contract Award	100%	0		30-Jan-15 A		13-Feb-15	11	$0.00	
2-W.07.02.01	ISR1475	Shielded Transport Pipes Receipt of PDR Report	100%	24	02-Feb-15 A	09-Mar-15 A	02-Feb-15	16-Mar-15	6	$7,388.16	
2-W.07.02.01	ISR1476	Shielded Transport Pipes Acceptance of PDR Report	100%	7	10-Mar-15 A	19-Mar-15 A	17-Mar-15	27-Apr-15	28	$1,847.04	
2-W.07.02.01	ISR1485	Shielded Transport Pipes Receipt of FDR Report	100%	33	01-May-15 A	18-Jun-15 A	28-Apr-15	22-May-15	-17	$14,776.32	
2-W.07.02.01	ISR1495	Shielded Transport Pipes Acceptance of FDR Report	100%	48	16-Jun-15 A	24-Aug-15 A	22-May-15	06-Jul-15	-34	$3,694.08	
2-W.07.02.01	ISR1505	Shielded Transport Pipes Receipt of Equipment & Spares	100%	25	04-Jan-16 A	08-Feb-16 A	07-Jul-15	11-Sep-15	-100	$41,558.40	
2-W.07.02.01	ISR1506	Shielded Transport Pipes Acceptance of Equipment & Spares	100%	7	09-Feb-16 A	19-Feb-16 A	14-Sep-15	01-Oct-15	-93	$4,617.60	
2-W.07.02.01	ISR1507	Shielded Transport Pipes Installation Complete	100%	28	01-Mar-16 A	08-Apr-16 A	02-Oct-15	09-Oct-15	-122	$9,235.20	
2-W.07.02.01	ISR1508	Shielded Transport Pipes Receipt of Commissioning Report	0%	10	01-Jul-16	15-Jul-16	13-Oct-15	06-Nov-15	-172	$7,388.16	114
2-W.07.02.01	ISR1509	Shielded Transport Pipes Approval of Commissioning Report	0%	10	18-Jul-16	29-Jul-16	09-Nov-15	22-Dec-15	-152	$1,847.04	114
Integrated Testing			25%	85	16-May-16 A	14-Sep-16	05-Apr-16	20-Jul-16	-39	$185,536.44	82
2-W.07.02.01	ISR1390	Integrated Testing	25%	85	16-May-16 A	14-Sep-16	05-Apr-16	20-Jul-16	-39	$185,536.44	82
Shielded Enclosures			100%	710	01-Oct-12 A	05-Aug-15 A	01-Oct-12	23-Oct-14	-196	$53,742.07	
ISR Shielded Enclosures			100%	710	01-Oct-12 A	05-Aug-15 A	01-Oct-12	23-Oct-14	-196	$53,742.07	
Design			0%	50	01-Oct-12 A	12-Dec-12 A	01-Oct-12	12-Dec-12	0	$0.00	
2-W.07.02.02	ISR1400	Preliminary Design	100%	20	01-Oct-12 A	29-Oct-12 A	01-Oct-12	29-Oct-12	0	$0.00	
2-W.07.02.02	ISR1410	AVAIL: ISR SE Controls Specification Document	100%	0		28-Nov-12 A		28-Nov-12	0	$0.00	
2-W.07.02.02	ISR1420	Preliminary Design Review	100%	5	30-Oct-12 A	05-Nov-12 A	30-Oct-12	05-Nov-12	0	$0.00	
2-W.07.02.02	ISR1430	Preliminary Design Approval	100%	0		05-Nov-12 A		05-Nov-12	0	$0.00	
2-W.07.02.02	ISR1440	Final Design & Spec	100%	20	06-Nov-12 A	06-Dec-12 A	06-Nov-12	05-Dec-12	0	$0.00	
2-W.07.02.02	ISR1450	Final Design Review	100%	5	06-Dec-12 A	12-Dec-12 A	06-Dec-12	12-Dec-12	0	$0.00	
2-W.07.02.02	ISR1460	Final Design Approval: ISR Shielded Enclosure	100%	0		12-Dec-12 A		12-Dec-12	0	$0.00	
Lead Hutch			0%	300	11-Jan-13 A	25-Mar-14 A	11-Jan-13	17-Jan-14	-45	$0.00	
2-W.07.02.02	ISR1470	Write Specification and SOW - Lead Hutch	100%	40	11-Jan-13 A	11-Mar-13 A	11-Jan-13	11-Mar-13	0	$0.00	
2-W.07.02.02	ISR1480	PPM Accept Requisition	100%	15	12-Mar-13 A	01-Apr-13 A	12-Mar-13	01-Apr-13	0	$0.00	
2-W.07.02.02	ISR1490	Prepare RFP	100%	15	01-Apr-13 A	19-Apr-13 A	01-Apr-13	19-Apr-13	0	$0.00	
2-W.07.02.02	ISR1500	Call for Bid	100%	20	22-Apr-13 A	17-May-13 A	22-Apr-13	17-May-13	0	$0.00	



(O) NEXT - Detail Schedule

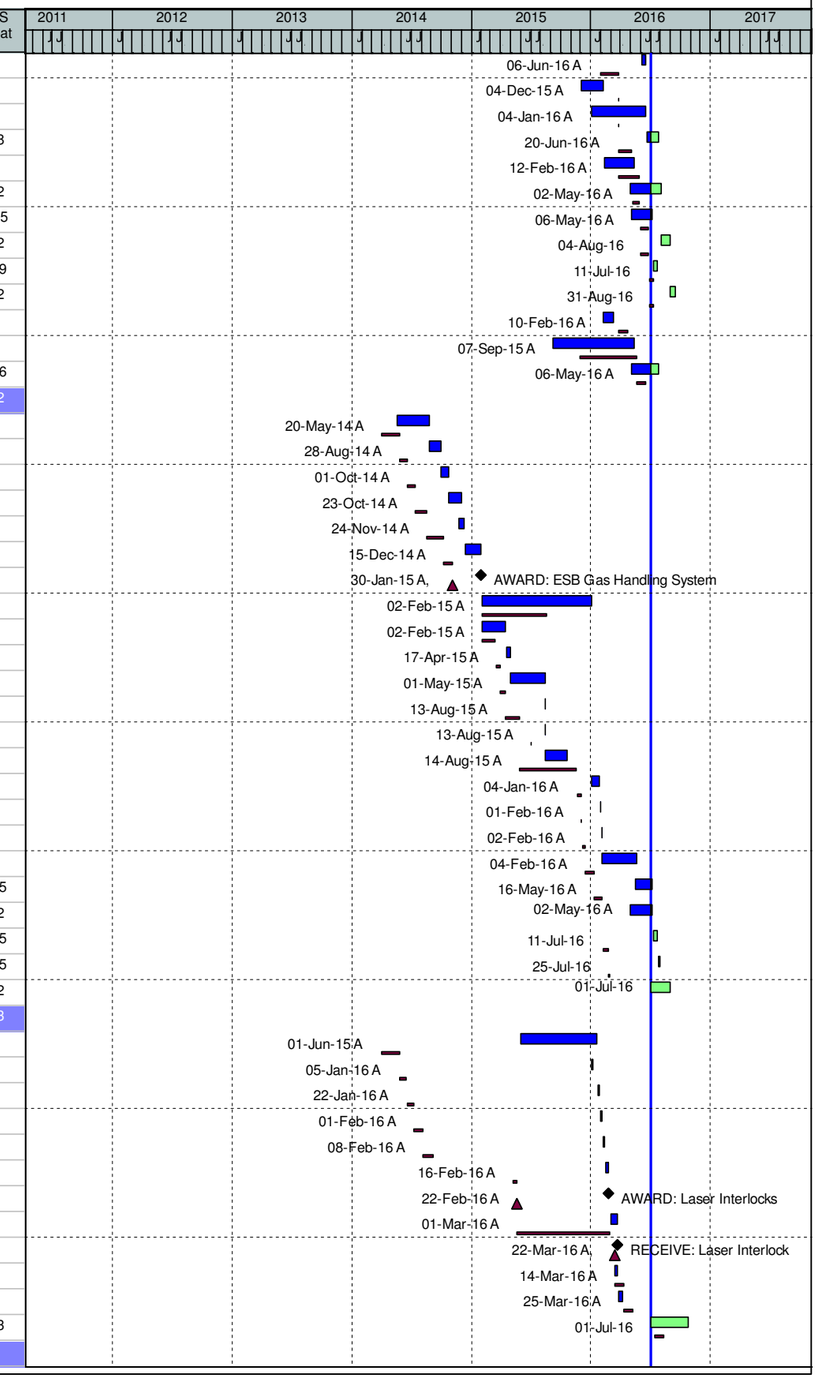
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.07.02.02	ISR1510	Receive and Evaluate Vendor Proposal	100%	20	20-May-13 A	17-Jun-13 A	20-May-13	17-Jun-13	0	$0.00	
2-W.07.02.02	ISR1520	Vendor Negotiations	100%	10	18-Jun-13 A	01-Jul-13 A	18-Jun-13	01-Jul-13	0	$0.00	
2-W.07.02.02	ISR1530	AWARD: Lead Hutch	100%	0	02-Jul-13 A		02-Jul-13		0	$0.00	
2-W.07.02.02	ISR1540	Procure/Fab - Lead Hutch	100%	61	02-Jul-13 A	30-Sep-13 A	02-Jul-13	30-Sep-13	1	$0.00	
2-W.07.02.02	ISR1540FA	Procure/Fab - Lead Hutch	100%	105	01-Oct-13 A	05-Mar-14 A	01-Oct-13	03-Jan-14	-41	$0.00	
2-W.07.02.02	ISR1560	Vendor Shipping	100%	14	06-Mar-14 A	25-Mar-14 A	06-Jan-14	17-Jan-14	-45	$0.00	
2-W.07.02.02	ISR1570	RECEIVE: Lead Hutch	100%	0		25-Mar-14 A		17-Jan-14	-45	$0.00	
Steel Hutches			0%	326	11-Jan-13 A	30-Apr-14 A	11-Jan-13	03-Feb-14	-61	$0.00	
2-W.07.02.02	ISR1580	Write Specification and SOW - Steel Hutches	100%	63	11-Jan-13 A	11-Apr-13 A	11-Jan-13	11-Apr-13	0	$0.00	
2-W.07.02.02	ISR1590	PPM Accept Requisition	100%	15	12-Apr-13 A	02-May-13 A	12-Apr-13	02-May-13	0	$0.00	
2-W.07.02.02	ISR1600	Prepare RFP	100%	15	03-May-13 A	23-May-13 A	03-May-13	23-May-13	0	$0.00	
2-W.07.02.02	ISR1610	Call for Bid	100%	20	24-May-13 A	21-Jun-13 A	24-May-13	21-Jun-13	0	$0.00	
2-W.07.02.02	ISR1620	Receive and Evaluate Vendor Proposal	100%	20	03-Jun-13 A	28-Jun-13 A	03-Jun-13	28-Jun-13	0	$0.00	
2-W.07.02.02	ISR1630	Vendor Negotiations	100%	11	28-Jun-13 A	16-Jul-13 A	28-Jun-13	15-Jul-13	-1	$0.00	
2-W.07.02.02	ISR1640	AWARD: Steel Hutches	100%	0	17-Jul-13 A		17-Jul-13		0	$0.00	
2-W.07.02.02	ISR1650	Procure/Fab - Steel Hutches	100%	52	17-Jul-13 A	30-Sep-13 A	17-Jul-13	30-Sep-13	1	$0.00	
2-W.07.02.02	ISR1650FA	Procure/Fab - Steel Hutches	100%	137	01-Oct-13 A	18-Apr-14 A	01-Oct-13	17-Jan-14	-63	$0.00	
2-W.07.02.02	ISR1670	Vendor Shipping	100%	7	21-Apr-14 A	30-Apr-14 A	21-Jan-14	03-Feb-14	-60	$0.00	
2-W.07.02.02	ISR1680	RECEIVE: Steel Hutches	100%	0		30-Apr-14 A		03-Feb-14	-61	$0.00	
Install & Test			100%	317	30-Apr-14 A	05-Aug-15 A	04-Feb-14	23-Oct-14	-196	$53,742.07	
2-W.07.02.02	ISR1690	ISR Hutches - Assembly and Installation	100%	100	30-Apr-14 A	22-Sep-14 A	04-Feb-14	22-Sep-14	0	$36,682.81	
2-W.07.02.02	ISR1700	ISR Hutches - Test	100%	315	02-May-14 A	05-Aug-15 A	04-Feb-14	22-Sep-14	-217	$17,059.26	
2-W.07.02.02	ISR1710	ISR Hutches (Shielded Enclosure) - Ready for Testing - INTER-PROJECT LIN	100%	0	25-Sep-14 A		23-Oct-14		19	$0.00	
Endstation Equipment			71.62%	1173	16-Mar-12 A	22-Nov-16	16-Mar-12	11-Nov-16	-5	$3,914,545.75	215
ISR Endstation Equipment			71.62%	1173	16-Mar-12 A	22-Nov-16	16-Mar-12	11-Nov-16	-5	$3,914,545.75	215
Design			100%	503	16-Mar-12 A	21-Mar-14 A	16-Mar-12	10-Jan-14	-47	$22,651.46	
2-W.07.02.03	ISR1730	AVAIL: ISR ES Controls Specification Document	100%	0		03-May-12 A		03-May-12	0	$0.00	
2-W.07.02.03	ISR1740	30% Preliminary Design	100%	35	16-Mar-12 A	03-May-12 A	16-Mar-12	03-May-12	0	$0.00	
2-W.07.02.03	ISR1750	60% Preliminary Design	100%	35	04-May-12 A	22-Jun-12 A	04-May-12	22-Jun-12	0	$0.00	
2-W.07.02.03	ISR1760	90% Preliminary Design	100%	35	25-Jun-12 A	13-Aug-12 A	25-Jun-12	13-Aug-12	0	$0.00	
2-W.07.02.03	ISR1770	Preliminary Design Review	100%	5	14-Aug-12 A	20-Aug-12 A	14-Aug-12	20-Aug-12	0	$0.00	
2-W.07.02.03	ISR1780	Preliminary Design Approval	100%	0		18-Sep-12 A		18-Sep-12	0	$0.00	
2-W.07.02.03	ISR1800	30% Final Design	100%	58	20-Jun-13 A	12-Sep-13 A	20-Jun-13	12-Aug-13	-22	$0.00	
2-W.07.02.03	ISR1810	60% Final Design	100%	11	13-Sep-13 A	30-Sep-13 A	13-Sep-13	30-Sep-13	1	$0.00	
2-W.07.02.03	ISR1810FA	60% Final Design	100%	23	01-Oct-13 A	01-Nov-13 A	01-Oct-13	01-Nov-13	0	$8,938.10	
2-W.07.02.03	ISR1820	90% Final Design	100%	37	04-Nov-13 A	27-Dec-13 A	04-Nov-13	03-Jan-14	4	$11,989.88	
2-W.07.02.03	ISR1830	Final Design Review	100%	1	20-Mar-14 A	21-Mar-14 A	06-Jan-14	10-Jan-14	-47	$1,723.48	
2-W.07.02.03	ISR1840	Final Design Approval	100%	0		21-Mar-14 A		10-Jan-14	-47	$0.00	
Hutch A: KB Mirror			91.38%	661	28-Jan-14 A	14-Sep-16	01-Apr-14	11-Jul-16	-46	$1,492,061.07	82
2-W.07.02.03	ISR1849	KB Mirror - Vendor support	100%	464	28-Jan-14 A	04-Dec-15 A	01-Apr-14	03-Nov-15	-20	$28,907.42	
2-W.07.02.03	ISR1850	Write Specification and SOW - KB Mirror	100%	70	28-Jan-14 A	07-May-14 A	01-Apr-14	24-Jun-14	34	$58,777.61	
2-W.07.02.03	ISR1860	PPM Accept Requisition	100%	58	08-May-14 A	31-Jul-14 A	25-Jun-14	21-Jul-14	-8	$0.00	
2-W.07.02.03	ISR1870	KB Mirror - Prepare RFP	100%	11	01-Aug-14 A	15-Aug-14 A	22-Jul-14	11-Aug-14	-4	$0.00	
2-W.07.02.03	ISR1890	KB Mirror - Receive and Evaluate Vendor Proposal	100%	53	18-Aug-14 A	03-Nov-14 A	17-Sep-14	05-Nov-14	3	$0.00	
2-W.07.02.03	ISR1900	KB Mirror - Vendor Negotiations	100%	15	03-Nov-14 A	24-Nov-14 A	06-Nov-14	05-Dec-14	8	$0.00	
2-W.07.02.03	ISR1910	AWARD: KB Mirror	100%	0		25-Nov-14 A		08-Dec-14	7	$0.00	
2-W.07.02.03	ISR1940	Receipt of PDR Report Final Version	100%	70	26-Nov-14 A	13-Mar-15 A	26-Jan-15	26-Jan-15	-32	$95,796.48	
2-W.07.02.03	ISR1950	Approval of PDR Report Final Version	100%	2	16-Mar-15 A	18-Mar-15 A	26-Jan-15	09-Mar-15	-6	$23,949.12	
2-W.07.02.03	ISR1950010	Receipt of FDR Report Final Version	100%	15	19-Mar-15 A	08-Apr-15 A	26-Mar-15	26-Mar-15	-9	$95,796.48	
2-W.07.02.03	ISR1950015	Approval of FDR Report Final Version	100%	20	01-May-15 A	01-Jun-15 A	27-Mar-15	07-May-15	-15	$23,949.12	
2-W.07.02.03	ISR1950020	Factory Acceptance Test Completed	100%	1	01-Jun-16 A	02-Jun-16 A	15-Oct-15	11-Nov-15	-138	$239,491.20	



(O) NEXT - Detail Schedule

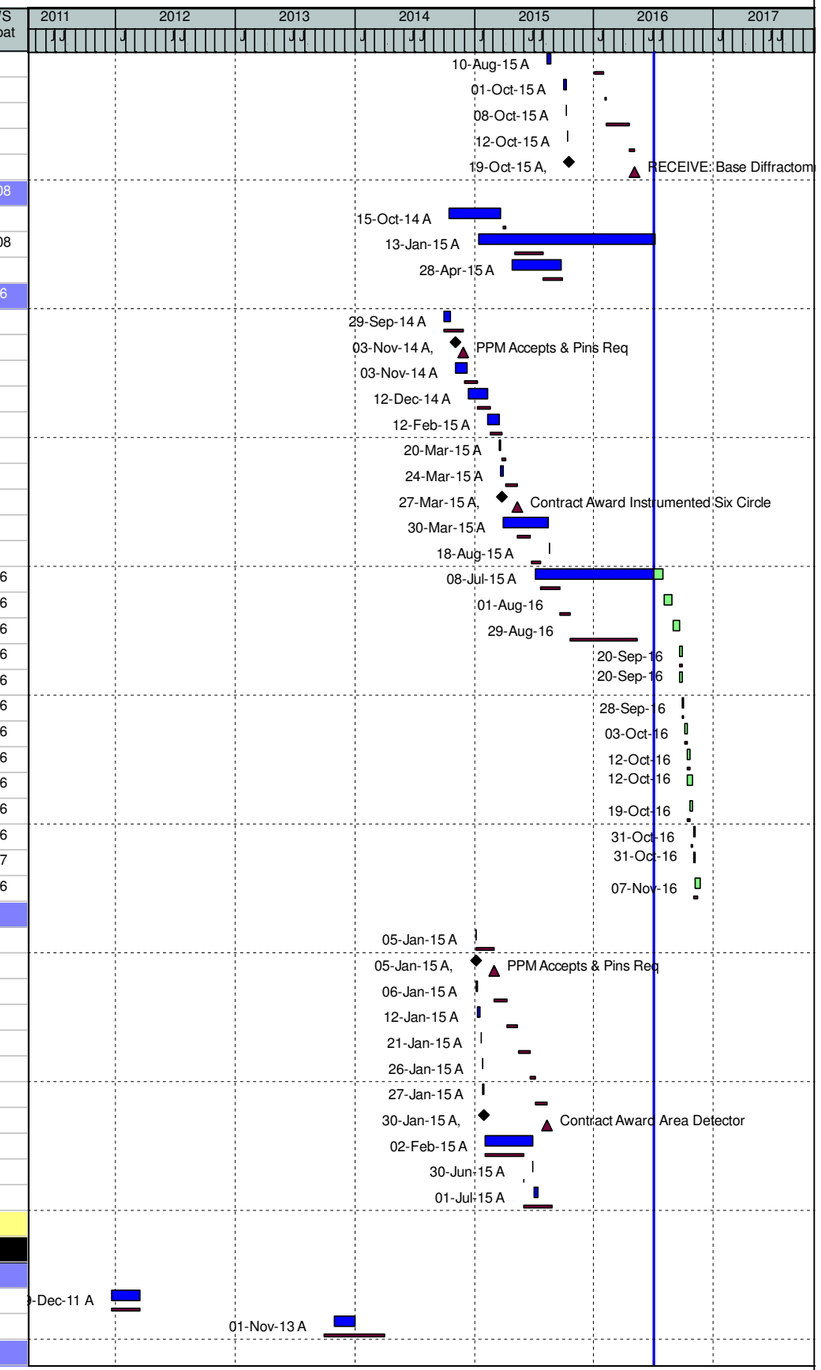
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.07.02.03	ISR1950021	KB Mirror Packing and Shipping	100%	9	06-Jun-16 A	17-Jun-16 A	01-Feb-16	24-Mar-16	-59	$0.00	
2-W.07.02.03	ISR1950025	Receipt of DHRM Components at BNL	100%	43	04-Dec-15 A	08-Feb-16 A	25-Mar-16	25-Mar-16	34	$273,291.20	
2-W.07.02.03	ISR1950030	Receipt of KB Mirror Components at BNL	100%	116	04-Jan-16 A	17-Jun-16 A	25-Mar-16	25-Mar-16	-58	$273,291.20	
2-W.07.02.03	ISR1950031	Bench Test: KB Mirror	50%	26	20-Jun-16 A	26-Jul-16	28-Mar-16	06-May-16	-55	$5,873.82	88
2-W.07.02.03	ISR1950035	Installation of DHRM Components at BNL Complete	100%	65	12-Feb-16 A	13-May-16 A	28-Mar-16	27-May-16	10	$59,872.80	
2-W.07.02.03	ISR1950036	Installation of KB Components at BNL Complete	50%	66	02-May-16 A	03-Aug-16	09-May-16	27-May-16	-46	$59,872.80	82
2-W.07.02.03	ISR1950040	Commissioning of DHRM Complete	90%	44	06-May-16 A	08-Jul-16	31-May-16	24-Jun-16	-9	$29,936.40	105
2-W.07.02.03	ISR1950041	Commissioning of KB Complete	0%	19	04-Aug-16	30-Aug-16	31-May-16	24-Jun-16	-46	$29,936.40	82
2-W.07.02.03	ISR1950045	Approval of DHRM Commissioning Report	0%	10	11-Jul-16	22-Jul-16	27-Jun-16	11-Jul-16	-9	$29,936.40	119
2-W.07.02.03	ISR1950050	Approval of KB Commissioning Report	0%	10	31-Aug-16	14-Sep-16	27-Jun-16	11-Jul-16	-46	$29,936.40	82
2-W.07.02.03	ISR1970	DHRM - Assembly	100%	21	10-Feb-16 A	11-Mar-16 A	25-Mar-16	21-Apr-16	30	$34,794.66	
2-W.07.02.03	ISR1980	DHRM - Installation	100%	171	07-Sep-15 A	13-May-16 A	01-Dec-15	19-May-16	5	$69,509.31	
2-W.07.02.03	ISR1981	DHRM - Test	90%	57	06-May-16 A	27-Jul-16	20-May-16	17-Jun-16	-27	$29,142.26	116
Hutch B: Gas Handling System			80.64%	572	20-May-14 A	30-Aug-16	01-Apr-14	26-Feb-16	-130	$717,749.96	92
2-W.07.02.03	ISR1990	ESB Gas Handling System - Write Specification and SOW	100%	68	20-May-14 A	27-Aug-14 A	01-Apr-14	27-May-14	-63	$4,679.54	
2-W.07.02.03	ISR2000	ESB Gas Handling System - PPM Accept Requisition	100%	23	28-Aug-14 A	01-Oct-14 A	28-May-14	19-Jun-14	-70	$0.00	
2-W.07.02.03	ISR2010	ESB Gas Handling System - Prepare RFP	100%	15	01-Oct-14 A	22-Oct-14 A	20-Jun-14	14-Jul-14	-70	$0.00	
2-W.07.02.03	ISR2020	ESB Gas Handling System - Call for Bid	100%	25	23-Oct-14 A	01-Dec-14 A	15-Jul-14	18-Aug-14	-70	$623.07	
2-W.07.02.03	ISR2030	ESB Gas Handling System - Receive and Evaluate Vendor Proposals	100%	12	24-Nov-14 A	12-Dec-14 A	19-Aug-14	07-Oct-14	-44	$3,542.53	
2-W.07.02.03	ISR2040	ESB Gas Handling System - Vendor Negotiations	100%	30	15-Dec-14 A	30-Jan-15 A	08-Oct-14	05-Nov-14	-55	$1,286.02	
2-W.07.02.03	ISR2050	AWARD: ESB Gas Handling System	100%	0		30-Jan-15 A		06-Nov-14	-55	$0.00	
2-W.07.02.03	ISR2050010	Gas Handling System - Vendor Support	100%	232	02-Feb-15 A	04-Jan-16 A	03-Feb-15	18-Aug-15	-93	$88,650.31	
2-W.07.02.03	ISR2060	Gas Handling System Receipt of PDR	100%	53	02-Feb-15 A	16-Apr-15 A	03-Feb-15	16-Mar-15	-23	$20,800.00	
2-W.07.02.03	ISR2060010	Gas Handling System Acceptance of PDR	100%	10	17-Apr-15 A	30-Apr-15 A	17-Mar-15	30-Mar-15	-23	$5,200.00	
2-W.07.02.03	ISR2060015	Gas Handling System Final Design & FDR	100%	74	01-May-15 A	14-Aug-15 A	31-Mar-15	13-Apr-15	-87	$41,600.00	
2-W.07.02.03	ISR2060020	Gas Handling System Acceptance of FDR	100%	1	13-Aug-15 A	13-Aug-15 A	14-Apr-15	26-May-15	-56	$10,400.00	
2-W.07.02.03	ISR2060021	Gas Handling System Acceptance of FDR - Amendment Increase	100%	1	13-Aug-15 A	13-Aug-15 A	01-Jul-15	01-Jul-15	-30	$26,000.00	
2-W.07.02.03	ISR2060025	Gas Handling System Fabrication & Factory Acceptance Test	100%	45	14-Aug-15 A	20-Oct-15 A	27-May-15	18-Nov-15	22	$114,164.96	
2-W.07.02.03	ISR2060030	Gas Handling System Factory Acceptance Test	100%	15	04-Jan-16 A	26-Jan-16 A	23-Nov-15	03-Dec-15	-34	$117,866.32	
2-W.07.02.03	ISR2060035	Gas Handling System Receipt of Equipment	100%	1	01-Feb-16 A	02-Feb-16 A	04-Dec-15	04-Dec-15	-38	$46,800.00	
2-W.07.02.03	ISR2060040	Gas Handling System Acceptance of Equipment	100%	2	02-Feb-16 A	04-Feb-16 A	07-Dec-15	14-Dec-15	-34	$5,200.00	
2-W.07.02.03	ISR2060045	Gas Handling System Vendor Installation	100%	75	04-Feb-16 A	20-May-16 A	15-Dec-15	12-Jan-16	-90	$62,400.00	
2-W.07.02.03	ISR2060050	Gas Handling System Commissioning & Training	20%	38	16-May-16 A	08-Jul-16	13-Jan-16	05-Feb-16	-107	$147,737.20	115
2-W.07.02.03	ISR2060051	Gas Handling System Commissioning Support - EAC	20%	48	02-May-16 A	08-Jul-16				$0.00	92
2-W.07.02.03	ISR2060055	Gas Handling System Receipt of Commissioning Report	0%	10	11-Jul-16	22-Jul-16	08-Feb-16	22-Feb-16	-107	$16,640.00	115
2-W.07.02.03	ISR2060060	Gas Handling System Approval of Commissioning report	0%	4	25-Jul-16	28-Jul-16	23-Feb-16	26-Feb-16	-107	$4,160.00	115
2-W.07.02.03	ISR2060065	Procure Compressor for GHS - EAC Activity	0%	42	01-Jul-16	30-Aug-16				$0.00	92
Laser Interlocks			90.62%	355	01-Jun-15 A	26-Oct-16	01-Apr-14	10-Aug-16	-53	$85,957.77	53
2-W.07.02.03	ISR2120	Laser Interlock - Write Specification and SOW	100%	160	01-Jun-15 A	21-Jan-16 A	01-Apr-14	27-May-14	-411	$4,679.54	
2-W.07.02.03	ISR2130	Laser Interlock - PPM Accept Requisition	100%	2	05-Jan-16 A	07-Jan-16 A	28-May-14	17-Jun-14	-387	$0.00	
2-W.07.02.03	ISR2140	Laser Interlock - Prepare RFP	100%	2	22-Jan-16 A	26-Jan-16 A	18-Jun-14	10-Jul-14	-384	$2,492.29	
2-W.07.02.03	ISR2150	Laser Interlock - Call for Bid	100%	5	01-Feb-16 A	05-Feb-16 A	11-Jul-14	07-Aug-14	-373	$623.07	
2-W.07.02.03	ISR2160	Laser Interlock - Receive and Evaluate Vendor Proposals	100%	5	08-Feb-16 A	12-Feb-16 A	08-Aug-14	05-Sep-14	-358	$3,526.41	
2-W.07.02.03	ISR2170	Laser Interlock - Vendor Negotiations	100%	5	16-Feb-16 A	22-Feb-16 A	08-May-15	21-May-15	-187	$1,286.02	
2-W.07.02.03	ISR2180	AWARD: Laser Interlocks	100%	0	22-Feb-16 A		22-May-15		-186	$0.00	
2-W.07.02.03	ISR2200	Laser Interlock - Fabrication	100%	15	01-Mar-16 A	22-Mar-16 A	22-May-15	29-Feb-16	-15	$30,598.00	
2-W.07.02.03	ISR2220	RECEIVE: Laser Interlock	100%	0		22-Mar-16 A		14-Mar-16	-5	$0.00	
2-W.07.02.03	ISR2230	Laser Interlock - Assembly	100%	6	14-Mar-16 A	22-Mar-16 A	15-Mar-16	11-Apr-16	15	$17,346.68	
2-W.07.02.03	ISR2240	Laser Interlock - Installation	100%	8	25-Mar-16 A	06-Apr-16 A	12-Apr-16	09-May-16	24	$17,346.68	
2-W.07.02.03	ISR2241	Laser Interlock - Test	0%	81	01-Jul-16	26-Oct-16	14-Jul-16	10-Aug-16	-53	$8,059.07	53
Base Diffractometer Parts			100%	48	10-Aug-15 A	19-Oct-15 A	04-Jan-16	03-May-16	136	$8,483.74	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.07.02.03	ISR2365	Base Diffractometer Parts - Write Specification and SOW	100%	10	10-Aug-15 A	24-Aug-15 A	04-Jan-16	01-Feb-16	109	$8,483.74	
2-W.07.02.03	ISR2370	Base Diffractometer Parts - PPM Accept Requisition	100%	5	01-Oct-15 A	07-Oct-15 A	02-Feb-16	08-Feb-16	82	$0.00	
2-W.07.02.03	ISR2375	Base Diffractometer Parts - Fabrication	100%	1	08-Oct-15 A	09-Oct-15 A	09-Feb-16	19-Apr-16	131	$0.00	
2-W.07.02.03	ISR2380	Base Diffractometer Parts - Shipping	100%	0	12-Oct-15 A	13-Oct-15 A	20-Apr-16	03-May-16	140	$0.00	
2-W.07.02.03	ISR2385	RECEIVE: Base Diffractometer Parts	100%	0		19-Oct-15 A		03-May-16	136	$0.00	
Transfer Existing Endstation Equipment			97.46%	434	15-Oct-14 A	08-Jul-16	01-Apr-15	25-Sep-15	-196	$192,211.60	308
2-W.07.02.03	ISR2340	Transfer Existing Endstation Equipment	100%	107	15-Oct-14 A	24-Mar-15 A	01-Apr-15	07-Apr-15	11	$38,713.57	
2-W.07.02.03	ISR2350	Transfer Existing Endstation Equipment - Assembly & Install	95%	375	13-Jan-15 A	08-Jul-16	06-May-15	30-Jul-15	-236	$97,822.06	308
2-W.07.02.03	ISR2360	Transfer Existing Endstation Equipment - Test	100%	105	28-Apr-15 A	25-Sep-15 A	31-Jul-15	25-Sep-15	1	$55,675.98	
Instrumented Six Circle			21.25%	538	29-Sep-14 A	22-Nov-16	01-Oct-14	11-Nov-16	-5	$1,054,622.16	36
2-W.07.02.03	ISR2390	Write Spec/SOW Instrumented Six Circle	100%	16	29-Sep-14 A	21-Oct-14 A	01-Oct-14	26-Nov-14	26	$47,902.16	
2-W.07.02.03	ISR2400	PPM Accepts & Pins Req	100%	0		03-Nov-14 A		26-Nov-14	18	$0.00	
2-W.07.02.03	ISR2405	Prepare and Submit RFP	100%	27	03-Nov-14 A	11-Dec-14 A	01-Dec-14	09-Jan-15	18	$0.00	
2-W.07.02.03	ISR2410	Offerors Prepare and Submit Proposals	100%	39	12-Dec-14 A	11-Feb-15 A	12-Jan-15	17-Feb-15	4	$0.00	
2-W.07.02.03	ISR2415	Evaluate Offeror Proposals	100%	25	12-Feb-15 A	19-Mar-15 A	18-Feb-15	24-Mar-15	3	$0.00	
2-W.07.02.03	ISR2420	Negotiate with Offerors	100%	2	20-Mar-15 A	24-Mar-15 A	25-Mar-15	07-Apr-15	11	$0.00	
2-W.07.02.03	ISR2425	Prepare and Approve Contract Package	100%	6	24-Mar-15 A	01-Apr-15 A	08-Apr-15	12-May-15	30	$0.00	
2-W.07.02.03	ISR2430	Contract Award Instrumented Six Circle	100%	0		27-Mar-15 A		12-May-15	33	$0.00	
2-W.07.02.03	ISR2435	Six Circle Diffractometer Receipt of PDR Report	100%	98	30-Mar-15 A	17-Aug-15 A	13-May-15	22-Jun-15	-38	$80,537.60	
2-W.07.02.03	ISR2440	Six Circle Diffractometer Approval of PDR Report	100%	2	18-Aug-15 A	19-Aug-15 A	23-Jun-15	21-Jul-15	-21	$20,134.40	
2-W.07.02.03	ISR2445	Six Circle Diffractometer Receipt of FDR Report	50%	268	08-Jul-15 A	29-Jul-16	22-Jul-15	18-Sep-15	-216	$151,008.00	36
2-W.07.02.03	ISR2450	Six Circle Diffractometer Approval of FDR Report	0%	20	01-Aug-16	26-Aug-16	21-Sep-15	19-Oct-15	-216	$151,008.00	36
2-W.07.02.03	ISR2455	Six Circle Diffractometer Vendor Fab	0%	15	29-Aug-16	19-Sep-16	20-Oct-15	11-May-16	-90	$0.00	36
2-W.07.02.03	ISR2456	Six Circle Diffractometer Factory Acceptance Test Complete/Report Received	0%	6	20-Sep-16	27-Sep-16	20-Sep-16	27-Sep-16	0	$241,612.80	36
2-W.07.02.03	ISR2457	Six Circle Diffractometer FAT Support - EAC	0%	6	20-Sep-16	27-Sep-16				$0.00	36
2-W.07.02.03	ISR2510	Six Circle Diffractometer Factory Acceptance Test Report Approved	0%	3	28-Sep-16	30-Sep-16	28-Sep-16	30-Sep-16	0	$60,403.20	36
2-W.07.02.03	ISR2515	Six Circle Diffractometer Receipt of Equipment	0%	6	03-Oct-16	11-Oct-16	03-Oct-16	11-Oct-16	0	$80,537.60	36
2-W.07.02.03	ISR2520	Six Circle Diffractometer Acceptance of Equipment	0%	8	12-Oct-16	21-Oct-16	12-Oct-16	21-Oct-16	0	$20,134.40	36
2-W.07.02.03	ISR2521	Six Circle Diffractometer Installation Support - EAC	0%	13	12-Oct-16	28-Oct-16				$0.00	36
2-W.07.02.03	ISR2525	Six Circle Diffractometer Equipment Intallation Complete	0%	8	19-Oct-16	28-Oct-16	12-Oct-16	21-Oct-16	-5	$100,672.00	36
2-W.07.02.03	ISR2530	Six Circle Diffractometer Commissioning & Training Complete	0%	5	31-Oct-16	04-Nov-16	24-Oct-16	28-Oct-16	-5	$50,336.00	36
2-W.07.02.03	ISR2531	Six Circle Diffractometer Commissioning Support - EAC	0%	4	31-Oct-16	04-Nov-16				$0.00	37
2-W.07.02.03	ISR2535	Six Circle Diffractometer Receipt & Approval of Commissioning Report	0%	10	07-Nov-16	22-Nov-16	31-Oct-16	11-Nov-16	-5	$50,336.00	36
Area Detector			100%	134	05-Jan-15 A	16-Jul-15 A	05-Jan-15	26-Aug-15	30	$340,808.00	
2-W.07.02.03	ISR2395	Write Spec/SOW Area Detector	100%	1	05-Jan-15 A	05-Jan-15 A	05-Jan-15	03-Mar-15	39	$0.00	
2-W.07.02.03	ISR2460	PPM Accepts & Pins Req	100%	0		05-Jan-15 A		03-Mar-15	39	$0.00	
2-W.07.02.03	ISR2465	Prepare and Submit RFP	100%	3	06-Jan-15 A	09-Jan-15 A	04-Mar-15	09-Apr-15	63	$0.00	
2-W.07.02.03	ISR2470	Offerors Prepare and Submit Proposals	100%	5	12-Jan-15 A	20-Jan-15 A	10-Apr-15	14-May-15	82	$0.00	
2-W.07.02.03	ISR2475	Evaluate Offeror Proposals	100%	2	21-Jan-15 A	23-Jan-15 A	15-May-15	19-Jun-15	104	$0.00	
2-W.07.02.03	ISR2480	Negotiate with Offerors	100%	0	26-Jan-15 A	26-Jan-15 A	22-Jun-15	06-Jul-15	113	$0.00	
2-W.07.02.03	ISR2485	Prepare and Approve Contract Package	100%	3	27-Jan-15 A	30-Jan-15 A	07-Jul-15	10-Aug-15	134	$0.00	
2-W.07.02.03	ISR2490	Contract Award Area Detector	100%	0		30-Jan-15 A		10-Aug-15	134	$0.00	
2-W.07.02.03	ISR2495	Vendor Fab Area Detector	100%	104	02-Feb-15 A	30-Jun-15 A	02-Feb-15	01-Jun-15	-20	$0.00	
2-W.07.02.03	ISR2500	Receive Area Detector	100%	0	30-Jun-15 A	30-Jun-15 A	02-Jun-15	02-Jun-15	-19	$170,404.00	
2-W.07.02.03	ISR2505	Accept Area Detector	100%	10	01-Jul-15 A	16-Jul-15 A	03-Jun-15	26-Aug-15	30	$170,404.00	
Data Acquisition			100%	1046	19-Dec-11 A	26-Feb-16 A	19-Dec-11	29-Feb-16	2	$245,229.16	
ISR Data Acquisition			100%	1046	19-Dec-11 A	26-Feb-16 A	19-Dec-11	29-Feb-16	2	$245,229.16	
Design			100%	509	19-Dec-11 A	31-Dec-13 A	19-Dec-11	02-Apr-14	63	$5,170.62	
2-W.07.02.04	ISR2250	Preliminary Design	100%	61	19-Dec-11 A	16-Mar-12 A	19-Dec-11	16-Mar-12	0	$0.00	
2-W.07.02.04	ISR2260	Final Design & Spec	100%	40	01-Nov-13 A	31-Dec-13 A	01-Oct-13	02-Apr-14	63	$5,170.62	
Basic DAQ			100%	122	01-Apr-15 A	23-Sep-15 A	01-Apr-15	02-Sep-15	-13	$138,067.11	



(O) NEXT - Detail Schedule

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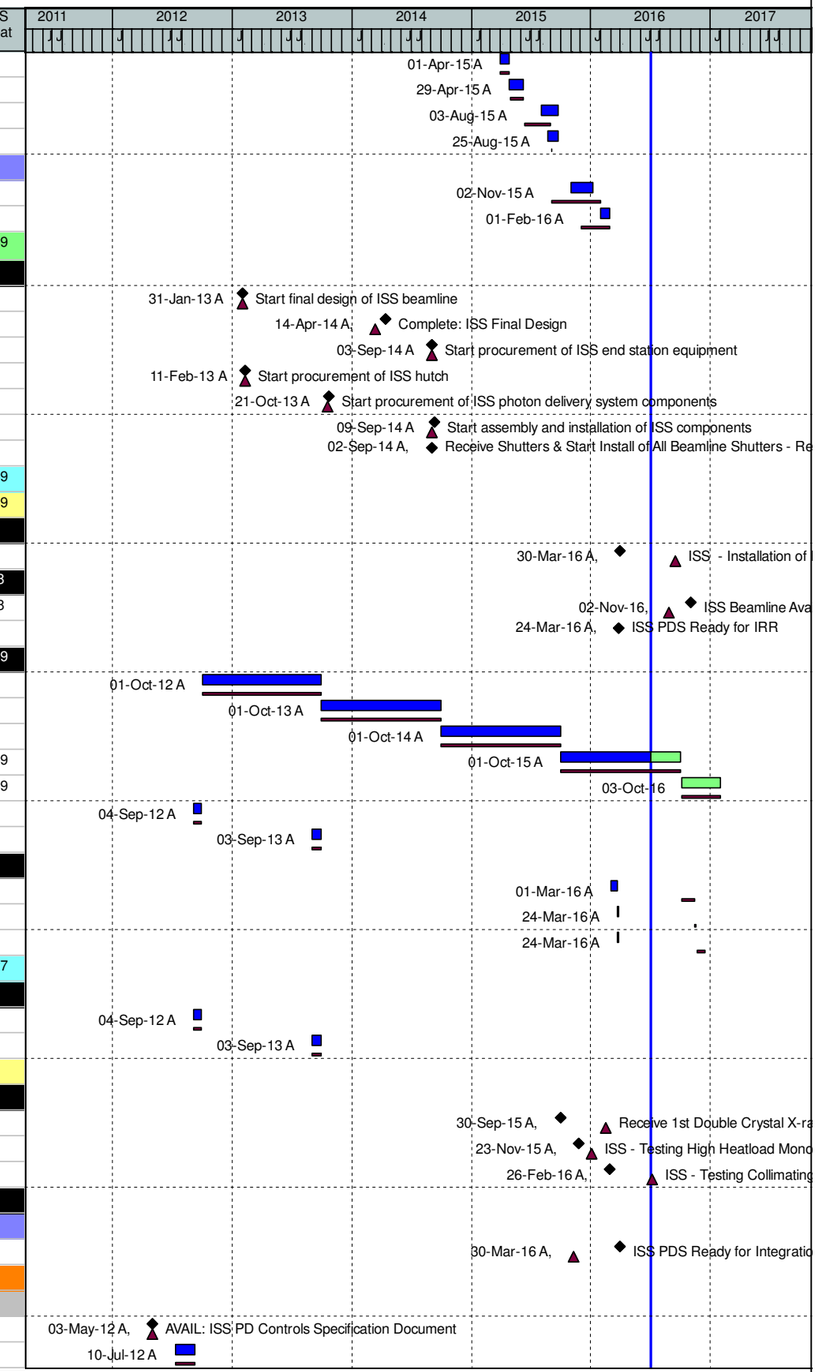
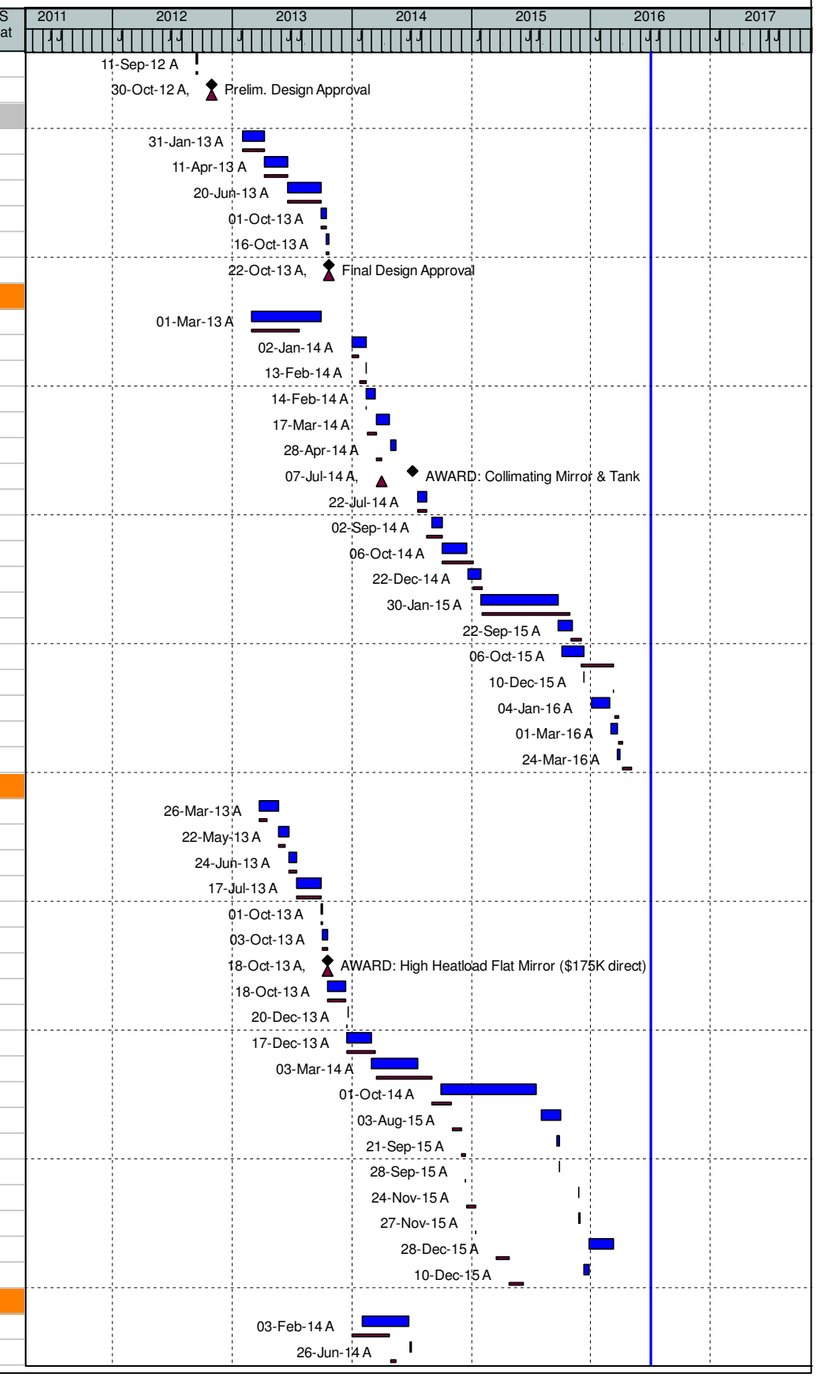
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.07.02.04	ISR2270	ISR Basic DAQ - Write Specification and SOW	100%	20	01-Apr-15 A	28-Apr-15 A	01-Apr-15	28-Apr-15	0	$10,192.18	
2-W.07.02.04	ISR2280	ISR Basic DAQ - Fabrication (history)	100%	29	29-Apr-15 A	10-Jun-15 A	29-Apr-15	10-Jun-15	1	$46,841.25	
2-W.07.02.04	ISR2281	ISR Basic DAQ - Fabrication	100%	36	03-Aug-15 A	23-Sep-15 A	11-Jun-15	01-Sep-15	-14	$0.00	
2-W.07.02.04	ISR2310	RECEIVE: ISR Basic DAQ	100%	20	25-Aug-15 A	23-Sep-15 A	02-Sep-15	02-Sep-15	-13	$81,033.68	
Install & Test			100%	78	02-Nov-15 A	26-Feb-16 A	03-Sep-15	29-Feb-16	2	$101,991.44	
2-W.07.02.04	ISR2320	ISR Basic DAQ - Assembly and Installation	100%	45	02-Nov-15 A	08-Jan-16 A	03-Sep-15	29-Jan-16	15	$48,397.94	
2-W.07.02.04	ISR2330	ISR Basic DAQ - Test	100%	18	01-Feb-16 A	26-Feb-16 A	02-Dec-15	29-Feb-16	2	$53,593.50	
ISS Beamline			94.18%	1279	19-Dec-11 A	30-Jan-17	19-Dec-11	31-Jan-17	1	$10,472,198.53	169
Milestones			0%	402	31-Jan-13 A	09-Sep-14 A	31-Jan-13	02-Sep-14	-5	$0.00	
2-W.08	MISS001	Start final design of ISS beamline	100%	0	31-Jan-13 A		31-Jan-13		0	$0.00	
2-W.08	MISS003	Complete: ISS Final Design	100%	0		14-Apr-14 A		12-Mar-14	-23	$0.00	
2-W.08	MISS005	Start procurement of ISS end station equipment	100%	0	03-Sep-14 A		02-Sep-14		-1	$0.00	
2-W.08	MISS010	Start procurement of ISS hutch	100%	0	11-Feb-13 A		11-Feb-13		0	$0.00	
2-W.08	MISS015	Start procurement of ISS photon delivery system components	100%	0	21-Oct-13 A		18-Oct-13		-1	$0.00	
2-W.08	MISS020	Start assembly and installation of ISS components	100%	0	09-Sep-14 A		02-Sep-14		-5	$0.00	
2-W.08	MISS035	Receive Shutters & Start Install of All Beamline Shutters - Ready For NEXT Ins	100%	0		02-Sep-14 A				$0.00	
ISS Management			94.19%	1100	04-Sep-12 A	30-Jan-17	04-Sep-12	31-Jan-17	1	$838,199.72	169
ISS Beamline Management			94.19%	1100	04-Sep-12 A	30-Jan-17	04-Sep-12	31-Jan-17	1	$838,199.72	169
Top Level Milestones			0%	0	30-Mar-16 A	30-Mar-16 A	14-Sep-16	14-Sep-16	118	$0.00	
2-W.08.01.01	M3150	ISS - Installation of Beamline Components Complete	100%	0		30-Mar-16 A		14-Sep-16	118	$0.00	
Milestones			0%	155	24-Mar-16 A	02-Nov-16	26-Aug-16	26-Aug-16	-46	$0.00	48
2-W.08.01.01	MISS030	ISS Beamline Available	0%	0		02-Nov-16		26-Aug-16	-46	$0.00	48
2-W.08.01.01	MISS040	ISS PDS Ready for IRR	100%	0		24-Mar-16 A				$0.00	
Management			93.15%	1100	04-Sep-12 A	30-Jan-17	04-Sep-12	31-Jan-17	1	$710,791.50	169
2-W.08.01.01	ISS0002	ISS BL Management FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.08.01.01	ISS0003	ISS BL Management FY14	100%	250	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	0	$151,134.04	
2-W.08.01.01	ISS0004	ISS BL Management FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$226,280.82	
2-W.08.01.01	ISS0005	ISS BL Management FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$158,825.03	169
2-W.08.01.01	ISS0007	ISS BL Management FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	31-Jan-17	1	$8,382.50	169
2-W.08.01.01	ISSFY12501!	ISS Managemnent FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$17,303.03	
2-W.08.01.01	ISSFY13501!	ISS Systems FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$148,866.08	
IRR Tasks			100%	19	01-Mar-16 A	28-Mar-16 A	03-Oct-16	16-Dec-16	184	$127,408.22	
2-W.08.01.01	ISS4875	ISS - Preparation of Beamline IRR Documentation	100%	17	01-Mar-16 A	24-Mar-16 A	03-Oct-16	11-Nov-16	163	$70,550.85	
2-W.08.01.01	ISS4880	ISS - Beamline IRR	100%	1	24-Mar-16 A	25-Mar-16 A	14-Nov-16	16-Nov-16	165	$11,697.75	
2-W.08.01.01	ISS4885	ISS - Closeout of Beamline Pre-start Items	100%	2	24-Mar-16 A	28-Mar-16 A	21-Nov-16	16-Dec-16	184	$45,159.62	
ISS Beamline Systems			94.18%	1221	19-Dec-11 A	02-Nov-16	19-Dec-11	02-Sep-16	-41	$9,633,998.80	227
Management			100%	268	04-Sep-12 A	30-Sep-13 A	04-Sep-12	30-Sep-13	0	$471,416.25	
2-W.08.02	ISSFY12501!	ISS Systems FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$39,187.67	
2-W.08.02	ISSFY13501!	ISS Systems FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$432,228.58	
Photon Delivery System			100%	1016	03-May-12 A	26-May-16 A	03-May-12	07-Jul-16	28	$4,754,342.57	
Top Level Milestones			0%	99	30-Sep-15 A	26-Feb-16 A	05-Jan-16	07-Jul-16	93	$0.00	
2-W.08.02.01	M2045	Receive 1st Double Crystal X-ray Monochromator	100%	0		30-Sep-15 A		16-Feb-16	92	$0.00	
2-W.08.02.01	M3140	ISS - Testing High Heatload Monochromator complete	100%	0		23-Nov-15 A		05-Jan-16	29	$0.00	
2-W.08.02.01	M3145	ISS - Testing Collimating Mirror complete	100%	0		26-Feb-16 A		07-Jul-16	93	$0.00	
ISS Procurement Work Package			100%	1016	03-May-12 A	26-May-16 A	03-May-12	29-Jun-16	23	$4,754,342.57	
ISS Photon Delivery System			100%	1016	03-May-12 A	26-May-16 A	03-May-12	29-Jun-16	23	$4,754,342.57	
2-W.08.02.01	ISS1440	ISS PDS Ready for Integration	100%	0		30-Mar-16 A		09-Nov-15	-96	$0.00	
Design			100%	367	03-May-12 A	22-Oct-13 A	03-May-12	22-Oct-13	0	$3,111.00	
Preliminary Design			0%	124	03-May-12 A	30-Oct-12 A	03-May-12	30-Oct-12	0	$0.00	
2-W.08.02.01	ISS0020	AVAIL: ISS PD Controls Specification Document	100%	0		03-May-12 A		03-May-12	0	$0.00	
2-W.08.02.01	ISS0050	90% Preliminary Design	100%	44	10-Jul-12 A	10-Sep-12 A	10-Jul-12	10-Sep-12	0	$0.00	



(O) NEXT - Detail Schedule

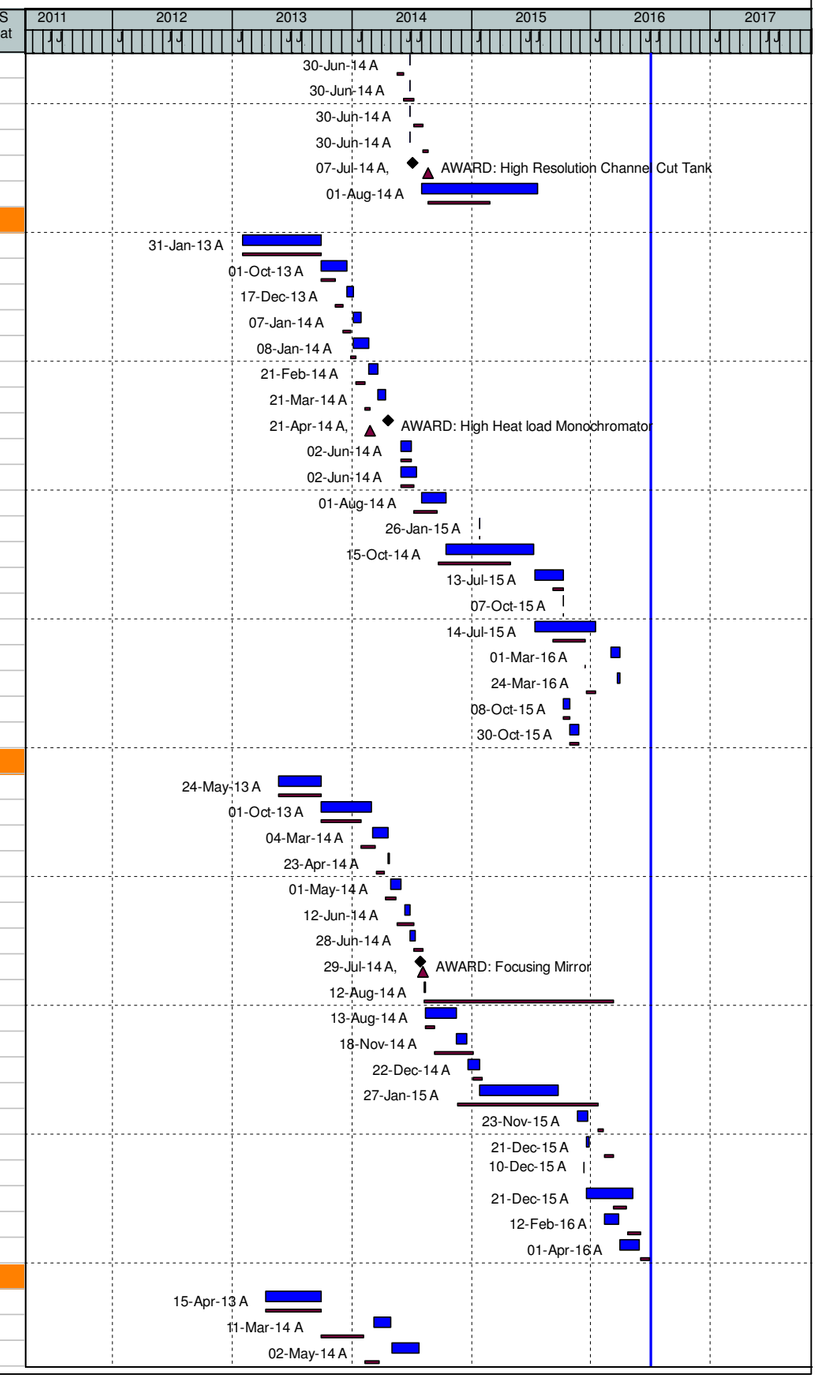
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.08.02.01	ISS0060	Prelim. Design Review	100%	5	11-Sep-12 A	17-Sep-12 A	11-Sep-12	17-Sep-12	0	$0.00	
2-W.08.02.01	ISS0070	Prelim. Design Approval	100%	0		30-Oct-12 A		30-Oct-12	0	$0.00	
Final Design			100%	183	31-Jan-13 A	22-Oct-13 A	31-Jan-13	22-Oct-13	0	$3,111.00	
2-W.08.02.01	ISS0090	30 % Final Design	100%	49	31-Jan-13 A	10-Apr-13 A	31-Jan-13	10-Apr-13	0	$0.00	
2-W.08.02.01	ISS0100	60 % Final Design	100%	49	11-Apr-13 A	19-Jun-13 A	11-Apr-13	19-Jun-13	0	$0.00	
2-W.08.02.01	ISS0110	90% Final Design	100%	69	20-Jun-13 A	30-Sep-13 A	20-Jun-13	30-Sep-13	1	$0.00	
2-W.08.02.01	ISS0110FA	90% Final Design	100%	10	01-Oct-13 A	14-Oct-13 A	01-Oct-13	14-Oct-13	0	$3,111.00	
2-W.08.02.01	ISS0120	Final Design Review	100%	5	16-Oct-13 A	22-Oct-13 A	16-Oct-13	22-Oct-13	0	$0.00	
2-W.08.02.01	ISS0130	Final Design Approval	100%	0		22-Oct-13 A		22-Oct-13	0	$0.00	
Collimating Mirror & Tank			100%	771	01-Mar-13 A	30-Mar-16 A	01-Mar-13	03-May-16	24	$916,760.00	
2-W.08.02.01	ISS0280	Write Specification and SOW: Collimating Mirror & Tank	100%	148	01-Mar-13 A	30-Sep-13 A	01-Mar-13	23-Jul-13	-48	$0.00	
2-W.08.02.01	ISS0290	PPM Accept Requisition	100%	29	02-Jan-14 A	12-Feb-14 A	02-Jan-14	23-Jan-14	-14	$0.00	
2-W.08.02.01	ISS0300	Prepare RFP	100%	1	13-Feb-14 A	13-Feb-14 A	24-Jan-14	13-Feb-14	0	$0.00	
2-W.08.02.01	ISS0310	Call for Bid	100%	20	14-Feb-14 A	14-Mar-14 A	14-Feb-14	14-Feb-14	-19	$0.00	
2-W.08.02.01	ISS0320	Receive and Evaluate Vendor Proposal	100%	30	17-Mar-14 A	25-Apr-14 A	18-Feb-14	17-Mar-14	-29	$0.00	
2-W.08.02.01	ISS0330	Vendor Negotiations	100%	13	28-Apr-14 A	14-May-14 A	18-Mar-14	31-Mar-14	-32	$0.00	
2-W.08.02.01	ISS0340	AWARD: Collimating Mirror & Tank	100%	0		07-Jul-14 A		01-Apr-14	-66	$0.00	
2-W.08.02.01	ISS0360	Collimating Mirror Receipt & Approval of Program Plan	100%	20	22-Jul-14 A	19-Aug-14 A	22-Jul-14	18-Aug-14	0	$93,600.00	
2-W.08.02.01	ISS0370	Collimating Mirror Preliminary Design	100%	23	02-Sep-14 A	03-Oct-14 A	19-Aug-14	03-Oct-14	1	$140,400.00	
2-W.08.02.01	ISS0380	Collimating Mirror Receipt of Final Design Review Minutes	100%	51	06-Oct-14 A	19-Dec-14 A	06-Oct-14	06-Jan-15	10	$112,320.00	
2-W.08.02.01	ISS0380A	Collimating Mirror Approval of Final Design Review Minutes	100%	26	22-Dec-14 A	30-Jan-15 A	07-Jan-15	04-Feb-15	3	$28,080.00	
2-W.08.02.01	ISS0390	Collimating Mirror Factory Acceptance Test Complete	100%	163	30-Jan-15 A	21-Sep-15 A	05-Feb-15	30-Oct-15	28	$112,320.00	
2-W.08.02.01	ISS0390A	Collimating Mirror Factory Acceptance Test Approved	100%	32	22-Sep-15 A	05-Nov-15 A	02-Nov-15	01-Dec-15	16	$28,080.00	
2-W.08.02.01	ISS0400	Vendor Shipment	100%	44	06-Oct-15 A	09-Dec-15 A	02-Dec-15	10-Mar-16	62	$0.00	
2-W.08.02.01	ISS0410	Collimating Mirror Receipt of all Equipment	100%	1	10-Dec-15 A	10-Dec-15 A	11-Mar-16	11-Mar-16	62	$154,180.00	
2-W.08.02.01	ISS0411	Collimating Mirror Approval of all Equipment	100%	39	04-Jan-16 A	29-Feb-16 A	14-Mar-16	25-Mar-16	19	$154,180.00	
2-W.08.02.01	ISS0425	Receipt of Phase 1 Commissioning Report	100%	17	01-Mar-16 A	23-Mar-16 A	28-Mar-16	05-Apr-16	9	$84,240.00	
2-W.08.02.01	ISS0426	Approval of Phase 1 Commissioning Report	100%	5	24-Mar-16 A	30-Mar-16 A	06-Apr-16	03-May-16	24	$9,360.00	
High Heatload Flat Mirror (LONG LEAD PROCUREMENT)			100%	739	26-Mar-13 A	09-Mar-16 A	26-Mar-13	09-Jun-15	-187	$196,462.97	
2-W.08.02.01	ISS0295	Write Specification and SOW: High Heatload Flat Mirror	100%	41	26-Mar-13 A	21-May-13 A	26-Mar-13	15-Apr-13	-26	$0.00	
2-W.08.02.01	ISS0305	PPM Accept Requisition	100%	22	22-May-13 A	21-Jun-13 A	22-May-13	12-Jun-13	-7	$0.00	
2-W.08.02.01	ISS0315	Prepare RFP	100%	15	24-Jun-13 A	16-Jul-13 A	24-Jun-13	16-Jul-13	0	$0.00	
2-W.08.02.01	ISS0325	Call for Bid	100%	52	17-Jul-13 A	30-Sep-13 A	17-Jul-13	30-Sep-13	1	$0.00	
2-W.08.02.01	ISS0335	Receive and Evaluate Vendor Proposal	100%	1	01-Oct-13 A	02-Oct-13 A	01-Oct-13	01-Oct-13	0	$0.00	
2-W.08.02.01	ISS0345	Vendor Negotiations	100%	10	03-Oct-13 A	17-Oct-13 A	02-Oct-13	17-Oct-13	0	$0.00	
2-W.08.02.01	ISS0355	AWARD: High Heatload Flat Mirror ($175K direct)	100%	0		18-Oct-13 A		18-Oct-13	-1	$0.00	
2-W.08.02.01	ISS0365	Prepare Drawings	100%	39	18-Oct-13 A	13-Dec-13 A	18-Oct-13	13-Dec-13	0	$0.00	
2-W.08.02.01	ISS0366	BNL Approval of Drawings	100%	1	20-Dec-13 A	20-Dec-13 A	16-Dec-13	16-Dec-13	-4	$36,400.00	
2-W.08.02.01	ISS0367	Silicon Materials at InSync	100%	50	17-Dec-13 A	28-Feb-14 A	17-Dec-13	14-Mar-14	10	$0.00	
2-W.08.02.01	ISS0368	Detailed Machining of Silicon Materials	100%	98	03-Mar-14 A	21-Jul-14 A	17-Mar-14	02-Sep-14	30	$0.00	
2-W.08.02.01	ISS0369	High Heatload Flat Mirror - Bonding with Integrity Testing	100%	198	01-Oct-14 A	20-Jul-15 A	03-Sep-14	31-Oct-14	-176	$0.00	
2-W.08.02.01	ISS0371	High Heatload Flat Mirror - Polishing with Metrology	100%	42	03-Aug-15 A	30-Sep-15 A	03-Nov-14	01-Dec-14	-209	$0.00	
2-W.08.02.01	ISS0375	High Heatload Flat Mirror - Shipping	100%	6	21-Sep-15 A	28-Sep-15 A	02-Dec-14	12-Dec-14	-198	$0.00	
2-W.08.02.01	ISS0385	RECEIVE: High Heatload Flat Mirror	100%	0	28-Sep-15 A	28-Sep-15 A	15-Dec-14	15-Dec-14	-196	$109,200.00	
2-W.08.02.01	ISS0395	High Heatload Flat Mirror - Acceptance Test	100%	3	24-Nov-15 A	27-Nov-15 A	16-Dec-14	15-Jan-15	-217	$0.00	
2-W.08.02.01	ISS0396	High Heatload Flat Mirror - Accepted at BNL	100%	1	27-Nov-15 A	30-Nov-15 A	16-Jan-15	16-Jan-15	-217	$36,400.00	
2-W.08.02.01	ISS0405	High Heatload Flat Mirror - Assembly	100%	50	28-Dec-15 A	09-Mar-16 A	17-Mar-15	27-Apr-15	-217	$8,227.79	
2-W.08.02.01	ISS0415	High Heatload Flat Mirror - Test	100%	11	10-Dec-15 A	28-Dec-15 A	28-Apr-15	09-Jun-15	-137	$6,235.18	
High Resolution Channel Cut Tank			100%	366	03-Feb-14 A	20-Jul-15 A	02-Jan-14	27-Feb-15	-99	$99,318.82	
2-W.08.02.01	ISS0560	Write Specification and SOW: High Resolution Channel Cut Tank	100%	101	03-Feb-14 A	25-Jun-14 A	02-Jan-14	25-Apr-14	-42	$42,671.69	
2-W.08.02.01	ISS0570	PPM Accept Requisition	100%	3	26-Jun-14 A	30-Jun-14 A	28-Apr-14	16-May-14	-30	$0.00	



(O) NEXT - Detail Schedule

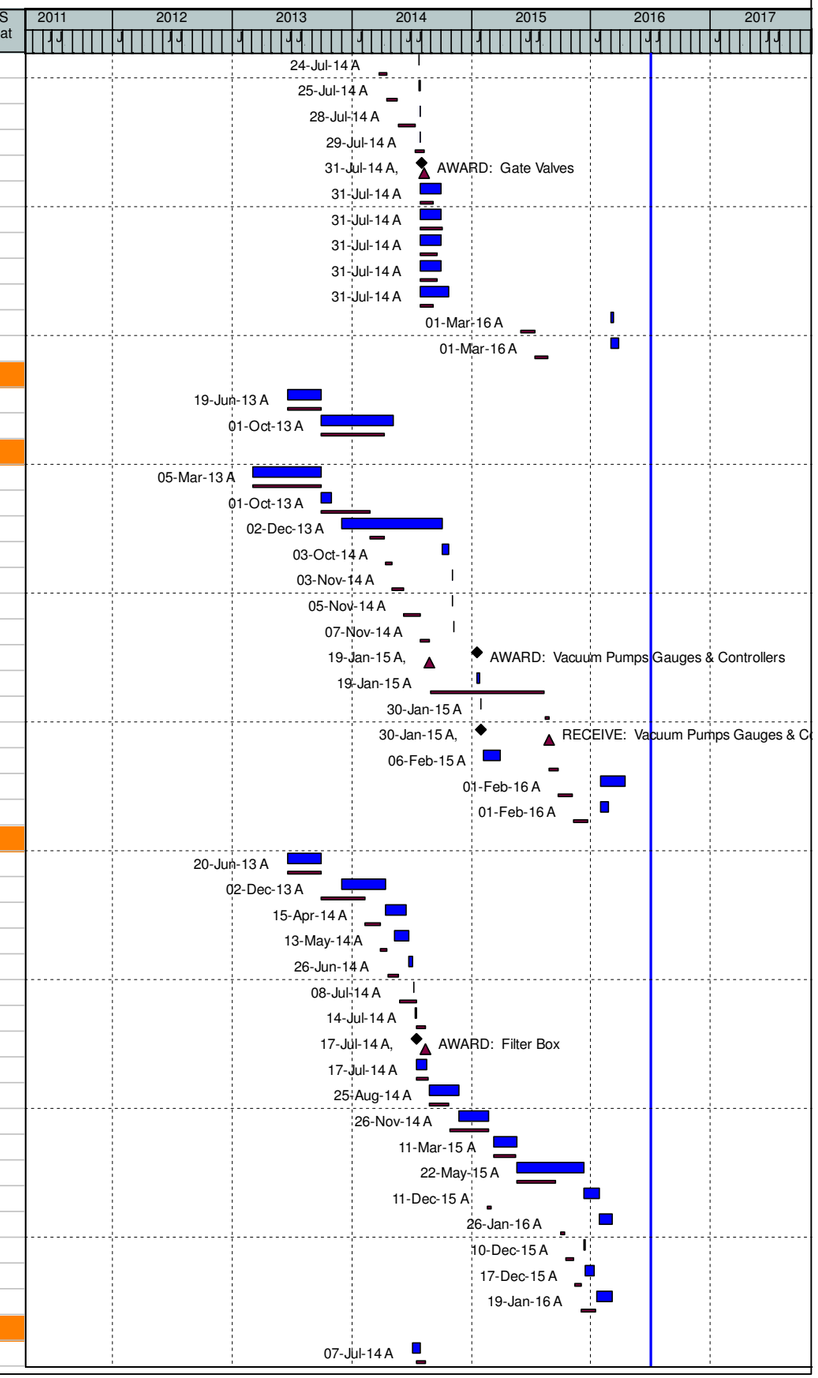
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.08.02.01	ISS0580	Prepare RFP	100%	0	30-Jun-14 A	30-Jun-14 A	19-May-14	09-Jun-14	-14	$0.00	
2-W.08.02.01	ISS0590	Call for Bid	100%	0	30-Jun-14 A	30-Jun-14 A	10-Jun-14	09-Jul-14	6	$0.00	
2-W.08.02.01	ISS0600	Receive and Evaluate Vendor Proposal	100%	0	30-Jun-14 A	30-Jun-14 A	10-Jul-14	06-Aug-14	26	$0.00	
2-W.08.02.01	ISS0610	Vendor Negotiations	100%	0	30-Jun-14 A	30-Jun-14 A	07-Aug-14	20-Aug-14	36	$0.00	
2-W.08.02.01	ISS0620	AWARD: High Resolution Channel Cut Tank	100%	0		07-Jul-14 A		20-Aug-14	33	$0.00	
2-W.08.02.01	ISS0640	High Resolution Channel Cut Tank - Fabrication	100%	241	01-Aug-14 A	20-Jul-15 A	21-Aug-14	27-Feb-15	-99	$56,647.13	
High Heatload Monochromator (LONG LEAD PROCUREMENT)			100%	790	31-Jan-13 A	30-Mar-16 A	31-Jan-13	15-Jan-16	-50	$1,521,156.73	
2-W.08.02.01	ISS0840	Write Specification and SOW: High Heat load Monochromator	100%	167	31-Jan-13 A	30-Sep-13 A	31-Jan-13	30-Sep-13	1	$0.00	
2-W.08.02.01	ISS0840FA	Write Specification and SOW: High Heat load Monochromator	100%	52	01-Oct-13 A	16-Dec-13 A	01-Oct-13	12-Nov-13	-22	$1,863.83	
2-W.08.02.01	ISS0850	PPM Accept Requisition	100%	14	17-Dec-13 A	07-Jan-14 A	13-Nov-13	05-Dec-13	-21	$0.00	
2-W.08.02.01	ISS0860	Prepare RFP	100%	15	07-Jan-14 A	28-Jan-14 A	06-Dec-13	27-Dec-13	-20	$0.00	
2-W.08.02.01	ISS0870	Call for Bid	100%	30	08-Jan-14 A	20-Feb-14 A	30-Dec-13	13-Jan-14	-26	$0.00	
2-W.08.02.01	ISS0880	Receive and Evaluate Vendor Proposal	100%	20	21-Feb-14 A	20-Mar-14 A	14-Jan-14	11-Feb-14	-26	$0.00	
2-W.08.02.01	ISS0890	Vendor Negotiations	100%	17	21-Mar-14 A	14-Apr-14 A	12-Feb-14	26-Feb-14	-33	$0.00	
2-W.08.02.01	ISS0900	AWARD: High Heat load Monochromator	100%	0		21-Apr-14 A		26-Feb-14	-37	$0.00	
2-W.08.02.01	ISS0920100	Receipt and Approval of Program Plan	100%	21	02-Jun-14 A	30-Jun-14 A	02-Jun-14	30-Jun-14	0	$116,569.44	
2-W.08.02.01	ISS0920110	Receipt and Approval of PDR	100%	32	02-Jun-14 A	17-Jul-14 A	02-Jun-14	09-Jul-14	-6	$116,569.44	
2-W.08.02.01	ISS0920120	High Heat load Monochromator - Final Design	100%	51	01-Aug-14 A	14-Oct-14 A	10-Jul-14	19-Sep-14	-16	$267,473.44	
2-W.08.02.01	ISS0920121	High Heat load Monochromator Receipt and Approval of FDR Phase 2	100%	0	26-Jan-15 A	26-Jan-15 A	26-Jan-15	26-Jan-15	1	$104,416.00	
2-W.08.02.01	ISS0920125	High Heat load Monochromator - Fabrication	100%	184	15-Oct-14 A	10-Jul-15 A	22-Sep-14	01-May-15	-48	$356,035.68	
2-W.08.02.01	ISS0920130	Receipt of ISS High Heatload Monochromator	100%	62	13-Jul-15 A	07-Oct-15 A	08-Sep-15	07-Oct-15	0	$178,475.44	
2-W.08.02.01	ISS0920130A	Receipt of ISS High Heatload Monochromator Contract Amendment	100%	1	07-Oct-15 A	08-Oct-15 A	07-Oct-15	07-Oct-15	0	$70,727.28	
2-W.08.02.01	ISS0920131	Acceptance of ISS High Heatload Monochromator	100%	128	14-Jul-15 A	15-Jan-16 A	09-Sep-15	15-Dec-15	-21	$44,619.12	
2-W.08.02.01	ISS0920135	High Heat load Monochromator - Receipt of Commissioning Report Phase I	100%	21	01-Mar-16 A	30-Mar-16 A	16-Dec-15	16-Dec-15	-70	$104,913.12	
2-W.08.02.01	ISS0920136	High Heat load Monochromator - Approval of Commissioning Report Phase I	100%	3	24-Mar-16 A	29-Mar-16 A	17-Dec-15	15-Jan-16	-49	$19,693.44	
2-W.08.02.01	ISS0960	High Heat load Monochromator - Assembly	100%	15	08-Oct-15 A	29-Oct-15 A	08-Oct-15	29-Oct-15	0	$91,613.07	
2-W.08.02.01	ISS0961	High Heat load Monochromator - Test	100%	15	30-Oct-15 A	23-Nov-15 A	30-Oct-15	23-Nov-15	0	$48,187.43	
Focusing Mirror			100%	752	24-May-13 A	26-May-16 A	24-May-13	29-Jun-16	23	$676,056.69	
2-W.08.02.01	ISS0980	Write Specification and SOW: Focusing Mirror	100%	87	24-May-13 A	30-Sep-13 A	24-May-13	30-Sep-13	1	$0.00	
2-W.08.02.01	ISS0980FA	Write Specification and SOW: Focusing Mirror	100%	103	01-Oct-13 A	03-Mar-14 A	01-Oct-13	28-Jan-14	-23	$21,106.29	
2-W.08.02.01	ISS0990	PPM Accept Requisition & Prepare RFP	100%	37	04-Mar-14 A	23-Apr-14 A	29-Jan-14	14-Mar-14	-28	$0.00	
2-W.08.02.01	ISS1000	Prepare RFP	100%	2	23-Apr-14 A	24-Apr-14 A	17-Mar-14	11-Apr-14	-9	$0.00	
2-W.08.02.01	ISS1010	Call for Bid	100%	21	01-May-14 A	02-Jun-14 A	14-Apr-14	16-May-14	-9	$0.00	
2-W.08.02.01	ISS1020	Receive and Evaluate Vendor Proposal	100%	12	12-Jun-14 A	27-Jun-14 A	19-May-14	09-Jul-14	6	$0.00	
2-W.08.02.01	ISS1030	Vendor Negotiations	100%	9	28-Jun-14 A	14-Jul-14 A	10-Jul-14	06-Aug-14	17	$0.00	
2-W.08.02.01	ISS1040	AWARD: Focusing Mirror	100%	0		29-Jul-14 A		06-Aug-14	7	$0.00	
2-W.08.02.01	ISS1060	Focusing Mirror - Receipt and Approval of Program Plan	100%	1	12-Aug-14 A	12-Aug-14 A	12-Aug-14	10-Mar-16	393	$0.00	
2-W.08.02.01	ISS1070	Focusing Mirror - Preliminary Design	100%	67	13-Aug-14 A	17-Nov-14 A	13-Aug-14	09-Sep-14	-48	$133,120.00	
2-W.08.02.01	ISS1080	Focusing Mirror - Receipt of FDR	100%	21	18-Nov-14 A	19-Dec-14 A	10-Sep-14	06-Jan-15	10	$106,496.00	
2-W.08.02.01	ISS1081	Focusing Mirror - Approval of FDR	100%	21	22-Dec-14 A	26-Jan-15 A	07-Jan-15	04-Feb-15	8	$26,624.00	
2-W.08.02.01	ISS1090	Focusing Mirror - Vendor Fab and Factory Acceptance Testing	100%	169	27-Jan-15 A	25-Sep-15 A	19-Nov-14	22-Jan-16	80	$0.00	
2-W.08.02.01	ISS1100	Receipt of Focusing Mirror System	100%	24	23-Nov-15 A	24-Dec-15 A	25-Jan-16	09-Feb-16	30	$239,616.00	
2-W.08.02.01	ISS1101	Acceptance of Focusing Mirror System	100%	4	21-Dec-15 A	28-Dec-15 A	10-Feb-16	09-Mar-16	50	$26,624.00	
2-W.08.02.01	ISS1105	EAC Receipt of Focusing Mirror Mechanics	100%	1	10-Dec-15 A	10-Dec-15 A				$0.00	
2-W.08.02.01	ISS1110	Installation of Focusing Mirror System	100%	97	21-Dec-15 A	09-May-16 A	10-Mar-16	20-Apr-16	-13	$66,560.00	
2-W.08.02.01	ISS1111	Phase 1 Commissioning Complete	100%	29	12-Feb-16 A	24-Mar-16 A	21-Apr-16	01-Jun-16	48	$50,319.36	
2-W.08.02.01	ISS1112	Phase 1 Commissioning Approved	100%	40	01-Apr-16 A	26-May-16 A	02-Jun-16	29-Jun-16	23	$5,591.04	
Gate Valves			100%	737	15-Apr-13 A	25-Mar-16 A	15-Apr-13	24-Aug-15	-146	$285,241.02	
2-W.08.02.01	ISS1120	Write Specification and SOW: Non-Optics Beamline Components	100%	116	15-Apr-13 A	30-Sep-13 A	15-Apr-13	30-Sep-13	1	$0.00	
2-W.08.02.01	ISS1120FA	Write Specification and SOW: Non-Optics Beamline Components	100%	38	11-Mar-14 A	01-May-14 A	01-Oct-13	07-Feb-14	-58	$34,418.20	
2-W.08.02.01	ISS1130	PPM Accept Requisition	100%	57	02-May-14 A	24-Jul-14 A	10-Feb-14	26-Mar-14	-83	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

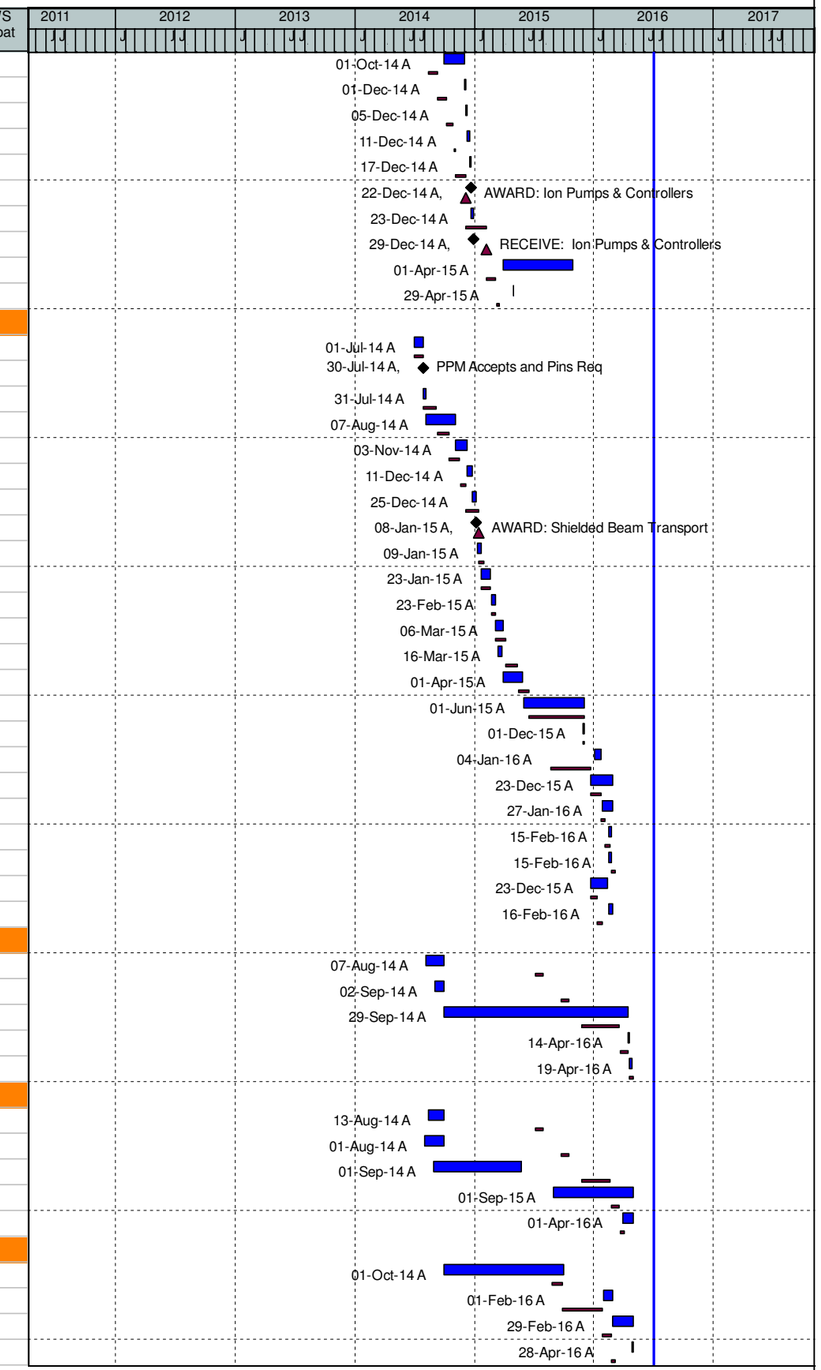
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.08.02.01	ISS1140	Gate Valves - Prepare RFQ	100%	1	24-Jul-14 A	25-Jul-14 A	27-Mar-14	16-Apr-14	-68	$0.00	
2-W.08.02.01	ISS1150	Gate Valves - Call for Bid	100%	1	25-Jul-14 A	28-Jul-14 A	17-Apr-14	21-May-14	-44	$0.00	
2-W.08.02.01	ISS1160	Gate Valves - Receive and Evaluate Proposal	100%	1	28-Jul-14 A	29-Jul-14 A	22-May-14	14-Jul-14	-10	$0.00	
2-W.08.02.01	ISS1170	Gate Valves - Negotiations	100%	2	29-Jul-14 A	31-Jul-14 A	15-Jul-14	11-Aug-14	8	$0.00	
2-W.08.02.01	ISS1180	AWARD: Gate Valves	100%	0		31-Jul-14 A		11-Aug-14	7	$0.00	
2-W.08.02.01	ISS1200	Procure 54132 GE02 Gate Valves (8)	100%	42	31-Jul-14 A	30-Sep-14 A	31-Jul-14	05-Sep-14	-16	$5,511.17	
2-W.08.02.01	ISS1210	Procure 48244 CE74 Gate Valves (7)	100%	42	31-Jul-14 A	30-Sep-14 A	31-Jul-14	03-Oct-14	4	$127,764.00	
2-W.08.02.01	ISS1220	Procure 10844 CE44 Gate Valves (2)	100%	42	31-Jul-14 A	30-Sep-14 A	31-Jul-14	19-Sep-14	-6	$7,338.24	
2-W.08.02.01	ISS1230	Procure 10844 CE01 Gate Valves (3)	100%	42	31-Jul-14 A	30-Sep-14 A	31-Jul-14	19-Sep-14	-6	$9,856.08	
2-W.08.02.01	ISS1235	Procure 54136 GE02 Gate Valves (2)	100%	60	31-Jul-14 A	24-Oct-14 A	31-Jul-14	05-Sep-14	-34	$3,329.66	
2-W.08.02.01	ISS1240	Install Gate Valves	100%	9	01-Mar-16 A	11-Mar-16 A	01-Jun-15	13-Jul-15	-166	$61,320.93	
2-W.08.02.01	ISS1250	Test Gate Valves	100%	19	01-Mar-16 A	25-Mar-16 A	14-Jul-15	24-Aug-15	-146	$35,702.74	
Precision Photon BPMs			100%	223	19-Jun-13 A	09-May-14 A	19-Jun-13	09-Apr-14	-22	$42,691.75	
2-W.08.02.01	ISS0420	Write Specification and SOW: Precision Photon BPMs	100%	70	19-Jun-13 A	30-Sep-13 A	19-Jun-13	30-Sep-13	1	$0.00	
2-W.08.02.01	ISS0420FA	Write Specification and SOW: Precision Photon BPMs	100%	152	01-Oct-13 A	09-May-14 A	01-Oct-13	09-Apr-14	-22	$42,691.75	
Vacuum Pumps Gauges and Controllers			100%	779	05-Mar-13 A	14-Apr-16 A	05-Mar-13	22-Dec-15	-77	$147,993.05	
2-W.08.02.01	ISS0700	Write Specification and SOW: Vacuum Pumps Gauges and Controllers	100%	145	05-Mar-13 A	30-Sep-13 A	05-Mar-13	30-Sep-13	1	$0.00	
2-W.08.02.01	ISS0700FA	Write Specification and SOW: Vacuum Pumps Gauges and Controllers	100%	21	01-Oct-13 A	31-Oct-13 A	01-Oct-13	26-Feb-14	79	$5,703.38	
2-W.08.02.01	ISS0710	Vacuum Pumps Gauges & Controllers - PPM Accept Requisition & Prepare RF	100%	211	02-Dec-13 A	02-Oct-14 A	27-Feb-14	11-Apr-14	-120	$0.00	
2-W.08.02.01	ISS0720	Vacuum Pumps Gauges & Controllers - Prepare RFP	100%	15	03-Oct-14 A	24-Oct-14 A	14-Apr-14	02-May-14	-120	$0.00	
2-W.08.02.01	ISS0730	Vacuum Pumps Gauges & Controllers - Call for Bid	100%	2	03-Nov-14 A	04-Nov-14 A	05-May-14	09-Jun-14	-102	$0.00	
2-W.08.02.01	ISS0740	Vacuum Pumps Gauges & Controllers - Receive and Evaluate Proposal	100%	2	05-Nov-14 A	06-Nov-14 A	10-Jun-14	30-Jul-14	-69	$0.00	
2-W.08.02.01	ISS0750	Vacuum Pumps Gauges & Controllers - Negotiations	100%	1	07-Nov-14 A	07-Nov-14 A	31-Jul-14	27-Aug-14	-50	$0.00	
2-W.08.02.01	ISS0760	AWARD: Vacuum Pumps Gauges & Controllers	100%	0		19-Jan-15 A		27-Aug-14	-95	$0.00	
2-W.08.02.01	ISS0780	Vacuum Pumps Gauges & Controllers - Fabrication	100%	4	19-Jan-15 A	26-Jan-15 A	28-Aug-14	12-Aug-15	140	$74,692.41	
2-W.08.02.01	ISS0790	Vacuum Pumps Gauges & Controllers - Shipping	100%	0	30-Jan-15 A	30-Jan-15 A	13-Aug-15	26-Aug-15	146	$0.00	
2-W.08.02.01	ISS0800	RECEIVE: Vacuum Pumps Gauges & Controllers	100%	0		30-Jan-15 A		26-Aug-15	145	$0.00	
2-W.08.02.01	ISS0810	Vacuum Pumps Gauges & Controllers - Bench Test	100%	35	06-Feb-15 A	30-Mar-15 A	27-Aug-15	24-Sep-15	126	$0.00	
2-W.08.02.01	ISS0820	Vacuum Pumps Gauges & Controllers - Assembly	100%	52	01-Feb-16 A	14-Apr-16 A	25-Sep-15	06-Nov-15	-107	$34,425.31	
2-W.08.02.01	ISS0830	Vacuum Pumps Gauges & Controllers - Test	100%	15	01-Feb-16 A	23-Feb-16 A	09-Nov-15	22-Dec-15	-40	$33,171.94	
Filter Box			100%	677	20-Jun-13 A	08-Mar-16 A	20-Jun-13	14-Jan-16	-36	$245,429.41	
2-W.08.02.01	ISS0140	Write Specification and SOW: Filter Box	100%	69	20-Jun-13 A	30-Sep-13 A	20-Jun-13	30-Sep-13	1	$0.00	
2-W.08.02.01	ISS0140FA	Write Specification and SOW: Filter Box	100%	92	02-Dec-13 A	15-Apr-14 A	01-Oct-13	11-Feb-14	-43	$44,962.73	
2-W.08.02.01	ISS0150	PPM Accept Requisition	100%	43	15-Apr-14 A	16-Jun-14 A	12-Feb-14	28-Mar-14	-54	$0.00	
2-W.08.02.01	ISS0160	Prepare RFQ	100%	30	13-May-14 A	25-Jun-14 A	31-Mar-14	18-Apr-14	-46	$0.00	
2-W.08.02.01	ISS0170	Call for Bid	100%	5	26-Jun-14 A	07-Jul-14 A	21-Apr-14	23-May-14	-27	$0.00	
2-W.08.02.01	ISS0180	Receive and Evaluate Vendor Proposal	100%	4	08-Jul-14 A	11-Jul-14 A	27-May-14	16-Jul-14	3	$0.00	
2-W.08.02.01	ISS0190	Vendor Negotiations	100%	4	14-Jul-14 A	17-Jul-14 A	17-Jul-14	13-Aug-14	19	$0.00	
2-W.08.02.01	ISS0200	AWARD: Filter Box	100%	0		17-Jul-14 A		13-Aug-14	19	$0.00	
2-W.08.02.01	ISS0220	Filter Box - Receipt and Approval of Program Plan	100%	22	17-Jul-14 A	18-Aug-14 A	17-Jul-14	22-Aug-14	5	$19,461.52	
2-W.08.02.01	ISS0230	Filter Box - Receipt and Approval of Design	100%	65	25-Aug-14 A	25-Nov-14 A	25-Aug-14	24-Oct-14	-22	$15,569.22	
2-W.08.02.01	ISS0240	Receipt and Approval of Filter Box	100%	56	26-Nov-14 A	23-Feb-15 A	27-Oct-14	23-Feb-15	1	$23,353.82	
2-W.08.02.01	ISS0241	Filter Box Drawing Review	100%	52	11-Mar-15 A	21-May-15 A	11-Mar-15	18-May-15	-3	$0.00	
2-W.08.02.01	ISS0242	Filter Box Fab & Receipt of Equipment at BNL	100%	139	22-May-15 A	10-Dec-15 A	19-May-15	15-Sep-15	-59	$53,830.40	
2-W.08.02.01	ISS0260	Filter Box - Assembly	100%	29	11-Dec-15 A	25-Jan-16 A	17-Feb-15	02-Mar-15	-226	$35,476.38	
2-W.08.02.01	ISS0270	Filter Box - Test	100%	30	26-Jan-16 A	08-Mar-16 A	30-Sep-15	14-Oct-15	-98	$39,317.74	
2-W.08.02.01	ISS0271	Filter Box Acceptance of Equipment by BNL	100%	4	10-Dec-15 A	16-Dec-15 A	15-Oct-15	11-Nov-15	-22	$13,457.60	
2-W.08.02.01	ISS0272	Filter Box Installation of Equipment Completed	100%	16	17-Dec-15 A	12-Jan-16 A	12-Nov-15	03-Dec-15	-25	$0.00	
2-W.08.02.01	ISS0275	Filter Box - Commissioning and Final Acceptance	100%	35	19-Jan-16 A	08-Mar-16 A	04-Dec-15	14-Jan-16	-36	$0.00	
Ion Pumps & Controllers			100%	328	07-Jul-14 A	27-Oct-15 A	18-Jul-14	20-Mar-15	-152	$49,136.96	
2-W.08.02.01	ISS0635	Write Specification: Ion Pumps & Controllers	100%	18	07-Jul-14 A	31-Jul-14 A	18-Jul-14	14-Aug-14	11	$3,831.26	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

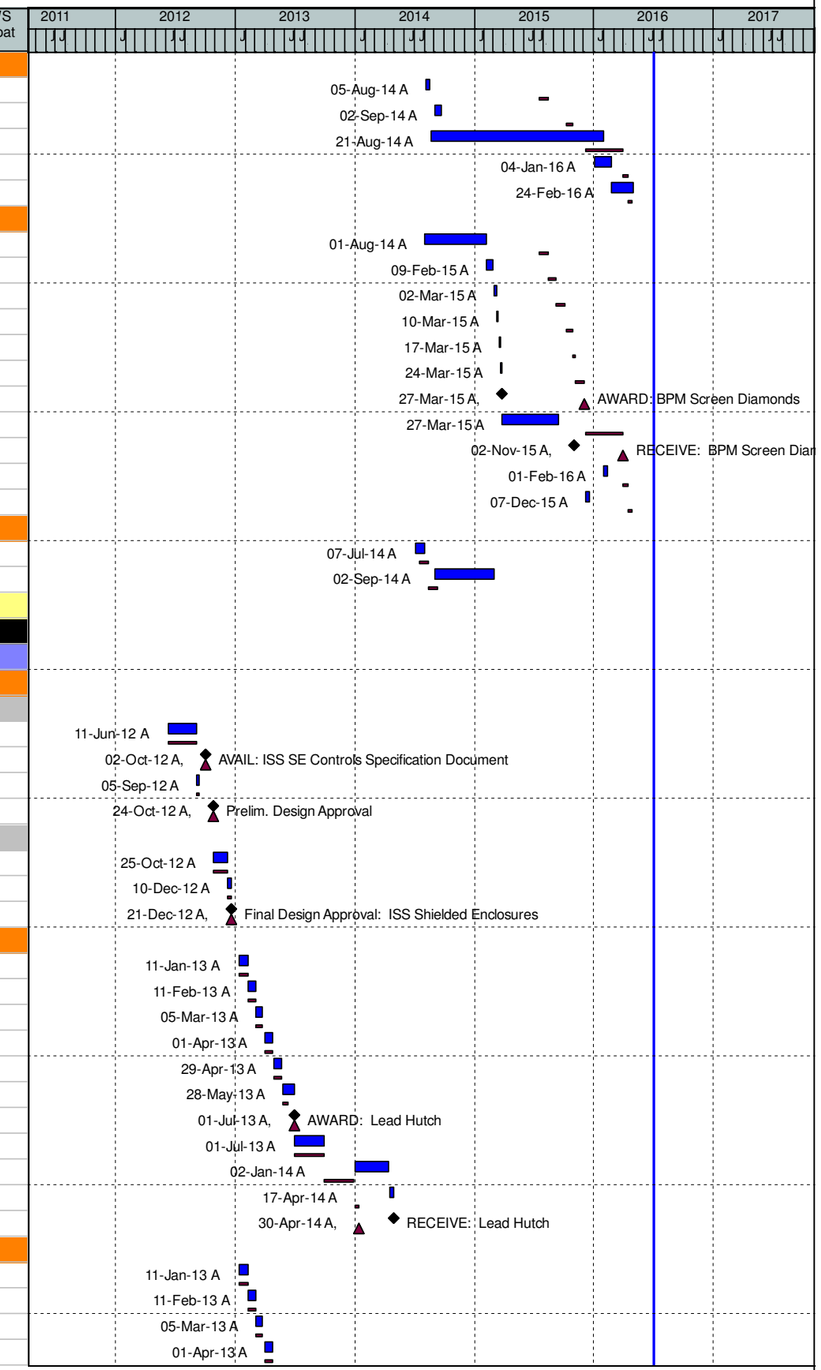
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.08.02.01	ISS0705	Ion Pumps & Controllers - Prepare & Submit RFQ	100%	43	01-Oct-14 A	04-Dec-14 A	15-Aug-14	09-Sep-14	-58	$0.00	
2-W.08.02.01	ISS0715	Ion Pumps & Controllers - Offerors Prepare & Submit Proposals	100%	4	01-Dec-14 A	04-Dec-14 A	10-Sep-14	07-Oct-14	-39	$1,583.52	
2-W.08.02.01	ISS0725	Ion Pumps & Controllers - Evaluate Proposals	100%	4	05-Dec-14 A	10-Dec-14 A	08-Oct-14	29-Oct-14	-28	$0.00	
2-W.08.02.01	ISS0735	Ion Pumps & Controllers - Negotiate with Offerors	100%	4	11-Dec-14 A	16-Dec-14 A	30-Oct-14	05-Nov-14	-27	$0.00	
2-W.08.02.01	ISS0745	Ion Pumps & Controllers - Prepare & Approve Contract Package	100%	4	17-Dec-14 A	22-Dec-14 A	06-Nov-14	05-Dec-14	-11	$0.00	
2-W.08.02.01	ISS0755	AWARD: Ion Pumps & Controllers	100%	0		22-Dec-14 A		05-Dec-14	-11	$0.00	
2-W.08.02.01	ISS0765	Ion Pumps & Controllers - Fabrication	100%	4	23-Dec-14 A	29-Dec-14 A	08-Dec-14	05-Feb-15	25	$35,097.93	
2-W.08.02.01	ISS0785	RECEIVE: Ion Pumps & Controllers	100%	0		29-Dec-14 A		05-Feb-15	25	$0.00	
2-W.08.02.01	ISS0805	Ion Pumps Controllers - Install	100%	145	01-Apr-15 A	27-Oct-15 A	06-Feb-15	06-Mar-15	-162	$5,613.86	
2-W.08.02.01	ISS0815	Ion Pumps Controllers - Test	100%	1	29-Apr-15 A	30-Apr-15 A	09-Mar-15	20-Mar-15	-28	$3,010.38	
Shielded Beam Transport			100%	414	01-Jul-14 A	29-Feb-16 A	01-Jul-14	08-Mar-16	6	$218,517.46	
2-W.08.02.01	ISS0825	Write Specification and SOW: Shielded Beam Transport	100%	20	01-Jul-14 A	30-Jul-14 A	01-Jul-14	30-Jul-14	0	$11,757.69	
2-W.08.02.01	ISS0826	PPM Accepts and Pins Req	100%	0		30-Jul-14 A				$0.00	
2-W.08.02.01	ISS0835	Shielded Beam Transport - Prepare & Submit RFP	100%	5	31-Jul-14 A	06-Aug-14 A	31-Jul-14	08-Sep-14	22	$0.00	
2-W.08.02.01	ISS0845	Shielded Beam Transport - Offerors Prepare & Submit Proposals	100%	60	07-Aug-14 A	03-Nov-14 A	09-Sep-14	14-Oct-14	-13	$0.00	
2-W.08.02.01	ISS0855	Shielded Beam Transport - Evaluate Proposals	100%	26	03-Nov-14 A	10-Dec-14 A	15-Oct-14	18-Nov-14	-14	$2,531.04	
2-W.08.02.01	ISS0865	Shielded Beam Transport - Negotiate with Offerors	100%	10	11-Dec-14 A	24-Dec-14 A	19-Nov-14	04-Dec-14	-14	$0.00	
2-W.08.02.01	ISS0875	Shielded Beam Transport - Prepare & Approve Contract Package	100%	7	25-Dec-14 A	08-Jan-15 A	05-Dec-14	13-Jan-15	4	$0.00	
2-W.08.02.01	ISS0885	AWARD: Shielded Beam Transport	100%	0		08-Jan-15 A		13-Jan-15	3	$0.00	
2-W.08.02.01	ISS0895	Shielded Beam Transport - Receipt of Program Plan	100%	9	09-Jan-15 A	22-Jan-15 A	14-Jan-15	30-Jan-15	6	$9,884.16	
2-W.08.02.01	ISS0895010	Shielded Beam Transport Approval of Program Plan	100%	20	23-Jan-15 A	20-Feb-15 A	23-Jan-15	20-Feb-15	0	$2,471.04	
2-W.08.02.01	ISS0895015	Shielded Beam Transport Receipt of PDR Report and Minutes	100%	9	23-Feb-15 A	05-Mar-15 A	23-Feb-15	05-Mar-15	0	$9,884.16	
2-W.08.02.01	ISS0895020	Shielded Beam Transport Approval of PDR Report and Minutes	100%	18	06-Mar-15 A	01-Apr-15 A	06-Mar-15	06-Apr-15	4	$2,471.04	
2-W.08.02.01	ISS0895025	Shielded Beam Transport Receipt of FDR Report and Minutes	100%	8	16-Mar-15 A	26-Mar-15 A	07-Apr-15	14-May-15	36	$19,768.32	
2-W.08.02.01	ISS0895030	Shielded Beam Transport Approval of FDR Report and Minutes	100%	42	01-Apr-15 A	29-May-15 A	15-May-15	15-Jun-15	11	$4,942.08	
2-W.08.02.01	ISS0895035	Shielded Beam Transport Receipt of System	100%	127	01-Jun-15 A	01-Dec-15 A	16-Jun-15	01-Dec-15	0	$33,359.04	
2-W.08.02.01	ISS0895035A	Shielded Beam Transport Receipt of System Contract Amendment	100%	2	01-Dec-15 A	02-Dec-15 A	01-Dec-15	01-Dec-15	-1	$55,744.00	
2-W.08.02.01	ISS0895040	Shielded Beam Transport Acceptance of System	100%	14	04-Jan-16 A	22-Jan-16 A	21-Aug-15	21-Dec-15	-21	$3,706.56	
2-W.08.02.01	ISS0895045	Shielded Beam Transport Installation of System	100%	44	23-Dec-15 A	26-Feb-16 A	21-Dec-15	22-Jan-16	-24	$30,917.12	
2-W.08.02.01	ISS0895050	Shielded Beam Transport Acceptance of Installation	100%	22	27-Jan-16 A	26-Feb-16 A	25-Jan-16	04-Feb-16	-15	$7,729.28	
2-W.08.02.01	ISS0895055	Shielded Beam Transport Commissioning	100%	7	15-Feb-16 A	25-Feb-16 A	05-Feb-16	19-Feb-16	-3	$5,559.84	
2-W.08.02.01	ISS0895060	Shielded Beam Transport Acceptance of Commissioning	100%	7	15-Feb-16 A	25-Feb-16 A	22-Feb-16	08-Mar-16	9	$617.76	
2-W.08.02.01	ISS0920	Shielded Beam Transport - Installation	100%	35	23-Dec-15 A	12-Feb-16 A	22-Dec-15	12-Jan-16	-22	$13,139.77	
2-W.08.02.01	ISS0930	Shielded Beam Transport - Test	100%	10	16-Feb-16 A	29-Feb-16 A	12-Jan-16	26-Jan-16	-23	$4,034.56	
Small Vacuum Parts			100%	430	07-Aug-14 A	27-Apr-16 A	06-Jul-15	29-Apr-16	3	$75,125.29	
2-W.08.02.01	ISS0935	Small Vacuum Parts - Write Specification	100%	36	07-Aug-14 A	29-Sep-14 A	06-Jul-15	31-Jul-15	210	$9,958.50	
2-W.08.02.01	ISS0965	Small Vacuum Parts - Evaluate Proposals	100%	20	02-Sep-14 A	30-Sep-14 A	24-Sep-15	15-Oct-15	261	$2,221.74	
2-W.08.02.01	ISS0995	Small Vacuum Parts - Fabrication	100%	385	29-Sep-14 A	14-Apr-16 A	24-Nov-15	18-Mar-16	-18	$57,210.60	
2-W.08.02.01	ISS1035	Small Vacuum Parts - Install	100%	2	14-Apr-16 A	18-Apr-16 A	21-Mar-16	15-Apr-16	0	$2,867.22	
2-W.08.02.01	ISS1045	Small Vacuum Parts - Test	100%	6	19-Apr-16 A	27-Apr-16 A	18-Apr-16	29-Apr-16	3	$2,867.22	
Pumps & Gauges			100%	437	01-Aug-14 A	29-Apr-16 A	06-Jul-15	01-Apr-16	-20	$84,086.25	
2-W.08.02.01	ISS1055	Pumps & Gauges - Write Specification	100%	33	13-Aug-14 A	30-Sep-14 A	06-Jul-15	31-Jul-15	209	$9,015.95	
2-W.08.02.01	ISS1085	Pumps & Gauges - Evaluate Proposals	100%	41	01-Aug-14 A	30-Sep-14 A	24-Sep-15	15-Oct-15	261	$4,443.48	
2-W.08.02.01	ISS1125	Pumps & Gauges - Fabrication	100%	181	01-Sep-14 A	25-May-15 A	24-Nov-15	19-Feb-16	185	$57,210.60	
2-W.08.02.01	ISS1165	Pumps & Gauges - Install	100%	166	01-Sep-15 A	29-Apr-16 A	22-Feb-16	18-Mar-16	-30	$8,304.16	
2-W.08.02.01	ISS1175	Pumps & Gauges - Test	100%	21	01-Apr-16 A	29-Apr-16 A	21-Mar-16	01-Apr-16	-20	$5,112.06	
BPM Monochromatic Fabrication			100%	394	01-Oct-14 A	29-Apr-16 A	28-Aug-15	08-Mar-16	-37	$50,198.69	
2-W.08.02.01	ISS1185	BPM Endstation - Vendor Design	100%	250	01-Oct-14 A	30-Sep-15 A	28-Aug-15	25-Sep-15	-3	$8,933.75	
2-W.08.02.01	ISS1255	BPM Endstation - Fabrication	100%	19	01-Feb-16 A	26-Feb-16 A	28-Sep-15	25-Jan-16	-23	$29,455.75	
2-W.08.02.01	ISS1295	BPM Endstation - Install	100%	44	29-Feb-16 A	29-Apr-16 A	26-Jan-16	23-Feb-16	-47	$6,136.37	
2-W.08.02.01	ISS1305	BPM Endstation - Test	100%	1	28-Apr-16 A	29-Apr-16 A	24-Feb-16	08-Mar-16	-37	$5,672.82	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

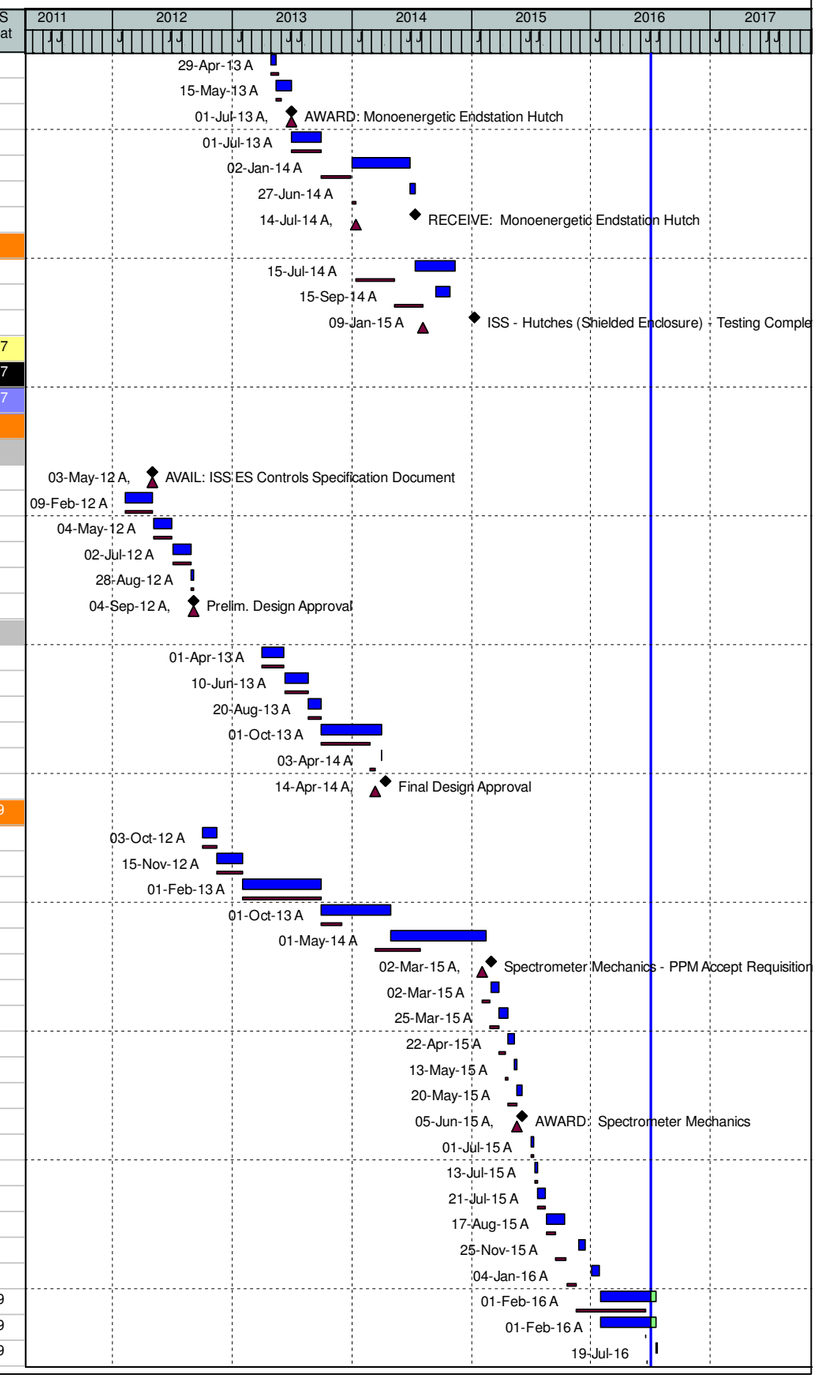
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
BPM Screen			100%	435	05-Aug-14 A	29-Apr-16 A	17-Jul-15	28-Apr-16	-1	$72,411.78	
2-W.08.02.01	ISS1315	BPM Screen Mechanics - Write Specification	100%	11	05-Aug-14 A	20-Aug-14 A	17-Jul-15	13-Aug-15	246	$6,327.60	
2-W.08.02.01	ISS1345	BPM Screen Mechanics - Evaluate Proposals	100%	15	02-Sep-14 A	22-Sep-14 A	07-Oct-15	28-Oct-15	275	$2,612.03	
2-W.08.02.01	ISS1385	BPM Screen Mechanics - Fabrication	100%	359	21-Aug-14 A	29-Jan-16 A	07-Dec-15	31-Mar-16	43	$58,980.00	
2-W.08.02.01	ISS1425	BPM Screen Mechanics - Install	100%	34	04-Jan-16 A	23-Feb-16 A	01-Apr-16	14-Apr-16	38	$2,351.38	
2-W.08.02.01	ISS1435	BPM Screen Mechanics - Test	100%	48	24-Feb-16 A	29-Apr-16 A	15-Apr-16	28-Apr-16	-1	$2,140.76	
BPM Screen Diamonds			100%	383	01-Aug-14 A	12-Feb-16 A	17-Jul-15	28-Apr-16	53	$57,163.64	
2-W.08.02.01	ISS1445	BPM Screen Diamonds - Write Specification	100%	128	01-Aug-14 A	06-Feb-15 A	17-Jul-15	13-Aug-15	131	$13,556.76	
2-W.08.02.01	ISS1455	BPM Screen Diamonds - Prepare & Submit RFQ	100%	13	09-Feb-15 A	27-Feb-15 A	14-Aug-15	08-Sep-15	135	$0.00	
2-W.08.02.01	ISS1465	BPM Screen Diamonds - Offerors Prepare & Submit Proposals	100%	5	02-Mar-15 A	09-Mar-15 A	09-Sep-15	06-Oct-15	149	$0.00	
2-W.08.02.01	ISS1475	BPM Screen Diamonds - Evaluate Proposals	100%	4	10-Mar-15 A	16-Mar-15 A	07-Oct-15	28-Oct-15	159	$1,306.02	
2-W.08.02.01	ISS1485	BPM Screen Diamonds - Negotiate with Offerors	100%	5	17-Mar-15 A	23-Mar-15 A	29-Oct-15	04-Nov-15	158	$0.00	
2-W.08.02.01	ISS1495	BPM Screen Diamonds - Prepare & Approve Contract Package	100%	3	24-Mar-15 A	27-Mar-15 A	05-Nov-15	04-Dec-15	175	$0.00	
2-W.08.02.01	ISS1505	AWARD: BPM Screen Diamonds	100%	0		27-Mar-15 A		04-Dec-15	175	$0.00	
2-W.08.02.01	ISS1515	BPM Screen Diamonds - Fabrication	100%	121	27-Mar-15 A	16-Sep-15 A	07-Dec-15	31-Mar-16	134	$35,388.00	
2-W.08.02.01	ISS1535	RECEIVE: BPM Screen Diamonds	100%	0		02-Nov-15 A		31-Mar-16	103	$0.00	
2-W.08.02.01	ISS1555	BPM Screen Diamonds - Install	100%	10	01-Feb-16 A	12-Feb-16 A	01-Apr-16	14-Apr-16	43	$3,601.40	
2-W.08.02.01	ISS1560	BPM Screen Diamonds - Test	100%	10	07-Dec-15 A	21-Dec-15 A	15-Apr-16	28-Apr-16	90	$3,311.47	
BPM White Beam			100%	161	07-Jul-14 A	02-Mar-15 A	18-Jul-14	09-Sep-14	-115	$13,481.07	
2-W.08.02.01	ISS1565	BPM White Beam - Write Specification	100%	20	07-Jul-14 A	01-Aug-14 A	18-Jul-14	14-Aug-14	9	$13,481.07	
2-W.08.02.01	ISS1575	BPM White Beam - Prepare & Submit RFQ	100%	121	02-Sep-14 A	02-Mar-15 A	15-Aug-14	09-Sep-14	-115	$0.00	
Shielded Enclosures			100%	643	11-Jun-12 A	09-Jan-15 A	11-Jun-12	07-Aug-14	-103	$51,759.93	
ISS Procurement Work Package			100%	643	11-Jun-12 A	09-Jan-15 A	11-Jun-12	07-Aug-14	-103	$51,759.93	
ISS Shielded Enclosures			100%	643	11-Jun-12 A	09-Jan-15 A	11-Jun-12	07-Aug-14	-103	$51,759.93	
Design			0%	135	11-Jun-12 A	21-Dec-12 A	11-Jun-12	21-Dec-12	0	$0.00	
Preliminary Design			0%	95	11-Jun-12 A	24-Oct-12 A	11-Jun-12	24-Oct-12	0	$0.00	
2-W.08.02.02	ISS1260	Preliminary Design	100%	60	11-Jun-12 A	04-Sep-12 A	11-Jun-12	04-Sep-12	0	$0.00	
2-W.08.02.02	ISS1270	AVAIL: ISS SE Controls Specification Document	100%	0		02-Oct-12 A		02-Oct-12	0	$0.00	
2-W.08.02.02	ISS1280	Prelim. Design Review	100%	5	05-Sep-12 A	11-Sep-12 A	05-Sep-12	11-Sep-12	0	$0.00	
2-W.08.02.02	ISS1290	Prelim. Design Approval	100%	0		24-Oct-12 A		24-Oct-12	0	$0.00	
Final Design			0%	40	25-Oct-12 A	21-Dec-12 A	25-Oct-12	21-Dec-12	0	$0.00	
2-W.08.02.02	ISS1300	Final Design	100%	30	25-Oct-12 A	07-Dec-12 A	25-Oct-12	07-Dec-12	0	$0.00	
2-W.08.02.02	ISS1310	Final Design Review	100%	10	10-Dec-12 A	21-Dec-12 A	10-Dec-12	21-Dec-12	0	$0.00	
2-W.08.02.02	ISS1320	Final Design Approval: ISS Shielded Enclosures	100%	0		21-Dec-12 A		21-Dec-12	0	$0.00	
Lead Hutch			0%	326	11-Jan-13 A	30-Apr-14 A	11-Jan-13	14-Jan-14	-74	$0.00	
2-W.08.02.02	ISS1330	Write Specification and SOW: Lead Hutch	100%	20	11-Jan-13 A	08-Feb-13 A	11-Jan-13	08-Feb-13	0	$0.00	
2-W.08.02.02	ISS1340	PPM Accept Requisition	100%	15	11-Feb-13 A	04-Mar-13 A	11-Feb-13	04-Mar-13	0	$0.00	
2-W.08.02.02	ISS1350	Prepare RFP	100%	15	05-Mar-13 A	25-Mar-13 A	05-Mar-13	25-Mar-13	0	$0.00	
2-W.08.02.02	ISS1360	Call for Bid	100%	20	01-Apr-13 A	26-Apr-13 A	01-Apr-13	26-Apr-13	0	$0.00	
2-W.08.02.02	ISS1370	Receive and Evaluate Vendor Proposal	100%	20	29-Apr-13 A	24-May-13 A	29-Apr-13	24-May-13	0	$0.00	
2-W.08.02.02	ISS1380	Vendor Negotiations	100%	24	28-May-13 A	01-Jul-13 A	28-May-13	10-Jun-13	-14	$0.00	
2-W.08.02.02	ISS1390	AWARD: Lead Hutch	100%	0		01-Jul-13 A		01-Jul-13	0	$0.00	
2-W.08.02.02	ISS1410	Procure/Fab - Lead Hutch	100%	62	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	1	$0.00	
2-W.08.02.02	ISS1410FA	Procure/Fab - Lead Hutch	100%	72	02-Jan-14 A	16-Apr-14 A	01-Oct-13	30-Dec-13	-73	$0.00	
2-W.08.02.02	ISS1420	Vendor Shipping	100%	9	17-Apr-14 A	30-Apr-14 A	31-Dec-13	14-Jan-14	-73	$0.00	
2-W.08.02.02	ISS1430	RECEIVE: Lead Hutch	100%	0		30-Apr-14 A		14-Jan-14	-74	$0.00	
Monoenergetic Endstation Hutch			0%	376	11-Jan-13 A	14-Jul-14 A	11-Jan-13	14-Jan-14	-124	$0.00	
2-W.08.02.02	ISS1450	Write Specification and SOW: Monoenergetic Endstation Hutch	100%	20	11-Jan-13 A	08-Feb-13 A	11-Jan-13	08-Feb-13	0	$0.00	
2-W.08.02.02	ISS1460	PPM Accept Requisition	100%	15	11-Feb-13 A	04-Mar-13 A	11-Feb-13	04-Mar-13	0	$0.00	
2-W.08.02.02	ISS1470	Prepare RFP	100%	15	05-Mar-13 A	25-Mar-13 A	05-Mar-13	25-Mar-13	0	$0.00	
2-W.08.02.02	ISS1480	Call for Bid	100%	20	01-Apr-13 A	26-Apr-13 A	01-Apr-13	26-Apr-13	0	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.08.02.02	ISS1490	Receive and Evaluate Vendor Proposal	100%	12	29-Apr-13 A	14-May-13 A	29-Apr-13	24-May-13	8	$0.00	
2-W.08.02.02	ISS1500	Vendor Negotiations	100%	32	15-May-13 A	01-Jul-13 A	15-May-13	29-May-13	-22	$0.00	
2-W.08.02.02	ISS1510	AWARD: Monoenergetic Endstation Hutch	100%	0		01-Jul-13 A		01-Jul-13	0	$0.00	
2-W.08.02.02	ISS1530	Procure/Fab - Monoenergetic Endstation Hutch	100%	62	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	1	$0.00	
2-W.08.02.02	ISS1530FA	Procure/Fab - Monoenergetic Endstation Hutch	100%	123	02-Jan-14 A	26-Jun-14 A	01-Oct-13	30-Dec-13	-124	$0.00	
2-W.08.02.02	ISS1540	Vendor Shipping	100%	10	27-Jun-14 A	14-Jul-14 A	31-Dec-13	14-Jan-14	-124	$0.00	
2-W.08.02.02	ISS1550	RECEIVE: Monoenergetic Endstation Hutch	100%	0		14-Jul-14 A		14-Jan-14	-124	$0.00	
Install & Test			100%	121	15-Jul-14 A	09-Jan-15 A	15-Jan-14	07-Aug-14	-103	$51,759.93	
2-W.08.02.02	ISS1570	Hutches - Assembly and Installation	100%	87	15-Jul-14 A	14-Nov-14 A	15-Jan-14	12-May-14	-129	$34,097.74	
2-W.08.02.02	ISS1580	Hutches - Test	100%	32	15-Sep-14 A	30-Oct-14 A	13-May-14	07-Aug-14	-57	$17,662.19	
2-W.08.02.02	ISS1590	ISS - Hutches (Shielded Enclosure) - Testing Complete - INTER-PROJECT LI	100%	0	09-Jan-15 A		07-Aug-14		-103	$0.00	
Endstation Equipment			86.2%	1186	09-Feb-12 A	02-Nov-16	09-Feb-12	02-Sep-16	-41	$4,062,282.32	227
ISS Procurement Work Package			86.2%	1186	09-Feb-12 A	02-Nov-16	09-Feb-12	02-Sep-16	-41	$4,062,282.32	227
ISS Endstation			86.2%	1186	09-Feb-12 A	02-Nov-16	09-Feb-12	02-Sep-16	-41	$4,062,282.32	227
Design			100%	545	09-Feb-12 A	14-Apr-14 A	09-Feb-12	12-Mar-14	-23	$17,041.66	
Preliminary Design			0%	145	09-Feb-12 A	04-Sep-12 A	09-Feb-12	04-Sep-12	0	$0.00	
2-W.08.02.03	ISS1610	AVAIL: ISS ES Controls Specification Document	100%	0		03-May-12 A		03-May-12	0	$0.00	
2-W.08.02.03	ISS1620	30% Preliminary Design	100%	60	09-Feb-12 A	03-May-12 A	09-Feb-12	03-May-12	0	$0.00	
2-W.08.02.03	ISS1630	60 % Preliminary Design	100%	40	04-May-12 A	29-Jun-12 A	04-May-12	29-Jun-12	0	$0.00	
2-W.08.02.03	ISS1640	90% Preliminary Design	100%	40	02-Jul-12 A	27-Aug-12 A	02-Jul-12	27-Aug-12	0	$0.00	
2-W.08.02.03	ISS1650	Prelim. Design Review	100%	5	28-Aug-12 A	04-Sep-12 A	28-Aug-12	04-Sep-12	0	$0.00	
2-W.08.02.03	ISS1660	Prelim. Design Approval	100%	0		04-Sep-12 A		04-Sep-12	0	$0.00	
Final Design			100%	260	01-Apr-13 A	14-Apr-14 A	01-Apr-13	12-Mar-14	-23	$17,041.66	
2-W.08.02.03	ISS1680	30 % Final Design	100%	49	01-Apr-13 A	07-Jun-13 A	01-Apr-13	07-Jun-13	0	$0.00	
2-W.08.02.03	ISS1690	60 % Final Design	100%	49	10-Jun-13 A	19-Aug-13 A	10-Jun-13	19-Aug-13	0	$0.00	
2-W.08.02.03	ISS1700	90 % Final Design	100%	28	20-Aug-13 A	30-Sep-13 A	20-Aug-13	30-Sep-13	1	$0.00	
2-W.08.02.03	ISS1700FA	90 % Final Design	100%	123	01-Oct-13 A	31-Mar-14 A	01-Oct-13	26-Feb-14	-23	$17,041.66	
2-W.08.02.03	ISS1710	Final Design Review	100%	1	03-Apr-14 A	04-Apr-14 A	27-Feb-14	12-Mar-14	-16	$0.00	
2-W.08.02.03	ISS1720	Final Design Approval	100%	0		14-Apr-14 A		12-Mar-14	-23	$0.00	
Spectrometer Mechanics			76%	1000	03-Oct-12 A	03-Oct-16	03-Oct-12	02-Sep-16	-20	$556,274.22	69
2-W.08.02.03	ISS1727	30% Prototyping and testing of Spectrometer Mechanics	100%	30	03-Oct-12 A	14-Nov-12 A	03-Oct-12	14-Nov-12	0	$0.00	
2-W.08.02.03	ISS1728	60% Prototyping and testing of Spectrometer Mechanics	100%	50	15-Nov-12 A	31-Jan-13 A	15-Nov-12	31-Jan-13	0	$0.00	
2-W.08.02.03	ISS1729	90% Prototyping and testing of Spectrometer Mechanics	100%	166	01-Feb-13 A	30-Sep-13 A	01-Feb-13	30-Sep-13	1	$0.00	
2-W.08.02.03	ISS1729FA	90% Prototyping and testing of Spectrometer Mechanics	100%	145	01-Oct-13 A	30-Apr-14 A	01-Oct-13	29-Nov-13	-104	$2,515.34	
2-W.08.02.03	ISS1730	Spectrometer Mechanics - Write Specification and SOW	100%	195	01-May-14 A	13-Feb-15 A	13-Mar-14	30-Jul-14	-133	$76,975.05	
2-W.08.02.03	ISS1740	Spectrometer Mechanics - PPM Accept Requisition	100%	0		02-Mar-15 A		02-Feb-15	-18	$0.00	
2-W.08.02.03	ISS1750	Spectrometer Mechanics - Prepare & Submit RFQ	100%	17	02-Mar-15 A	24-Mar-15 A	02-Feb-15	25-Feb-15	-19	$0.00	
2-W.08.02.03	ISS1760	Spectrometer Mechanics - Offerors Prepare & Submit Proposals	100%	20	25-Mar-15 A	21-Apr-15 A	26-Feb-15	25-Mar-15	-19	$0.00	
2-W.08.02.03	ISS1770	Spectrometer Mechanics - Evaluate Offeror Proposals	100%	15	22-Apr-15 A	12-May-15 A	26-Mar-15	15-Apr-15	-19	$0.00	
2-W.08.02.03	ISS1780	Spectrometer Mechanics - Negotiate with Offerors	100%	5	13-May-15 A	19-May-15 A	16-Apr-15	22-Apr-15	-19	$0.00	
2-W.08.02.03	ISS1785	Spectrometer Mechanics - Prepare & Approve Package	100%	11	20-May-15 A	05-Jun-15 A	23-Apr-15	20-May-15	-10	$0.00	
2-W.08.02.03	ISS1790	AWARD: Spectrometer Mechanics	100%	0		05-Jun-15 A		20-May-15	-10	$0.00	
2-W.08.02.03	ISS1810	Spectrometer Mechanics - Receipt of Program Plan	100%	7	01-Jul-15 A	10-Jul-15 A	01-Jul-15	10-Jul-15	0	$76,285.04	
2-W.08.02.03	ISS1830	Spectrometer Mechanics - Approval of Program Plan	100%	6	13-Jul-15 A	20-Jul-15 A	13-Jul-15	20-Jul-15	0	$19,071.52	
2-W.08.02.03	ISS1840	Spectrometer Mechanics - Receipt of PDR Report	100%	19	21-Jul-15 A	14-Aug-15 A	21-Jul-15	14-Aug-15	0	$76,285.04	
2-W.08.02.03	ISS1890	Spectrometer Mechanics - Approval of PDR Report	100%	41	17-Aug-15 A	14-Oct-15 A	17-Aug-15	14-Sep-15	-21	$19,071.52	
2-W.08.02.03	ISS1920	Spectrometer Mechanics - Receipt of FDR Report	100%	13	25-Nov-15 A	14-Dec-15 A	15-Sep-15	16-Oct-15	-38	$76,285.04	
2-W.08.02.03	ISS2145	Spectrometer Mechanics - Approval of FDR Report	100%	17	04-Jan-16 A	28-Jan-16 A	19-Oct-15	16-Nov-15	-47	$19,071.52	
2-W.08.02.03	ISS2155	Spectrometer Mechanics - Vendor Fab & Shipping	70%	118	01-Feb-16 A	18-Jul-16	17-Nov-15	16-Jun-16	-21	$0.00	69
2-W.08.02.03	ISS2160	Spectrometer Mechanics - Receipt of all Equipment and Spares	50%	118	01-Feb-16 A	18-Jul-16	17-Jun-16	17-Jun-16	-20	$114,427.04	69
2-W.08.02.03	ISS2165	Spectrometer Mechanics - Acceptance of Equipment & Spares	0%	2	19-Jul-16	20-Jul-16	20-Jun-16	21-Jun-16	-20	$28,607.28	69



(O) NEXT - Detail Schedule

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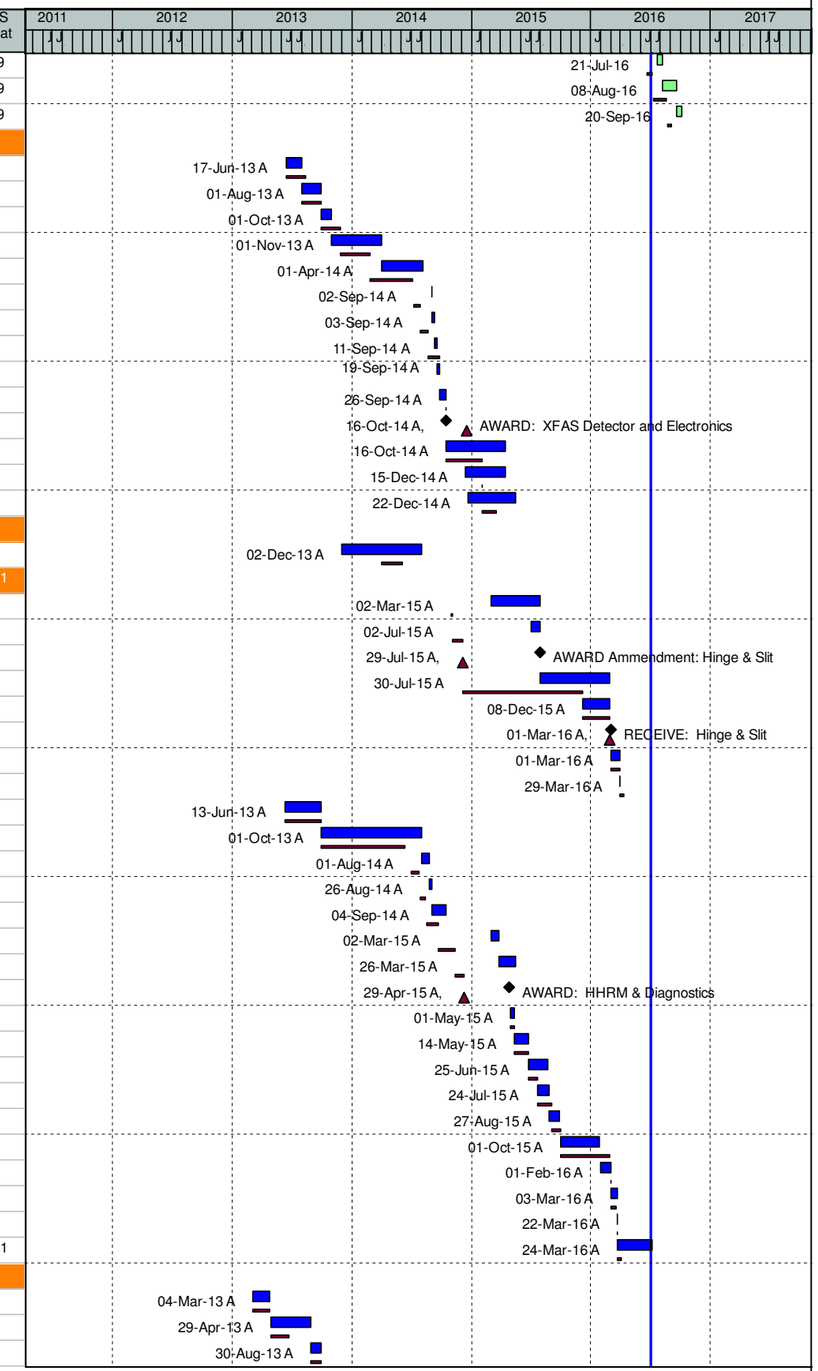
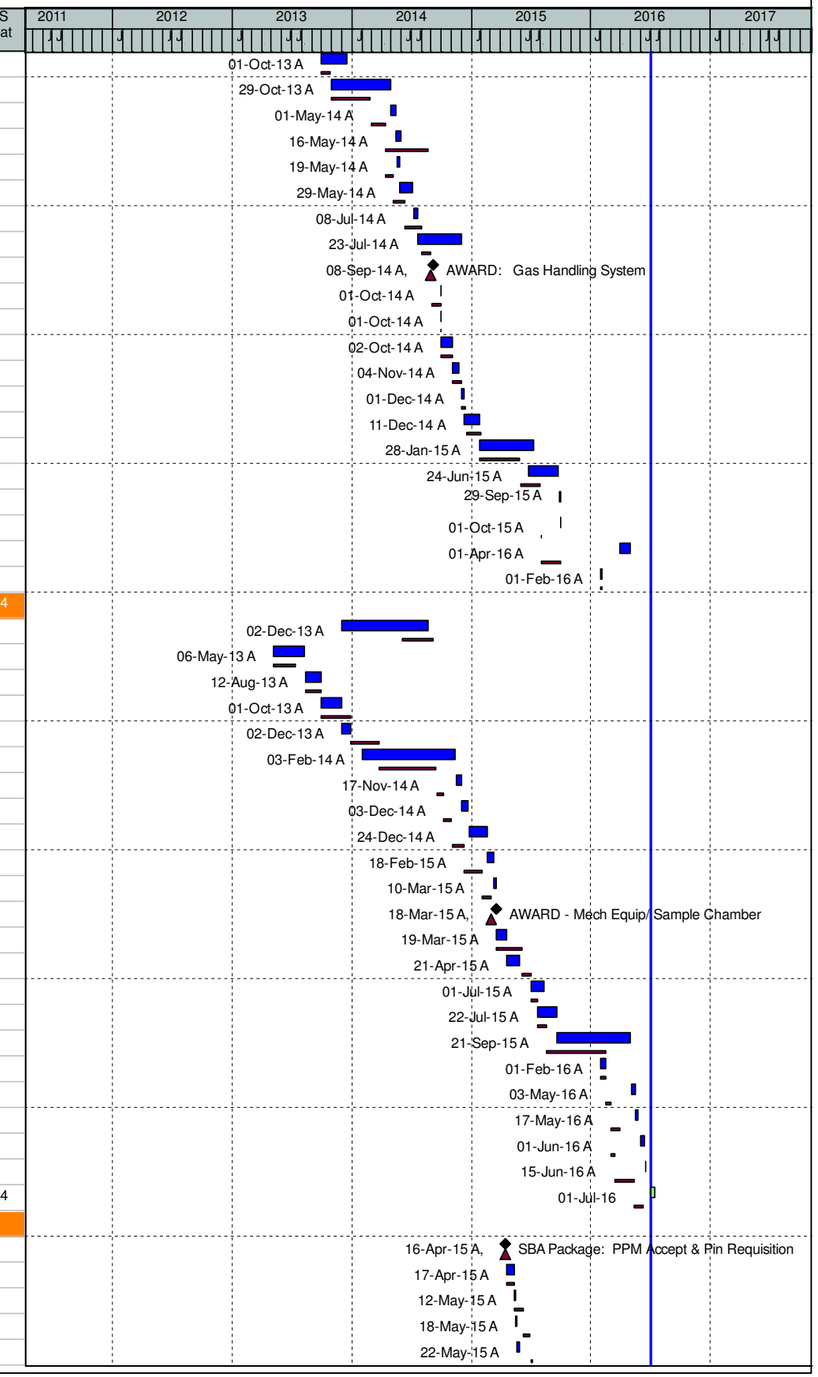
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.08.02.03	ISS2175	Spectrometer Mechanics - Install & Commissioning Complete	0%	12	21-Jul-16	05-Aug-16	22-Jun-16	08-Jul-16	-20	$23,839.92	69
2-W.08.02.03	ISS2185	Spectrometer Mechanics - Receipt of Commissioning Report	0%	30	08-Aug-16	19-Sep-16	11-Jul-16	19-Aug-16	-20	$19,071.52	69
2-W.08.02.03	ISS2195	Spectrometer Mechanics - Approval of Commissioning Report	0%	10	20-Sep-16	03-Oct-16	22-Aug-16	02-Sep-16	-20	$4,768.40	69
XAFS Detector and Electronics			100%	479	17-Jun-13 A	18-May-15 A	17-Jun-13	17-Mar-15	-44	$231,362.38	
2-W.08.02.03	ISS1847	30% Prototyping and testing of XAFS detector	100%	31	17-Jun-13 A	31-Jul-13 A	17-Jun-13	13-Aug-13	9	$0.00	
2-W.08.02.03	ISS1848	60% Prototyping and testing of XAFS detector	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.08.02.03	ISS1848FA	60% Prototyping and testing of XAFS detector	100%	22	01-Oct-13 A	31-Oct-13 A	01-Oct-13	28-Nov-13	18	$364.54	
2-W.08.02.03	ISS1849	90% Prototyping and testing of XAFS detector	100%	101	01-Nov-13 A	31-Mar-14 A	29-Nov-13	26-Feb-14	-23	$1,822.71	
2-W.08.02.03	ISS1850	XAFS Detector and Electronics - Write Specification and SOW	100%	87	01-Apr-14 A	04-Aug-14 A	27-Feb-14	07-Jul-14	-20	$46,505.37	
2-W.08.02.03	ISS1860	XAFS Detector and Electronics - PPM Accept Requisition	100%	1	02-Sep-14 A	02-Sep-14 A	08-Jul-14	30-Jul-14	-23	$0.00	
2-W.08.02.03	ISS1870	XAFS Detector and Electronics - Prepare RFP	100%	6	03-Sep-14 A	10-Sep-14 A	31-Jul-14	20-Aug-14	-14	$0.00	
2-W.08.02.03	ISS1880	XAFS Detector and Electronics - Call for Bid	100%	5	11-Sep-14 A	18-Sep-14 A	21-Aug-14	25-Sep-14	6	$0.00	
2-W.08.02.03	ISS1881	XAFS Detector and Electronics - Receive and Evaluate Vendor Proposal	100%	4	19-Sep-14 A	25-Sep-14 A				$0.00	
2-W.08.02.03	ISS1900	XAFS Detector and Electronics - Vendor Negotiations	100%	13	26-Sep-14 A	15-Oct-14 A	14-Oct-14	16-Oct-14	1	$0.00	
2-W.08.02.03	ISS1910	AWARD: XFAS Detector and Electronics	100%	0		16-Oct-14 A		16-Dec-14	41	$0.00	
2-W.08.02.03	ISS1930	XAFS Detector and Electronics - Procure/Fab	100%	124	16-Oct-14 A	16-Apr-15 A	16-Oct-14	02-Feb-15	-52	$0.00	
2-W.08.02.03	ISS1950	RECEIVE: XFAS Detector and Electronics	100%	84	15-Dec-14 A	16-Apr-15 A	03-Feb-15	03-Feb-15	-51	$91,334.88	
2-W.08.02.03	ISS1960	ACCECPT: XAFS Detector and Electronics	100%	101	22-Dec-14 A	18-May-15 A	03-Feb-15	17-Mar-15	-44	$91,334.88	
Interface Mechanical Equipment			0%	167	02-Dec-13 A	31-Jul-14 A	01-Apr-14	03-Jun-14	-40	$0.00	
2-W.08.02.03	ISS1969	Interfacing Mechanical Equipment to Hutch Utilities	100%	167	02-Dec-13 A	31-Jul-14 A	01-Apr-14	03-Jun-14	-40	$0.00	
High Harmonic Rejection Mirror			99.7%	766	13-Jun-13 A	06-Jul-16	13-Jun-13	11-Apr-16	-60	$378,434.61	131
2-W.08.02.03	ISS1600	Hinge & Slit - Change Spec	100%	107	02-Mar-15 A	31-Jul-15 A	30-Oct-14	05-Nov-14	-182	$0.00	
2-W.08.02.03	ISS1605	Hinge & Slit - Write Ammendment Specification	100%	19	02-Jul-15 A	29-Jul-15 A	06-Nov-14	05-Dec-14	-161	$0.00	
2-W.08.02.03	ISS1615	AWARD Ammendment: Hinge & Slit	100%	0		29-Jul-15 A		05-Dec-14	-161	$0.00	
2-W.08.02.03	ISS1625	Hinge & Slit - Fabrication	100%	145	30-Jul-15 A	29-Feb-16 A	08-Dec-14	07-Dec-15	-56	$80,475.12	
2-W.08.02.03	ISS1635	Hinge & Slit Fab Contract Amendment 2	100%	56	08-Dec-15 A	29-Feb-16 A	08-Dec-15	29-Feb-16	0	$12,064.00	
2-W.08.02.03	ISS1645	RECEIVE: Hinge & Slit	100%	0		01-Mar-16 A		29-Feb-16	0	$0.00	
2-W.08.02.03	ISS1665	Hinge & Slit - Install	100%	20	01-Mar-16 A	28-Mar-16 A	01-Mar-16	28-Mar-16	0	$18,045.58	
2-W.08.02.03	ISS1670	Hinge & Slit - Test	100%	1	29-Mar-16 A	30-Mar-16 A	29-Mar-16	11-Apr-16	9	$3,388.42	
2-W.08.02.03	ISS2090	Write Specification and SOW: HHRM & Diagnostics	100%	74	13-Jun-13 A	30-Sep-13 A	13-Jun-13	30-Sep-13	1	$0.00	
2-W.08.02.03	ISS2090FA	Write Specification and SOW: High Harmonic Rejection Mirror	100%	208	01-Oct-13 A	31-Jul-14 A	01-Oct-13	12-Jun-14	-33	$35,765.49	
2-W.08.02.03	ISS2100	HHRM & Diagnostics - PPM Accept Requisition	100%	18	01-Aug-14 A	26-Aug-14 A	01-Jul-14	25-Jul-14	-22	$0.00	
2-W.08.02.03	ISS2110	HHRM & Diagnostics - Prepare RFP	100%	4	26-Aug-14 A	02-Sep-14 A	28-Jul-14	15-Aug-14	-10	$0.00	
2-W.08.02.03	ISS2120	HHRM & Diagnostics - Call for Bid	100%	30	04-Sep-14 A	16-Oct-14 A	18-Aug-14	22-Sep-14	-17	$0.00	
2-W.08.02.03	ISS2130	HHRM & Diagnostics - Receive and Evaluate Proposal	100%	17	02-Mar-15 A	25-Mar-15 A	23-Sep-14	11-Nov-14	-88	$0.00	
2-W.08.02.03	ISS2140	HHRM & Diagnostics - Negotiations	100%	37	26-Mar-15 A	15-May-15 A	12-Nov-14	11-Dec-14	-106	$0.00	
2-W.08.02.03	ISS2150	AWARD: HHRM & Diagnostics	100%	0		29-Apr-15 A		11-Dec-14	-93	$0.00	
2-W.08.02.03	ISS2170	HHRM Receipt and Approval of Program Plan	100%	8	01-May-15 A	13-May-15 A	01-May-15	13-May-15	1	$34,304.40	
2-W.08.02.03	ISS2180	HHRM Receipt of PDR Report	100%	29	14-May-15 A	24-Jun-15 A	14-May-15	24-Jun-15	0	$36,591.36	
2-W.08.02.03	ISS2190	HHRM Approval of PDR Report	100%	41	25-Jun-15 A	21-Aug-15 A	25-Jun-15	23-Jul-15	-21	$9,147.84	
2-W.08.02.03	ISS2200	HHRM Receipt of FDR Report	100%	23	24-Jul-15 A	26-Aug-15 A	24-Jul-15	02-Sep-15	6	$36,591.36	
2-W.08.02.03	ISS2205	HHRM Approval of FDR Report	100%	22	27-Aug-15 A	28-Sep-15 A	03-Sep-15	01-Oct-15	3	$9,147.84	
2-W.08.02.03	ISS2214	HHRM Vendor Fabrication	100%	79	01-Oct-15 A	28-Jan-16 A	02-Oct-15	29-Feb-16	22	$0.00	
2-W.08.02.03	ISS2215	HHRM Receipt of Equipment at BNL	100%	22	01-Feb-16 A	02-Mar-16 A	01-Mar-16	01-Mar-16	-1	$64,034.88	
2-W.08.02.03	ISS2225	HHRM Acceptance of Equipment by BNL	100%	13	03-Mar-16 A	21-Mar-16 A	02-Mar-16	18-Mar-16	-1	$16,008.72	
2-W.08.02.03	ISS2235	HHRM Installation and Commissioning Complete	100%	2	22-Mar-16 A	23-Mar-16 A	21-Mar-16	21-Mar-16	-2	$11,434.80	
2-W.08.02.03	ISS2245	HHRM Receipt & Approval of Commissioning Report	90%	73	24-Mar-16 A	06-Jul-16	22-Mar-16	04-Apr-16	-65	$11,434.80	131
Gas Handling System			100%	792	04-Mar-13 A	29-Apr-16 A	04-Mar-13	02-Feb-16	-62	$815,185.99	
2-W.08.02.03	ISS2207	30% Prototyping Gas Handling System	100%	40	04-Mar-13 A	26-Apr-13 A	04-Mar-13	26-Apr-13	0	$0.00	
2-W.08.02.03	ISS2208	60% Prototyping Gas Handling System	100%	86	29-Apr-13 A	29-Aug-13 A	29-Apr-13	24-Jun-13	-46	$0.00	
2-W.08.02.03	ISS2209	90% Prototyping Gas Handling System	100%	20	30-Aug-13 A	30-Sep-13 A	30-Aug-13	30-Sep-13	1	$0.00	



(O) NEXT - Detail Schedule

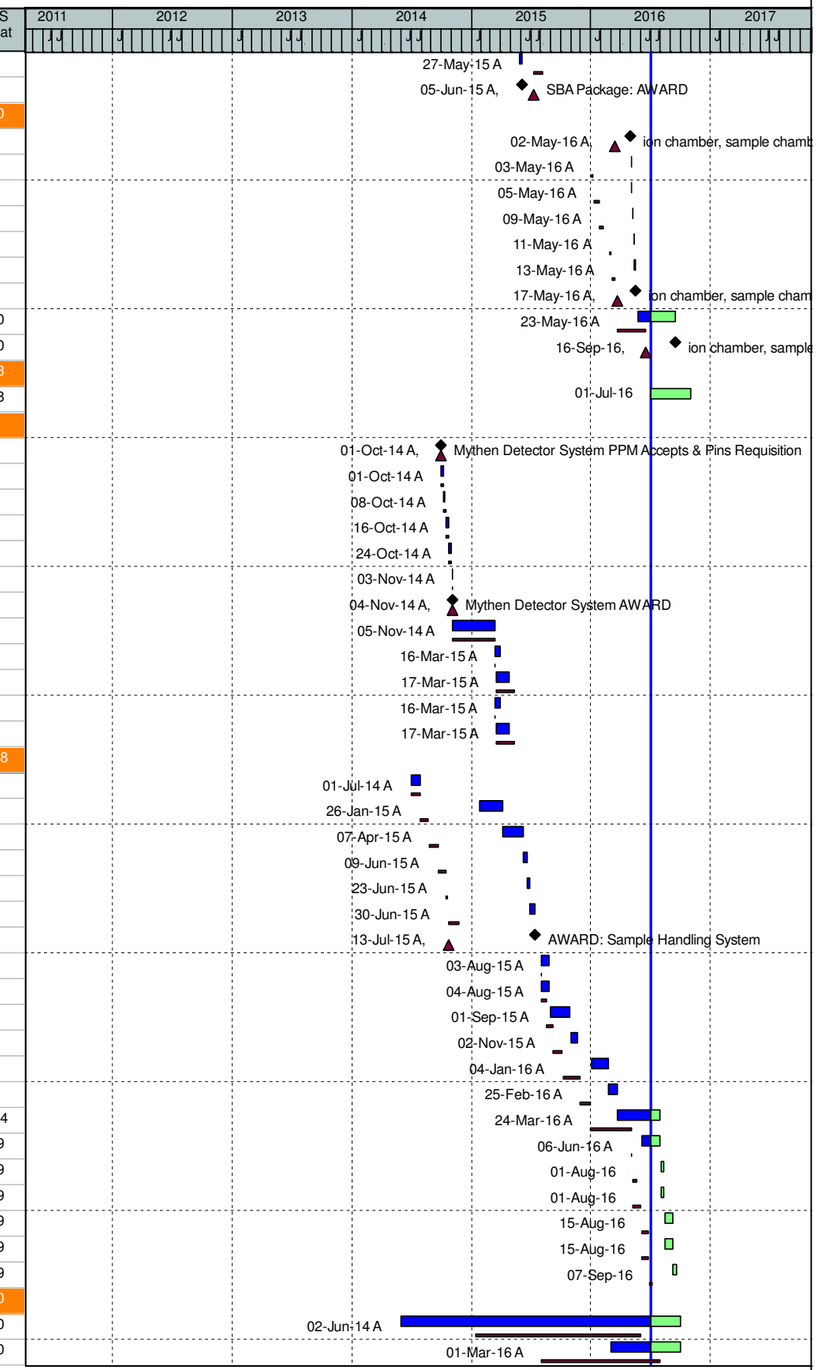
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.08.02.03	ISS2209FA	90% Prototyping Gas Handling System	100%	52	01-Oct-13 A	16-Dec-13 A	01-Oct-13	28-Oct-13	-33	$701.74	
2-W.08.02.03	ISS2210	Write Specification and SOW: Gas Handling System	100%	125	29-Oct-13 A	30-Apr-14 A	29-Oct-13	25-Feb-14	-45	$41,786.43	
2-W.08.02.03	ISS2220	PPM Accept Requisition & Prepare RFP	100%	12	01-May-14 A	16-May-14 A	03-Mar-14	15-Apr-14	-23	$0.00	
2-W.08.02.03	ISS2221	Assemble BNL Review Panel	100%	10	16-May-14 A	30-May-14 A	16-Apr-14	22-Aug-14	58	$0.00	
2-W.08.02.03	ISS2230	Prepare RFP	100%	7	19-May-14 A	28-May-14 A	16-Apr-14	06-May-14	-15	$0.00	
2-W.08.02.03	ISS2240	Call for Bid	100%	26	29-May-14 A	07-Jul-14 A	07-May-14	11-Jun-14	-16	$0.00	
2-W.08.02.03	ISS2250	Receive and Evaluate Vendor Proposal	100%	11	08-Jul-14 A	22-Jul-14 A	12-Jun-14	01-Aug-14	8	$0.00	
2-W.08.02.03	ISS2260	Gas Handling System - Negotiations	100%	89	23-Jul-14 A	01-Dec-14 A	04-Aug-14	29-Aug-14	-61	$0.00	
2-W.08.02.03	ISS2270	AWARD: Gas Handling System	100%	0		08-Sep-14 A		29-Aug-14	-5	$0.00	
2-W.08.02.03	ISS2280	Gas Handling System - Vendor Design (20K direct)	100%	0	01-Oct-14 A	01-Oct-14 A	02-Sep-14	30-Sep-14	0	$12,356.94	
2-W.08.02.03	ISS2281	Gas Handling System - Receipt & Approval of Program Plan	100%	0	01-Oct-14 A	01-Oct-14 A	01-Oct-14	01-Oct-14	1	$15,080.00	
2-W.08.02.03	ISS2282	Gas Handling System - Receipt of PDR & Minutes	100%	22	02-Oct-14 A	03-Nov-14 A	02-Oct-14	03-Nov-14	0	$41,600.00	
2-W.08.02.03	ISS2282A	Gas Handling System - Approval of PDR & Minutes	100%	15	04-Nov-14 A	24-Nov-14 A	04-Nov-14	03-Dec-14	5	$10,400.00	
2-W.08.02.03	ISS2283	Gas Handling System - Receipt of FDR & Minutes	100%	8	01-Dec-14 A	10-Dec-14 A	04-Dec-14	15-Dec-14	3	$124,800.00	
2-W.08.02.03	ISS2283A	Gas Handling System - Approval of FDR & Minutes	100%	30	11-Dec-14 A	27-Jan-15 A	16-Dec-14	30-Jan-15	3	$31,200.00	
2-W.08.02.03	ISS2284	Gas Handling System - Fab and Receipt at BNL	100%	114	28-Jan-15 A	09-Jul-15 A	28-Jan-15	26-May-15	-31	$438,044.88	
2-W.08.02.03	ISS2285	Gas Handling System - Acceptance by BNL	100%	65	24-Jun-15 A	25-Sep-15 A	02-Jun-15	31-Jul-15	-38	$41,968.16	
2-W.08.02.03	ISS2285A	EAC Activity - Gas Handling System (conduit, addl m&S)	100%	1	29-Sep-15 A	29-Sep-15 A				$0.00	
2-W.08.02.03	ISS2300	Gas Handling System - Receipt of Commissioning Report	100%	1	01-Oct-15 A	02-Oct-15 A	03-Aug-15	03-Aug-15	-42	$18,720.00	
2-W.08.02.03	ISS2305	Gas Handling System - Approval of Commissioning Report	100%	21	01-Apr-16 A	29-Apr-16 A	04-Aug-15	29-Sep-15	-146	$2,080.00	
2-W.08.02.03	ISS2306	Gas Handling System - Contract Amendment 3	100%	2	01-Feb-16 A	02-Feb-16 A	01-Feb-16	02-Feb-16	0	$36,447.84	
Mechanical Equip/Sample Chamber			99.42%	800	06-May-13 A	15-Jul-16	06-May-13	09-Jun-16	-25	$887,748.18	124
2-W.08.02.03	ISS1970	Mech Equip/ Sample Chamber - Write Specification and SOW	100%	183	02-Dec-13 A	22-Aug-14 A	04-Jun-14	05-Sep-14	9	$64,681.89	
2-W.08.02.03	ISS2327	30% Prototyping Sample Handling system	100%	67	06-May-13 A	09-Aug-13 A	06-May-13	11-Jul-13	-21	$0.00	
2-W.08.02.03	ISS2328	60% Prototyping Sample Handling system	100%	34	12-Aug-13 A	30-Sep-13 A	12-Aug-13	30-Sep-13	1	$0.00	
2-W.08.02.03	ISS2328FA	60% Prototyping Sample Handling system	100%	41	01-Oct-13 A	29-Nov-13 A	01-Oct-13	27-Dec-13	19	$3,034.81	
2-W.08.02.03	ISS2329	90% Prototyping Sample Handling system	100%	20	02-Dec-13 A	31-Dec-13 A	30-Dec-13	26-Mar-14	59	$6,652.88	
2-W.08.02.03	ISS2330	Mech Equip/ Sample Chamber - Write Specification and SOW	100%	199	03-Feb-14 A	14-Nov-14 A	27-Mar-14	16-Sep-14	-42	$66,658.60	
2-W.08.02.03	ISS2340	Mech Equip/ Sample Chamber - PPM Accept Requisition	100%	10	17-Nov-14 A	02-Dec-14 A	17-Sep-14	09-Oct-14	-35	$0.00	
2-W.08.02.03	ISS2350	Mech Equip/ Sample Chamber - Prepare RFP	100%	15	03-Dec-14 A	23-Dec-14 A	10-Oct-14	31-Oct-14	-35	$0.00	
2-W.08.02.03	ISS2360	Mech Equip/ Sample Chamber - Call for Bid	100%	35	24-Dec-14 A	17-Feb-15 A	03-Nov-14	09-Dec-14	-45	$0.00	
2-W.08.02.03	ISS2370	Mech Equip/ Sample Chamber - Receive and Evaluate Proposal	100%	13	18-Feb-15 A	09-Mar-15 A	10-Dec-14	02-Feb-15	-23	$0.00	
2-W.08.02.03	ISS2380	Mech Equip/ Sample Chamber - Negotiations	100%	6	10-Mar-15 A	18-Mar-15 A	03-Feb-15	03-Mar-15	-10	$0.00	
2-W.08.02.03	ISS2390	AWARD - Mech Equip/ Sample Chamber	100%	0		18-Mar-15 A		03-Mar-15	-10	$0.00	
2-W.08.02.03	ISS2410	ISS Sample Chamber Receipt of PDR Minutes	100%	22	19-Mar-15 A	20-Apr-15 A	19-Mar-15	03-Jun-15	32	$82,867.20	
2-W.08.02.03	ISS2420	ISS Sample Chamber Approval of PDR Minutes	100%	25	21-Apr-15 A	27-May-15 A	04-Jun-15	01-Jul-15	26	$20,716.80	
2-W.08.02.03	ISS2430	ISS Sample Chamber Receipt of FDR Minutes	100%	28	01-Jul-15 A	10-Aug-15 A	02-Jul-15	22-Jul-15	-13	$82,867.20	
2-W.08.02.03	ISS2440	ISS Sample Chamber Approval of FDR Minutes	100%	42	22-Jul-15 A	18-Sep-15 A	23-Jul-15	19-Aug-15	-21	$20,716.80	
2-W.08.02.03	ISS2445	ISS Sample Chamber Factory Acceptance Test Complete	100%	154	21-Sep-15 A	02-May-16 A	20-Aug-15	16-Feb-16	-54	$259,376.00	
2-W.08.02.03	ISS2446	ISS Sample Chamber FAT Contract Amendment 2	100%	11	01-Feb-16 A	16-Feb-16 A	01-Feb-16	16-Feb-16	0	$20,800.00	
2-W.08.02.03	ISS2455	ISS Sample Chamber Receipt of Equipment at BNL	100%	10	03-May-16 A	16-May-16 A	17-Feb-16	01-Mar-16	-54	$186,867.20	
2-W.08.02.03	ISS2465	ISS Sample Chamber Acceptance of Equipment by BNL	100%	4	17-May-16 A	23-May-16 A	02-Mar-16	29-Mar-16	-38	$20,716.80	
2-W.08.02.03	ISS2475	ISS Sample Chamber Installation of Equipment Complete	100%	10	01-Jun-16 A	14-Jun-16 A	02-Mar-16	15-Mar-16	-64	$25,896.00	
2-W.08.02.03	ISS2485	ISS Sample Chamber Receipt of Commissioning Report	100%	1	15-Jun-16 A	15-Jun-16 A	16-Mar-16	11-May-16	-24	$20,716.80	
2-W.08.02.03	ISS2500	ISS Sample Chamber Approval of Commissioning Report	0%	10	01-Jul-16	15-Jul-16	12-May-16	09-Jun-16	-25	$5,179.20	124
SBA Package			0%	35	16-Apr-15 A	05-Jun-15 A	16-Apr-15	05-Aug-15	42	$0.00	
2-W.08.02.03	ISS1845	SBA Package: PPM Accept & Pin Requisition	100%	0		16-Apr-15 A		16-Apr-15	0	$0.00	
2-W.08.02.03	ISS1855	SBA Package: Prepare & Submit RFQ	100%	17	17-Apr-15 A	11-May-15 A	17-Apr-15	11-May-15	0	$0.00	
2-W.08.02.03	ISS1865	SBA Package: Offerors Prepare & Submit Proposals	100%	5	12-May-15 A	18-May-15 A	12-May-15	09-Jun-15	15	$0.00	
2-W.08.02.03	ISS1875	SBA Package: Evaluate Offeror Proposals	100%	4	18-May-15 A	22-May-15 A	10-Jun-15	30-Jun-15	27	$0.00	
2-W.08.02.03	ISS1885	SBA Package: Negotiate with Offerors	100%	2	22-May-15 A	27-May-15 A	01-Jul-15	08-Jul-15	30	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

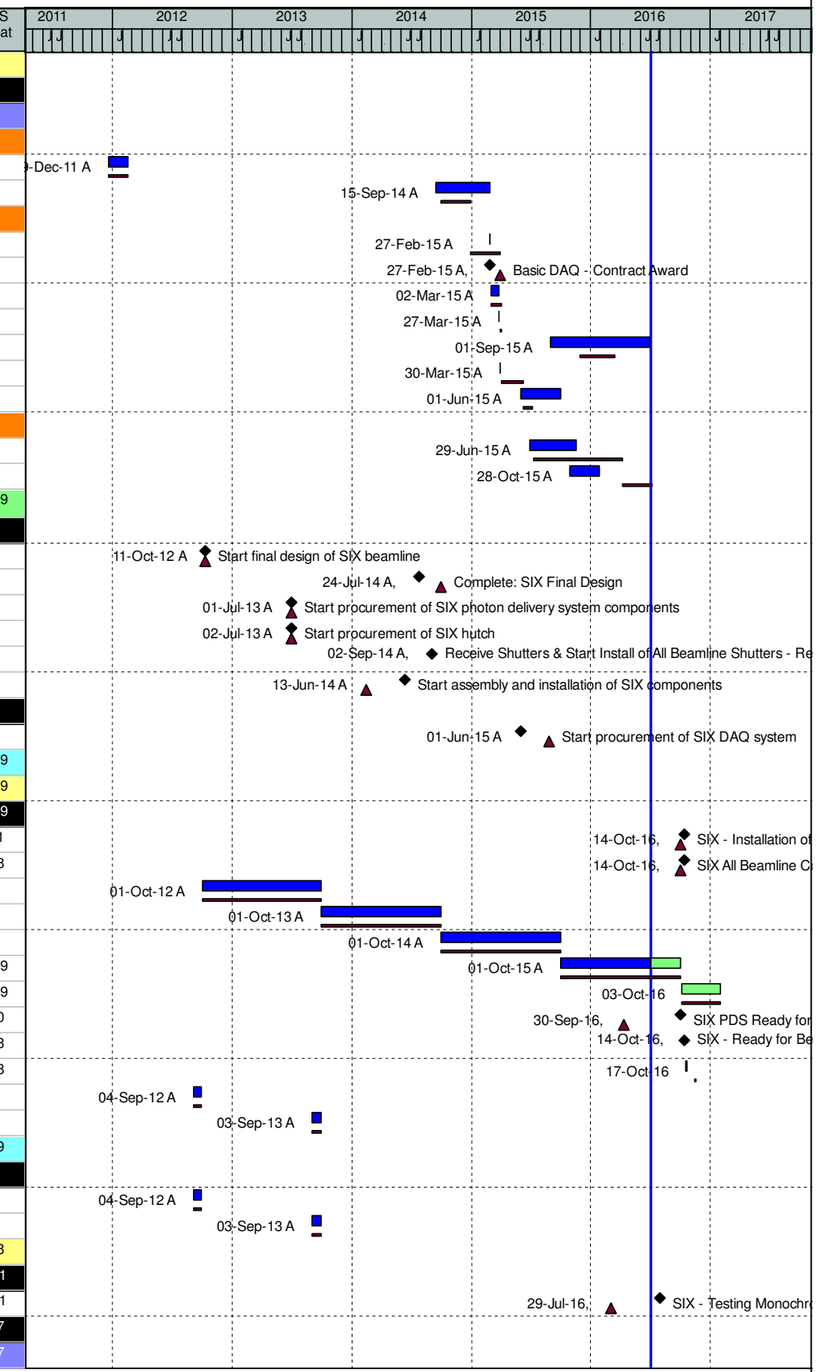
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.08.02.03	ISS1895	SBA Package: Prepare and Approve Package	100%	7	27-May-15 A	05-Jun-15 A	09-Jul-15	05-Aug-15	43	$0.00	
2-W.08.02.03	ISS1905	SBA Package: AWARD	100%	0		05-Jun-15 A		09-Jul-15	22	$0.00	
Ion Chamber, Sample Chamber Integration, VH xtal&lens, Vac Distribution			8%	96	02-May-16 A	16-Sep-16	04-Jan-16	16-Jun-16	-64	$117,960.00	80
2-W.08.02.03	ISS1940	ion chamber, sample chamber integration, VH xtal&lens, vacuum distribution: I	100%	0		02-May-16 A		15-Mar-16	-34	$0.00	
2-W.08.02.03	ISS1945	ion chamber, sample chamber integration, VH xtal&lens, vacuum distribution P	100%	1	03-May-16 A	04-May-16 A	04-Jan-16	08-Jan-16	-80	$0.00	
2-W.08.02.03	ISS1955	ion chamber, sample chamber integration, VH xtal&lens, vacuum distribution: C	100%	1	05-May-16 A	06-May-16 A	11-Jan-16	25-Jan-16	-72	$0.00	
2-W.08.02.03	ISS1965	ion chamber, sample chamber integration, VH xtal&lens, vacuum distribution E	100%	1	09-May-16 A	10-May-16 A	26-Jan-16	08-Feb-16	-64	$0.00	
2-W.08.02.03	ISS1975	ion chamber, sample chamber integration, VH xtal&lens, vacuum distribution N	100%	1	11-May-16 A	12-May-16 A	26-Feb-16	04-Mar-16	-48	$0.00	
2-W.08.02.03	ISS1980	ion chamber, sample chamber integration, VH xtal&lens, vacuum distribution: F	100%	1	13-May-16 A	16-May-16 A	07-Mar-16	14-Mar-16	-44	$0.00	
2-W.08.02.03	ISS1985	ion chamber, sample chamber integration, VH xtal&lens, vacuum distribution: A	100%	0		17-May-16 A		22-Mar-16	-39	$0.00	
2-W.08.02.03	ISS1990	ion chamber, sample chamber integration, VH xtal&lens, vacuum distribution	8%	82	23-May-16 A	16-Sep-16	23-Mar-16	15-Jun-16	-65	$117,960.00	80
2-W.08.02.03	ISS1995	ion chamber, sample chamber integration, VH xtal&lens, vacuum distribution: F	0%	0		16-Sep-16		16-Jun-16	-64	$0.00	80
ISS Detector Mounts & Cryostat			0%	86	01-Jul-16	02-Nov-16				$0.00	48
2-W.08.02.03	ISS2000	Detector Mounts & Cryostat	0%	86	01-Jul-16	02-Nov-16				$0.00	48
Mythen Detector System			100%	141	01-Oct-14 A	28-Apr-15 A	01-Oct-14	11-May-15	10	$156,166.40	
2-W.08.02.03	ISS2005	Mythen Detector System PPM Accepts & Pins Requisition	100%	0		01-Oct-14 A		01-Oct-14	1	$0.00	
2-W.08.02.03	ISS2015	Mythen Detector System Prepare & Submit RFQ	100%	4	01-Oct-14 A	07-Oct-14 A	01-Oct-14	07-Oct-14	1	$0.00	
2-W.08.02.03	ISS2020	Mythen Detector System Offerors Prepare & Submit Proposals	100%	3	08-Oct-14 A	14-Oct-14 A	08-Oct-14	15-Oct-14	2	$0.00	
2-W.08.02.03	ISS2025	Mythen Detector System Evaluate Offeror Proposals	100%	6	16-Oct-14 A	24-Oct-14 A	16-Oct-14	23-Oct-14	0	$0.00	
2-W.08.02.03	ISS2030	Mythen Detector System Negotiate with Offerors	100%	6	24-Oct-14 A	31-Oct-14 A	24-Oct-14	31-Oct-14	0	$0.00	
2-W.08.02.03	ISS2035	Mythen Detector System Prepare and Approve Package	100%	2	03-Nov-14 A	04-Nov-14 A	03-Nov-14	04-Nov-14	0	$0.00	
2-W.08.02.03	ISS2040	Mythen Detector System AWARD	100%	0		04-Nov-14 A		04-Nov-14	0	$0.00	
2-W.08.02.03	ISS2045	Mythen Detector System Vendor Fab	100%	86	05-Nov-14 A	13-Mar-15 A	05-Nov-14	13-Mar-15	0	$0.00	
2-W.08.02.03	ISS2050	Mythen Detector RECEIVE	100%	11	16-Mar-15 A	31-Mar-15 A	16-Mar-15	16-Mar-15	-10	$117,926.64	
2-W.08.02.03	ISS2055	Mythen Detector ACCEPT	100%	30	17-Mar-15 A	28-Apr-15 A	17-Mar-15	11-May-15	10	$13,102.96	
2-W.08.02.03	ISS2125	Mythen Control System RECEIVE	100%	11	16-Mar-15 A	31-Mar-15 A	16-Mar-15	16-Mar-15	-10	$22,623.12	
2-W.08.02.03	ISS2135	Mythen Control System ACCEPT	100%	30	17-Mar-15 A	28-Apr-15 A	17-Mar-15	11-May-15	10	$2,513.68	
Sample Handling System			65.73%	556	01-Jul-14 A	19-Sep-16	01-Jul-14	08-Jul-16	-50	$472,298.44	258
2-W.08.02.03	ISS0565	Write Specification: Sample Handling System	100%	20	01-Jul-14 A	30-Jul-14 A	01-Jul-14	30-Jul-14	0	$5,291.41	
2-W.08.02.03	ISS0575	Sample Handling System - Prepare & Submit RFQ	100%	50	26-Jan-15 A	06-Apr-15 A	31-Jul-14	22-Aug-14	-152	$0.00	
2-W.08.02.03	ISS0585	Sample Handling System Offerors Prepare & Submit Proposals	100%	44	07-Apr-15 A	08-Jun-15 A	25-Aug-14	22-Sep-14	-176	$0.00	
2-W.08.02.03	ISS0595	Sample Handling System - Evaluate Proposals	100%	9	09-Jun-15 A	22-Jun-15 A	23-Sep-14	14-Oct-14	-170	$1,797.06	
2-W.08.02.03	ISS0605	Sample Handling System - Negotiate with Offerors	100%	5	23-Jun-15 A	30-Jun-15 A	15-Oct-14	21-Oct-14	-171	$0.00	
2-W.08.02.03	ISS0615	Sample Handling System - Prepare & Approve Contract Package	100%	9	30-Jun-15 A	13-Jul-15 A	22-Oct-14	25-Nov-14	-155	$0.00	
2-W.08.02.03	ISS0625	AWARD: Sample Handling System	100%	0		13-Jul-15 A		22-Oct-14	-179	$0.00	
2-W.08.02.03	ISS0645	Sample Handling System Receipt of Program Plan	100%	17	03-Aug-15 A	26-Aug-15 A	03-Aug-15	03-Aug-15	-16	$62,400.00	
2-W.08.02.03	ISS0646	Sample Handling System Approval of Program Plan	100%	16	04-Aug-15 A	26-Aug-15 A	04-Aug-15	17-Aug-15	-6	$6,146.40	
2-W.08.02.03	ISS0647	Sample Handling System Receipt of PDR & Minutes	100%	42	01-Sep-15 A	30-Oct-15 A	18-Aug-15	08-Sep-15	-37	$62,400.00	
2-W.08.02.03	ISS0648	Sample Handling System Approval of PDR & Minutes	100%	13	02-Nov-15 A	23-Nov-15 A	09-Sep-15	06-Oct-15	-30	$6,146.40	
2-W.08.02.03	ISS0653	Sample Handling System Receipt of FDR & Minutes	100%	36	04-Jan-16 A	24-Feb-16 A	07-Oct-15	30-Nov-15	-58	$104,000.00	
2-W.08.02.03	ISS0654	Sample Handling System Approval of FDR & Minutes	100%	20	25-Feb-16 A	23-Mar-16 A	01-Dec-15	29-Dec-15	-58	$10,244.00	
2-W.08.02.03	ISS0655	Sample Handling System Vendor Fab & Shipping	90%	89	24-Mar-16 A	28-Jul-16	30-Dec-15	05-May-16	-58	$0.00	294
2-W.08.02.03	ISS0656	Sample Handling System Receipt of Equipment	50%	39	06-Jun-16 A	29-Jul-16	06-May-16	06-May-16	-58	$104,000.00	79
2-W.08.02.03	ISS0657	Sample Handling System Acceptance of Equipment	0%	10	01-Aug-16	12-Aug-16	09-May-16	20-May-16	-58	$33,092.80	79
2-W.08.02.03	ISS0685	Sample Handling System - BNL Install Support	0%	10	01-Aug-16	12-Aug-16	09-May-16	02-Jun-16	-50	$2,712.40	79
2-W.08.02.03	ISS0686	Sample Handling System Install & Commissioning Complete	0%	16	15-Aug-16	06-Sep-16	03-Jun-16	24-Jun-16	-50	$45,697.60	79
2-W.08.02.03	ISS0695	Sample Handling System - BNL Test Support	0%	16	15-Aug-16	06-Sep-16	03-Jun-16	24-Jun-16	-50	$5,521.57	79
2-W.08.02.03	ISS0696	Sample Handling System Receipt & Approval of Commissioning Report	0%	9	07-Sep-16	19-Sep-16	27-Jun-16	08-Jul-16	-50	$22,848.80	79
Install & Test			65%	586	02-Jun-14 A	30-Sep-16	15-Jan-15	29-Jul-16	-44	$429,810.43	70
2-W.08.02.03	ISS2450	Assembly and Installation - Endstation Components	65%	586	02-Jun-14 A	30-Sep-16	15-Jan-15	31-May-16	-86	$267,980.61	70
2-W.08.02.03	ISS2460	Test - Endstation Components	65%	151	01-Mar-16 A	30-Sep-16	05-Aug-15	29-Jul-16	-44	$161,829.82	70



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

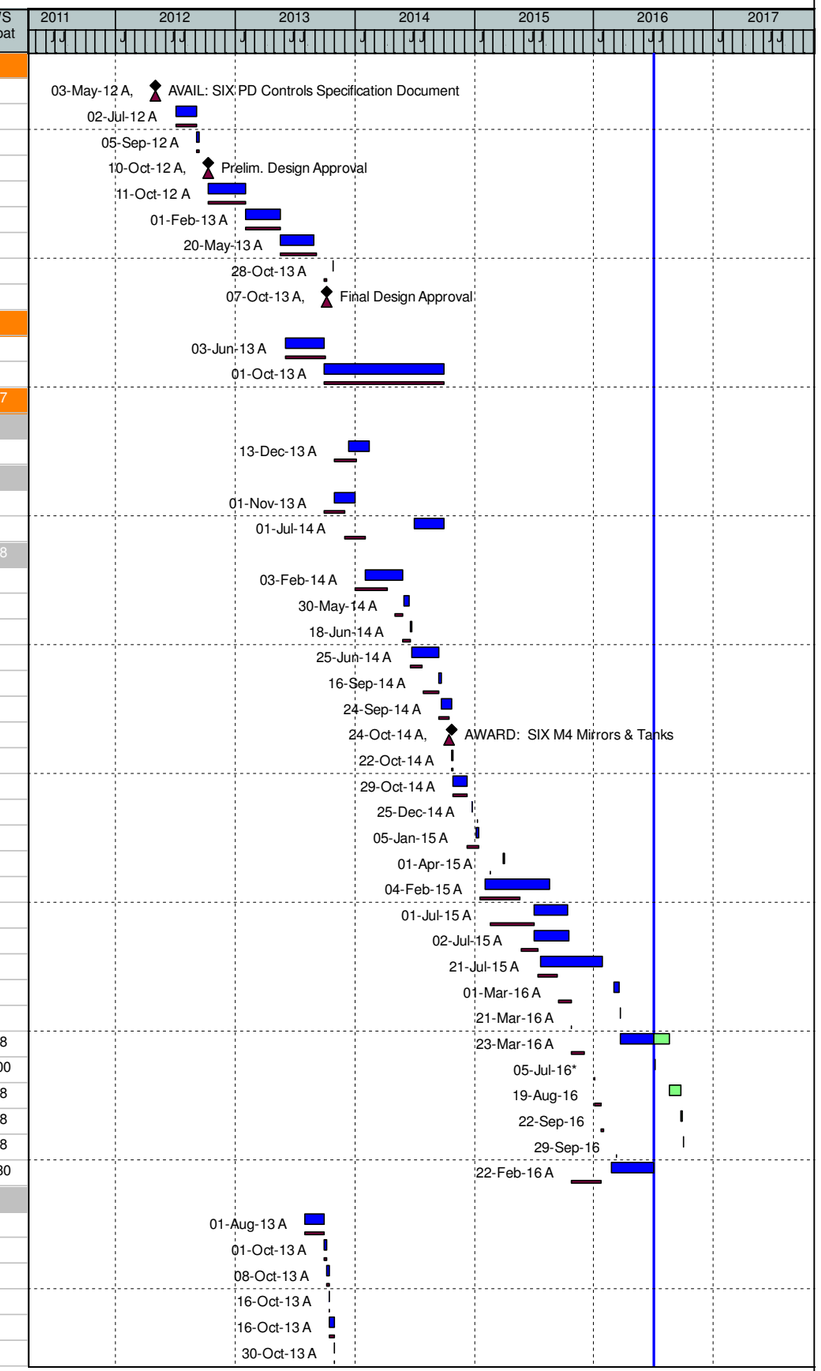
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
Data Acquisition			100%	1131	19-Dec-11 A	27-Jun-16 A	19-Dec-11	06-Jul-16	7	$294,197.73	
ISS Procurement Work Package			100%	1131	19-Dec-11 A	27-Jun-16 A	19-Dec-11	06-Jul-16	7	$294,197.73	
ISS Data Acquisition			100%	1131	19-Dec-11 A	27-Jun-16 A	19-Dec-11	06-Jul-16	7	$294,197.73	
Design			100%	795	19-Dec-11 A	26-Feb-15 A	19-Dec-11	29-Dec-14	-38	$5,336.08	
2-W.08.02.04	ISS2470	Preliminary Design	100%	40	19-Dec-11 A	15-Feb-12 A	19-Dec-11	15-Feb-12	0	$0.00	
2-W.08.02.04	ISS2480	Basic DAQ - Final Design	100%	110	15-Sep-14 A	26-Feb-15 A	01-Oct-14	29-Dec-14	-38	$5,336.08	
Basic DAQ			100%	335	27-Feb-15 A	27-Jun-16 A	30-Dec-14	15-Mar-16	-72	$202,132.86	
2-W.08.02.04	ISS2490	Basic DAQ - Write Specification and SOW	100%	0	27-Feb-15 A	27-Feb-15 A	30-Dec-14	31-Mar-15	23	$17,964.46	
2-W.08.02.04	ISS2495	Basic DAQ - Contract Award	100%	0		27-Feb-15 A		31-Mar-15	23	$0.00	
2-W.08.02.04	ISS2510	Basic DAQ - Fabrication	100%	19	02-Mar-15 A	27-Mar-15 A	02-Mar-15	01-Apr-15	4	$0.00	
2-W.08.02.04	ISS2520	Basic DAQ - Receipt at BNL	100%	0	27-Mar-15 A	27-Mar-15 A	01-Apr-15	01-Apr-15	4	$97,413.68	
2-W.08.02.04	ISS2525	Pizza Boxes	100%	205	01-Sep-15 A	27-Jun-16 A	01-Dec-15	15-Mar-16	-72	$62,400.00	
2-W.08.02.04	ISS2530	Basic DAQ - Accepted by BNL	100%	1	30-Mar-15 A	31-Mar-15 A	02-Apr-15	09-Jun-15	50	$24,354.72	
2-W.08.02.04	ISS2540	Basic DAQ - Bench Test	100%	86	01-Jun-15 A	01-Oct-15 A	10-Jun-15	08-Jul-15	-59	$0.00	
Install & Test			100%	146	29-Jun-15 A	28-Jan-16 A	09-Jul-15	06-Jul-16	111	$86,728.80	
2-W.08.02.04	ISS2550	Basic DAQ - Assembly and Installation	100%	97	29-Jun-15 A	16-Nov-15 A	09-Jul-15	05-Apr-16	96	$45,194.96	
2-W.08.02.04	ISS2560	Basic DAQ - Test	100%	62	28-Oct-15 A	28-Jan-16 A	07-Apr-16	06-Jul-16	111	$41,533.83	
SIX Beamline			70.63%	1251	31-Jan-12 A	30-Jan-17	31-Jan-12	31-Jan-17	1	$11,764,771.38	169
Milestones			0%	471	11-Oct-12 A	02-Sep-14 A	11-Oct-12	30-Sep-14	21	$0.00	
2-W.09	MSIX001	Start final design of SIX beamline	100%	0	11-Oct-12 A		11-Oct-12		0	$0.00	
2-W.09	MSIX003	Complete: SIX Final Design	100%	0		24-Jul-14 A		30-Sep-14	48	$0.00	
2-W.09	MSIX005	Start procurement of SIX photon delivery system components	100%	0	01-Jul-13 A		01-Jul-13		0	$0.00	
2-W.09	MSIX010	Start procurement of SIX hutch	100%	0	02-Jul-13 A		02-Jul-13		0	$0.00	
2-W.09	MSIX015	Receive Shutters & Start Install of All Beamline Shutters - Ready For NEXT Ins	100%	0		02-Sep-14 A				$0.00	
2-W.09	MSMI015	Start assembly and installation of SIX components	100%	0	13-Jun-14 A		14-Feb-14		-83	$0.00	
Milestones			0%	0	01-Jun-15 A	01-Jun-15 A	27-Aug-15	27-Aug-15	62	$0.00	
2-W.09	MSIX020	Start procurement of SIX DAQ system	100%	0	01-Jun-15 A		27-Aug-15		62	$0.00	
SIX Management			89.46%	1100	04-Sep-12 A	30-Jan-17	04-Sep-12	31-Jan-17	1	$729,841.76	169
SIX Beamline Management			89.46%	1100	04-Sep-12 A	30-Jan-17	04-Sep-12	31-Jan-17	1	$729,841.76	169
Management			89.46%	1100	04-Sep-12 A	30-Jan-17	04-Sep-12	31-Jan-17	1	$729,841.76	169
2-W.09.01.01	M3195	SIX - Installation of Beamline Components Complete	0%	0		14-Oct-16		30-Sep-16	-9	$0.00	61
2-W.09.01.01	MSIX030	SIX All Beamline Components Complete	0%	0		14-Oct-16		30-Sep-16	-9	$0.00	58
2-W.09.01.01	SIX0002	SIX BL Management FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.09.01.01	SIX0003	SIX BL Management FY14	100%	250	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	0	$157,015.05	
2-W.09.01.01	SIX0004	SIX BL Management FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$214,175.40	
2-W.09.01.01	SIX0005	SIX BL Management FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$223,885.83	169
2-W.09.01.01	SIX0007	SIX BL Management FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	31-Jan-17	1	$8,382.50	169
2-W.09.01.01	SIX1410	SIX PDS Ready for Integration	0%	0		30-Sep-16		11-Apr-16	-121	$0.00	70
2-W.09.01.01	SIX4895	SIX - Ready for Beamline IRR	0%	0		14-Oct-16				$0.00	58
2-W.09.01.01	SIX4900	SIX - Beamline IRR	0%	3	17-Oct-16	19-Oct-16	14-Nov-16	16-Nov-16	20	$11,697.75	58
2-W.09.01.01	SIXFY12501!	SIX Management FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$9,684.52	
2-W.09.01.01	SIXFY13501!	SIX Management FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$105,000.72	
SIX Beamline Systems			69.39%	1212	31-Jan-12 A	01-Dec-16	31-Jan-12	15-Nov-16	-10	$11,034,929.62	29
Management			100%	268	04-Sep-12 A	30-Sep-13 A	04-Sep-12	30-Sep-13	0	$717,818.15	
2-W.09.02	SIXFY12501!	SIX Systems FY12	100%	19	04-Sep-12 A	28-Sep-12 A	04-Sep-12	28-Sep-12	0	$73,983.55	
2-W.09.02	SIXFY13501!	SIX Systems FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$643,834.60	
Photon Delivery System			90.05%	1113	03-May-12 A	14-Oct-16	03-May-12	02-Nov-16	13	$4,619,067.23	58
Management			0%	0	29-Jul-16	29-Jul-16	01-Mar-16	01-Mar-16	-106	$0.00	111
2-W.09.02.01	M3185	SIX - Testing Monochromator and Slits complete	0%	0		29-Jul-16		01-Mar-16	-106	$0.00	111
SIX Procurement Work Package			95.99%	1104	03-May-12 A	30-Sep-16	03-May-12	13-May-16	-97	$3,440,170.10	67
SIX Photon Delivery System			95.99%	1104	03-May-12 A	30-Sep-16	03-May-12	13-May-16	-97	$3,440,170.10	67



(O) NEXT - Detail Schedule

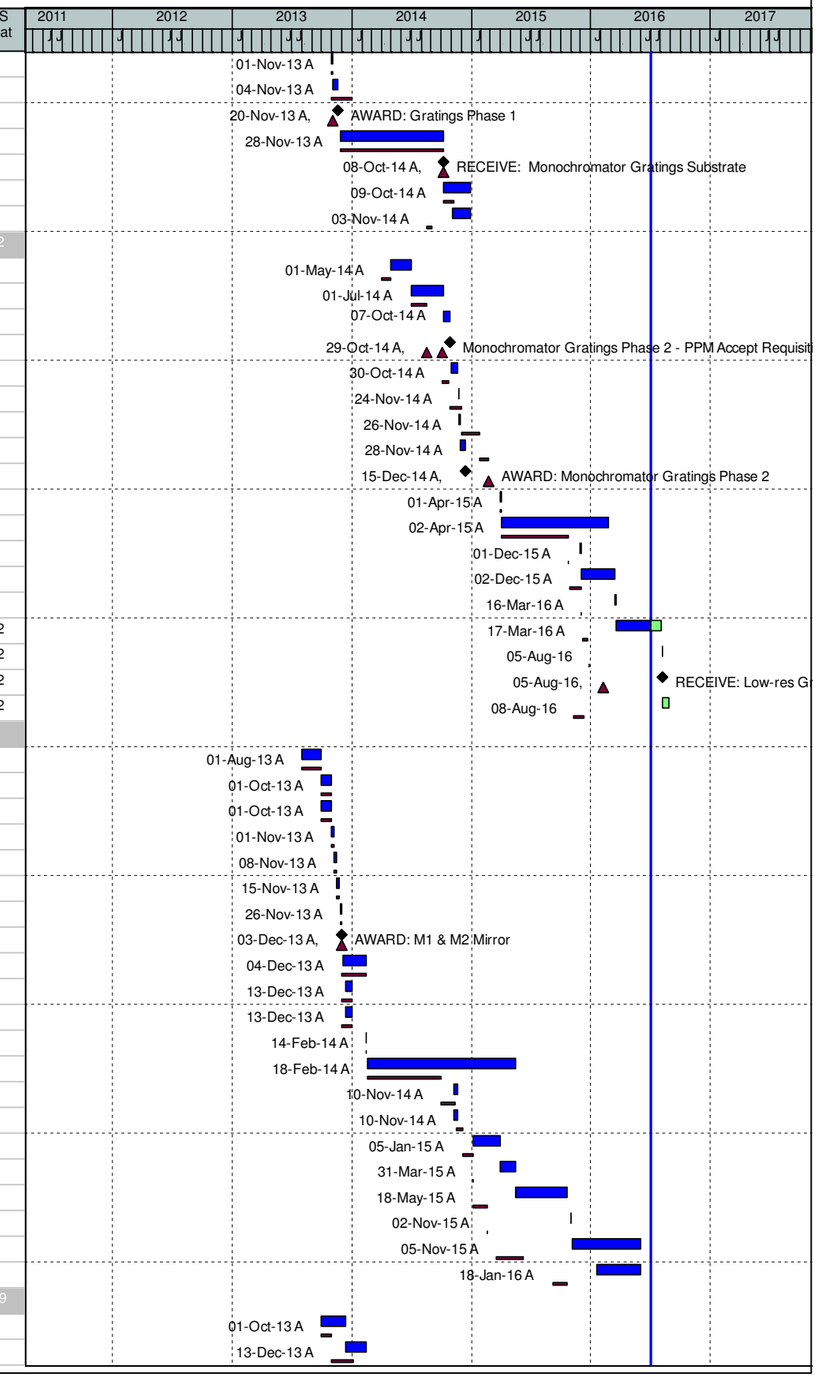
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
Design			0%	370	03-May-12 A	28-Oct-13 A	03-May-12	07-Oct-13	-13	$0.00	
2-W.09.02.01	SIX0015	AVAIL: SIX PD Controls Specification Document	100%	0		03-May-12 A		03-May-12	0	$0.00	
2-W.09.02.01	SIX0040	90% Preliminary Design	100%	45	02-Jul-12 A	04-Sep-12 A	02-Jul-12	04-Sep-12	0	$0.00	
2-W.09.02.01	SIX0050	Prelim. Design Review	100%	5	05-Sep-12 A	11-Sep-12 A	05-Sep-12	11-Sep-12	0	$0.00	
2-W.09.02.01	SIX0060	Prelim. Design Approval	100%	0		10-Oct-12 A		10-Oct-12	0	$0.00	
2-W.09.02.01	SIX0080	30% Final Design	100%	75	11-Oct-12 A	31-Jan-13 A	11-Oct-12	31-Jan-13	0	$0.00	
2-W.09.02.01	SIX0090	60% Final Design	100%	75	01-Feb-13 A	17-May-13 A	01-Feb-13	17-May-13	0	$0.00	
2-W.09.02.01	SIX0100	90% Final Design	100%	71	20-May-13 A	30-Aug-13 A	20-May-13	05-Sep-13	4	$0.00	
2-W.09.02.01	SIX0110	Final Design Review	100%	0	28-Oct-13 A	28-Oct-13 A	01-Oct-13	07-Oct-13	-13	$0.00	
2-W.09.02.01	SIX0120	Final Design Approval	100%	0		07-Oct-13 A		07-Oct-13	0	$0.00	
PDS Procurement Support			100%	333	03-Jun-13 A	30-Sep-14 A	03-Jun-13	30-Sep-14	0	$73,035.12	
2-W.09.02.01	SIX0139	Procurement Support FY13	100%	82	03-Jun-13 A	30-Sep-13 A	03-Jun-13	01-Oct-13	2	$0.00	
2-W.09.02.01	SIX0140	Procurement Support FY14	100%	250	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	0	$73,035.12	
SIX PDS Procurement			95.9%	857	01-May-13 A	30-Sep-16	01-May-13	13-May-16	-97	$3,367,134.98	67
Horizontal Focusing Mirror and Tank			100%	43	13-Dec-13 A	14-Feb-14 A	01-Nov-13	06-Jan-14	-28	$21,335.85	
2-W.09.02.01	SIX0300	Write Spec Horizontal Focusing Mirror and Tank	100%	43	13-Dec-13 A	14-Feb-14 A	01-Nov-13	06-Jan-14	-28	$21,335.85	
Diagon Optics			100%	227	01-Nov-13 A	30-Sep-14 A	01-Oct-13	03-Feb-14	-165	$11,442.48	
2-W.09.02.01	SIX0439	Design Validation	100%	41	01-Nov-13 A	02-Jan-14 A	01-Oct-13	29-Nov-13	-22	$0.00	
2-W.09.02.01	SIX0440	Diagon Optics - Write Spec and SOW	100%	62	01-Jul-14 A	30-Sep-14 A	02-Dec-13	03-Feb-14	-165	$11,442.48	
SIX M4 Mirrors & Tanks			89.18%	668	03-Feb-14 A	29-Sep-16	03-Jan-14	10-Mar-16	-142	$553,750.66	68
2-W.09.02.01	SIX0580	Write Spec SIX M4 Mirrors & Tanks	100%	81	03-Feb-14 A	28-May-14 A	03-Jan-14	08-Apr-14	-35	$26,803.97	
2-W.09.02.01	SIX0590	SIX M4 Mirrors & Tanks - PPM Accept Requisition	100%	12	30-May-14 A	17-Jun-14 A	05-May-14	28-May-14	-13	$0.00	
2-W.09.02.01	SIX0600	SIX M4 Mirrors & Tanks - Prepare RFP	100%	5	18-Jun-14 A	24-Jun-14 A	29-May-14	18-Jun-14	-4	$0.00	
2-W.09.02.01	SIX0610	SIX M4 Mirrors & Tanks - Call for Bid	100%	56	25-Jun-14 A	15-Sep-14 A	19-Jun-14	25-Jul-14	-35	$0.00	
2-W.09.02.01	SIX0620	SIX M4 Mirrors & Tanks - Receive and Evaluate Vendor Proposal	100%	5	16-Sep-14 A	23-Sep-14 A	28-Jul-14	15-Sep-14	-5	$0.00	
2-W.09.02.01	SIX0630	SIX M4 Mirrors & Tanks - Vendor Negotiations	100%	20	24-Sep-14 A	23-Oct-14 A	16-Sep-14	14-Oct-14	-6	$0.00	
2-W.09.02.01	SIX0640	AWARD: SIX M4 Mirrors & Tanks	100%	0		24-Oct-14 A		14-Oct-14	-7	$0.00	
2-W.09.02.01	SIX0643	ESM M4 Mirrors & Tanks - Program Plan	100%	5	22-Oct-14 A	28-Oct-14 A	22-Oct-14	28-Oct-14	0	$24,700.00	
2-W.09.02.01	SIX0646	ESM M4 Mirrors & Tanks - Preliminary Design Through PDR	100%	29	29-Oct-14 A	10-Dec-14 A	29-Oct-14	10-Dec-14	0	$78,897.52	
2-W.09.02.01	SIX0649	ESM M4 Mirrors & Tanks - Preliminary Design Review Acceptance	100%	1	25-Dec-14 A	25-Dec-14 A	09-Jan-15	09-Jan-15	8	$19,724.64	
2-W.09.02.01	SIX0651	ESM M4 Mirrors & Tanks - Final Design Through FDR	100%	10	05-Jan-15 A	16-Jan-15 A	11-Dec-14	16-Jan-15	0	$118,346.80	
2-W.09.02.01	SIX0653	ESM M4 Mirrors & Tanks - Final Design Review Acceptance	100%	1	01-Apr-15 A	01-Apr-15 A	17-Feb-15	17-Feb-15	-31	$29,586.96	
2-W.09.02.01	SIX0656	ESM M4 Mirrors & Tanks - Production	100%	139	04-Feb-15 A	20-Aug-15 A	20-Jan-15	21-May-15	-63	$35,786.40	
2-W.09.02.01	SIX0659	ESM M4 Mirrors & Tanks - Assembly	100%	73	01-Jul-15 A	15-Oct-15 A	17-Feb-15	01-Jul-15	-72	$36,639.20	
2-W.09.02.01	SIX0661	ESM M4 Mirrors & Tanks - Factory Test Set Up	100%	73	02-Jul-15 A	16-Oct-15 A	26-May-15	14-Jul-15	-65	$15,052.96	
2-W.09.02.01	SIX0663	SIX M4 Mirrors & Tanks - Testing	100%	128	21-Jul-15 A	26-Jan-16 A	15-Jul-15	11-Sep-15	-90	$22,154.08	
2-W.09.02.01	SIX0666	SIX M4 Mirrors & Tanks - Shipping & Delivery	100%	13	01-Mar-16 A	18-Mar-16 A	14-Sep-15	23-Oct-15	-98	$28,402.40	
2-W.09.02.01	SIX0669	SIX M4 Mirrors & Tanks - Receipt of Mechanical System	100%	1	21-Mar-16 A	22-Mar-16 A	23-Oct-15	23-Oct-15	-100	$17,254.64	
2-W.09.02.01	SIX0671	SIX M4 Mirrors & Tanks - Installation of Mechanical System	95%	105	23-Mar-16 A	18-Aug-16	26-Oct-15	04-Dec-15	-178	$12,328.16	68
2-W.09.02.01	SIX0673	SIX M4 Mirrors & Tanks - Receipt of Equipment at BNL (optics)	0%	1	05-Jul-16*	05-Jul-16	04-Jan-16	04-Jan-16	-127	$17,254.64	100
2-W.09.02.01	SIX0676	SIX M4 Mirrors & Tanks - Installation Phase II	0%	23	19-Aug-16	21-Sep-16	05-Jan-16	22-Jan-16	-169	$12,328.16	68
2-W.09.02.01	SIX0677	SIX M4 Mirrors & Tanks - Commissioning of Equipment	0%	5	22-Sep-16	28-Sep-16	25-Jan-16	29-Jan-16	-169	$19,724.64	68
2-W.09.02.01	SIX0679	SIX M4 Mirrors & Tanks - Commissioning Acceptance Report	0%	1	29-Sep-16	29-Sep-16	10-Mar-16	10-Mar-16	-142	$4,930.64	68
2-W.09.02.01	SIX0680	SIX M4 Mirrors & Tanks - Install & Assembly Support BNL	85%	94	22-Feb-16 A	01-Jul-16	26-Oct-15	22-Jan-16	-113	$33,834.85	130
Monochromator Gratings Substrate (LONG LEAD PROCUREMENT)			100%	354	01-Aug-13 A	31-Dec-14 A	01-Aug-13	07-Nov-14	-35	$254,085.89	
2-W.09.02.01	SIX0720	Write Spec and SOW: Monochromator Gratings Substrate Phase 1	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.09.02.01	SIX0720FA	Write Spec and SOW: Monochromator Gratings Substrate Phase 1	100%	5	01-Oct-13 A	07-Oct-13 A	01-Oct-13	07-Oct-13	0	$22,570.22	
2-W.09.02.01	SIX0730	PPM Accept Requisition	100%	5	08-Oct-13 A	14-Oct-13 A	08-Oct-13	14-Oct-13	0	$0.00	
2-W.09.02.01	SIX0740	Prepare RFQ	100%	0	16-Oct-13 A	16-Oct-13 A	16-Oct-13	16-Oct-13	0	$0.00	
2-W.09.02.01	SIX0750	Call for Bid	100%	10	16-Oct-13 A	30-Oct-13 A	16-Oct-13	29-Oct-13	0	$0.00	
2-W.09.02.01	SIX0760	Receive and Evaluate Vendor Proposal	100%	2	30-Oct-13 A	01-Nov-13 A	30-Oct-13	30-Oct-13	-1	$0.00	



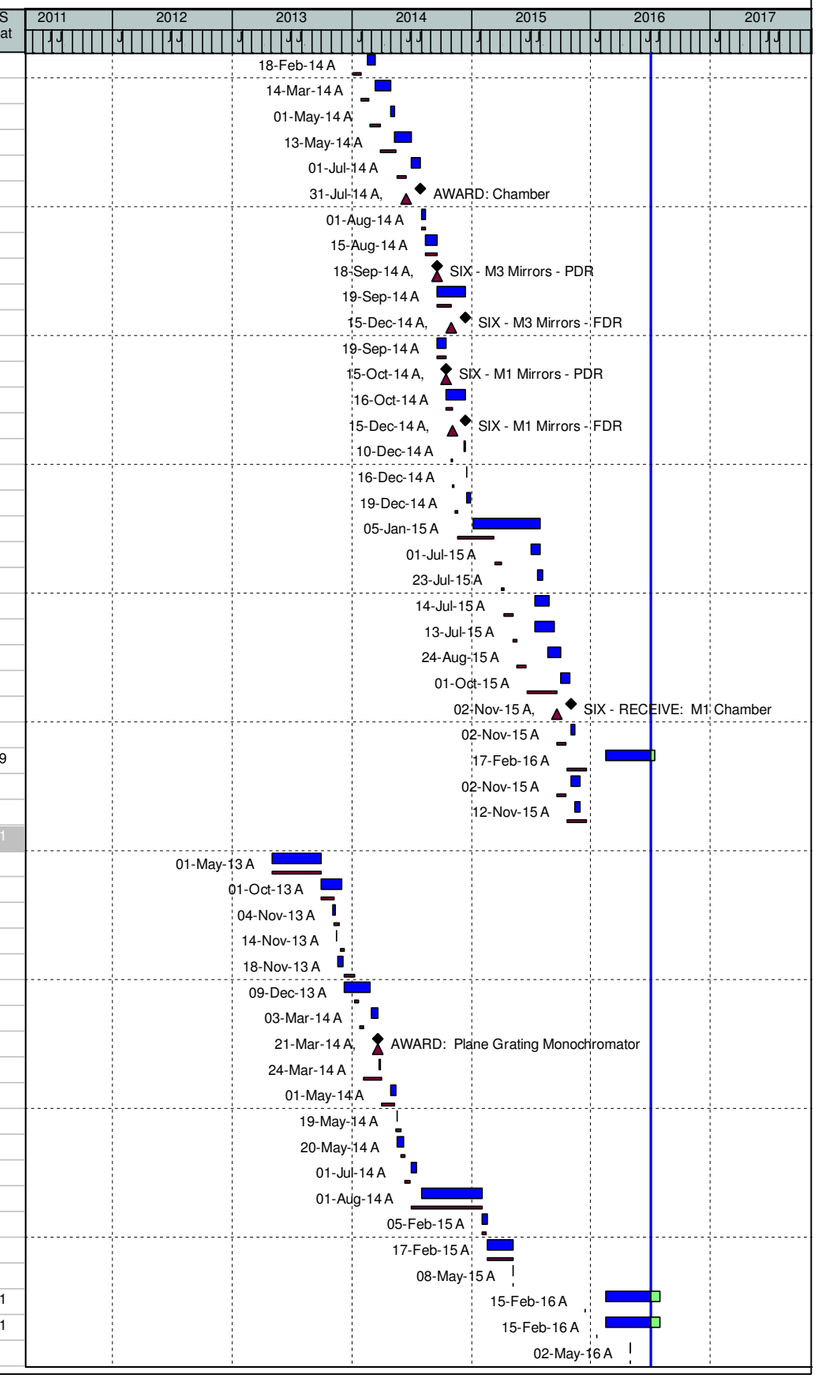
(O) NEXT - Detail Schedule

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.09.02.01	SIX0770	Vendor Negotiations	100%	1	01-Nov-13 A	04-Nov-13 A	31-Oct-13	04-Nov-13	1	$0.00	
2-W.09.02.01	SIX0776	Procure/Fab - Monochromator Gratings Phase 1	100%	13	04-Nov-13 A	20-Nov-13 A	01-Nov-13	31-Dec-13	26	$37,185.67	
2-W.09.02.01	SIX0780	AWARD: Gratings Phase 1	100%	0		20-Nov-13 A		04-Nov-13	-12	$0.00	
2-W.09.02.01	SIX0781	Monochromator Gratings Substrate - Fabrication	100%	217	28-Nov-13 A	08-Oct-14 A	28-Nov-13	08-Oct-14	0	$0.00	
2-W.09.02.01	SIX0785	RECEIVE: Monochromator Gratings Substrate	100%	0		08-Oct-14 A		08-Oct-14	0	$0.00	
2-W.09.02.01	SIX0800	Monochromator Gratings Substrate - BNL Acceptance (14 units)	100%	56	09-Oct-14 A	31-Dec-14 A	09-Oct-14	07-Nov-14	-35	$179,375.04	
2-W.09.02.01	SIX0810	Monochromator Gratings Substrate - Bench Test	100%	40	03-Nov-14 A	31-Dec-14 A	19-Aug-14	02-Sep-14	-82	$14,954.96	
Monochromator Gratings Phase 2			72.1%	582	01-May-14 A	25-Aug-16	01-Apr-14	09-Feb-16	-139	$172,627.75	92
2-W.09.02.01	SIX4999	Write Specification Lag	100%	42	01-May-14 A	30-Jun-14 A	01-Apr-14	30-Apr-14	-42	$0.00	
2-W.09.02.01	SIX5000	Monochromator Gratings Phase 2 - Write Spec	100%	67	01-Jul-14 A	06-Oct-14 A	01-Jul-14	18-Aug-14	-34	$27,740.37	
2-W.09.02.01	SIX5005	Monochromator Gratings Phase 2 - Vendor Prototyping	100%	16	07-Oct-14 A	29-Oct-14 A				$0.00	
2-W.09.02.01	SIX5010	Monochromator Gratings Phase 2 - PPM Accept Requisition	100%	0		29-Oct-14 A		02-Oct-14	-18	$0.00	
2-W.09.02.01	SIX5020	Monochromator Gratings Phase 2 - Prepare & Submit RFQ	100%	17	30-Oct-14 A	21-Nov-14 A	03-Oct-14	24-Oct-14	-20	$0.00	
2-W.09.02.01	SIX5030	Monochromator Gratings Phase 2 - Offerors Prepare & Submit Proposals	100%	2	24-Nov-14 A	25-Nov-14 A	27-Oct-14	02-Dec-14	3	$0.00	
2-W.09.02.01	SIX5040	Monochromator Gratings Phase 2 - Evaluate Offeror Proposals	100%	1	26-Nov-14 A	27-Nov-14 A	03-Dec-14	26-Jan-15	37	$0.00	
2-W.09.02.01	SIX5050	Monochromator Gratings Phase 2 - Negotiate & Contract Package Approval	100%	10	28-Nov-14 A	15-Dec-14 A	27-Jan-15	24-Feb-15	47	$0.00	
2-W.09.02.01	SIX5060	AWARD: Monochromator Gratings Phase 2	100%	0		15-Dec-14 A		24-Feb-15	47	$0.00	
2-W.09.02.01	SIX50701	Monochromator Gratings Phase 2 - Program Plan	100%	1	01-Apr-15 A	01-Apr-15 A	01-Apr-15	01-Apr-15	0	$32,240.00	
2-W.09.02.01	SIX50703	Monochromator Gratings Phase 2 - Fabrication	100%	223	02-Apr-15 A	23-Feb-16 A	02-Apr-15	23-Oct-15	-80	$0.00	
2-W.09.02.01	SIX50706	Monochromator Gratings Phase 2 - Demonstration of Uniform Grating	100%	1	01-Dec-15 A	01-Dec-15 A	26-Oct-15	26-Oct-15	-24	$32,240.00	
2-W.09.02.01	SIX50708	Low-res Gratings Rulings - Fabrication of First Grating	100%	71	02-Dec-15 A	15-Mar-16 A	27-Oct-15	03-Dec-15	-69	$0.00	
2-W.09.02.01	SIX50711	Low-res Gratings Rulings - Reciept of First Grating	100%	1	16-Mar-16 A	16-Mar-16 A	04-Dec-15	04-Dec-15	-69	$32,240.00	
2-W.09.02.01	SIX50713	Low-res Gratings Rulings- Fab and Shipping for Second Device	80%	99	17-Mar-16 A	04-Aug-16	07-Dec-15	24-Dec-15	-154	$0.00	92
2-W.09.02.01	SIX50716	Low-res Gratings Rulings - Reciept of Second Grating	0%	1	05-Aug-16	05-Aug-16	28-Dec-15	28-Dec-15	-154	$32,240.00	92
2-W.09.02.01	SIX5090	RECEIVE: Low-res Gratings Rulings	0%	0		05-Aug-16		09-Feb-16	-125	$0.00	92
2-W.09.02.01	SIX6000	Monochromator Gratings Phase 2 - Bench Test	0%	14	08-Aug-16	25-Aug-16	10-Nov-15	09-Dec-15	-180	$15,927.39	92
M1 & M2 Mirror Package			100%	707	01-Aug-13 A	31-May-16 A	01-Aug-13	20-Oct-15	-152	$223,025.01	
2-W.09.02.01	SIX0875	Write Spec M1 & M2 Mirror	100%	41	01-Aug-13 A	30-Sep-13 A	01-Aug-13	30-Sep-13	1	$0.00	
2-W.09.02.01	SIX0875FA	Write Spec M1 & M2 Mirror	100%	22	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	0	$7,734.62	
2-W.09.02.01	SIX0876	Write Spec M2 Mirror	100%	21	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	1	$4,003.00	
2-W.09.02.01	SIX0880	PPM Accept Requisition	100%	4	01-Nov-13 A	07-Nov-13 A	01-Nov-13	07-Nov-13	1	$0.00	
2-W.09.02.01	SIX0881	Prepare RFQ	100%	4	08-Nov-13 A	14-Nov-13 A	08-Nov-13	14-Nov-13	1	$0.00	
2-W.09.02.01	SIX0895	Call for Bid	100%	4	15-Nov-13 A	25-Nov-13 A	15-Nov-13	25-Nov-13	1	$0.00	
2-W.09.02.01	SIX0905	Receive and Evaluate Vendor Proposal	100%	4	26-Nov-13 A	02-Dec-13 A	26-Nov-13	02-Dec-13	1	$0.00	
2-W.09.02.01	SIX0955	AWARD: M1 & M2 Mirror	100%	0		03-Dec-13 A		02-Dec-13	0	$0.00	
2-W.09.02.01	SIX0965	Vendor Submittal of Drawings to BNL	100%	49	04-Dec-13 A	13-Feb-14 A	03-Dec-13	13-Feb-14	0	$0.00	
2-W.09.02.01	SIX0966	Procure/Fab M1 & M2 Mirror	100%	12	13-Dec-13 A	31-Dec-13 A	03-Dec-13	31-Dec-13	0	$5,907.33	
2-W.09.02.01	SIX0967	Procure/Fab M2 Mirror	100%	12	13-Dec-13 A	31-Dec-13 A	03-Dec-13	31-Dec-13	0	$5,907.33	
2-W.09.02.01	SIX0975	BNL Approval & Acceptance of Drawings	100%	1	14-Feb-14 A	14-Feb-14 A	14-Feb-14	14-Feb-14	0	$51,812.80	
2-W.09.02.01	SIX0980	SIX M1 Mirror Delivered	100%	312	18-Feb-14 A	15-May-15 A	18-Feb-14	01-Oct-14	-154	$0.00	
2-W.09.02.01	SIX0985	ESM M1 Delivered	100%	8	10-Nov-14 A	20-Nov-14 A	02-Oct-14	14-Nov-14	-3	$0.00	
2-W.09.02.01	SIX0986	ESM M2 Delivered	100%	8	10-Nov-14 A	20-Nov-14 A	17-Nov-14	05-Dec-14	10	$0.00	
2-W.09.02.01	SIX0987	SIX M2 Mirror Delivered	100%	59	05-Jan-15 A	30-Mar-15 A	08-Dec-14	06-Jan-15	-57	$0.00	
2-W.09.02.01	SIX0988	M1 & M2 Mirror - Delivered to BNL	100%	34	31-Mar-15 A	15-May-15 A	07-Jan-15	07-Jan-15	-90	$86,355.36	
2-W.09.02.01	SIX0989	M1 & M2 Mirror - Acceptance Testing by BNL	100%	108	18-May-15 A	20-Oct-15 A	08-Jan-15	17-Feb-15	-171	$0.00	
2-W.09.02.01	SIX0989A	M1 & M2 Mirror - Final Approval and Acceptance by BNL	100%	1	02-Nov-15 A	02-Nov-15 A	18-Feb-15	18-Feb-15	-179	$34,542.56	
2-W.09.02.01	SIX0990	M1 & M2 Mirror - Assembly	100%	141	05-Nov-15 A	31-May-16 A	17-Mar-15	09-Jun-15	-244	$13,724.76	
2-W.09.02.01	SIX0995	M1 & M2 Mirror - Test	100%	93	18-Jan-16 A	31-May-16 A	08-Sep-15	20-Oct-15	-152	$13,037.25	
M1 Chamber			99.57%	698	01-Oct-13 A	15-Jul-16	01-Oct-13	18-Dec-15	-144	$821,757.68	119
2-W.09.02.01	SIX0859A	Chamber Lag Activity	100%	50	01-Oct-13 A	12-Dec-13 A	01-Oct-13	31-Oct-13	-28	$0.00	
2-W.09.02.01	SIX0860	Write Spec Chamber	100%	43	13-Dec-13 A	14-Feb-14 A	01-Nov-13	06-Jan-14	-28	$18,278.44	



(O) NEXT - Detail Schedule

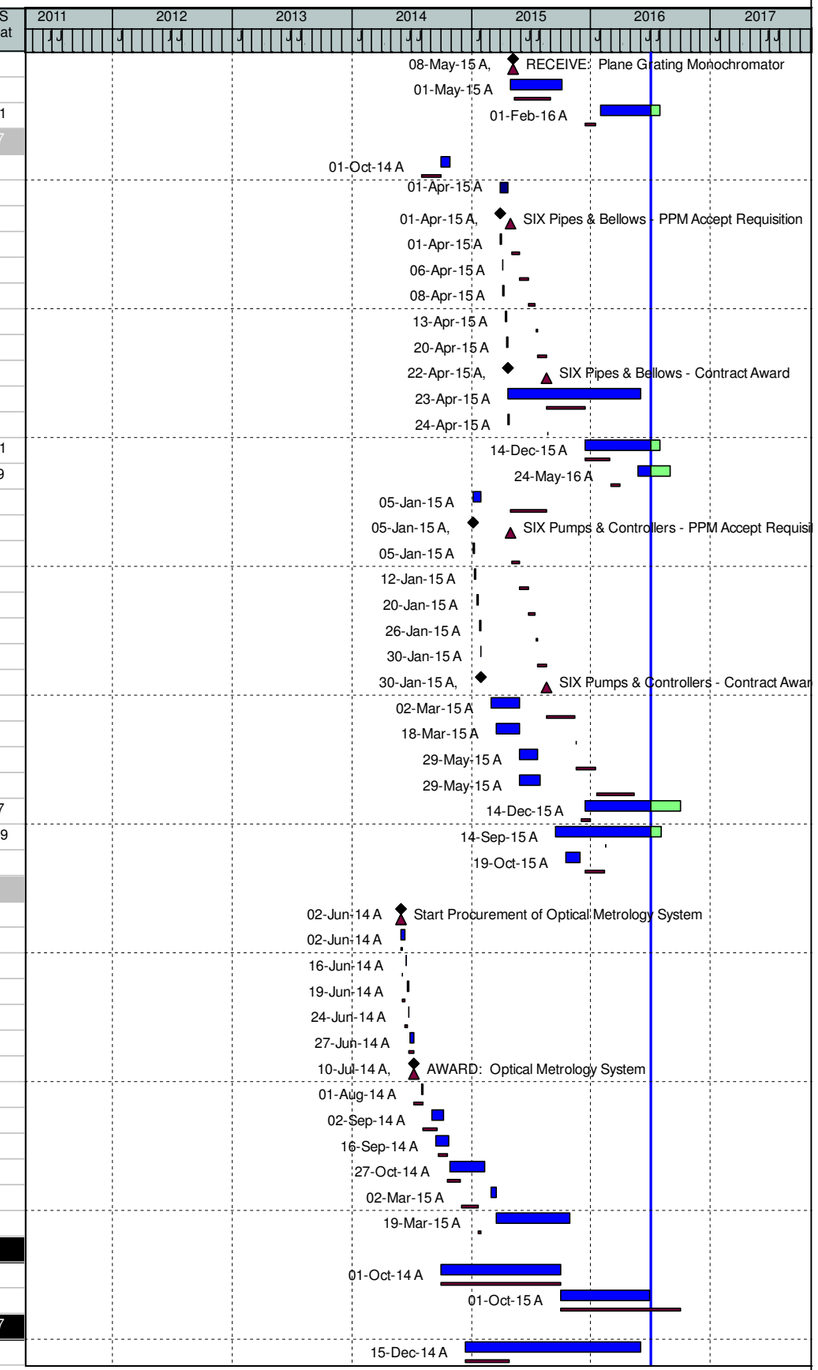
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.09.02.01	SIX0870	PPM Accept Requisition	100%	18	18-Feb-14 A	13-Mar-14 A	07-Jan-14	30-Jan-14	-29	$0.00	
2-W.09.02.01	SIX0871	Prepare RFP	100%	34	14-Mar-14 A	01-May-14 A	31-Jan-14	21-Feb-14	-48	$0.00	
2-W.09.02.01	SIX0890	Call for Bid	100%	7	01-May-14 A	12-May-14 A	24-Feb-14	28-Mar-14	-30	$0.00	
2-W.09.02.01	SIX0900	Receive and Evaluate Vendor Proposal	100%	34	13-May-14 A	01-Jul-14 A	31-Mar-14	16-May-14	-30	$0.00	
2-W.09.02.01	SIX0910	Vendor Negotiations	100%	20	01-Jul-14 A	30-Jul-14 A	19-May-14	16-Jun-14	-30	$0.00	
2-W.09.02.01	SIX0920	AWARD: Chamber	100%	0		31-Jul-14 A		16-Jun-14	-30	$0.00	
2-W.09.02.01	SIX0930100	SIX - Program Plan	100%	10	01-Aug-14 A	14-Aug-14 A	01-Aug-14	14-Aug-14	0	$23,207.60	
2-W.09.02.01	SIX0930105	SIX - M3 Mirrors - Preliminary Design	100%	24	15-Aug-14 A	18-Sep-14 A	15-Aug-14	18-Sep-14	0	$70,295.68	
2-W.09.02.01	SIX0930110	SIX - M3 Mirrors - PDR	100%	0		18-Sep-14 A		18-Sep-14	0	$0.00	
2-W.09.02.01	SIX0930115	SIX - M3 Mirrors - Final Design	100%	59	19-Sep-14 A	15-Dec-14 A	19-Sep-14	30-Oct-14	-30	$105,443.52	
2-W.09.02.01	SIX0930120	SIX - M3 Mirrors - FDR	100%	0		15-Dec-14 A		30-Oct-14	-30	$0.00	
2-W.09.02.01	SIX0930125	SIX - M1 Mirrors - Preliminary Design	100%	18	19-Sep-14 A	15-Oct-14 A	19-Sep-14	15-Oct-14	0	$70,295.68	
2-W.09.02.01	SIX0930130	SIX - M1 Mirrors - PDR	100%	0		15-Oct-14 A		15-Oct-14	0	$0.00	
2-W.09.02.01	SIX0930135	SIX - M1 Mirrors - Final Design	100%	41	16-Oct-14 A	15-Dec-14 A	16-Oct-14	05-Nov-14	-26	$105,443.52	
2-W.09.02.01	SIX0930140	SIX - M1 Mirrors - FDR	100%	0		15-Dec-14 A		05-Nov-14	-26	$0.00	
2-W.09.02.01	SIX0930145	SIX - Long leads ordered	100%	4	10-Dec-14 A	15-Dec-14 A	31-Oct-14	05-Nov-14	-26	$4,904.64	
2-W.09.02.01	SIX0930150	SIX - Manufacturing Drawings finished	100%	3	16-Dec-14 A	18-Dec-14 A	06-Nov-14	10-Nov-14	-26	$3,923.92	
2-W.09.02.01	SIX0930155	SIX - Procurement finished	100%	8	19-Dec-14 A	31-Dec-14 A	11-Nov-14	20-Nov-14	-26	$8,828.56	
2-W.09.02.01	SIX0930160	SIX - All parts delivered incl. Free issue items	100%	146	05-Jan-15 A	31-Jul-15 A	21-Nov-14	12-Mar-15	-99	$108,879.68	
2-W.09.02.01	SIX0930165	SIX - Mechanical Assembly finished	100%	21	01-Jul-15 A	31-Jul-15 A	13-Mar-15	02-Apr-15	-83	$19,617.52	
2-W.09.02.01	SIX0930170	SIX - Electrical Assembly finished - ready for performance tests	100%	10	23-Jul-15 A	05-Aug-15 A	03-Apr-15	09-Apr-15	-82	$5,885.36	
2-W.09.02.01	SIX0930175	SIX - Performance tests finished	100%	32	14-Jul-15 A	26-Aug-15 A	10-Apr-15	07-May-15	-77	$26,484.64	
2-W.09.02.01	SIX0930180	SIX - Vacuum performance test finished (mass spec after bakeout)	100%	43	13-Jul-15 A	10-Sep-15 A	08-May-15	21-May-15	-77	$12,751.44	
2-W.09.02.01	SIX0930185	SIX - Factory acceptance test of the system (FAT)	100%	26	24-Aug-15 A	30-Sep-15 A	22-May-15	18-Jun-15	-71	$26,484.64	
2-W.09.02.01	SIX0930190	SIX - Shipping	100%	19	01-Oct-15 A	29-Oct-15 A	19-Jun-15	18-Sep-15	-27	$40,216.80	
2-W.09.02.01	SIX0930195	SIX - RECEIVE: M1 Chamber	100%	0		02-Nov-15 A		18-Sep-15	-29	$0.00	
2-W.09.02.01	SIX0930200	SIX - Installation	100%	10	02-Nov-15 A	13-Nov-15 A	21-Sep-15	16-Oct-15	-20	$35,147.84	
2-W.09.02.01	SIX0930205	SIX - Approval of the Commissioning Report	90%	106	17-Feb-16 A	15-Jul-16	19-Oct-15	18-Dec-15	-144	$35,147.84	119
2-W.09.02.01	SIX0960	SIX - BNL M1 Chamber - Assembly	100%	18	02-Nov-15 A	27-Nov-15 A	21-Sep-15	16-Oct-15	-28	$53,814.12	
2-W.09.02.01	SIX0970	SIX - BNL M1 Chamber - Test	100%	10	12-Nov-15 A	27-Nov-15 A	19-Oct-15	18-Dec-15	15	$46,706.24	
Plane Grating Monochromator PGM (LONG LEAD PROCUREMENT)			98.71%	813	01-May-13 A	29-Jul-16	01-May-13	02-May-16	-62	$686,542.08	111
2-W.09.02.01	SIX1140	Write Spec Plane Grating Monochromator Tank and Miror (PGM)	100%	104	01-May-13 A	30-Sep-13 A	01-May-13	30-Sep-13	1	$0.00	
2-W.09.02.01	SIX1140FA	Write Spec Plane Grating Monochromator Tank and Mirror (PGM)	100%	42	01-Oct-13 A	02-Dec-13 A	01-Oct-13	07-Nov-13	-15	$1,611.30	
2-W.09.02.01	SIX1150	PPM Accept Requisition	100%	8	04-Nov-13 A	13-Nov-13 A	08-Nov-13	25-Nov-13	6	$0.00	
2-W.09.02.01	SIX1151	Prepare RFP	100%	1	14-Nov-13 A	15-Nov-13 A	26-Nov-13	09-Dec-13	15	$0.00	
2-W.09.02.01	SIX1170	Call for Bid	100%	13	18-Nov-13 A	06-Dec-13 A	10-Dec-13	08-Jan-14	21	$0.00	
2-W.09.02.01	SIX1180	Receive and Evaluate Vendor Proposal	100%	55	09-Dec-13 A	28-Feb-14 A	09-Jan-14	23-Jan-14	-24	$0.00	
2-W.09.02.01	SIX1190	Vendor Negotiations	100%	14	03-Mar-14 A	21-Mar-14 A	24-Jan-14	06-Feb-14	-29	$0.00	
2-W.09.02.01	SIX1200	AWARD: Plane Grating Monochromator	100%	0		21-Mar-14 A		21-Mar-14	1	$0.00	
2-W.09.02.01	SIX1205	Procure/Fab Plane Grating Monochromator (bcws applied to 1st payment)	100%	5	24-Mar-14 A	31-Mar-14 A	07-Feb-14	31-Mar-14	1	$86,606.25	
2-W.09.02.01	SIX1206	Preliminary Design Report 50%	100%	11	01-May-14 A	15-May-14 A	01-Apr-14	13-May-14	-2	$0.00	
2-W.09.02.01	SIX1207	Approval of PDR and Minutes	100%	0	19-May-14 A	19-May-14 A	14-May-14	29-May-14	8	$30,814.22	
2-W.09.02.01	SIX1208	Final Design Report 50%	100%	14	20-May-14 A	09-Jun-14 A	30-May-14	11-Jun-14	2	$83,818.80	
2-W.09.02.01	SIX1209	Approval of FDR and Minutes	100%	12	01-Jul-14 A	18-Jul-14 A	12-Jun-14	27-Jun-14	-13	$83,818.80	
2-W.09.02.01	SIX12091	Plane Grating Monochromator - Fabrication	100%	126	01-Aug-14 A	04-Feb-15 A	30-Jun-14	03-Feb-15	-1	$0.00	
2-W.09.02.01	SIX1210	Plane Grating Monochromator - Factory Acceptance Test	100%	8	05-Feb-15 A	17-Feb-15 A	04-Feb-15	13-Feb-15	-1	$125,590.40	
2-W.09.02.01	SIX12101	Plane Grating Monochromator - Final Fabrication & Shipping	100%	58	17-Feb-15 A	07-May-15 A	17-Feb-15	07-May-15	0	$0.00	
2-W.09.02.01	SIX1211	Plane Grating Monochromator - Reciept	100%	1	08-May-15 A	08-May-15 A	08-May-15	08-May-15	0	$125,590.40	
2-W.09.02.01	SIX1212	Plane Grating Monochromator - Receipt of Commissioning Report 50%	90%	117	15-Feb-16 A	29-Jul-16	14-Dec-15	14-Dec-15	-158	$27,939.60	111
2-W.09.02.01	SIX1215	Plane Grating Monochromator - Approval of Commissioning Report	90%	117	15-Feb-16 A	29-Jul-16	19-Jan-16	19-Jan-16	-135	$27,939.60	111
2-W.09.02.01	SIX1216	Plane Grating Monochromator - Amendment No. 2	100%	1	02-May-16 A	02-May-16 A	02-May-16	02-May-16	0	$25,469.60	



(O) NEXT - Detail Schedule

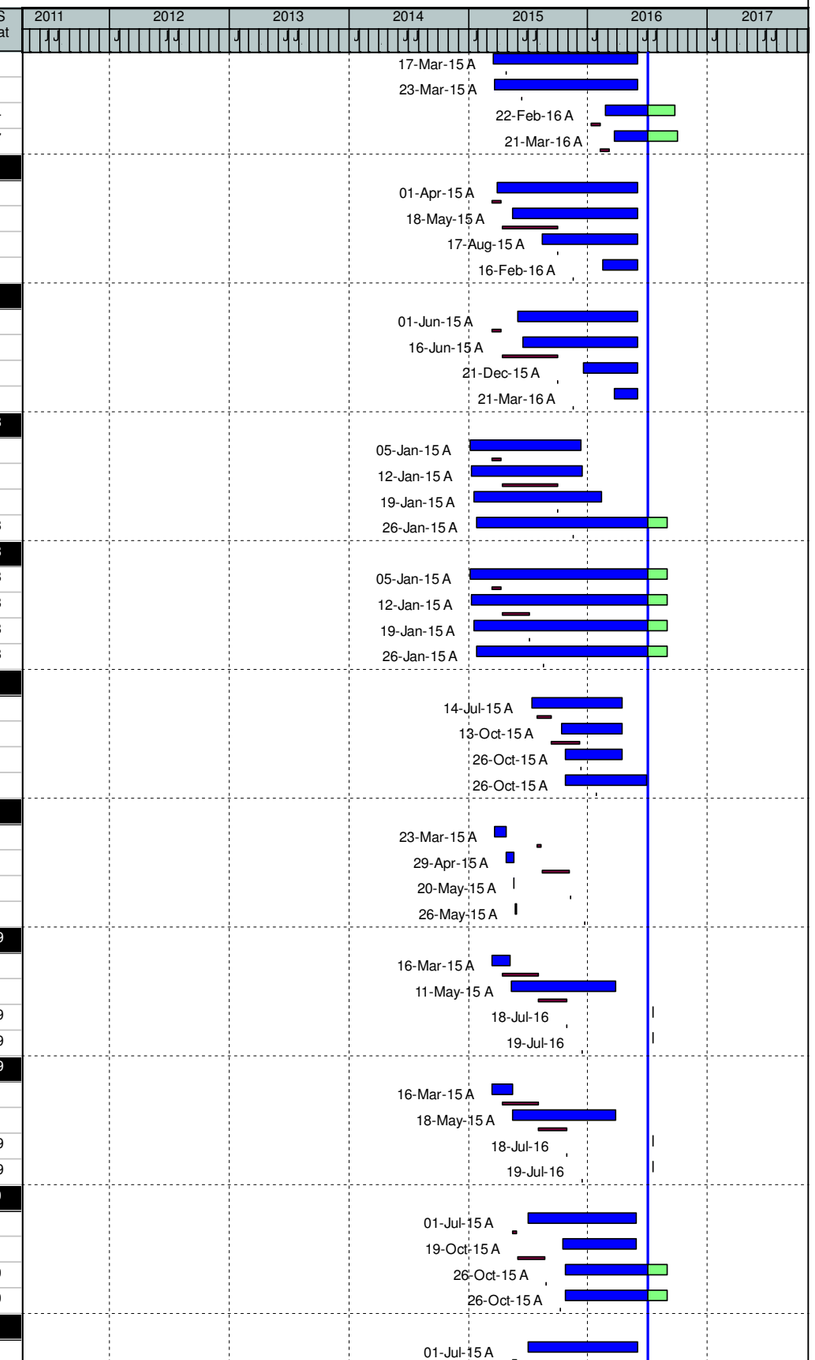
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.09.02.01	SIX1220	RECEIVE: Plane Grating Monochromator	100%	0		08-May-15 A		08-May-15	0	$0.00	
2-W.09.02.01	SIX1240	Plane Grating Monochromator - Assembly & Installation	100%	109	01-May-15 A	05-Oct-15 A	11-May-15	01-Sep-15	-23	$34,798.00	
2-W.09.02.01	SIX1250	Plane Grating Monochromator - Test & Commissioning	90%	127	01-Feb-16 A	29-Jul-16	14-Dec-15	15-Jan-16	-136	$32,545.12	111
Non-Optics Beamline Components			96.65%	502	01-Oct-14 A	30-Sep-16	01-Aug-14	13-May-16	-97	$519,962.23	67
2-W.09.02.01	SIX1160	Write Spec Procure Non-Optics Beamline Components	100%	20	01-Oct-14 A	30-Oct-14 A	01-Aug-14	01-Oct-14	-19	$25,078.76	
2-W.09.02.01	SIX4062	SIX Pipes & Bellows - Procurement Support	100%	16	01-Apr-15 A	22-Apr-15 A	01-May-15	19-Aug-15	83	$24,201.72	
2-W.09.02.01	SIX4062100	SIX Pipes & Bellows - PPM Accept Requisition	100%	0		01-Apr-15 A		01-May-15	23	$0.00	
2-W.09.02.01	SIX4062105	SIX Pipes & Bellows - Prepare & Submit RFQ	100%	3	01-Apr-15 A	03-Apr-15 A	04-May-15	27-May-15	37	$0.00	
2-W.09.02.01	SIX4062110	SIX Pipes & Bellows - Offerors Prepare & Submit Proposals	100%	2	06-Apr-15 A	07-Apr-15 A	28-May-15	24-Jun-15	55	$0.00	
2-W.09.02.01	SIX4062115	SIX Pipes & Bellows - Evaluate Offeror Proposals	100%	3	08-Apr-15 A	10-Apr-15 A	25-Jun-15	16-Jul-15	67	$0.00	
2-W.09.02.01	SIX4062120	SIX Pipes & Bellows - Negotiation	100%	5	13-Apr-15 A	17-Apr-15 A	17-Jul-15	23-Jul-15	67	$0.00	
2-W.09.02.01	SIX4062125	SIX Pipes & Bellows - Prepare and Approve Contract Package	100%	3	20-Apr-15 A	22-Apr-15 A	24-Jul-15	20-Aug-15	84	$0.00	
2-W.09.02.01	SIX4062130	SIX Pipes & Bellows - Contract Award	100%	0		22-Apr-15 A		20-Aug-15	84	$0.00	
2-W.09.02.01	SIX4063	SIX Pipes & Bellows - Fabrication Support	100%	278	23-Apr-15 A	31-May-16 A	20-Aug-15	14-Dec-15	-116	$2,690.55	
2-W.09.02.01	SIX4064	SIX Bellows & UHV	100%	1	24-Apr-15 A	27-Apr-15 A	21-Aug-15	21-Aug-15	83	$58,119.26	
2-W.09.02.01	SIX4065	SIX Pipes & Bellows - Assembly	90%	159	14-Dec-15 A	29-Jul-16	15-Dec-15	29-Feb-16	-107	$8,551.56	111
2-W.09.02.01	SIX4066	SIX Pipes & Bellows - Test	70%	69	24-May-16 A	30-Aug-16	01-Mar-16	31-Mar-16	-106	$9,298.64	89
2-W.09.02.01	SIX4067	SIX Pumps & Controllers - Procurement Support	100%	19	05-Jan-15 A	30-Jan-15 A	01-May-15	19-Aug-15	140	$24,518.33	
2-W.09.02.01	SIX4067100	SIX Pumps & Controllers - PPM Accept Requisition	100%	0		05-Jan-15 A		01-May-15	83	$0.00	
2-W.09.02.01	SIX4067105	SIX Pumps & Controllers - Prepare & Submit RFQ	100%	5	05-Jan-15 A	09-Jan-15 A	04-May-15	27-May-15	95	$0.00	
2-W.09.02.01	SIX4067110	SIX Pumps & Controllers - Offerors Prepare & Submit Proposals	100%	5	12-Jan-15 A	16-Jan-15 A	28-May-15	24-Jun-15	110	$0.00	
2-W.09.02.01	SIX4067115	SIX Pumps & Controllers - Evaluate Offeror Proposals	100%	4	20-Jan-15 A	23-Jan-15 A	25-Jun-15	16-Jul-15	121	$0.00	
2-W.09.02.01	SIX4067120	SIX Pumps & Controllers - Negotiation	100%	4	26-Jan-15 A	29-Jan-15 A	17-Jul-15	23-Jul-15	122	$0.00	
2-W.09.02.01	SIX4067125	SIX Pumps & Controllers - Prepare and Approve Contract Package	100%	1	30-Jan-15 A	30-Jan-15 A	24-Jul-15	20-Aug-15	141	$0.00	
2-W.09.02.01	SIX4067130	SIX Pumps & Controllers - Contract Award	100%	0		30-Jan-15 A		20-Aug-15	142	$0.00	
2-W.09.02.01	SIX4068	SIX Pumps & Controllers - Fabrication Support	100%	62	02-Mar-15 A	28-May-15 A	20-Aug-15	13-Nov-15	119	$2,680.74	
2-W.09.02.01	SIX4069	SIX Pumps & Controllers - Delivery	100%	50	18-Mar-15 A	28-May-15 A	16-Nov-15	16-Nov-15	120	$182,838.00	
2-W.09.02.01	SIX4070	SIX Pumps & Controllers - Assembly	100%	39	29-May-15 A	24-Jul-15 A	17-Nov-15	15-Jan-16	120	$6,707.10	
2-W.09.02.01	SIX4071	SIX Pumps & Controllers - Test	100%	44	29-May-15 A	31-Jul-15 A	19-Jan-16	13-May-16	198	$8,085.77	
2-W.09.02.01	SIX4092	Install & Assembly - Non-Optics Beamline Components	85%	203	14-Dec-15 A	30-Sep-16	03-Dec-15	31-Dec-15	-190	$36,911.47	67
2-W.09.02.01	SIX4150	SIX Pipes	90%	223	14-Sep-15 A	02-Aug-16	16-Feb-16	16-Feb-16	-118	$82,572.00	109
2-W.09.02.01	SIX4155	SIX Pipes & Ion Pumps Support System	100%	28	19-Oct-15 A	30-Nov-15 A	15-Dec-15	12-Feb-16	52	$47,708.33	
Optical Metrology System			100%	354	02-Jun-14 A	29-Oct-15 A	02-Jun-14	28-Jan-15	-191	$102,605.36	
2-W.09.02.01	SIX0025	Start Procurement of Optical Metrology System	100%	0	02-Jun-14 A		02-Jun-14		0	$0.00	
2-W.09.02.01	SIX0035	PPM Accepts Req	100%	10	02-Jun-14 A	13-Jun-14 A	02-Jun-14	04-Jun-14	-7	$0.00	
2-W.09.02.01	SIX0045	Prepare RFQ & Post	100%	2	16-Jun-14 A	18-Jun-14 A	05-Jun-14	05-Jun-14	-8	$0.00	
2-W.09.02.01	SIX0055	Receive Proposals	100%	3	19-Jun-14 A	24-Jun-14 A	06-Jun-14	12-Jun-14	-7	$0.00	
2-W.09.02.01	SIX0065	Evaluate Vendor Proposals	100%	2	24-Jun-14 A	26-Jun-14 A	13-Jun-14	20-Jun-14	-3	$0.00	
2-W.09.02.01	SIX0070	Award Package Prep & Review	100%	7	27-Jun-14 A	09-Jul-14 A	23-Jun-14	08-Jul-14	-1	$0.00	
2-W.09.02.01	SIX0075	AWARD: Optical Metrology System	100%	0		10-Jul-14 A		09-Jul-14	0	$0.00	
2-W.09.02.01	SIX0085	Optical Metrology System - BSA Approval of Draft Drawing Package	100%	4	01-Aug-14 A	06-Aug-14 A	09-Jul-14	06-Aug-14	0	$20,521.28	
2-W.09.02.01	SIX0095	Optical Metrology System - BSA Approval of Operational Software and Hardw	100%	25	02-Sep-14 A	06-Oct-14 A	07-Aug-14	19-Sep-14	-11	$30,780.88	
2-W.09.02.01	SIX0105	Optical Metrology System - BSA Approval of Demonstration of X-Ray Mirror M	100%	26	16-Sep-14 A	23-Oct-14 A	22-Sep-14	20-Oct-14	-2	$10,260.64	
2-W.09.02.01	SIX0115	Optical Metrology System - BSA Approval of Demonstration of Calibration	100%	73	27-Oct-14 A	12-Feb-15 A	21-Oct-14	26-Nov-14	-50	$10,260.64	
2-W.09.02.01	SIX0125	Optical Metrology System - Receipt and Acceptance of Equipment at BNL	100%	13	02-Mar-15 A	18-Mar-15 A	01-Dec-14	21-Jan-15	-39	$15,390.96	
2-W.09.02.01	SIX0130	Optical Metrology System - BSA Acceptance of Complete Commissioning and	100%	157	19-Mar-15 A	29-Oct-15 A	22-Jan-15	28-Jan-15	-191	$15,390.96	
Management			100%	437	01-Oct-14 A	30-Jun-16 A	01-Oct-14	30-Sep-16	65	$200,498.95	
2-W.09.02.01	SIX0150	Procurement Support FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$128,772.31	
2-W.09.02.01	SIX0160	Procurement Support FY16	100%	187	01-Oct-15 A	30-Jun-16 A	01-Oct-15	30-Sep-16	65	$71,726.64	
Diagon			88.58%	452	15-Dec-14 A	30-Sep-16	15-Dec-14	08-Mar-16	-145	$122,813.07	67
2-W.09.02.01	SIX4033	Fabrication Support - Diagon	100%	366	15-Dec-14 A	31-May-16 A	15-Dec-14	28-Apr-15	-274	$2,637.14	



(O) NEXT - Detail Schedule

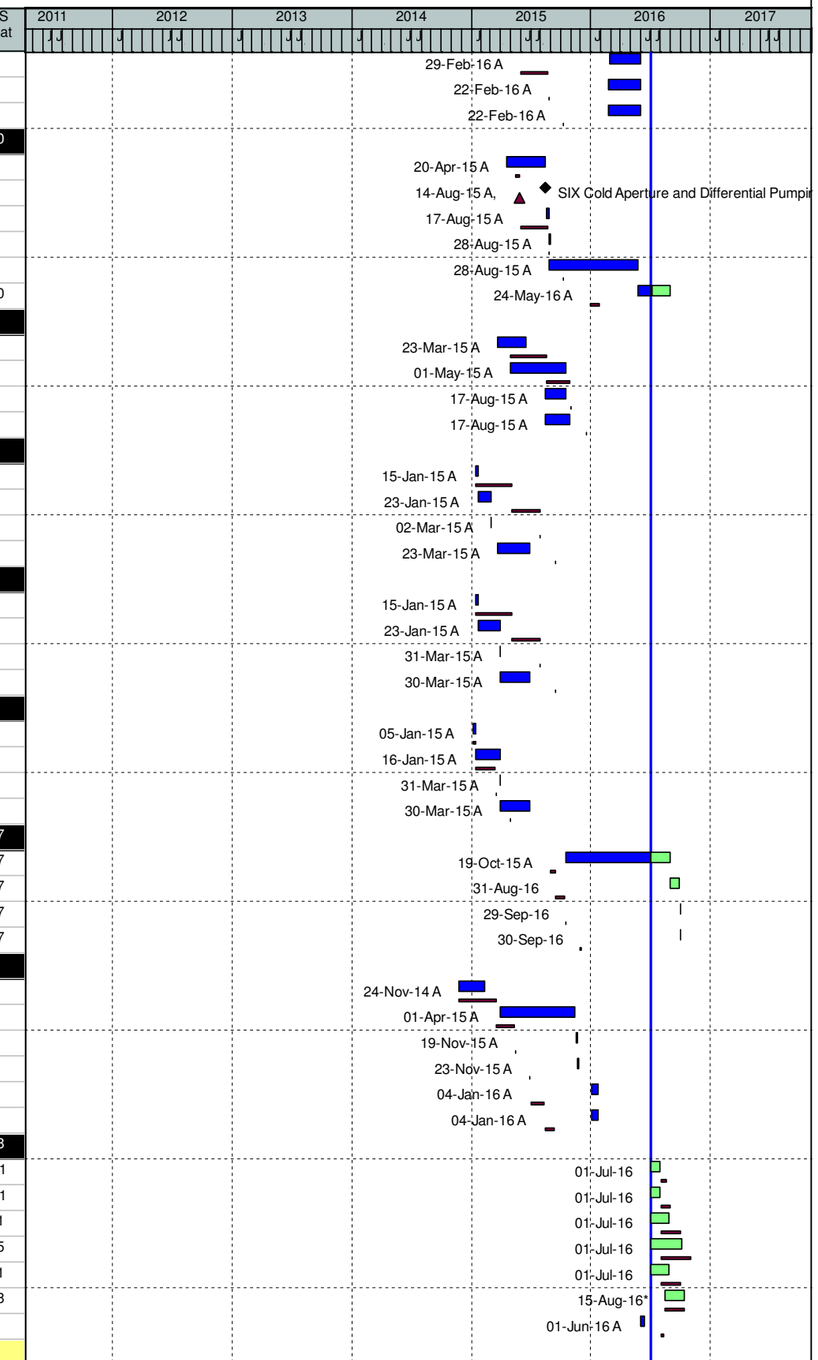
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.09.02.01	SIX4034	Delivery - Diagon	100%	305	17-Mar-15 A	31-May-16 A	28-Apr-15	28-Apr-15	-274	$45,722.76	
2-W.09.02.01	SIX4035	Acceptance - Diagon	100%	301	23-Mar-15 A	31-May-16 A	12-Jun-15	12-Jun-15	-242	$11,430.69	
2-W.09.02.01	SIX4060	Install & Assembly - Diagon System	80%	150	22-Feb-16 A	21-Sep-16	11-Jan-16	08-Feb-16	-158	$34,708.74	74
2-W.09.02.01	SIX4061	Test & Commissioning - Diagon System	75%	137	21-Mar-16 A	30-Sep-16	09-Feb-16	08-Mar-16	-145	$28,313.74	67
Baffle Slits - Water Cooled			100%	294	01-Apr-15 A	31-May-16 A	16-Mar-15	16-Nov-15	-134	$51,746.87	
2-W.09.02.01	SIX4036	PO Prep and Submittal - Baffle Slits - water cooled	100%	294	01-Apr-15 A	31-May-16 A	16-Mar-15	10-Apr-15	-286	$1,925.73	
2-W.09.02.01	SIX4037	Fabrication Support - Baffle Slits - water cooled	100%	261	18-May-15 A	31-May-16 A	13-Apr-15	30-Sep-15	-166	$2,637.14	
2-W.09.02.01	SIX4038	Delivery - Baffle Slits - water cooled	100%	198	17-Aug-15 A	31-May-16 A	01-Oct-15	01-Oct-15	-165	$37,747.20	
2-W.09.02.01	SIX4039	Acceptance - Baffle Slits - water cooled	100%	75	16-Feb-16 A	31-May-16 A	16-Nov-15	16-Nov-15	-134	$9,436.80	
Diagn. Unit - Water Cooled			100%	251	01-Jun-15 A	31-May-16 A	16-Mar-15	16-Nov-15	-133	$41,130.47	
2-W.09.02.01	SIX4040	PO Prep and Submittal - Diagn. Unit - water cooled	100%	251	01-Jun-15 A	31-May-16 A	16-Mar-15	10-Apr-15	-285	$1,925.73	
2-W.09.02.01	SIX4041	Fabrication Support - Diagn. Unit - water cooled	100%	240	16-Jun-15 A	31-May-16 A	13-Apr-15	30-Sep-15	-165	$2,637.14	
2-W.09.02.01	SIX4042	Delivery - Diagn. Unit - water cooled	100%	111	21-Dec-15 A	31-May-16 A	01-Oct-15	01-Oct-15	-164	$29,254.08	
2-W.09.02.01	SIX4043	Acceptance - Diagn. Unit - water cooled	100%	50	21-Mar-16 A	31-May-16 A	16-Nov-15	16-Nov-15	-133	$7,313.52	
Baffle Slits			92.91%	419	05-Jan-15 A	31-Aug-16	16-Mar-15	16-Nov-15	-199	$39,950.87	88
2-W.09.02.01	SIX4044	PO Prep and Submittal - Baffle slits	100%	235	05-Jan-15 A	10-Dec-15 A	16-Mar-15	10-Apr-15	-167	$1,925.73	
2-W.09.02.01	SIX4045	Fabrication Support - Baffle slits	100%	235	12-Jan-15 A	17-Dec-15 A	13-Apr-15	30-Sep-15	-52	$2,637.14	
2-W.09.02.01	SIX4046	Delivery - Baffle slits	100%	269	19-Jan-15 A	12-Feb-16 A	01-Oct-15	01-Oct-15	-90	$28,310.40	
2-W.09.02.01	SIX4047	Acceptance - Baffle slits	60%	405	26-Jan-15 A	31-Aug-16	16-Nov-15	16-Nov-15	-199	$7,077.60	88
Diagnostic Units			95%	419	05-Jan-15 A	31-Aug-16	16-Mar-15	20-Aug-15	-259	$56,000.97	88
2-W.09.02.01	SIX4048	PO Prep and Submittal - Diagnostic Units	95%	419	05-Jan-15 A	31-Aug-16	16-Mar-15	10-Apr-15	-351	$1,925.73	88
2-W.09.02.01	SIX4049	Fabrication Support - Diagnostic Units	95%	414	12-Jan-15 A	31-Aug-16	13-Apr-15	07-Jul-15	-291	$2,637.14	88
2-W.09.02.01	SIX4050	Delivery - Diagnostic Units	95%	409	19-Jan-15 A	31-Aug-16	08-Jul-15	08-Jul-15	-290	$41,150.48	88
2-W.09.02.01	SIX4051	Acceptance - Diagnostic Units	95%	405	26-Jan-15 A	31-Aug-16	20-Aug-15	20-Aug-15	-259	$10,287.62	88
Gas Cell			100%	244	14-Jul-15 A	30-Jun-16 A	30-Jul-15	26-Jan-16	-110	$71,864.77	
2-W.09.02.01	SIX4052	PO Prep and Submittal - Gas cell	100%	191	14-Jul-15 A	15-Apr-16 A	30-Jul-15	10-Sep-15	-149	$1,925.73	
2-W.09.02.01	SIX4053	Fabrication Support - Gas cell	100%	128	13-Oct-15 A	15-Apr-16 A	11-Sep-15	08-Dec-15	-89	$2,701.84	
2-W.09.02.01	SIX4054	Delivery - Gas cell	100%	119	26-Oct-15 A	15-Apr-16 A	09-Dec-15	09-Dec-15	-88	$53,789.76	
2-W.09.02.01	SIX4055	Acceptance - Gas cell	100%	172	26-Oct-15 A	30-Jun-16 A	26-Jan-16	26-Jan-16	-110	$13,447.44	
Laser Alignment			100%	46	23-Mar-15 A	26-May-15 A	30-Jul-15	24-Dec-15	147	$10,866.44	
2-W.09.02.01	SIX4056	PO Prep and Submittal - laser alignment	100%	26	23-Mar-15 A	28-Apr-15 A	30-Jul-15	12-Aug-15	75	$1,925.73	
2-W.09.02.01	SIX4057	Fabrication Support - laser alignment	100%	15	29-Apr-15 A	19-May-15 A	13-Aug-15	06-Nov-15	119	$2,673.71	
2-W.09.02.01	SIX4058	Delivery - laser alignment	100%	1	20-May-15 A	20-May-15 A	09-Nov-15	09-Nov-15	119	$5,013.60	
2-W.09.02.01	SIX4059	Acceptance - laser alignment	100%	1	26-May-15 A	26-May-15 A	24-Dec-15	24-Dec-15	147	$1,253.40	
White Beam Mask			8.86%	340	16-Mar-15 A	19-Jul-16	15-Apr-15	15-Dec-15	-149	$51,773.59	119
2-W.09.02.01	SIX4010	RFQ Prep and Submittal - White beam Mask	100%	40	16-Mar-15 A	08-May-15 A	15-Apr-15	03-Aug-15	59	$1,925.73	
2-W.09.02.01	SIX4011	Fabrication Support - White beam Mask	100%	220	11-May-15 A	25-Mar-16 A	04-Aug-15	28-Oct-15	-101	$2,663.86	
2-W.09.02.01	SIX4012	Delivery - White beam Mask	0%	1	18-Jul-16	18-Jul-16	29-Oct-15	29-Oct-15	-179	$37,747.20	119
2-W.09.02.01	SIX4013	White beam Mask purchase of Support System	0%	1	19-Jul-16	19-Jul-16	15-Dec-15	15-Dec-15	-149	$9,436.80	119
Pink Beam Mask			7.22%	340	16-Mar-15 A	19-Jul-16	15-Apr-15	15-Dec-15	-149	$63,569.59	119
2-W.09.02.01	SIX4014	RFQ Prep and Submittal - Pink beam mask	100%	45	16-Mar-15 A	15-May-15 A	15-Apr-15	03-Aug-15	54	$1,925.73	
2-W.09.02.01	SIX4015	Fabrication Support - Pink beam mask	100%	215	18-May-15 A	25-Mar-16 A	04-Aug-15	28-Oct-15	-101	$2,663.86	
2-W.09.02.01	SIX4016	Delivery - Pink beam mask	0%	1	18-Jul-16	18-Jul-16	29-Oct-15	29-Oct-15	-179	$47,184.00	119
2-W.09.02.01	SIX4017	Pink beam mask purchase of Support System	0%	1	19-Jul-16	19-Jul-16	15-Dec-15	15-Dec-15	-149	$11,796.00	119
BS Collimator			73.5%	293	01-Jul-15 A	29-Aug-16	15-May-15	08-Oct-15	-223	$39,074.12	90
2-W.09.02.01	SIX4018	PO Prep and Submittal - BS collimator	100%	229	01-Jul-15 A	30-May-16 A	15-May-15	29-May-15	-251	$1,925.73	
2-W.09.02.01	SIX4019	Fabrication Support - BS collimator	100%	154	19-Oct-15 A	30-May-16 A	01-Jun-15	24-Aug-15	-191	$2,637.14	
2-W.09.02.01	SIX4020	Delivery - BS collimator	70%	213	26-Oct-15 A	29-Aug-16	25-Aug-15	25-Aug-15	-254	$27,433.65	90
2-W.09.02.01	SIX4021	Acceptance - BS collimator	70%	213	26-Oct-15 A	29-Aug-16	08-Oct-15	08-Oct-15	-223	$7,077.60	90
BS Schielding Wall			100%	230	01-Jul-15 A	31-May-16 A	15-May-15	08-Oct-15	-160	$29,008.64	
2-W.09.02.01	SIX4022	PO Prep and Submittal - BS schielding wall	100%	229	01-Jul-15 A	31-May-16 A	15-May-15	29-May-15	-251	$1,925.73	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

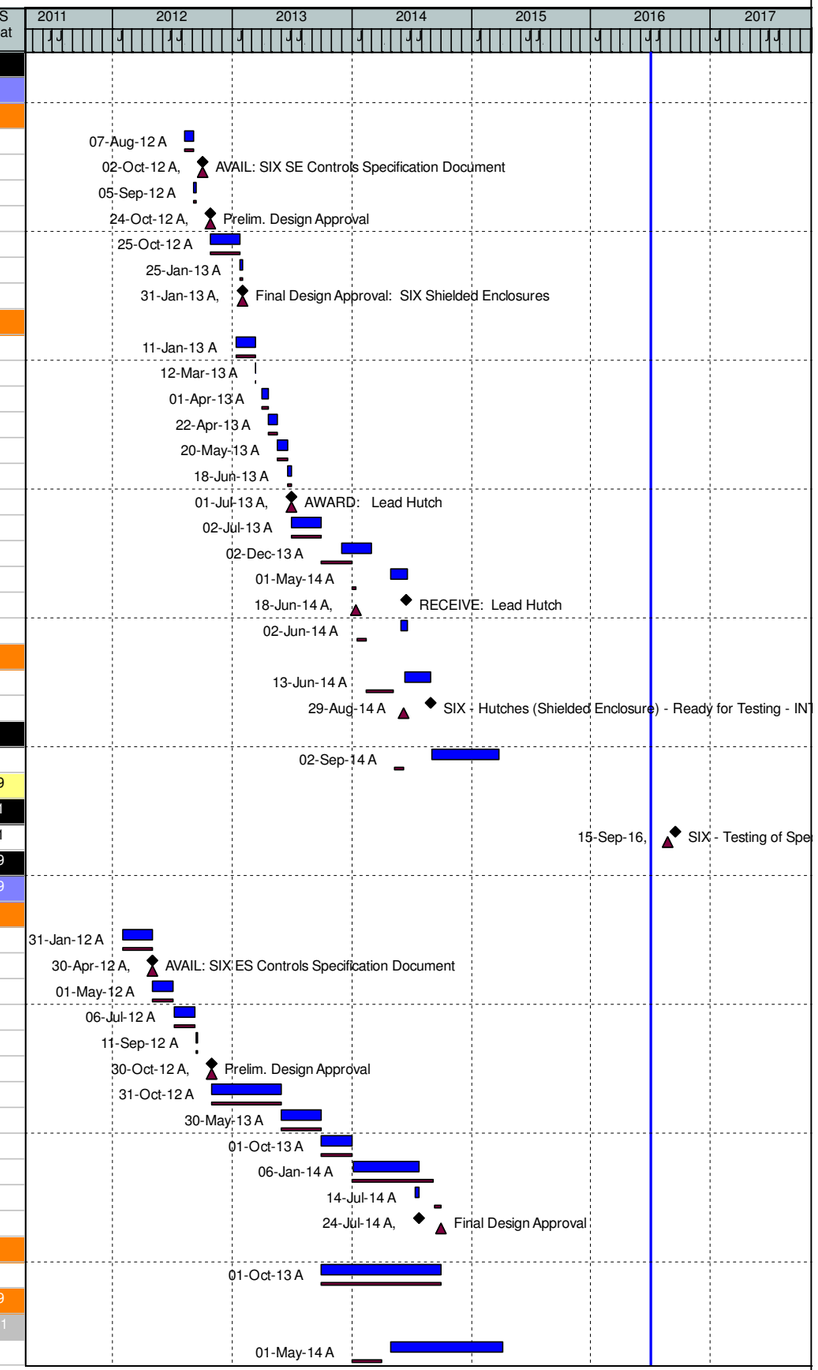
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.09.02.01	SIX4023	Fabrication Support - BS schielding wall	100%	66	29-Feb-16 A	31-May-16 A	01-Jun-15	24-Aug-15	-192	$2,637.14	
2-W.09.02.01	SIX4024	Delivery - BS schielding wall	100%	71	22-Feb-16 A	31-May-16 A	25-Aug-15	25-Aug-15	-191	$19,432.17	
2-W.09.02.01	SIX4025	Acceptance - BS schielding wall	100%	71	22-Feb-16 A	31-May-16 A	08-Oct-15	08-Oct-15	-160	$5,013.60	
Cold Aperture & Differetial Pumping			70.79%	344	20-Apr-15 A	29-Aug-16	15-May-15	28-Jan-16	-149	$56,530.83	90
2-W.09.02.01	SIX4026	SIX Cold Aperture and Differential Pumping - PO Prep and Submittal	100%	83	20-Apr-15 A	14-Aug-15 A	15-May-15	29-May-15	-54	$1,925.73	
2-W.09.02.01	SIX4026100	SIX Cold Aperture and Differential Pumping - Contract Award	100%	0		14-Aug-15 A		29-May-15	-54	$0.00	
2-W.09.02.01	SIX4027	SIX Cold Aperture and Differential Pumping - Fabrication Support	100%	9	17-Aug-15 A	27-Aug-15 A	01-Jun-15	24-Aug-15	-3	$2,637.14	
2-W.09.02.01	SIX4028	SIX Cold Aperture and Differential Pumping - Delivery	100%	1	28-Aug-15 A	31-Aug-15 A	25-Aug-15	25-Aug-15	-3	$19,432.17	
2-W.09.02.01	SIX4029	SIX Differential Pumping - Acceptance	100%	186	28-Aug-15 A	26-May-16 A	08-Oct-15	08-Oct-15	-157	$5,013.60	
2-W.09.02.01	SIX4030	SIX Differential Pumping - Install & Assembly	40%	68	24-May-16 A	29-Aug-16	30-Dec-15	28-Jan-16	-149	$27,522.19	90
Stands			100%	156	23-Mar-15 A	30-Oct-15 A	01-May-15	17-Dec-15	32	$39,986.31	
2-W.09.02.01	SIX4072	RFQ Prep and Submittal - stands	100%	63	23-Mar-15 A	18-Jun-15 A	01-May-15	19-Aug-15	43	$1,925.73	
2-W.09.02.01	SIX4073	Fabrication Support - stands	100%	116	01-May-15 A	15-Oct-15 A	20-Aug-15	30-Oct-15	11	$2,672.58	
2-W.09.02.01	SIX4074	Delivery - stands	100%	43	17-Aug-15 A	16-Oct-15 A	02-Nov-15	02-Nov-15	11	$28,310.40	
2-W.09.02.01	SIX4075	Acceptance - stands	100%	53	17-Aug-15 A	30-Oct-15 A	17-Dec-15	17-Dec-15	32	$7,077.60	
Gauges & Controllers			100%	116	15-Jan-15 A	30-Jun-15 A	15-Jan-15	15-Sep-15	53	$36,568.80	
2-W.09.02.01	SIX4076	RFQ Prep and Submittal - gauges & controlles	100%	4	15-Jan-15 A	22-Jan-15 A	15-Jan-15	05-May-15	73	$1,925.73	
2-W.09.02.01	SIX4077	Fabrication Support - gauges &controlles	100%	25	23-Jan-15 A	02-Mar-15 A	06-May-15	30-Jul-15	107	$2,637.14	
2-W.09.02.01	SIX4078	Delivery - gauges &controlles	100%	0	02-Mar-15 A	02-Mar-15 A	31-Jul-15	31-Jul-15	108	$25,604.74	
2-W.09.02.01	SIX4079	Acceptance - gauges &controlles	100%	71	23-Mar-15 A	30-Jun-15 A	15-Sep-15	15-Sep-15	53	$6,401.19	
RGA			100%	116	15-Jan-15 A	30-Jun-15 A	15-Jan-15	15-Sep-15	53	$34,282.66	
2-W.09.02.01	SIX4080	RFQ Prep and Submittal - RGA	100%	5	15-Jan-15 A	22-Jan-15 A	15-Jan-15	05-May-15	72	$1,925.73	
2-W.09.02.01	SIX4081	Fabrication Support - RGA	100%	47	23-Jan-15 A	31-Mar-15 A	06-May-15	30-Jul-15	85	$2,637.14	
2-W.09.02.01	SIX4082	Delivery - RGA	100%	1	31-Mar-15 A	31-Mar-15 A	31-Jul-15	31-Jul-15	86	$23,775.83	
2-W.09.02.01	SIX4083	Acceptance - RGA	100%	66	30-Mar-15 A	30-Jun-15 A	15-Sep-15	15-Sep-15	53	$5,943.96	
Valves (90 Degrees)			100%	124	05-Jan-15 A	30-Jun-15 A	05-Jan-15	01-May-15	-41	$11,849.93	
2-W.09.02.01	SIX4084	PO Prep and Submittal - valves (90 degr)	100%	9	05-Jan-15 A	15-Jan-15 A	05-Jan-15	15-Jan-15	0	$1,925.73	
2-W.09.02.01	SIX4085	Fabrication Support - valves (90 degr)	100%	51	16-Jan-15 A	31-Mar-15 A	16-Jan-15	16-Mar-15	-11	$2,637.14	
2-W.09.02.01	SIX4086	Delivery - valves (90 degr)	100%	1	31-Mar-15 A	31-Mar-15 A	17-Mar-15	17-Mar-15	-10	$5,829.65	
2-W.09.02.01	SIX4087	Acceptance - valves (90 degr)	100%	66	30-Mar-15 A	30-Jun-15 A	01-May-15	01-May-15	-41	$1,457.41	
Chiller & Beamline Interconnection Hardware			0.91%	241	19-Oct-15 A	30-Sep-16	01-Sep-15	01-Dec-15	-211	$63,580.84	67
2-W.09.02.01	SIX4088	PO Prep and Submittal - Water Temp Control (25%) and NEG Pump (75%)	30%	219	19-Oct-15 A	30-Aug-16	01-Sep-15	15-Sep-15	-241	$1,925.73	67
2-W.09.02.01	SIX4089	Fabrication Support - Water Temp Control (25%) and NEG Pump (75%)	0%	20	31-Aug-16	28-Sep-16	16-Sep-15	14-Oct-15	-241	$2,675.11	67
2-W.09.02.01	SIX4090	Delivery - Water Temp Control (25%) and NEG Pump (75%)	0%	1	29-Sep-16	29-Sep-16	15-Oct-15	15-Oct-15	-241	$47,184.00	67
2-W.09.02.01	SIX4091	Acceptance - Water Temp Control (25%) and NEG Pump (75%)	0%	1	30-Sep-16	30-Sep-16	01-Dec-15	01-Dec-15	-211	$11,796.00	67
M2 Mirror Polishing			100%	289	24-Nov-14 A	22-Jan-16 A	24-Nov-14	10-Sep-15	-90	$50,251.05	
2-W.09.02.01	SIX4094	RFQ Prep and Submittal - M2 Mirror Polishing	100%	51	24-Nov-14 A	10-Feb-15 A	24-Nov-14	19-Mar-15	26	$1,769.98	
2-W.09.02.01	SIX4095	Fabrication Support - M2 Mirror Polishing	100%	158	01-Apr-15 A	13-Nov-15 A	20-Mar-15	14-May-15	-126	$2,637.14	
2-W.09.02.01	SIX4096	Delivery - Polished M2 Mirror	100%	0	19-Nov-15 A	20-Nov-15 A	15-May-15	15-May-15	-129	$24,290.21	
2-W.09.02.01	SIX4097	Acceptance - Polished M2 Mirror	100%	2	23-Nov-15 A	25-Nov-15 A	30-Jun-15	30-Jun-15	-100	$6,072.55	
2-W.09.02.01	SIX4099	Install & Assembly - Polished M2 Mirror	100%	14	04-Jan-16 A	22-Jan-16 A	01-Jul-15	12-Aug-15	-110	$11,280.02	
2-W.09.02.01	SIX4100	Test & Commissioning - Polished M2 Mirror	100%	13	04-Jan-16 A	22-Jan-16 A	13-Aug-15	10-Sep-15	-89	$4,201.14	
Additional Small Procurements & ETC Tasks			1.37%	95	01-Jun-16 A	14-Oct-16	01-Aug-16	02-Nov-16	13	$107,548.35	58
2-W.09.02.01	SIX5025	SIX - Piezo Shutter	0%	20	01-Jul-16	29-Jul-16	01-Aug-16	19-Aug-16	15	$16,640.00	111
2-W.09.02.01	SIX5035	SIX - Sample Chamber Cameras	0%	20	01-Jul-16	29-Jul-16	01-Aug-16	31-Aug-16	23	$15,600.00	111
2-W.09.02.01	SIX5045	SIX - Sample Chamber Questar mount	0%	40	01-Jul-16	26-Aug-16	01-Aug-16	29-Sep-16	23	$15,600.00	91
2-W.09.02.01	SIX5055	SIX - Vacuum manifold and roughing pump	0%	66	01-Jul-16	04-Oct-16	01-Aug-16	02-Nov-16	20	$36,400.00	65
2-W.09.02.01	SIX5065	SIX - Vacuum roughing pump, pipe, valves and gauges for PDS air guards	0%	40	01-Jul-16	26-Aug-16	01-Aug-16	29-Sep-16	23	$12,480.00	91
2-W.09.02.01	SIX5075	SIX - SEB2 Door Opening	0%	43	15-Aug-16*	14-Oct-16	15-Aug-16	14-Oct-16	0	$9,360.00	58
2-W.09.02.01	SIX5085	SIX - Newport stages for grating metrology - Labor	100%	10	01-Jun-16 A	14-Jun-16 A	01-Aug-16	12-Aug-16	42	$1,468.35	
Shielded Enclosures			100%	656	07-Aug-12 A	26-Mar-15 A	07-Aug-12	09-Jun-14	-197	$64,685.29	



(O) NEXT - Detail Schedule

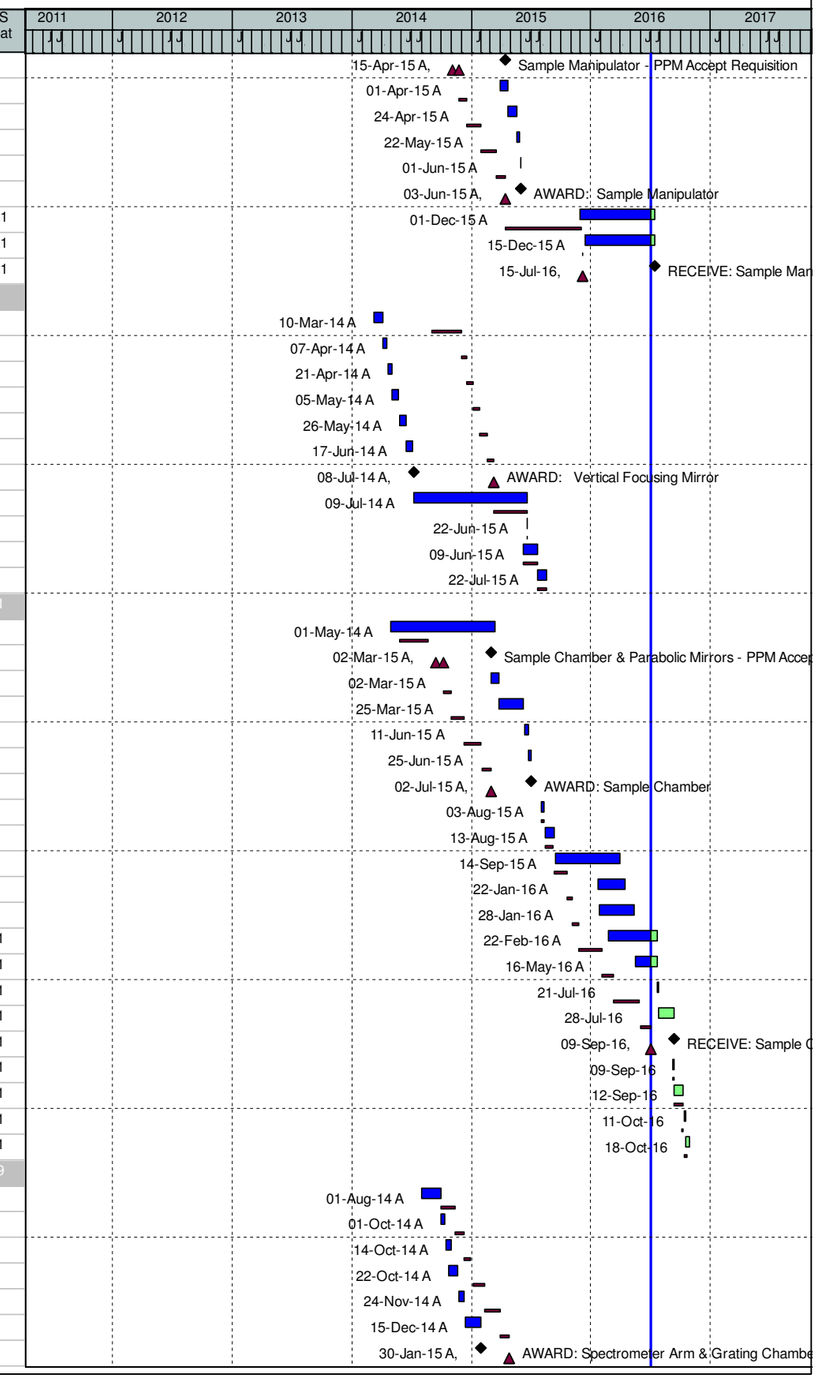
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
SIX Procurement Work Package			100%	516	07-Aug-12 A	29-Aug-14 A	07-Aug-12	09-Jun-14	-58	$47,023.10	
SIX Shielded Enclosures			100%	516	07-Aug-12 A	29-Aug-14 A	07-Aug-12	09-Jun-14	-58	$47,023.10	
Design			0%	120	07-Aug-12 A	31-Jan-13 A	07-Aug-12	31-Jan-13	0	$0.00	
2-W.09.02.02	SIX1400	Preliminary Design - Shielded Enclosures	100%	20	07-Aug-12 A	04-Sep-12 A	07-Aug-12	04-Sep-12	0	$0.00	
2-W.09.02.02	SIX1405	AVAIL: SIX SE Controls Specification Document	100%	0		02-Oct-12 A		02-Oct-12	0	$0.00	
2-W.09.02.02	SIX1420	Prelim. Design Review	100%	5	05-Sep-12 A	11-Sep-12 A	05-Sep-12	11-Sep-12	0	$0.00	
2-W.09.02.02	SIX1430	Prelim. Design Approval	100%	0		24-Oct-12 A		24-Oct-12	0	$0.00	
2-W.09.02.02	SIX1435	Final Design - Shielded Enclosures	100%	60	25-Oct-12 A	24-Jan-13 A	25-Oct-12	24-Jan-13	0	$0.00	
2-W.09.02.02	SIX1440	Final Design Review	100%	5	25-Jan-13 A	31-Jan-13 A	25-Jan-13	31-Jan-13	0	$0.00	
2-W.09.02.02	SIX1450	Final Design Approval: SIX Shielded Enclosures	100%	0		31-Jan-13 A		31-Jan-13	0	$0.00	
Lead Hutch			0%	360	11-Jan-13 A	19-Jun-14 A	11-Jan-13	13-Feb-14	-87	$0.00	
2-W.09.02.02	SIX1490	Write Spec and SOW: Lead Hutch	100%	40	11-Jan-13 A	11-Mar-13 A	11-Jan-13	11-Mar-13	0	$0.00	
2-W.09.02.02	SIX1500	PPM Accept Requisition	100%	1	12-Mar-13 A	12-Mar-13 A	12-Mar-13	12-Mar-13	0	$0.00	
2-W.09.02.02	SIX1510	Prepare RFP	100%	15	01-Apr-13 A	19-Apr-13 A	01-Apr-13	19-Apr-13	0	$0.00	
2-W.09.02.02	SIX1520	Call for Bid	100%	20	22-Apr-13 A	17-May-13 A	22-Apr-13	17-May-13	0	$0.00	
2-W.09.02.02	SIX1530	Receive and Evaluate Vendor Proposal	100%	20	20-May-13 A	17-Jun-13 A	20-May-13	17-Jun-13	0	$0.00	
2-W.09.02.02	SIX1540	Vendor Negotiations	100%	10	18-Jun-13 A	01-Jul-13 A	18-Jun-13	01-Jul-13	0	$0.00	
2-W.09.02.02	SIX1550	AWARD: Lead Hutch	100%	0		01-Jul-13 A		01-Jul-13	0	$0.00	
2-W.09.02.02	SIX1555	Procure/Fab - Lead Hutch	100%	61	02-Jul-13 A	30-Sep-13 A	02-Jul-13	30-Sep-13	1	$0.00	
2-W.09.02.02	SIX1555FA	Procure/Fab - Lead Hutch	100%	62	02-Dec-13 A	03-Mar-14 A	01-Oct-13	31-Dec-13	-41	$0.00	
2-W.09.02.02	SIX1560	Vendor Shipping	100%	34	01-May-14 A	18-Jun-14 A	02-Jan-14	15-Jan-14	-107	$0.00	
2-W.09.02.02	SIX1570	RECEIVE: Lead Hutch	100%	0		18-Jun-14 A		15-Jan-14	-106	$0.00	
2-W.09.02.02	SIX1580	Bench Test: Lead Hutch	100%	13	02-Jun-14 A	19-Jun-14 A	16-Jan-14	13-Feb-14	-87	$0.00	
Install & Test			100%	54	13-Jun-14 A	29-Aug-14 A	14-Feb-14	09-Jun-14	-58	$47,023.10	
2-W.09.02.02	SIX1590	Assembly and Installation	100%	54	13-Jun-14 A	29-Aug-14 A	14-Feb-14	09-May-14	-77	$47,023.10	
2-W.09.02.02	SIX1610	SIX - Hutches (Shielded Enclosure) - Ready for Testing - INTER-PROJECT LI	100%	0	29-Aug-14 A		09-Jun-14		-57	$0.00	
Endstation Equipment - Assembly & Install			100%	140	02-Sep-14 A	26-Mar-15 A	12-May-14	09-Jun-14	-197	$17,662.19	
2-W.09.02.02	SIX1600	Test	100%	140	02-Sep-14 A	26-Mar-15 A	12-May-14	09-Jun-14	-197	$17,662.19	
Endstation Equipment			48.04%	1212	31-Jan-12 A	01-Dec-16	31-Jan-12	15-Nov-16	-10	$5,511,206.00	29
Top Level Milestones			0%	0	15-Sep-16	15-Sep-16	23-Aug-16	23-Aug-16	-16	$0.00	81
2-W.09.02.03	M3190	SIX - Testing of Spectrometer Detector Complete	0%	0		15-Sep-16		23-Aug-16	-16	$0.00	81
SIX Procurement Work Package			46.48%	1212	31-Jan-12 A	01-Dec-16	31-Jan-12	15-Nov-16	-10	$5,097,391.13	29
Six Endstation			46.48%	1212	31-Jan-12 A	01-Dec-16	31-Jan-12	15-Nov-16	-10	$5,097,391.13	29
Design			100%	621	31-Jan-12 A	24-Jul-14 A	31-Jan-12	30-Sep-14	48	$175,049.97	
2-W.09.02.03	SIX1640	30% Preliminary Design	100%	64	31-Jan-12 A	30-Apr-12 A	31-Jan-12	30-Apr-12	0	$0.00	
2-W.09.02.03	SIX1645	AVAIL: SIX ES Controls Specification Document	100%	0		30-Apr-12 A		30-Apr-12	0	$0.00	
2-W.09.02.03	SIX1650	60% Preliminary Design	100%	46	01-May-12 A	05-Jul-12 A	01-May-12	05-Jul-12	0	$0.00	
2-W.09.02.03	SIX1660	90% Preliminary Design	100%	46	06-Jul-12 A	10-Sep-12 A	06-Jul-12	10-Sep-12	0	$0.00	
2-W.09.02.03	SIX1670	Prelim. Design Review	100%	5	11-Sep-12 A	17-Sep-12 A	11-Sep-12	17-Sep-12	0	$0.00	
2-W.09.02.03	SIX1680	Prelim. Design Approval	100%	0		30-Oct-12 A		30-Oct-12	0	$0.00	
2-W.09.02.03	SIX1690	30 % Final Design	100%	143	31-Oct-12 A	29-May-13 A	31-Oct-12	29-May-13	0	$0.00	
2-W.09.02.03	SIX1700	60 % Final Design	100%	84	30-May-13 A	30-Sep-13 A	30-May-13	30-Sep-13	1	$0.00	
2-W.09.02.03	SIX1700FA	60 % Final Design	100%	64	01-Oct-13 A	03-Jan-14 A	01-Oct-13	02-Jan-14	-1	$52,156.55	
2-W.09.02.03	SIX1710	90 % Final Design	100%	138	06-Jan-14 A	24-Jul-14 A	03-Jan-14	05-Sep-14	31	$122,893.42	
2-W.09.02.03	SIX1720	Final Design Review	100%	8	14-Jul-14 A	24-Jul-14 A	11-Sep-14	30-Sep-14	48	$0.00	
2-W.09.02.03	SIX1730	Final Design Approval	100%	0		24-Jul-14 A		30-Sep-14	48	$0.00	
End Station Procurement Support			100%	250	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	0	$58,196.72	
2-W.09.02.03	SIX0170	Procurement Support FY14	100%	250	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	0	$58,196.72	
SIX Endstation Procurement			43.91%	771	01-Nov-13 A	01-Dec-16	01-Oct-13	15-Nov-16	-10	$4,864,144.44	29
Sample Manipulator & Cryostat			95.73%	553	01-May-14 A	15-Jul-16	03-Jan-14	07-Dec-15	-153	$170,729.98	121
2-W.09.02.03	SIX1950	Sample Manipulator - Write Spec and SOW	100%	232	01-May-14 A	07-Apr-15 A	03-Jan-14	31-Mar-14	-254	$24,881.94	



(O) NEXT - Detail Schedule

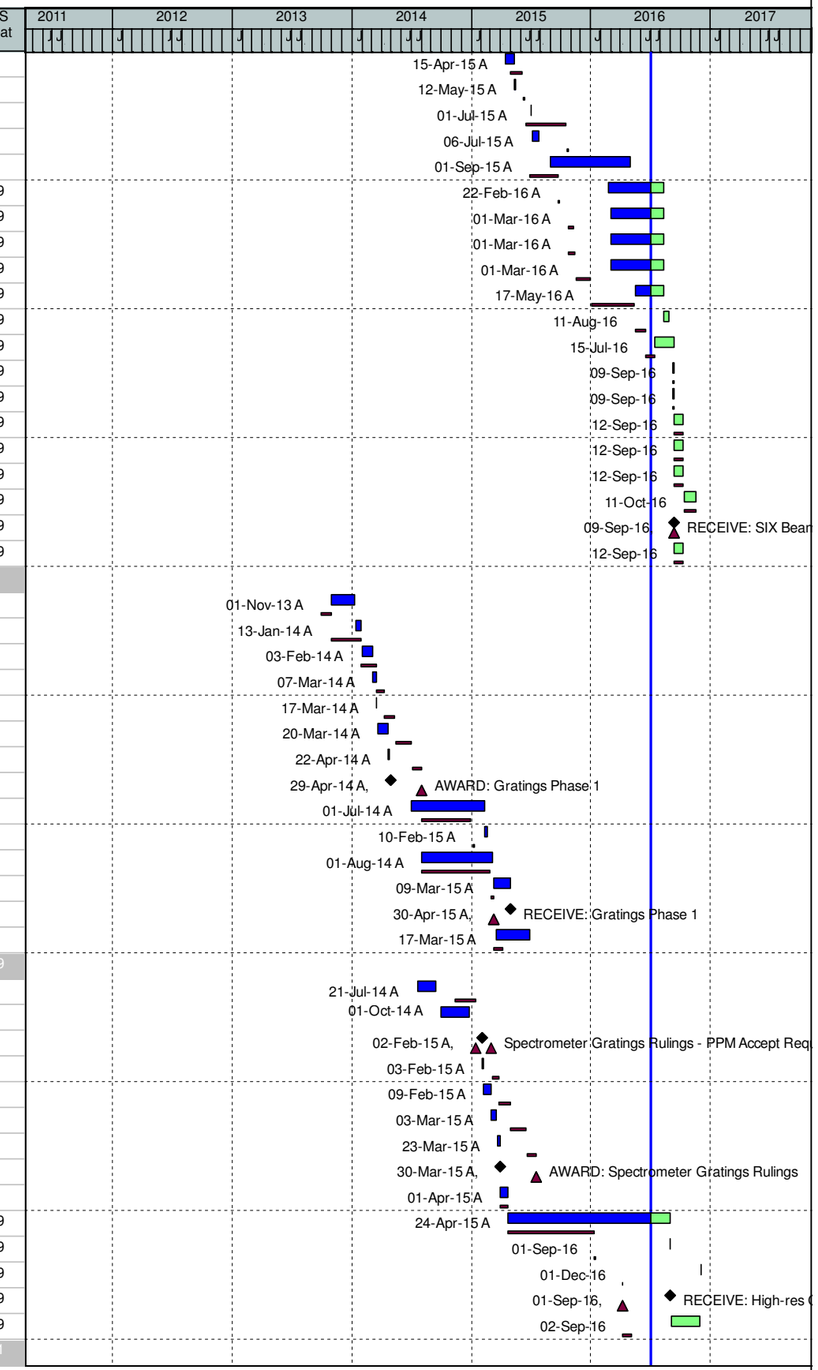
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.09.02.03	SIX1960	Sample Manipulator - PPM Accept Requisition	100%	0		15-Apr-15 A		25-Nov-14	-93	$0.00	
2-W.09.02.03	SIX1970	Sample Manipulator - Prepare & Submit RFQ	100%	17	01-Apr-15 A	23-Apr-15 A	26-Nov-14	18-Dec-14	-85	$0.00	
2-W.09.02.03	SIX1980	Sample Manipulator - Offerors Prepare & Submit Proposals	100%	19	24-Apr-15 A	21-May-15 A	19-Dec-14	28-Jan-15	-79	$0.00	
2-W.09.02.03	SIX1990	Sample Manipulator - Evaluate Offeror Proposals	100%	4	22-May-15 A	29-May-15 A	29-Jan-15	19-Mar-15	-49	$0.00	
2-W.09.02.03	SIX2000	Sample Manipulator - Negotiate & Contract Package Approval	100%	2	01-Jun-15 A	03-Jun-15 A	20-Mar-15	16-Apr-15	-32	$0.00	
2-W.09.02.03	SIX2010	AWARD: Sample Manipulator	100%	0		03-Jun-15 A		16-Apr-15	-32	$0.00	
2-W.09.02.03	SIX2015	Sample Manipulator - Fabrication	95%	158	01-Dec-15 A	15-Jul-16	16-Apr-15	04-Dec-15	-154	$0.00	121
2-W.09.02.03	SIX2017	Sample Manipulator - Delivery	95%	148	15-Dec-15 A	15-Jul-16	07-Dec-15	07-Dec-15	-153	$145,848.04	121
2-W.09.02.03	SIX2030	RECEIVE: Sample Manipulator	0%	0		15-Jul-16		07-Dec-15	-153	$0.00	121
Vertical Focusing Mirror			100%	363	10-Mar-14 A	18-Aug-15 A	03-Sep-14	18-Aug-15	0	$157,501.40	
2-W.09.02.03	SIX2090	Write Spec and SOW: Vertical Focusing Mirror	100%	20	10-Mar-14 A	04-Apr-14 A	03-Sep-14	03-Dec-14	166	$28,067.17	
2-W.09.02.03	SIX2100	PPM Accept Requisition	100%	10	07-Apr-14 A	18-Apr-14 A	04-Dec-14	17-Dec-14	166	$0.00	
2-W.09.02.03	SIX2110	Prepare RFQ	100%	10	21-Apr-14 A	02-May-14 A	18-Dec-14	05-Jan-15	166	$0.00	
2-W.09.02.03	SIX2120	Call for Bid	100%	15	05-May-14 A	23-May-14 A	06-Jan-15	27-Jan-15	166	$0.00	
2-W.09.02.03	SIX2130	Receive and Evaluate Vendor Proposal	100%	15	26-May-14 A	16-Jun-14 A	28-Jan-15	18-Feb-15	166	$0.00	
2-W.09.02.03	SIX2140	Vendor Negotiations	100%	12	17-Jun-14 A	07-Jul-14 A	19-Feb-15	09-Mar-15	167	$0.00	
2-W.09.02.03	SIX2150	AWARD: Vertical Focusing Mirror	100%	0		08-Jul-14 A		09-Mar-15	166	$0.00	
2-W.09.02.03	SIX2155	Vertical Focusing Mirror - Fabrication	100%	238	09-Jul-14 A	19-Jun-15 A	10-Mar-15	19-Jun-15	0	$0.00	
2-W.09.02.03	SIX2160	Vertical Focusing Mirror Receipt and Acceptance	100%	1	22-Jun-15 A	22-Jun-15 A	22-Jun-15	22-Jun-15	0	$102,960.00	
2-W.09.02.03	SIX2190	Vertical Focusing Mirror - Assembly and Installation	100%	30	09-Jun-15 A	21-Jul-15 A	09-Jun-15	21-Jul-15	0	$13,216.88	
2-W.09.02.03	SIX2200	Vertical Focusing Mirror - Test and Installation	100%	20	22-Jul-15 A	18-Aug-15 A	22-Jul-15	18-Aug-15	0	$13,257.36	
Sample Chamber			72.38%	626	01-May-14 A	28-Oct-16	27-May-14	21-Oct-16	-5	$487,271.42	51
2-W.09.02.03	SIX2230	Sample Chamber & Parabolic Mirrors - Write Spec	100%	216	01-May-14 A	16-Mar-15 A	27-May-14	20-Aug-14	-139	$34,559.42	
2-W.09.02.03	SIX2240	Sample Chamber & Parabolic Mirrors - PPM Accept Requisition	100%	0		02-Mar-15 A		08-Oct-14	-94	$0.00	
2-W.09.02.03	SIX2250	Sample Chamber & Parabolic Mirrors - Prepare & Submit RFQ	100%	17	02-Mar-15 A	24-Mar-15 A	09-Oct-14	30-Oct-14	-96	$0.00	
2-W.09.02.03	SIX2260	Sample Chamber & Parabolic Mirrors - Offerors Prepare & Submit Proposals	100%	55	25-Mar-15 A	10-Jun-15 A	31-Oct-14	08-Dec-14	-126	$0.00	
2-W.09.02.03	SIX2270	Sample Chamber & Parabolic Mirrors - Evaluate Offeror Proposals	100%	10	11-Jun-15 A	24-Jun-15 A	09-Dec-14	30-Jan-15	-101	$0.00	
2-W.09.02.03	SIX2280	Sample Chamber - Negotiate & Contract Package Approval	100%	5	25-Jun-15 A	02-Jul-15 A	02-Feb-15	02-Mar-15	-86	$0.00	
2-W.09.02.03	SIX2290	AWARD: Sample Chamber	100%	0		02-Jul-15 A		02-Mar-15	-87	$0.00	
2-W.09.02.03	SIX2291	Sample & Grating Chamber - Program Plan	100%	8	03-Aug-15 A	12-Aug-15 A	03-Aug-15	12-Aug-15	0	$20,800.00	
2-W.09.02.03	SIX2293	Sample Chamber - Preliminary Design	100%	21	13-Aug-15 A	11-Sep-15 A	13-Aug-15	09-Sep-15	-2	$88,608.00	
2-W.09.02.03	SIX2296	Sample Chamber - Final Design	100%	134	14-Sep-15 A	28-Mar-16 A	10-Sep-15	21-Oct-15	-107	$132,912.00	
2-W.09.02.03	SIX2297	Sample Chamber - Manufacturing Drawings	100%	60	22-Jan-16 A	15-Apr-16 A	22-Oct-15	04-Nov-15	-111	$9,289.28	
2-W.09.02.03	SIX2299	Sample Chamber - Vendor Procurement	100%	76	28-Jan-16 A	13-May-16 A	05-Nov-15	25-Nov-15	-118	$14,291.68	
2-W.09.02.03	SIX2300	Sample Chamber - Vendor Fabrication & Delivery	85%	106	22-Feb-16 A	20-Jul-16	26-Nov-15	04-Feb-16	-116	$50,020.88	51
2-W.09.02.03	SIX2301	Sample Chamber - Assembly	40%	46	16-May-16 A	20-Jul-16	05-Feb-16	10-Mar-16	-92	$24,295.44	51
2-W.09.02.03	SIX2303	Sample Chamber - Factory Test	0%	5	21-Jul-16	27-Jul-16	11-Mar-16	27-May-16	-41	$55,022.24	51
2-W.09.02.03	SIX2305	Sample Chamber - Packing & Delivery	0%	31	28-Jul-16	09-Sep-16	31-May-16	01-Jul-16	-48	$24,296.48	51
2-W.09.02.03	SIX2310	RECEIVE: Sample Chamber	0%	0		09-Sep-16		01-Jul-16	-48	$0.00	51
2-W.09.02.03	SIX2311	Sample Chamber - Reciept Amendment $9,300	0%	1	09-Sep-16	09-Sep-16	09-Sep-16	09-Sep-16	0	$9,672.00	51
2-W.09.02.03	SIX2312	Sample Chamber - Install	0%	20	12-Sep-16	07-Oct-16	12-Sep-16	07-Oct-16	0	$17,721.60	51
2-W.09.02.03	SIX2335	Sample Chamber - Commissioning	0%	5	11-Oct-16	17-Oct-16	03-Oct-16	07-Oct-16	-5	$4,625.92	51
2-W.09.02.03	SIX2345	Sample Chamber - Commissioning Report Approval	0%	9	18-Oct-16	28-Oct-16	11-Oct-16	21-Oct-16	-5	$1,156.48	51
Spectrometer Arm & Grating Chamber			26.08%	575	01-Aug-14 A	15-Nov-16	01-Oct-14	15-Nov-16	0	$2,851,441.06	39
2-W.09.02.03	SIX2370	Spectrometer Arm & Grating Chamber - Write Spec & SOW	100%	42	01-Aug-14 A	30-Sep-14 A	01-Oct-14	12-Nov-14	30	$62,288.62	
2-W.09.02.03	SIX2380	Spectrometer Arm & Grating Chamber - PPM Accept Requisition	100%	8	01-Oct-14 A	13-Oct-14 A	13-Nov-14	09-Dec-14	39	$0.00	
2-W.09.02.03	SIX2390	Spectrometer Arm & Grating Chamber - Prepare RFP	100%	13	14-Oct-14 A	31-Oct-14 A	10-Dec-14	31-Dec-14	41	$0.00	
2-W.09.02.03	SIX2400	Spectrometer Arm & Grating Chamber - Call for Bid	100%	23	22-Oct-14 A	21-Nov-14 A	05-Jan-15	09-Feb-15	50	$0.00	
2-W.09.02.03	SIX2410	Spectrometer Arm & Grating Chamber - Receive and Evaluate Vendor Propos	100%	12	24-Nov-14 A	12-Dec-14 A	10-Feb-15	31-Mar-15	73	$0.00	
2-W.09.02.03	SIX2420	Spectrometer Arm & Grating Chamber - Vendor Negotiations	100%	31	15-Dec-14 A	30-Jan-15 A	01-Apr-15	28-Apr-15	61	$0.00	
2-W.09.02.03	SIX2430	AWARD: Spectrometer Arm & Grating Chamber	100%	0		30-Jan-15 A		28-Apr-15	61	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

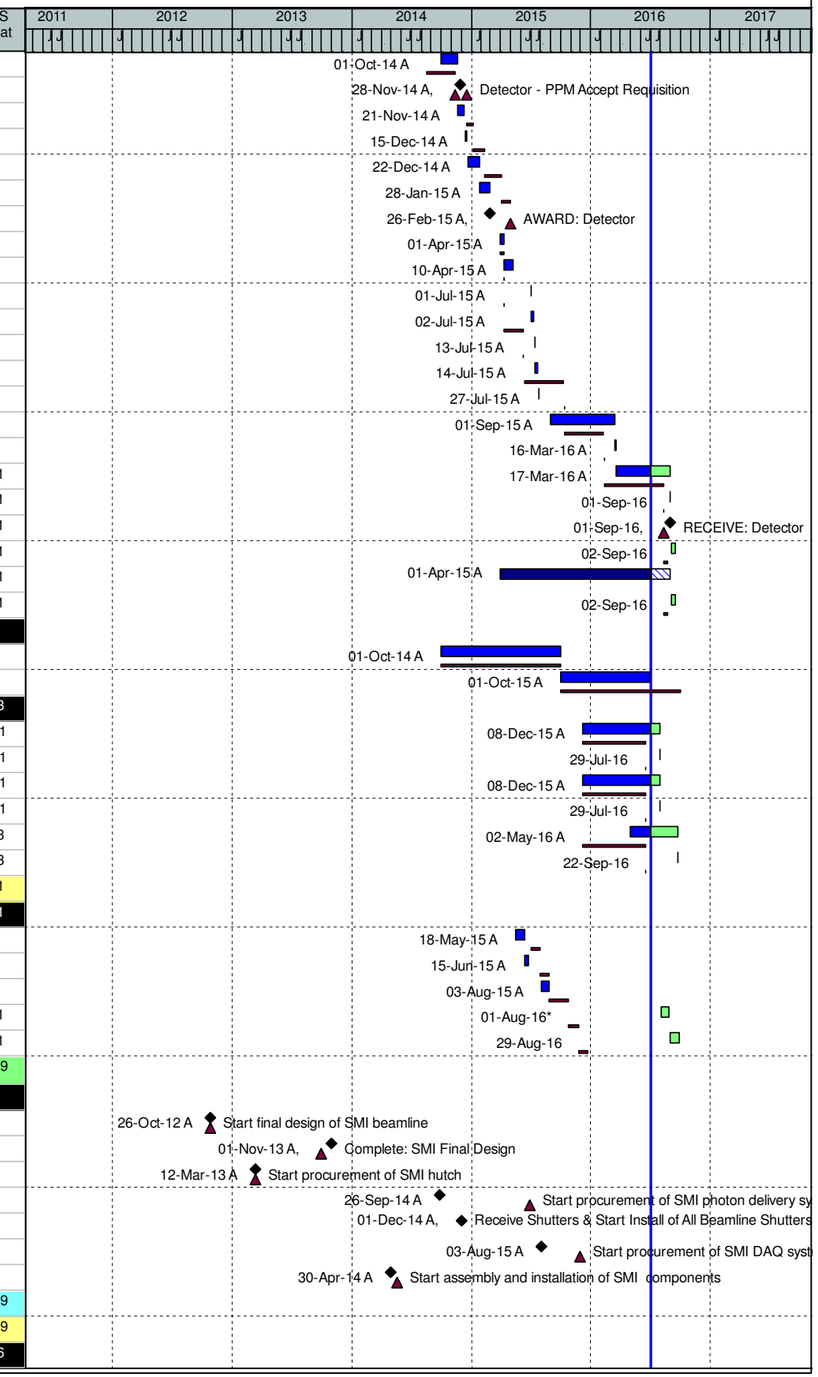
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.09.02.03	SIX243501	SIX Beamline Spectrometer Arm System - Preliminary Design	100%	19	15-Apr-15 A	11-May-15 A	29-Apr-15	05-Jun-15	18	$41,600.00	
2-W.09.02.03	SIX243502	SIX Beamline Spectrometer Arm System - PDR	100%	5	12-May-15 A	18-May-15 A	08-Jun-15	12-Jun-15	18	$10,400.00	
2-W.09.02.03	SIX243506	SIX Beamline Spectrometer Arm System - Final Design	100%	2	01-Jul-15 A	02-Jul-15 A	16-Jun-15	16-Oct-15	73	$190,320.00	
2-W.09.02.03	SIX243511	SIX Beamline Spectrometer Arm System - FDR	100%	15	06-Jul-15 A	24-Jul-15 A	19-Oct-15	23-Oct-15	63	$52,000.00	
2-W.09.02.03	SIX243512	SIX Beamline Spectrometer Arm System - Manufacturing Drawings & Long Le	100%	166	01-Sep-15 A	29-Apr-16 A	30-Jun-15	24-Sep-15	-149	$167,275.68	
2-W.09.02.03	SIX243513	SIX Beamline Spectrometer Arm System - All Parts delivered including Free iss	80%	121	22-Feb-16 A	10-Aug-16	25-Sep-15	25-Sep-15	-219	$111,517.12	39
2-W.09.02.03	SIX243514	SIX Beamline Spectrometer Arm System - Mechanical Assembly	40%	115	01-Mar-16 A	10-Aug-16	26-Oct-15	09-Nov-15	-189	$61,335.04	39
2-W.09.02.03	SIX243515	SIX Beamline Spectrometer Arm System - Electrical Assembly	40%	115	01-Mar-16 A	10-Aug-16	26-Oct-15	13-Nov-15	-185	$89,214.32	39
2-W.09.02.03	SIX243516	SIX Beamline Spectrometer Arm System - Performance Tests	30%	115	01-Mar-16 A	10-Aug-16	16-Nov-15	31-Dec-15	-154	$195,154.96	39
2-W.09.02.03	SIX243517	SIX Beamline Spectrometer Arm System - Vacuum Performance Test	10%	60	17-May-16 A	10-Aug-16	04-Jan-16	13-May-16	-61	$117,784.16	39
2-W.09.02.03	SIX243518	SIX Beamline Spectrometer Arm System - Factory Acceptance Test	0%	12	11-Aug-16	26-Aug-16	16-May-16	16-Jun-16	-50	$168,657.84	39
2-W.09.02.03	SIX243519	SIX Beamline Spectrometer Arm System - Packaging & Delivery	0%	40	15-Jul-16	09-Sep-16	17-Jun-16	15-Jul-16	-39	$121,542.72	39
2-W.09.02.03	SIX243520	SIX Beamline Spectrometer Arm System - Reciept	0%	1	09-Sep-16	09-Sep-16	09-Sep-16	09-Sep-16	0	$283,700.56	39
2-W.09.02.03	SIX243524	SIX Beamline Spectrometer Arm System - Reciept of M7 Mirror	0%	1	09-Sep-16	09-Sep-16	09-Sep-16	09-Sep-16	0	$43,420.00	39
2-W.09.02.03	SIX243525	SIX Beamline Spectrometer Arm System - Measurement of M7 Mirror	0%	20	12-Sep-16	07-Oct-16	12-Sep-16	07-Oct-16	0	$43,420.00	39
2-W.09.02.03	SIX243526	SIX Beamline Spectrometer Arm System - Insallation	0%	20	12-Sep-16	07-Oct-16	12-Sep-16	07-Oct-16	0	$690,643.20	39
2-W.09.02.03	SIX243531	Dual Parabolic M5 Mirrors - Installation	0%	20	12-Sep-16	07-Oct-16	12-Sep-16	07-Oct-16	0	$207,376.00	39
2-W.09.02.03	SIX243536	SIX Beamline Spectrometer Arm System - Phase 1 Commissioning	0%	26	11-Oct-16	15-Nov-16	11-Oct-16	15-Nov-16	0	$100,422.40	39
2-W.09.02.03	SIX2450	RECEIVE: SIX Beamline Spectrometer Arm System	0%	0		09-Sep-16		09-Sep-16	0	$0.00	39
2-W.09.02.03	SIX2470	SIX Beamline Spectrometer Arm System - Installation Support	0%	20	12-Sep-16	07-Oct-16	12-Sep-16	07-Oct-16	0	$93,368.43	39
Gratings Substrates Phase 1			100%	414	01-Nov-13 A	30-Jun-15 A	01-Oct-13	06-Apr-15	-60	$241,260.64	
2-W.09.02.03	SIX2505	Write Spec and SOW Requirements Definition	100%	46	01-Nov-13 A	10-Jan-14 A	01-Oct-13	31-Oct-13	-46	$0.00	
2-W.09.02.03	SIX2510	Write Spec and SOW: Gratings Phase 1	100%	13	13-Jan-14 A	31-Jan-14 A	01-Nov-13	30-Jan-14	0	$42,787.12	
2-W.09.02.03	SIX2520	PPM Accept Requisition & Prepare RFP	100%	23	03-Feb-14 A	06-Mar-14 A	31-Jan-14	18-Mar-14	8	$0.00	
2-W.09.02.03	SIX2530	Prepare RFP	100%	7	07-Mar-14 A	17-Mar-14 A	19-Mar-14	08-Apr-14	16	$0.00	
2-W.09.02.03	SIX2540	Call for Bid	100%	3	17-Mar-14 A	19-Mar-14 A	09-Apr-14	13-May-14	39	$0.00	
2-W.09.02.03	SIX2550	Receive and Evaluate Vendor Proposal	100%	22	20-Mar-14 A	21-Apr-14 A	14-May-14	02-Jul-14	52	$0.00	
2-W.09.02.03	SIX2560	Vendor Negotiations	100%	4	22-Apr-14 A	28-Apr-14 A	07-Jul-14	01-Aug-14	67	$0.00	
2-W.09.02.03	SIX2570	AWARD: Gratings Phase 1	100%	0		29-Apr-14 A		01-Aug-14	66	$0.00	
2-W.09.02.03	SIX2575050	Spectrometer Grating Substrate - 2 (2 units) - Fabrication	100%	150	01-Jul-14 A	09-Feb-15 A	04-Aug-14	31-Dec-14	-25	$0.00	
2-W.09.02.03	SIX2575100	Spectrometer Grating Substrate - 2 (2 units) - Delivery	100%	5	10-Feb-15 A	17-Feb-15 A	05-Jan-15	09-Jan-15	-25	$45,760.00	
2-W.09.02.03	SIX2575105	Spectrometer Grating Substrate - 1 (2 units) - Fabrication	100%	147	01-Aug-14 A	06-Mar-15 A	04-Aug-14	27-Feb-15	-5	$0.00	
2-W.09.02.03	SIX2575110	Spectrometer Grating Substrate - 1 (2 units) - Delivery	100%	39	09-Mar-15 A	30-Apr-15 A	02-Mar-15	09-Mar-15	-38	$137,280.00	
2-W.09.02.03	SIX2590	RECEIVE: Gratings Phase 1	100%	0		30-Apr-15 A		09-Mar-15	-38	$0.00	
2-W.09.02.03	SIX2600	Gratings Phase 1 - Bench Test	100%	75	17-Mar-15 A	30-Jun-15 A	10-Mar-15	06-Apr-15	-60	$15,433.52	
Gratings Rulings Phase 2			34.28%	594	21-Jul-14 A	01-Dec-16	14-Nov-14	03-May-16	-146	$313,843.70	29
2-W.09.02.03	SIX2850	Spectrometer Gratings Rulings - Write Spec	100%	40	21-Jul-14 A	15-Sep-14 A	14-Nov-14	15-Jan-15	82	$44,156.32	
2-W.09.02.03	SIX2855	Spectrometer Gratings Rulings - Vendor Prototyping	100%	59	01-Oct-14 A	25-Dec-14 A				$0.00	
2-W.09.02.03	SIX2860	Spectrometer Gratings Rulings - PPM Accept Requisition	100%	0		02-Feb-15 A		04-Mar-15	22	$0.00	
2-W.09.02.03	SIX2870	Spectrometer Gratings Rulings - Prepare & Submit RFQ	100%	3	03-Feb-15 A	06-Feb-15 A	05-Mar-15	25-Mar-15	33	$0.00	
2-W.09.02.03	SIX2880	Spectrometer Gratings Rulings - Offerors Prepare & Submit Proposals	100%	14	09-Feb-15 A	02-Mar-15 A	26-Mar-15	29-Apr-15	43	$0.00	
2-W.09.02.03	SIX2890	Spectrometer Gratings Rulings - Evaluate Offeror Proposals	100%	13	03-Mar-15 A	20-Mar-15 A	30-Apr-15	18-Jun-15	64	$0.00	
2-W.09.02.03	SIX2900	Spectrometer Gratings Rulings - Negotiate & Contract Package Approval	100%	5	23-Mar-15 A	30-Mar-15 A	19-Jun-15	17-Jul-15	78	$0.00	
2-W.09.02.03	SIX2910	AWARD: Spectrometer Gratings Rulings	100%	0		30-Mar-15 A		17-Jul-15	78	$0.00	
2-W.09.02.03	SIX291205	Gratings Phase 2 - Program Plan	100%	17	01-Apr-15 A	23-Apr-15 A	01-Apr-15	23-Apr-15	0	$63,440.00	
2-W.09.02.03	SIX291210	High-res Gratings Rulings - Fabrication	75%	342	24-Apr-15 A	31-Aug-16	24-Apr-15	12-Jan-16	-162	$0.00	29
2-W.09.02.03	SIX291215	High-res Gratings Rulings - Delivery	0%	1	01-Sep-16	01-Sep-16	13-Jan-16	13-Jan-16	-162	$101,504.00	29
2-W.09.02.03	SIX291225	High-res Gratings Rulings - Acceptance	0%	1	01-Dec-16	01-Dec-16	05-Apr-16	05-Apr-16	-166	$88,816.00	29
2-W.09.02.03	SIX2930	RECEIVE: High-res Gratings Rulings	0%	0		01-Sep-16		05-Apr-16	-105	$0.00	29
2-W.09.02.03	SIX2940	High-res Gratings Rulings - Metrology	0%	60	02-Sep-16	30-Nov-16	06-Apr-16	03-May-16	-145	$15,927.39	29
Detector			57.57%	491	01-Oct-14 A	15-Sep-16	18-Aug-14	23-Aug-16	-16	$642,096.25	81



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

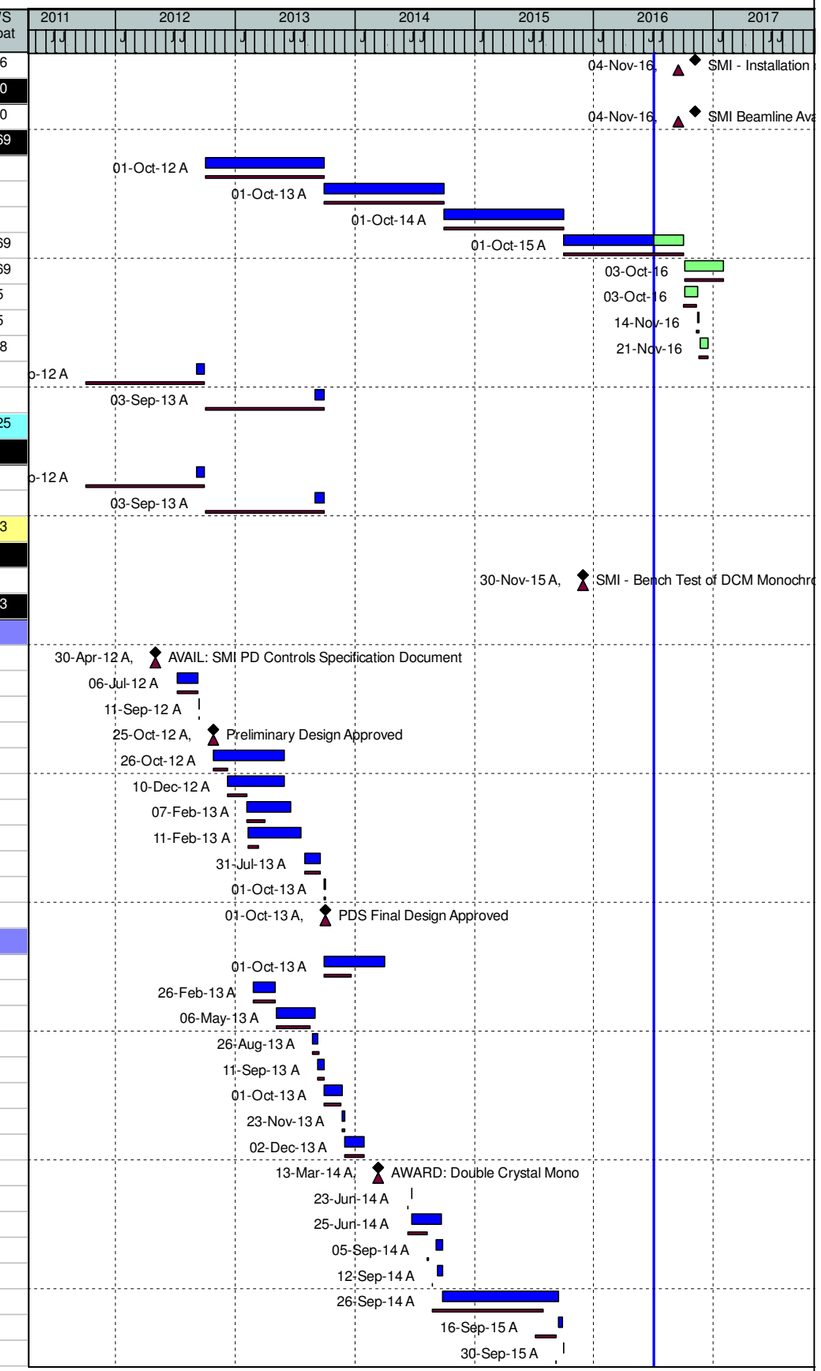
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.09.02.03	SIX2650	Detector - Write Spec	100%	36	01-Oct-14 A	20-Nov-14 A	18-Aug-14	11-Nov-14	-7	$27,892.07	
2-W.09.02.03	SIX2660	Detector - PPM Accept Requisition	100%	0		28-Nov-14 A		17-Dec-14	13	$0.00	
2-W.09.02.03	SIX2670	Detector - Prepare & Submit RFQ	100%	13	21-Nov-14 A	12-Dec-14 A	18-Dec-14	06-Jan-15	15	$0.00	
2-W.09.02.03	SIX2680	Detector - Offerors Prepare & Submit Proposals	100%	4	15-Dec-14 A	19-Dec-14 A	07-Jan-15	11-Feb-15	35	$0.00	
2-W.09.02.03	SIX2690	Detector - Evaluate Offeror Proposals	100%	23	22-Dec-14 A	28-Jan-15 A	12-Feb-15	02-Apr-15	46	$0.00	
2-W.09.02.03	SIX2700	Detector - Negotiate & Contract Package Approval	100%	20	28-Jan-15 A	26-Feb-15 A	03-Apr-15	30-Apr-15	46	$0.00	
2-W.09.02.03	SIX2710	AWARD: Detector	100%	0		26-Feb-15 A		30-Apr-15	46	$0.00	
2-W.09.02.03	SIX271505	Program Plan	100%	7	01-Apr-15 A	09-Apr-15 A	01-Apr-15	09-Apr-15	0	$99,955.44	
2-W.09.02.03	SIX271510	Design Review Report	100%	21	10-Apr-15 A	08-May-15 A	10-Apr-15	10-Apr-15	-20	$118,185.60	
2-W.09.02.03	SIX271515	1st e2v sensor receipt - 25% Design Complete	100%	1	01-Jul-15 A	01-Jul-15 A	10-Apr-15	10-Apr-15	-57	$24,066.64	
2-W.09.02.03	SIX271520	Fabrication - 2nd e2v sensor	100%	6	02-Jul-15 A	10-Jul-15 A	10-Apr-15	09-Jun-15	-22	$0.00	
2-W.09.02.03	SIX271525	2nd e2v sensor receipt - 50% Design Complete	100%	1	13-Jul-15 A	13-Jul-15 A	10-Jun-15	10-Jun-15	-22	$24,066.64	
2-W.09.02.03	SIX271530	Fabrication - 3rd e2v sensor	100%	8	14-Jul-15 A	23-Jul-15 A	11-Jun-15	09-Oct-15	55	$0.00	
2-W.09.02.03	SIX271535	3rd e2v sensor receipt - 75% Design Complete	100%	1	27-Jul-15 A	28-Jul-15 A	13-Oct-15	13-Oct-15	54	$24,066.64	
2-W.09.02.03	SIX271540	Fabrication - 4th e2v sensor	100%	133	01-Sep-15 A	15-Mar-16 A	13-Oct-15	09-Feb-16	-24	$0.00	
2-W.09.02.03	SIX271545	4th e2v sensor receipt - 100% Design Complete	100%	1	16-Mar-16 A	16-Mar-16 A	10-Feb-16	10-Feb-16	-24	$24,066.64	
2-W.09.02.03	SIX271550	Fabrication & Shipping - All remaining equipment	90%	118	17-Mar-16 A	31-Aug-16	11-Feb-16	09-Aug-16	-16	$0.00	81
2-W.09.02.03	SIX271555	Reciept of all remaining equipment	0%	1	01-Sep-16	01-Sep-16	10-Aug-16	10-Aug-16	-16	$169,652.08	81
2-W.09.02.03	SIX2730	RECEIVE: Detector	0%	0		01-Sep-16		10-Aug-16	-16	$0.00	81
2-W.09.02.03	SIX273010	Detector Commissioning Phase 1	0%	9	02-Sep-16	15-Sep-16	11-Aug-16	23-Aug-16	-16	$88,639.20	81
2-W.09.02.03	SIX2750	Detector - BNL Fabrication Support	85%	360	01-Apr-15 A	01-Sep-16	13-Apr-15	10-Aug-16	-16	$32,164.89	81
2-W.09.02.03	SIX2760	Detector - Install & Commissioning Support	0%	9	02-Sep-16	15-Sep-16	11-Aug-16	23-Aug-16	-16	$9,340.40	81
Management			100%	437	01-Oct-14 A	30-Jun-16 A	01-Oct-14	30-Sep-16	65	$278,614.87	
2-W.09.02.03	SIX0180	Procurement Support FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$153,554.21	
2-W.09.02.03	SIX0190	Procurement Support FY16	100%	187	01-Oct-15 A	30-Jun-16 A	01-Oct-15	30-Sep-16	65	$125,060.65	
Cryostat			0%	201	08-Dec-15 A	22-Sep-16	08-Dec-15	15-Jun-16	-69	$135,200.00	73
2-W.09.02.03	SIX2031	Cryostat Cryocooler - Fabrication	80%	163	08-Dec-15 A	29-Jul-16	08-Dec-15	15-Jun-16	-31	$0.00	111
2-W.09.02.03	SIX2032	Cryostat Cryocooler - Delivery	0%	1	29-Jul-16	29-Jul-16	15-Jun-16	15-Jun-16	-31	$101,920.00	111
2-W.09.02.03	SIX2033	Cryostat Low Vibration Interface - Fabrication	80%	163	08-Dec-15 A	29-Jul-16	08-Dec-15	15-Jun-16	-31	$0.00	111
2-W.09.02.03	SIX2034	Cryostat Low Vibration Interface - Delivery	0%	1	29-Jul-16	29-Jul-16	15-Jun-16	15-Jun-16	-31	$19,760.00	111
2-W.09.02.03	SIX2035	Cryostat Cooling Braids - Fabrication	70%	101	02-May-16 A	22-Sep-16	08-Dec-15	15-Jun-16	-69	$0.00	73
2-W.09.02.03	SIX2036	Cryostat Cooling Braids - Delivery	0%	1	22-Sep-16	22-Sep-16	15-Jun-16	15-Jun-16	-69	$13,520.00	73
Data Acquisition			55.14%	343	18-May-15 A	26-Sep-16	01-Jul-15	22-Dec-15	-192	$122,152.96	71
Data Acquisition System			55.14%	343	18-May-15 A	26-Sep-16	01-Jul-15	22-Dec-15	-192	$122,152.96	71
2-W.09.02.04	SIX2770	Preliminary Design	100%	18	18-May-15 A	12-Jun-15 A	01-Jul-15	29-Jul-15	33	$11,449.44	
2-W.09.02.04	SIX2780	Final Design & Spec	100%	9	15-Jun-15 A	26-Jun-15 A	30-Jul-15	26-Aug-15	43	$11,261.33	
2-W.09.02.04	SIX2800	Fabricate - Basic DAQ	100%	19	03-Aug-15 A	28-Aug-15 A	27-Aug-15	23-Oct-15	39	$44,649.45	
2-W.09.02.04	SIX2820	Assembly and Installation - ETC	0%	20	01-Aug-16*	26-Aug-16	26-Oct-15	24-Nov-15	-192	$27,590.49	71
2-W.09.02.04	SIX2830	Test - ETC	0%	20	29-Aug-16	26-Sep-16	25-Nov-15	22-Dec-15	-192	$27,202.24	71
SMI Beamline			89.91%	1270	03-Jan-12 A	30-Jan-17	03-Oct-11	31-Jan-17	1	$9,108,986.23	169
Milestones			0%	689	26-Oct-12 A	03-Aug-15 A	26-Oct-12	30-Nov-15	81	$0.00	
2-W.10	MSMI001	Start final design of SMI beamline	100%	0	26-Oct-12 A		26-Oct-12		0	$0.00	
2-W.10	MSMI003	Complete: SMI Final Design	100%	0		01-Nov-13 A		01-Oct-13	-22	$0.00	
2-W.10	MSMI005	Start procurement of SMI hutch	100%	0	12-Mar-13 A		12-Mar-13		0	$0.00	
2-W.10	MSMI007	Start procurement of SMI photon delivery system components	100%	0	26-Sep-14 A		30-Jun-15		188	$0.00	
2-W.10	MSMI008	Receive Shutters & Start Install of All Beamline Shutters - Ready For NEXT Ins	100%	0		01-Dec-14 A				$0.00	
2-W.10	MSMI010	Start procurement of SMI DAQ system	100%	0	03-Aug-15 A		30-Nov-15		81	$0.00	
2-W.10	MSMI020	Start assembly and installation of SMI components	100%	0	30-Apr-14 A		19-May-14		13	$0.00	
SMI Management			86.61%	1100	04-Sep-12 A	30-Jan-17	03-Oct-11	31-Jan-17	1	$802,276.98	169
SMI Beamline Management			86.61%	1100	04-Sep-12 A	30-Jan-17	03-Oct-11	31-Jan-17	1	$802,276.98	169
Top Level Milestones			0%	0	04-Nov-16	04-Nov-16	16-Sep-16	16-Sep-16	-34	$0.00	46



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

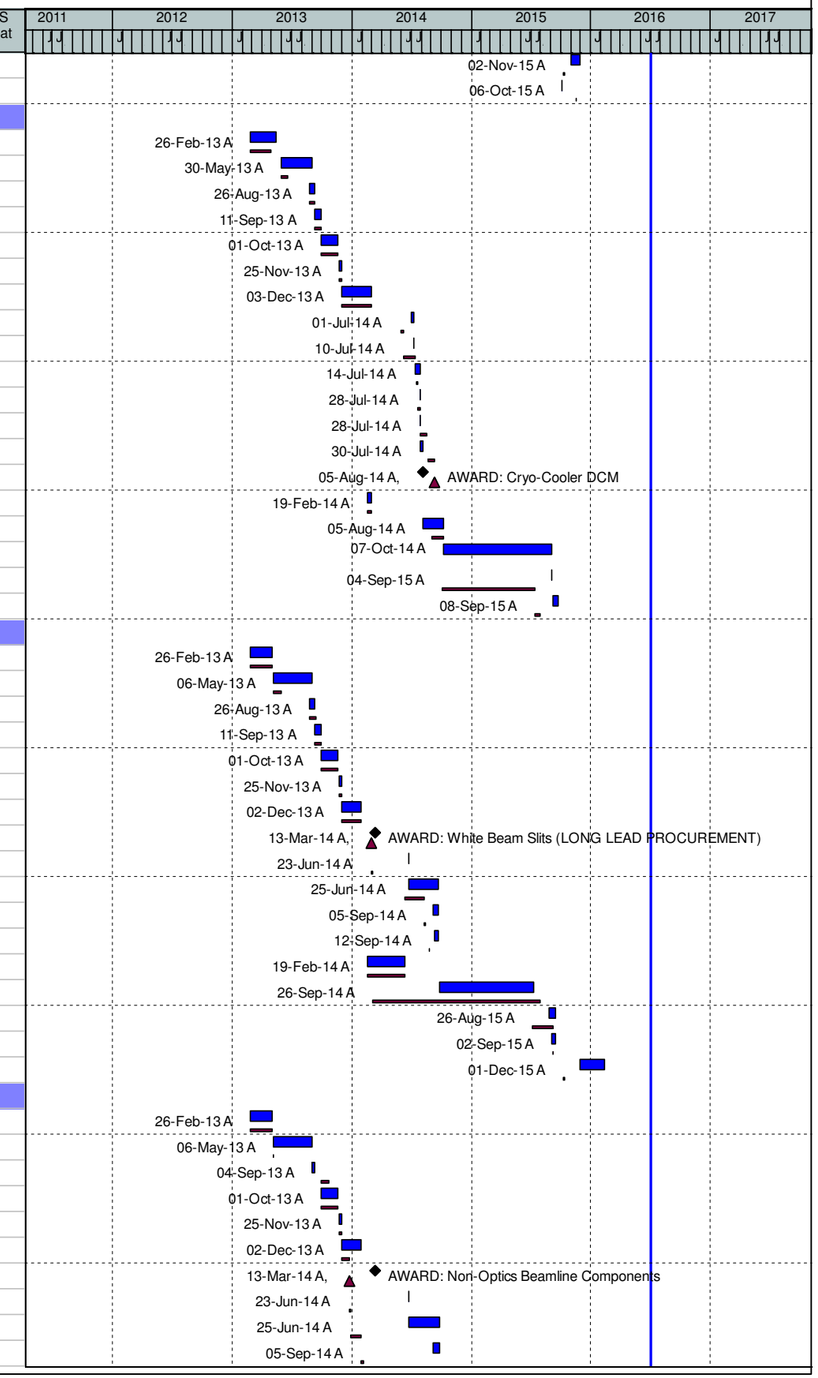
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.01.01	M3240	SMI - Installation of Beamline Components Complete	0%	0		04-Nov-16		16-Sep-16	-34	$0.00	46
Milestones			0%	0	04-Nov-16	04-Nov-16	13-Sep-16	13-Sep-16	-37	$0.00	10
2-W.10.01.01	MSMI030	SMI Beamline Available	0%	0		04-Nov-16		13-Sep-16	-37	$0.00	10
Management			86.61%	1100	04-Sep-12 A	30-Jan-17	03-Oct-11	31-Jan-17	1	$802,276.98	169
2-W.10.01.01	SMI0002	SMI BL Management FY13	100%	249	01-Oct-12 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$0.00	
2-W.10.01.01	SMI0003	SMI BL Management FY14	100%	250	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	0	$167,223.98	
2-W.10.01.01	SMI0004	SMI BL Management FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$279,956.21	
2-W.10.01.01	SMI0005	SMI BL Management FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$138,257.16	169
2-W.10.01.01	SMI0007	SMI BL Management FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	31-Jan-17	1	$8,382.50	169
2-W.10.01.01	SMI7025	SMI - Preparation of Beamline IRR Documentation	0%	29	03-Oct-16	11-Nov-16	30-Sep-16	10-Nov-16	-1	$31,515.90	5
2-W.10.01.01	SMI7030	SMI - Beamline IRR	0%	3	14-Nov-16	16-Nov-16	11-Nov-16	15-Nov-16	-1	$11,697.75	5
2-W.10.01.01	SMI7035	SMI - Closeout of Beamline Pre-start Items	0%	20	21-Nov-16	16-Dec-16	16-Nov-16	15-Dec-16	-1	$20,693.02	18
2-W.10.01.01	SMIFY12501	SMI Management FY12	100%	19	04-Sep-12 A	28-Sep-12 A	03-Oct-11	28-Sep-12	0	$19,102.87	
2-W.10.01.01	SMIFY13501	SMI Management FY13	100%	20	03-Sep-13 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$125,447.61	
SMI Beamline Systems			90.22%	1214	03-Jan-12 A	04-Nov-16	03-Oct-11	30-Sep-16	-24	$8,306,709.25	225
Management			100%	268	04-Sep-12 A	30-Sep-13 A	03-Oct-11	30-Sep-13	0	$363,250.11	
2-W.10.02	SMIFY12502	SMI Systems FY12	100%	19	04-Sep-12 A	28-Sep-12 A	03-Oct-11	28-Sep-12	0	$17,023.17	
2-W.10.02	SMIFY13502	SMI Systems FY13	100%	20	03-Sep-13 A	30-Sep-13 A	01-Oct-12	30-Sep-13	0	$346,226.94	
Photon Delivery System			96.12%	1088	30-Apr-12 A	02-Sep-16	30-Apr-12	01-Jul-16	-44	$4,136,134.38	53
Top Level Milestones			0%	0	30-Nov-15 A	30-Nov-15 A	30-Nov-15	30-Nov-15	1	$0.00	
2-W.10.02.01	M3225	SMI - Bench Test of DCM Monochromator Complete	100%	0		30-Nov-15 A		30-Nov-15	1	$0.00	
SMI Photon Delivery System			96.12%	1088	30-Apr-12 A	02-Sep-16	30-Apr-12	01-Jul-16	-44	$4,136,134.38	53
Design			100%	356	30-Apr-12 A	01-Oct-13 A	30-Apr-12	01-Oct-13	0	$4,561.34	
2-W.10.02.01	SMI0020	AVAIL: SMI PD Controls Specification Document	100%	0		30-Apr-12 A		30-Apr-12	0	$0.00	
2-W.10.02.01	SMI0050	90% Preliminary Design	100%	46	06-Jul-12 A	10-Sep-12 A	06-Jul-12	10-Sep-12	0	$0.00	
2-W.10.02.01	SMI0060	Preliminary Design Review	100%	2	11-Sep-12 A	12-Sep-12 A	11-Sep-12	12-Sep-12	0	$0.00	
2-W.10.02.01	SMI0070	Preliminary Design Approved	100%	0		25-Oct-12 A		25-Oct-12	0	$0.00	
2-W.10.02.01	SMI0090	Final Design Ray tracing	100%	148	26-Oct-12 A	31-May-13 A	26-Oct-12	07-Dec-12	-119	$0.00	
2-W.10.02.01	SMI0100	Final Design - FEA and Cryo Cooler	100%	119	10-Dec-12 A	31-May-13 A	10-Dec-12	06-Feb-13	-80	$0.00	
2-W.10.02.01	SMI0110	Final Design - Monochromator	100%	94	07-Feb-13 A	20-Jun-13 A	07-Feb-13	03-Apr-13	-55	$0.00	
2-W.10.02.01	SMI0120	Final Design - Focusing Mirror H-V	100%	111	11-Feb-13 A	19-Jul-13 A	11-Feb-13	14-Mar-13	-88	$0.00	
2-W.10.02.01	SMI0130	Final Design - Endstation Component Placement	100%	33	31-Jul-13 A	16-Sep-13 A	31-Jul-13	16-Sep-13	0	$0.00	
2-W.10.02.01	SMI0150	PDS Final Design Review	100%	1	01-Oct-13 A	01-Oct-13 A	01-Oct-13	01-Oct-13	0	$4,561.34	
2-W.10.02.01	SMI0160	PDS Final Design Approved	100%	0		01-Oct-13 A		01-Oct-13	0	$0.00	
DC Monochromator (LONG LEAD PROCUREMENT)			100%	690	26-Feb-13 A	30-Nov-15 A	26-Feb-13	16-Nov-15	-7	$1,326,678.67	
2-W.10.02.01	SMI0140	PDS General Procurement and Vendor Support	100%	123	01-Oct-13 A	31-Mar-14 A	01-Oct-13	20-Dec-13	-67	$31,092.42	
2-W.10.02.01	SMI0170	Write Specs Double Crystal Mono	100%	49	26-Feb-13 A	03-May-13 A	26-Feb-13	03-May-13	0	$0.00	
2-W.10.02.01	SMI0180	PPM Accept Requisition Double Crystal Mono	100%	82	06-May-13 A	03-Sep-13 A	06-May-13	15-Aug-13	-11	$0.00	
2-W.10.02.01	SMI0190	Prepare RFP Double Crystal Mono	100%	11	26-Aug-13 A	10-Sep-13 A	26-Aug-13	13-Sep-13	3	$0.00	
2-W.10.02.01	SMI0200	Call for bid Double Crystal Mono	100%	13	11-Sep-13 A	30-Sep-13 A	11-Sep-13	30-Sep-13	1	$0.00	
2-W.10.02.01	SMI0200FA	Call for bid Double Crystal Mono	100%	36	01-Oct-13 A	22-Nov-13 A	01-Oct-13	20-Nov-13	0	$0.00	
2-W.10.02.01	SMI0210	Receive and Evaluate Vendor Proposals DC Mono	100%	6	23-Nov-13 A	02-Dec-13 A	25-Nov-13	02-Dec-13	0	$12,461.45	
2-W.10.02.01	SMI0220	Vendor Negotiations Double Crystal Mono	100%	41	02-Dec-13 A	30-Jan-14 A	03-Dec-13	30-Jan-14	0	$0.00	
2-W.10.02.01	SMI0230	AWARD: Double Crystal Mono	100%	0		13-Mar-14 A		13-Mar-14	-1	$0.00	
2-W.10.02.01	SMI0231	Receive PDR and Minutes (Milestone Payment)	100%	2	23-Jun-14 A	24-Jun-14 A	12-Jun-14	12-Jun-14	-8	$249,582.32	
2-W.10.02.01	SMI0240	Double Crystal Mono - Final Design	100%	62	25-Jun-14 A	24-Sep-14 A	13-Jun-14	11-Aug-14	-30	$0.00	
2-W.10.02.01	SMI0250	Double Crystal Mono - Final Design Review	100%	14	05-Sep-14 A	24-Sep-14 A	12-Aug-14	15-Aug-14	-27	$0.00	
2-W.10.02.01	SMI0260	Double Crystal Mono - Final Design Approved	100%	9	12-Sep-14 A	24-Sep-14 A	25-Aug-14	25-Aug-14	-21	$374,374.00	
2-W.10.02.01	SMI0270	Double Crystal Mono - Fabrication - Double Crystal Mono	100%	241	26-Sep-14 A	15-Sep-15 A	26-Aug-14	30-Jul-15	-31	$0.00	
2-W.10.02.01	SMI0290	Double Crystal Mono - Shipping	100%	8	16-Sep-15 A	25-Sep-15 A	08-Jul-15	08-Sep-15	-13	$0.00	
2-W.10.02.01	SMI0300	RECEIVE: Double Crystal Mono	100%	0	30-Sep-15 A	30-Sep-15 A	08-Sep-15	08-Sep-15	-15	$396,526.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

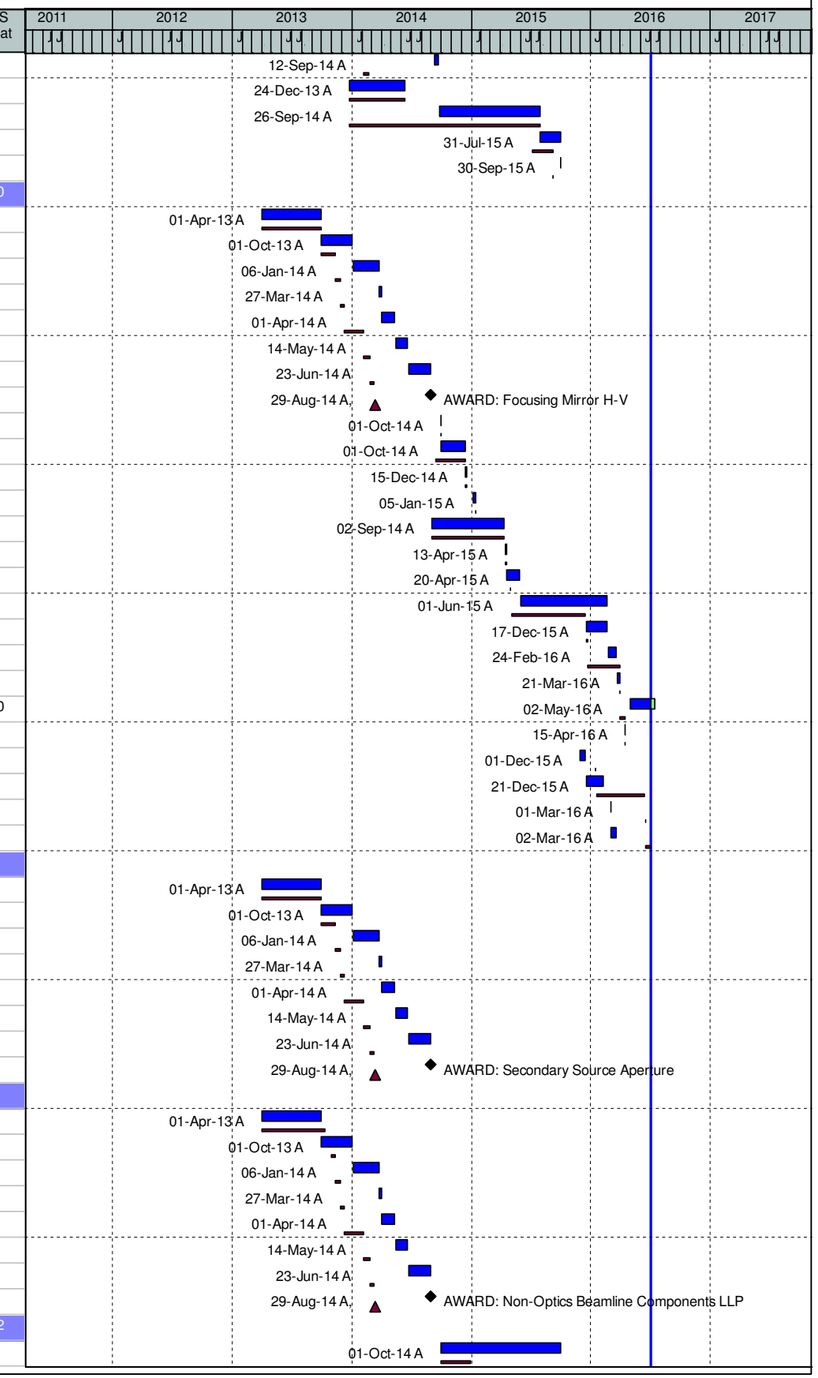
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.01	SMI0310	Double Crystal Mono - Bench Test	100%	18	02-Nov-15 A	30-Nov-15 A	09-Oct-15	14-Oct-15	-30	$13,060.17	
2-W.10.02.01	SMI0315	Double Crystal Mono - Approval of Phase 1 Commissioning Report (Milestone	100%	1	06-Oct-15 A	07-Oct-15 A	16-Nov-15	16-Nov-15	28	$249,582.32	
Cryo-Cooler DCM			100%	644	26-Feb-13 A	21-Sep-15 A	26-Feb-13	29-Jul-15	-37	$190,920.67	
2-W.10.02.01	SMI0320	Write Specs Cryo Cooler	100%	57	26-Feb-13 A	15-May-13 A	26-Feb-13	29-Apr-13	-12	$0.00	
2-W.10.02.01	SMI0330	PPM Accept Requisition Cryo Cooler	100%	65	30-May-13 A	03-Sep-13 A	30-May-13	17-Jun-13	-52	$0.00	
2-W.10.02.01	SMI0340	Prepare RFP Cryo Cooler	100%	11	26-Aug-13 A	10-Sep-13 A	26-Aug-13	10-Sep-13	0	$0.00	
2-W.10.02.01	SMI0350	Call for bid Cryo Cooler	100%	13	11-Sep-13 A	30-Sep-13 A	11-Sep-13	30-Sep-13	1	$0.00	
2-W.10.02.01	SMI0350FA	Call for bid Cryo Cooler	100%	36	01-Oct-13 A	20-Nov-13 A	01-Oct-13	20-Nov-13	0	$0.00	
2-W.10.02.01	SMI0360	Receive and Evaluate Vendor Proposals Cryo cooler	100%	6	25-Nov-13 A	02-Dec-13 A	25-Nov-13	02-Dec-13	0	$0.00	
2-W.10.02.01	SMI0370	Vendor Negotiations Cryo Cooler	100%	60	03-Dec-13 A	03-Mar-14 A	03-Dec-13	03-Mar-14	1	$0.00	
2-W.10.02.01	SMI0371	Write RFQ Spec Cryo Cooler	100%	5	01-Jul-14 A	09-Jul-14 A	02-Jun-14	06-Jun-14	-21	$0.00	
2-W.10.02.01	SMI0372	Technical Document Review	100%	2	10-Jul-14 A	11-Jul-14 A	09-Jun-14	15-Jul-14	2	$0.00	
2-W.10.02.01	SMI0373	PPM Accepts Req Cryo Cooler	100%	10	14-Jul-14 A	28-Jul-14 A	16-Jul-14	22-Jul-14	-3	$0.00	
2-W.10.02.01	SMI0374	Prepare RFQ	100%	0	28-Jul-14 A	28-Jul-14 A	23-Jul-14	29-Jul-14	2	$0.00	
2-W.10.02.01	SMI0375	Call for Bid	100%	1	28-Jul-14 A	29-Jul-14 A	30-Jul-14	19-Aug-14	16	$0.00	
2-W.10.02.01	SMI0376	Cryo Cooler DCM- Receive and Evaluate Vendor Proposals	100%	5	30-Jul-14 A	05-Aug-14 A	20-Aug-14	09-Sep-14	24	$0.00	
2-W.10.02.01	SMI0380	AWARD: Cryo-Cooler DCM	100%	0		05-Aug-14 A		09-Sep-14	24	$0.00	
2-W.10.02.01	SMI0430	Vendor Fabrication Cryo Cooler	100%	8	19-Feb-14 A	03-Mar-14 A	19-Feb-14	28-Feb-14	0	$6,788.67	
2-W.10.02.01	SMI0430FA	Receipt and Approval of Cryo Cooler FDR	100%	44	05-Aug-14 A	06-Oct-14 A	02-Sep-14	06-Oct-14	0	$73,652.80	
2-W.10.02.01	SMI0435	Fabrication Cryo Cooler System	100%	228	07-Oct-14 A	03-Sep-15 A				$0.00	
2-W.10.02.01	SMI0440	Receipt and Acceptance of Cryo Cooler System	100%	1	04-Sep-15 A	04-Sep-15 A	06-Oct-14	15-Jul-15	-37	$110,479.20	
2-W.10.02.01	SMI0460	Bench Test: Cryo Cooler	100%	10	08-Sep-15 A	21-Sep-15 A	16-Jul-15	29-Jul-15	-37	$0.00	
White Beam Slits (LONG LEAD PROCUREMENT)			100%	742	26-Feb-13 A	12-Feb-16 A	26-Feb-13	14-Oct-15	-82	$30,863.22	
2-W.10.02.01	SMI0175	Write Specs White Beam Slits	100%	49	26-Feb-13 A	03-May-13 A	26-Feb-13	03-May-13	0	$0.00	
2-W.10.02.01	SMI0185	PPM Accept Requisition White Beam Slits	100%	82	06-May-13 A	03-Sep-13 A	06-May-13	30-May-13	-64	$0.00	
2-W.10.02.01	SMI0195	Prepare RFP White Beam Slits	100%	11	26-Aug-13 A	10-Sep-13 A	26-Aug-13	13-Sep-13	3	$0.00	
2-W.10.02.01	SMI0205	Call for bid White Beam Slits	100%	13	11-Sep-13 A	30-Sep-13 A	11-Sep-13	30-Sep-13	1	$0.00	
2-W.10.02.01	SMI0205FA	Call for bid White Beam Slits	100%	36	01-Oct-13 A	20-Nov-13 A	01-Oct-13	20-Nov-13	0	$0.00	
2-W.10.02.01	SMI0215	Receive and Evaluate Vendor White Beam Slits	100%	6	25-Nov-13 A	02-Dec-13 A	25-Nov-13	02-Dec-13	0	$12,461.45	
2-W.10.02.01	SMI0225	Vendor Negotiations White Beam Slits	100%	41	02-Dec-13 A	30-Jan-14 A	03-Dec-13	30-Jan-14	0	$0.00	
2-W.10.02.01	SMI0235	AWARD: White Beam Slits (LONG LEAD PROCUREMENT)	100%	0		13-Mar-14 A		03-Mar-14	-9	$0.00	
2-W.10.02.01	SMI0236	Receive PDR and Minutes	100%	2	23-Jun-14 A	24-Jun-14 A	03-Mar-14	04-Mar-14	-79	$0.00	
2-W.10.02.01	SMI0245	White Beam Slits - Final Design	100%	62	25-Jun-14 A	24-Sep-14 A	13-Jun-14	11-Aug-14	-30	$0.00	
2-W.10.02.01	SMI0255	White Beam Slits - Final Design Review	100%	13	05-Sep-14 A	24-Sep-14 A	12-Aug-14	15-Aug-14	-26	$0.00	
2-W.10.02.01	SMI0275	White Beam Slits - Final Design Approved	100%	8	12-Sep-14 A	24-Sep-14 A	25-Aug-14	25-Aug-14	-20	$0.00	
2-W.10.02.01	SMI0285	Vendor Fabrication - White Beam Slits	100%	81	19-Feb-14 A	12-Jun-14 A	19-Feb-14	12-Jun-14	0	$5,341.61	
2-W.10.02.01	SMI02851	White Beam Slits - Fabrication	100%	195	26-Sep-14 A	10-Jul-15 A	05-Mar-14	30-Jul-15	15	$0.00	
2-W.10.02.01	SMI0295	White Beam Slits - Shipping	100%	14	26-Aug-15 A	16-Sep-15 A	08-Jul-15	08-Sep-15	-5	$0.00	
2-W.10.02.01	SMI0305	RECEIVE: White Beam Slits	100%	9	02-Sep-15 A	16-Sep-15 A	08-Sep-15	08-Sep-15	-5	$0.00	
2-W.10.02.01	SMI0325	White Beam Slits - Bench Test	100%	51	01-Dec-15 A	12-Feb-16 A	08-Oct-15	14-Oct-15	-82	$13,060.17	
Non-Optics Beamline Components (058NX LLP)			100%	651	26-Feb-13 A	30-Sep-15 A	26-Feb-13	08-Sep-15	-16	$36,801.00	
2-W.10.02.01	SMI0475	Write Specification and SOW for Non-Optics Beamline Components	100%	48	26-Feb-13 A	03-May-13 A	26-Feb-13	03-May-13	1	$0.00	
2-W.10.02.01	SMI0485	PPM Accept Requisition	100%	83	06-May-13 A	03-Sep-13 A	06-May-13	06-May-13	-83	$0.00	
2-W.10.02.01	SMI0486	Prepare RFP BL Non Optics Components	100%	5	04-Sep-13 A	10-Sep-13 A	01-Oct-13	21-Oct-13	28	$0.00	
2-W.10.02.01	SMI0505	Call for Bid	100%	36	01-Oct-13 A	20-Nov-13 A	01-Oct-13	20-Nov-13	0	$0.00	
2-W.10.02.01	SMI0515	Receive and Evaluate Vendor Proposals Non Optics	100%	6	25-Nov-13 A	02-Dec-13 A	25-Nov-13	02-Dec-13	0	$3,678.84	
2-W.10.02.01	SMI0525	Contract Negotiations	100%	41	02-Dec-13 A	30-Jan-14 A	03-Dec-13	24-Dec-13	-24	$0.00	
2-W.10.02.01	SMI0535	AWARD: Non-Optics Beamline Components	100%	0		13-Mar-14 A		26-Dec-13	-53	$0.00	
2-W.10.02.01	SMI0536	Receive PDR and Minutes	100%	2	23-Jun-14 A	24-Jun-14 A	26-Dec-13	27-Dec-13	-123	$0.00	
2-W.10.02.01	SMI0537	White Beam Pkg - Final Design	100%	63	25-Jun-14 A	24-Sep-14 A	30-Dec-13	29-Jan-14	-165	$0.00	
2-W.10.02.01	SMI0538	White Beam Pkg - Final Design Review	100%	14	05-Sep-14 A	24-Sep-14 A	30-Jan-14	05-Feb-14	-160	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.01	SMI0539	White Beam Pkg - Final Design Approved	100%	8	12-Sep-14 A	24-Sep-14 A	06-Feb-14	20-Feb-14	-149	$0.00	
2-W.10.02.01	SMI0555	Vendor Fabrication BL Non Optics Components	100%	118	24-Dec-13 A	12-Jun-14 A	24-Dec-13	12-Jun-14	0	$33,122.17	
2-W.10.02.01	SMI05551	White Beam Pkg - Fabrication	100%	210	26-Sep-14 A	30-Jul-15 A	26-Dec-13	30-Jul-15	0	$0.00	
2-W.10.02.01	SMI0565	White Beam Pkg - Shipping	100%	43	31-Jul-15 A	30-Sep-15 A	08-Jul-15	08-Sep-15	-16	$0.00	
2-W.10.02.01	SMI0585	Receive: White Beam Pkg	100%	0	30-Sep-15 A	30-Sep-15 A	08-Sep-15	08-Sep-15	-15	$0.00	
Focusing Mirror System H-V (LONG LEAD PROCUREMENT)			99.44%	823	01-Apr-13 A	13-Jul-16	01-Apr-13	01-Jul-16	-7	$1,871,490.58	90
2-W.10.02.01	SMI0590	Write Specs Focusing Mirror H-V	100%	126	01-Apr-13 A	30-Sep-13 A	01-Apr-13	30-Sep-13	1	$0.00	
2-W.10.02.01	SMI0590FA	Write Specs Focusing Mirror H-V	100%	64	01-Oct-13 A	03-Jan-14 A	01-Oct-13	11-Nov-13	-35	$2,912.73	
2-W.10.02.01	SMI0600	PPM Accept Requisition PPM Accept Requisition Focusing Mirror H-V	100%	56	06-Jan-14 A	26-Mar-14 A	12-Nov-13	26-Nov-13	-82	$0.00	
2-W.10.02.01	SMI0610	Prepare RFP Focusing Mirror H-V	100%	3	27-Mar-14 A	31-Mar-14 A	27-Nov-13	09-Dec-13	-76	$0.00	
2-W.10.02.01	SMI0620	Call for bid Focusing Mirror H-V	100%	31	01-Apr-14 A	13-May-14 A	10-Dec-13	06-Feb-14	-67	$0.00	
2-W.10.02.01	SMI0630	Receive and Evaluate Vendor Proposals Mirror HV	100%	27	14-May-14 A	20-Jun-14 A	07-Feb-14	25-Feb-14	-82	$2,452.56	
2-W.10.02.01	SMI0640	Focusing Mirror H-V - Negotiations	100%	47	23-Jun-14 A	29-Aug-14 A	26-Feb-14	11-Mar-14	-119	$0.00	
2-W.10.02.01	SMI0650	AWARD: Focusing Mirror H-V	100%	0		29-Aug-14 A		12-Mar-14	-119	$0.00	
2-W.10.02.01	SMI0651	Receive Program Plan H-V Mirrors and SSA	100%	1	01-Oct-14 A	01-Oct-14 A	01-Oct-14	01-Oct-14	0	$264,566.64	
2-W.10.02.01	SMI0652	Vendor Design H-V Mirrors and SSA	100%	50	01-Oct-14 A	12-Dec-14 A	15-Sep-14	12-Dec-14	0	$0.00	
2-W.10.02.01	SMI0653	Preliminary Design Review H-V Mirrors and SSA	100%	5	15-Dec-14 A	19-Dec-14 A	15-Dec-14	19-Dec-14	0	$12,655.20	
2-W.10.02.01	SMI0654	Receipt & Approval of H-V Mirrors & SSA PDR & Minutes	100%	9	05-Jan-15 A	15-Jan-15 A	15-Jan-15	15-Jan-15	0	$352,755.52	
2-W.10.02.01	SMI0670	Vendor Final Design H-V Mirrors & SSA	100%	151	02-Sep-14 A	10-Apr-15 A	02-Sep-14	10-Apr-15	0	$0.00	
2-W.10.02.01	SMI0680	Vendor Final Design Review H-V Mirrors & SSA	100%	5	13-Apr-15 A	17-Apr-15 A	13-Apr-15	17-Apr-15	0	$12,655.20	
2-W.10.02.01	SMI0690	Receipt & Approval of H-V Mirrors & SSA FDR & Minutes	100%	29	20-Apr-15 A	29-May-15 A	01-May-15	01-May-15	-19	$440,944.40	
2-W.10.02.01	SMI0700	Vendor Fabrication H-V Mirrors & SSA	100%	181	01-Jun-15 A	19-Feb-16 A	04-May-15	16-Dec-15	-43	$0.00	
2-W.10.02.01	SMI0701	Optics Factory Acceptance Tests H-V Mirrors & SSA	100%	43	17-Dec-15 A	19-Feb-16 A	17-Dec-15	23-Dec-15	-38	$14,790.33	
2-W.10.02.01	SMI0710	Vendor Shipping H-V Mirrors & SSA	100%	17	24-Feb-16 A	18-Mar-16 A	24-Dec-15	30-Mar-16	9	$0.00	
2-W.10.02.01	SMI0720	Receipt & Acceptance of all H-V Mirrors & SSA	100%	8	21-Mar-16 A	31-Mar-16 A	31-Mar-16	31-Mar-16	1	$552,616.48	
2-W.10.02.01	SMI0730	Bench Test H-V Mirrors & SSA	20%	51	02-May-16 A	13-Jul-16	01-Apr-16	14-Apr-16	-62	$13,060.17	90
2-W.10.02.01	SMI0735	Receipt & Approval Phase 1 Commissioning H-V Mirrors & SSA	100%	1	15-Apr-16 A	15-Apr-16 A	15-Apr-16	15-Apr-16	0	$150,377.76	
2-W.10.02.01	SMI0740	Removable Pipe Receipt & Approval FDR	100%	12	01-Dec-15 A	17-Dec-15 A	15-Jan-16	15-Jan-16	20	$41,362.88	
2-W.10.02.01	SMI0745	Removable Pipe Vendor Fab	100%	32	21-Dec-15 A	08-Feb-16 A	19-Jan-16	14-Jun-16	90	$0.00	
2-W.10.02.01	SMI0750	Removable Pipe Receipt of Equipment	100%	2	01-Mar-16 A	03-Mar-16 A	15-Jun-16	15-Jun-16	74	$5,170.88	
2-W.10.02.01	SMI0755	Removable Pipe Acceptance of Equipment	100%	12	02-Mar-16 A	17-Mar-16 A	16-Jun-16	01-Jul-16	75	$5,169.84	
Secondary Source Aperture (LONG LEAD PROCUREMENT)			0%	356	01-Apr-13 A	29-Aug-14 A	01-Apr-13	12-Mar-14	-120	$0.00	
2-W.10.02.01	SMI0595	Write Specs Secondary Source Aperture (included in Focusing Mirror H-V Spe	100%	126	01-Apr-13 A	30-Sep-13 A	01-Apr-13	30-Sep-13	1	$0.00	
2-W.10.02.01	SMI0595FA	Write Specs Secondary Source Aperture (included in Focusing Mirror H-V Spe	100%	64	01-Oct-13 A	03-Jan-14 A	01-Oct-13	11-Nov-13	-35	$0.00	
2-W.10.02.01	SMI0596	PPM Accept Requisition PPM Accept Requisition Secondary Source Aperture	100%	56	06-Jan-14 A	26-Mar-14 A	12-Nov-13	26-Nov-13	-82	$0.00	
2-W.10.02.01	SMI0597	Prepare RFP Secondary Source Aperture	100%	3	27-Mar-14 A	31-Mar-14 A	27-Nov-13	09-Dec-13	-76	$0.00	
2-W.10.02.01	SMI0598	Call for bid Secondary Source Aperture	100%	31	01-Apr-14 A	13-May-14 A	10-Dec-13	06-Feb-14	-67	$0.00	
2-W.10.02.01	SMI0599	Receive and Evaluate Vendor Proposals Secondary Source Aperture	100%	27	14-May-14 A	20-Jun-14 A	07-Feb-14	25-Feb-14	-82	$0.00	
2-W.10.02.01	SMI0601	Secondary Source Aperture - Vendor Negotiations	100%	48	23-Jun-14 A	29-Aug-14 A	26-Feb-14	11-Mar-14	-120	$0.00	
2-W.10.02.01	SMI0602	AWARD: Secondary Source Aperture	100%	0		29-Aug-14 A		12-Mar-14	-119	$0.00	
Non-Optics Beamline Components (060NX LLP)			100%	356	01-Apr-13 A	29-Aug-14 A	01-Apr-13	12-Mar-14	-120	$4,291.98	
2-W.10.02.01	SMI0575	Write Specification and SOW for Non-Optics Beamline Components	100%	126	01-Apr-13 A	30-Sep-13 A	01-Apr-13	11-Oct-13	10	$0.00	
2-W.10.02.01	SMI0575FA	Write Specification and SOW for Non-Optics Beamline Components	100%	64	01-Oct-13 A	03-Jan-14 A	30-Oct-13	11-Nov-13	-35	$0.00	
2-W.10.02.01	SMI0615	PPM Accept Requisition	100%	56	06-Jan-14 A	26-Mar-14 A	12-Nov-13	26-Nov-13	-82	$0.00	
2-W.10.02.01	SMI0625	Prepare RFP BL Non Optics Components	100%	3	27-Mar-14 A	31-Mar-14 A	27-Nov-13	09-Dec-13	-76	$0.00	
2-W.10.02.01	SMI0635	Call for bid BL Non Optics Components	100%	31	01-Apr-14 A	13-May-14 A	10-Dec-13	06-Feb-14	-67	$0.00	
2-W.10.02.01	SMI0645	Receive and Evaluate Vendor Proposals Non Optics	100%	27	14-May-14 A	20-Jun-14 A	07-Feb-14	25-Feb-14	-82	$4,291.98	
2-W.10.02.01	SMI0655	Non-Optics Beamline Components LLP - Contract Negotiations	100%	48	23-Jun-14 A	29-Aug-14 A	26-Feb-14	11-Mar-14	-120	$0.00	
2-W.10.02.01	SMI0665	AWARD: Non-Optics Beamline Components LLP	100%	0		29-Aug-14 A		12-Mar-14	-120	$0.00	
Non-optics Beamline Components			79.87%	474	01-Oct-14 A	22-Aug-16	01-Oct-14	01-Jul-16	-35	$445,809.36	62
2-W.10.02.01	SMI0470	Non-Optics Beamline Components - Write Specification and SOW	100%	251	01-Oct-14 A	01-Oct-15 A	01-Oct-14	29-Dec-14	-191	$51,961.35	



(O) NEXT - Detail Schedule

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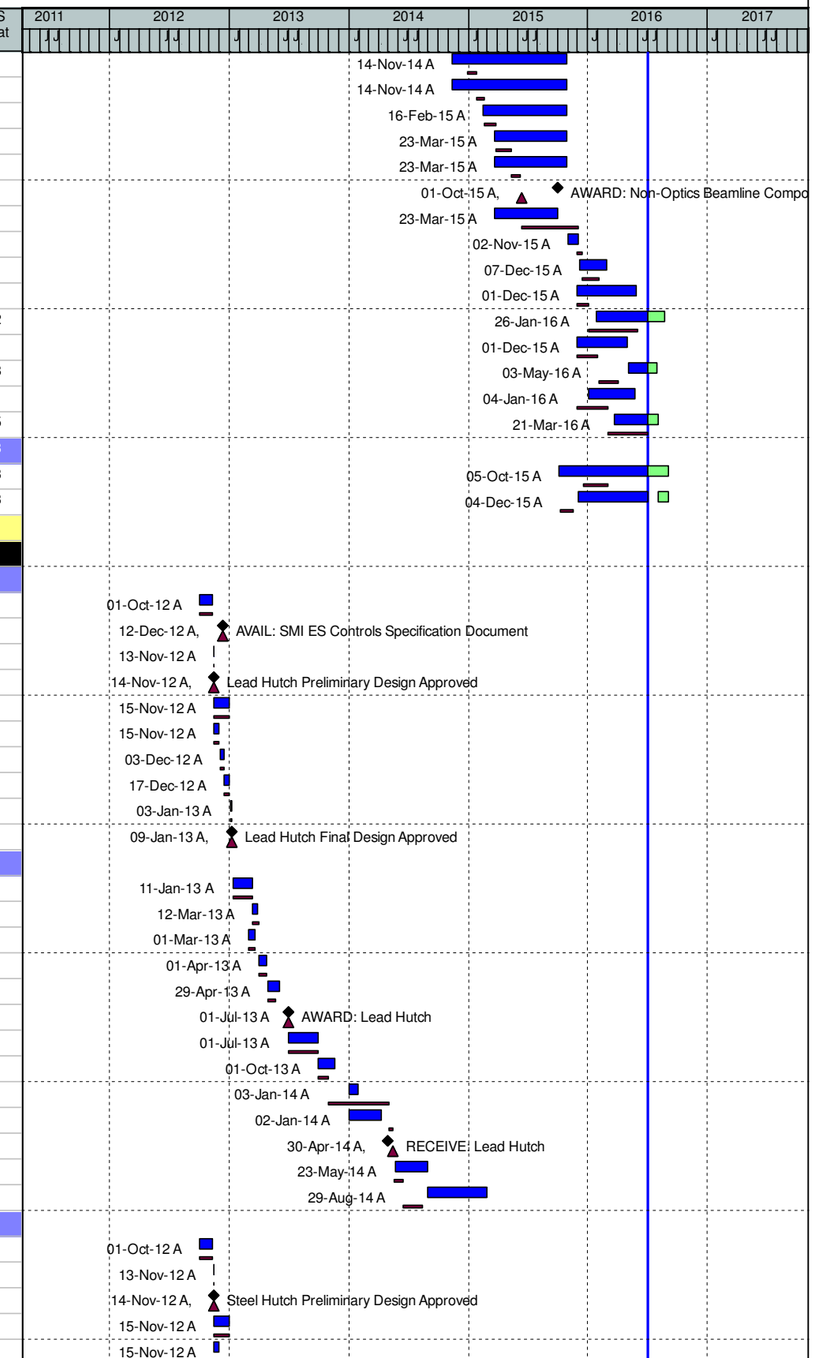
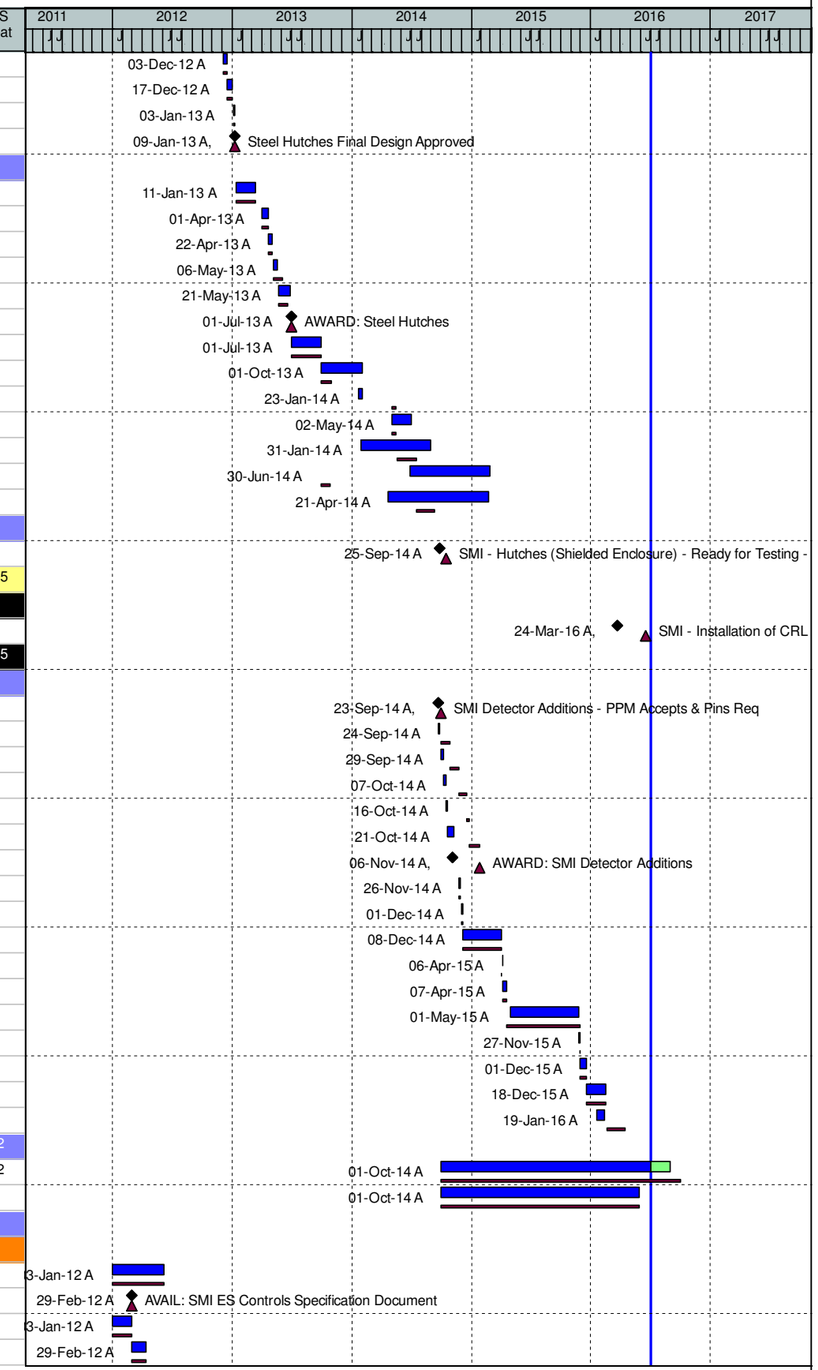
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.01	SMI0480	Non-Optics Beamline Components - PPM Accept Requisition	100%	240	14-Nov-14 A	30-Oct-15 A	30-Dec-14	26-Jan-15	-194	$0.00	
2-W.10.02.01	SMI0490	Non-Optics Beamline Components - Prepare RFP	100%	240	14-Nov-14 A	30-Oct-15 A	27-Jan-15	17-Feb-15	-179	$0.00	
2-W.10.02.01	SMI0500	Non-Optics Beamline Components - Call for bid	100%	177	16-Feb-15 A	28-Oct-15 A	18-Feb-15	24-Mar-15	-151	$0.00	
2-W.10.02.01	SMI0510	Non-Optics Beamline Components - Receive and Evaluate Vendor Proposals	100%	153	23-Mar-15 A	28-Oct-15 A	25-Mar-15	12-May-15	-116	$10,565.81	
2-W.10.02.01	SMI0520	Non-Optics Beamline Components - Negotiations	100%	155	23-Mar-15 A	29-Oct-15 A	13-May-15	10-Jun-15	-98	$0.00	
2-W.10.02.01	SMI0530	AWARD: Non-Optics Beamline Components	100%	0		01-Oct-15 A		11-Jun-15	-79	$0.00	
2-W.10.02.01	SMI0550	Non-Optics Beamline Components - Fabrication	100%	135	23-Mar-15 A	01-Oct-15 A	11-Jun-15	03-Dec-15	43	$173,990.53	
2-W.10.02.01	SMI0580	SMI Turbos spec and procure	100%	22	02-Nov-15 A	04-Dec-15 A	01-Dec-15	15-Dec-15	8	$0.00	
2-W.10.02.01	SMI0605	SMI Turbos fab and receipt	100%	56	07-Dec-15 A	26-Feb-16 A	16-Dec-15	03-Feb-16	-16	$31,200.00	
2-W.10.02.01	SMI0660	SMI XPBMs spec and procure	100%	125	01-Dec-15 A	27-May-16 A	01-Dec-15	04-Jan-16	-102	$0.00	
2-W.10.02.01	SMI0675	SMI XPBMs fab and receipt	79%	147	26-Jan-16 A	22-Aug-16	05-Jan-16	02-Jun-16	-56	$93,600.00	62
2-W.10.02.01	SMI0685	SMI PPS Aperture spec and procure	100%	106	01-Dec-15 A	02-May-16 A	01-Dec-15	01-Feb-16	-64	$0.00	
2-W.10.02.01	SMI0695	SMI PPS Aperture fab and receipt	12.5%	62	03-May-16 A	29-Jul-16	02-Feb-16	01-Apr-16	-83	$39,520.00	78
2-W.10.02.01	SMI0705	SMI Vacuum Interfaces spec and procure	100%	98	04-Jan-16 A	23-May-16 A	01-Dec-15	01-Mar-16	-58	$0.00	
2-W.10.02.01	SMI0715	SMI Vacuum Interfaces fab and receipt	21%	96	21-Mar-16 A	03-Aug-16	02-Mar-16	01-Jul-16	-22	$44,971.68	75
Installation and Test			73.14%	231	05-Oct-15 A	02-Sep-16	07-Oct-15	01-Mar-16	-131	$224,717.56	53
2-W.10.02.01	SMI0760	Assembly and Installation of PDS	70%	231	05-Oct-15 A	02-Sep-16	17-Dec-15	01-Mar-16	-131	$177,630.02	53
2-W.10.02.01	SMI0770	Test Photon Delivery System in place	85%	190	04-Dec-15 A	02-Sep-16	07-Oct-15	18-Nov-15	-199	$47,087.54	53
Shielded Enclosures			100%	599	01-Oct-12 A	27-Feb-15 A	01-Oct-12	15-Oct-14	-91	$44,153.23	
SMI Shielded Enclosures			100%	599	01-Oct-12 A	27-Feb-15 A	01-Oct-12	15-Oct-14	-91	$44,153.23	
Design Lead Hutch			0%	67	01-Oct-12 A	09-Jan-13 A	01-Oct-12	09-Jan-13	0	$0.00	
2-W.10.02.02	SMI0780	Lead Hutch Preliminary Design - Inclusive	100%	30	01-Oct-12 A	12-Nov-12 A	01-Oct-12	12-Nov-12	0	$0.00	
2-W.10.02.02	SMI0790	AVAIL: SMI ES Controls Specification Document	100%	0		12-Dec-12 A		12-Dec-12	0	$0.00	
2-W.10.02.02	SMI0800	Lead Hutch Preliminary Design Review	100%	2	13-Nov-12 A	14-Nov-12 A	13-Nov-12	14-Nov-12	0	$0.00	
2-W.10.02.02	SMI0810	Lead Hutch Preliminary Design Approved	100%	0		14-Nov-12 A		14-Nov-12	0	$0.00	
2-W.10.02.02	SMI0820	Lead Hutch Final Design - Inclusive	100%	30	15-Nov-12 A	02-Jan-13 A	15-Nov-12	02-Jan-13	0	$0.00	
2-W.10.02.02	SMI0830	Lead Hutch Final Design - Layout	100%	10	15-Nov-12 A	30-Nov-12 A	15-Nov-12	30-Nov-12	0	$0.00	
2-W.10.02.02	SMI0840	Lead Hutch Final Design - Ports	100%	10	03-Dec-12 A	14-Dec-12 A	03-Dec-12	14-Dec-12	0	$0.00	
2-W.10.02.02	SMI0850	Lead Hutch Final Design - Labyrinths/Utilities	100%	10	17-Dec-12 A	02-Jan-13 A	17-Dec-12	02-Jan-13	0	$0.00	
2-W.10.02.02	SMI0860	Lead Hutch Final Design Review	100%	5	03-Jan-13 A	09-Jan-13 A	03-Jan-13	09-Jan-13	0	$0.00	
2-W.10.02.02	SMI0870	Lead Hutch Final Design Approved	100%	0		09-Jan-13 A		09-Jan-13	0	$0.00	
Lead Hutch			100%	531	11-Jan-13 A	27-Feb-15 A	11-Jan-13	14-Aug-14	-132	$13,786.00	
2-W.10.02.02	SMI0880	Write specification and SOW for Lead Hutch	100%	40	11-Jan-13 A	11-Mar-13 A	11-Jan-13	11-Mar-13	0	$0.00	
2-W.10.02.02	SMI0890	PPM Accept Requisition Lead Hutch	100%	14	12-Mar-13 A	29-Mar-13 A	12-Mar-13	01-Apr-13	1	$0.00	
2-W.10.02.02	SMI0900	Prepare RFP Lead Hutch	100%	15	01-Mar-13 A	21-Mar-13 A	01-Mar-13	21-Mar-13	0	$0.00	
2-W.10.02.02	SMI0910	Call for bid Lead Hutch	100%	20	01-Apr-13 A	26-Apr-13 A	01-Apr-13	26-Apr-13	0	$0.00	
2-W.10.02.02	SMI0920	Receive and Evaluate Proposals Lead Hutch	100%	24	29-Apr-13 A	03-Jun-13 A	29-Apr-13	24-May-13	-4	$0.00	
2-W.10.02.02	SMI0930	AWARD: Lead Hutch	100%	0	01-Jul-13 A		01-Jul-13		0	$0.00	
2-W.10.02.02	SMI0950	Vendor negotiations Lead Hutch	100%	62	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	1	$0.00	
2-W.10.02.02	SMI0950FA	Vendor negotiations Lead Hutch	100%	36	01-Oct-13 A	20-Nov-13 A	01-Oct-13	31-Oct-13	-14	$0.00	
2-W.10.02.02	SMI0960	Vendor Fabrication Lead Hutch	100%	16	03-Jan-14 A	28-Jan-14 A	01-Nov-13	02-May-14	68	$0.00	
2-W.10.02.02	SMI0970	Vendor Shipping Lead Hutch	100%	69	02-Jan-14 A	10-Apr-14 A	05-May-14	16-May-14	26	$0.00	
2-W.10.02.02	SMI0980	RECEIVE: Lead Hutch	100%	0		30-Apr-14 A		16-May-14	12	$0.00	
2-W.10.02.02	SMI0990	Lead Hutch - Assembly and Installation	100%	68	23-May-14 A	29-Aug-14 A	19-May-14	16-Jun-14	-52	$10,716.53	
2-W.10.02.02	SMI1000	Lead Hutch - Test	100%	122	29-Aug-14 A	27-Feb-15 A	17-Jun-14	14-Aug-14	-132	$3,069.46	
Design Steel Hutches			0%	67	01-Oct-12 A	09-Jan-13 A	01-Oct-12	09-Jan-13	0	$0.00	
2-W.10.02.02	SMI1010	Steel Hutch Preliminary Design - Inclusive	100%	30	01-Oct-12 A	12-Nov-12 A	01-Oct-12	12-Nov-12	0	$0.00	
2-W.10.02.02	SMI1020	Steel Hutch Preliminary Design Review	100%	2	13-Nov-12 A	14-Nov-12 A	13-Nov-12	14-Nov-12	0	$0.00	
2-W.10.02.02	SMI1030	Steel Hutch Preliminary Design Approved	100%	0		14-Nov-12 A		14-Nov-12	0	$0.00	
2-W.10.02.02	SMI1040	Steel Hutches Final Design - Inclusive	100%	30	15-Nov-12 A	02-Jan-13 A	15-Nov-12	02-Jan-13	0	$0.00	
2-W.10.02.02	SMI1050	Steel Hutches Final Design - Layout	100%	10	15-Nov-12 A	30-Nov-12 A	15-Nov-12	30-Nov-12	0	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

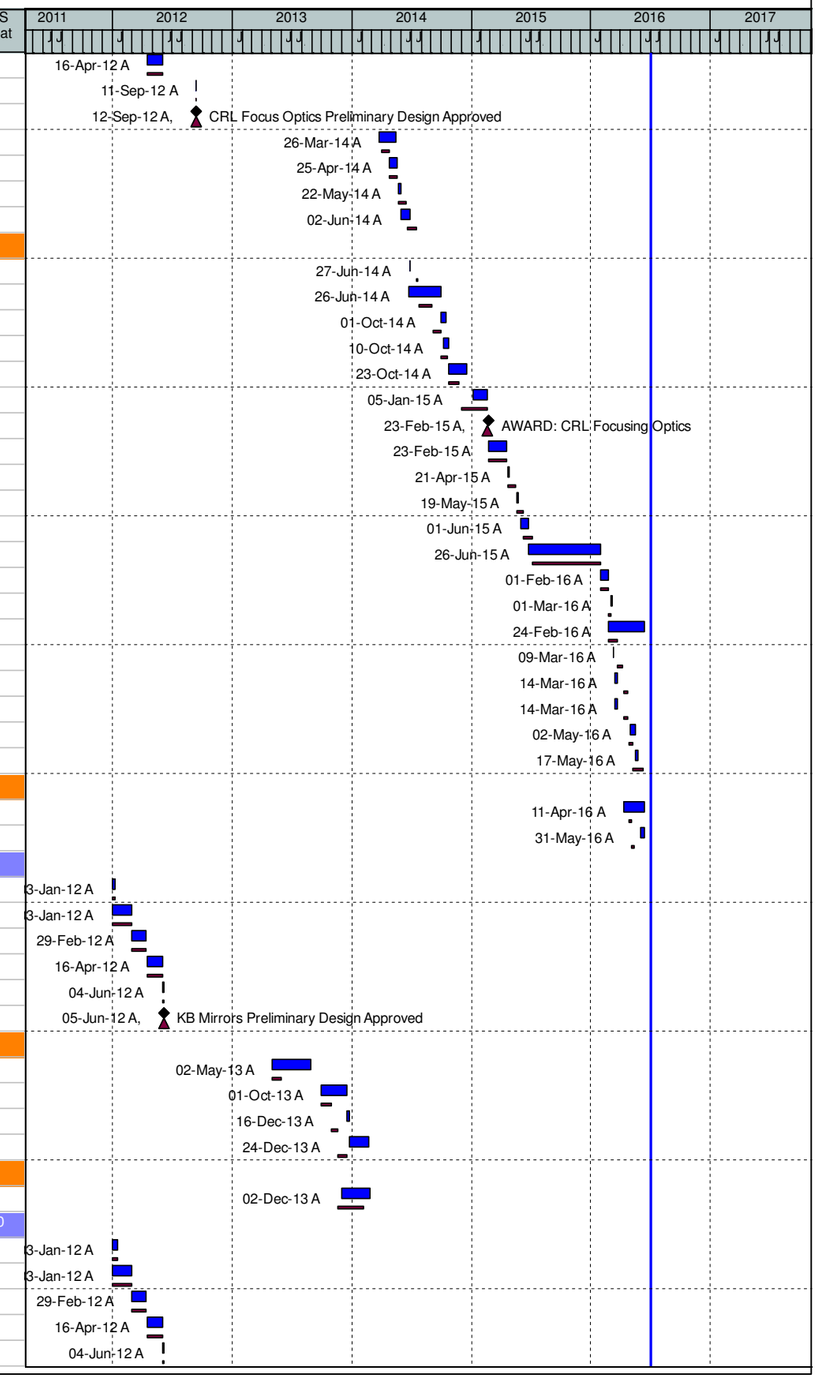
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.02	SMI1060	Steel Hutches Final Design - Ports	100%	10	03-Dec-12 A	14-Dec-12 A	03-Dec-12	14-Dec-12	0	$0.00	
2-W.10.02.02	SMI1070	Steel Hutches Final Design - Labyrinths/Utilities	100%	10	17-Dec-12 A	02-Jan-13 A	17-Dec-12	02-Jan-13	0	$0.00	
2-W.10.02.02	SMI1080	Steel Hutches Final Design Review	100%	5	03-Jan-13 A	09-Jan-13 A	03-Jan-13	09-Jan-13	0	$0.00	
2-W.10.02.02	SMI1090	Steel Hutches Final Design Approved	100%	0		09-Jan-13 A		09-Jan-13	0	$0.00	
Steel Hutches			100%	531	11-Jan-13 A	27-Feb-15 A	11-Jan-13	12-Sep-14	-112	$30,367.24	
2-W.10.02.02	SMI1100	Write specification and SOW for Steel Hutches	100%	40	11-Jan-13 A	12-Mar-13 A	11-Jan-13	11-Mar-13	0	$0.00	
2-W.10.02.02	SMI1110	PPM Accept Requisition Steel Hutches	100%	15	01-Apr-13 A	19-Apr-13 A	01-Apr-13	19-Apr-13	0	$0.00	
2-W.10.02.02	SMI1120	Prepare RFP Steel Hutches	100%	10	22-Apr-13 A	03-May-13 A	22-Apr-13	03-May-13	0	$0.00	
2-W.10.02.02	SMI1130	Call for bid Steel Hutches	100%	10	06-May-13 A	20-May-13 A	06-May-13	03-Jun-13	10	$0.00	
2-W.10.02.02	SMI1140	Receive and Evaluate Proposals Steel Hutches	100%	26	21-May-13 A	27-Jun-13 A	21-May-13	20-Jun-13	-4	$0.00	
2-W.10.02.02	SMI1150	AWARD: Steel Hutches	100%	0	01-Jul-13 A		01-Jul-13		0	$0.00	
2-W.10.02.02	SMI1170	Vendor negotiations Steel Hutch	100%	62	01-Jul-13 A	30-Sep-13 A	01-Jul-13	30-Sep-13	1	$0.00	
2-W.10.02.02	SMI1170FA	Vendor negotiations Steel Hutch	100%	83	01-Oct-13 A	03-Feb-14 A	01-Oct-13	31-Oct-13	-61	$0.00	
2-W.10.02.02	SMI1190	Vendor Shipping Steel Hutch C	100%	7	23-Jan-14 A	31-Jan-14 A	05-May-14	16-May-14	74	$0.00	
2-W.10.02.02	SMI1191	Vendor Shipping Steel Hutch B	100%	41	02-May-14 A	01-Jul-14 A	05-May-14	16-May-14	-30	$0.00	
2-W.10.02.02	SMI1210	Steel Hutches - Assembly and Installation - C	100%	147	31-Jan-14 A	29-Aug-14 A	19-May-14	16-Jul-14	-32	$21,384.47	
2-W.10.02.02	SMI1211	Steel Hutches - Assembly and Installation - B	100%	164	30-Jun-14 A	27-Feb-15 A	01-Oct-13	28-Oct-13	-331	$0.00	
2-W.10.02.02	SMI1220	Steel Hutches - Test	100%	208	21-Apr-14 A	23-Feb-15 A	17-Jul-14	12-Sep-14	-107	$8,982.77	
Installation and Test			0%	0	25-Sep-14 A	25-Sep-14 A	15-Oct-14	15-Oct-14	13	$0.00	
2-W.10.02.02	SMI1230	SMI - Hutches (Shielded Enclosure) - Ready for Testing - INTER-PROJECT L	100%	0	25-Sep-14 A		15-Oct-14		13	$0.00	
Endstation Equipment			83.27%	1214	03-Jan-12 A	04-Nov-16	03-Jan-12	30-Sep-16	-24	$3,591,290.56	225
Top Level Milestones			0%	0	24-Mar-16 A	24-Mar-16 A	17-Jun-16	17-Jun-16	61	$0.00	
2-W.10.02.03	M3230	SMI - Installation of CRL Focusing Optics Complete	100%	0		24-Mar-16 A		17-Jun-16	61	$0.00	
SMI Endstation			83.27%	1214	03-Jan-12 A	04-Nov-16	03-Jan-12	30-Sep-16	-24	$3,591,290.56	225
SMI Detector Additions			100%	349	23-Sep-14 A	17-Feb-16 A	01-Oct-14	13-Apr-16	40	$977,738.98	
2-W.10.02.03	SMI6142	SMI Detector Additions - PPM Accepts & Pins Req	100%	0		23-Sep-14 A		01-Oct-14	7	$0.00	
2-W.10.02.03	SMI6145	SMI Detector Additions - Prepare & Submit RFQ	100%	2	24-Sep-14 A	26-Sep-14 A	02-Oct-14	27-Oct-14	21	$1,334.02	
2-W.10.02.03	SMI6155	SMI Detector Additions - Offerors Prepare & Submit Proposals	100%	7	29-Sep-14 A	07-Oct-14 A	28-Oct-14	24-Nov-14	33	$0.00	
2-W.10.02.03	SMI6160	SMI Detector Additions - Evaluate Proposals	100%	6	07-Oct-14 A	15-Oct-14 A	25-Nov-14	17-Dec-14	43	$1,265.52	
2-W.10.02.03	SMI6165	SMI Detector Additions - Negotiate with Offerors	100%	3	16-Oct-14 A	20-Oct-14 A	18-Dec-14	24-Dec-14	45	$0.00	
2-W.10.02.03	SMI6235	SMI Detector Additions - Prepare & Approve Contract Package	100%	14	21-Oct-14 A	07-Nov-14 A	25-Dec-14	27-Jan-15	51	$0.00	
2-W.10.02.03	SMI6240	AWARD: SMI Detector Additions	100%	0		06-Nov-14 A		27-Jan-15	52	$0.00	
2-W.10.02.03	SMI6245	SMI Detector Additions Program Plan Received	100%	1	26-Nov-14 A	26-Nov-14 A	26-Nov-14	26-Nov-14	0	$153,584.08	
2-W.10.02.03	SMI6250	SMI Detector Additions Program Plan Approved	100%	5	01-Dec-14 A	05-Dec-14 A	01-Dec-14	05-Dec-14	0	$38,395.76	
2-W.10.02.03	SMI6255	SMI Detector Additions Vendor Prepare Drawings	100%	80	08-Dec-14 A	03-Apr-15 A	05-Dec-14	02-Apr-15	-1	$0.00	
2-W.10.02.03	SMI6260	SMI Detector Additions Receive Vac Interface Drawings	100%	1	06-Apr-15 A	06-Apr-15 A	03-Apr-15	03-Apr-15	-1	$153,584.08	
2-W.10.02.03	SMI6265	SMI Detector Additions Approve Vac Interface Drawings	100%	10	07-Apr-15 A	20-Apr-15 A	06-Apr-15	17-Apr-15	-1	$38,395.76	
2-W.10.02.03	SMI6270	SMI Detector Additions Vendor Fab	100%	144	01-May-15 A	27-Nov-15 A	20-Apr-15	27-Nov-15	1	$0.00	
2-W.10.02.03	SMI6275	SMI Detector Additions Delivery of all Equipment at BNL	100%	1	27-Nov-15 A	30-Nov-15 A	30-Nov-15	30-Nov-15	1	$479,949.60	
2-W.10.02.03	SMI6280	SMI Detector Additions Final Acceptance of all Equipment by BNL	100%	13	01-Dec-15 A	17-Dec-15 A	01-Dec-15	17-Dec-15	0	$95,989.92	
2-W.10.02.03	SMI6285	SMI Detector Additions - Assembly & Installation	100%	40	18-Dec-15 A	17-Feb-16 A	18-Dec-15	17-Feb-16	0	$4,701.06	
2-W.10.02.03	SMI6290	SMI Detector Additions - Test	100%	19	19-Jan-16 A	13-Feb-16 A	18-Feb-16	13-Apr-16	42	$10,539.18	
End Station Integration Activities			93.83%	480	01-Oct-14 A	30-Aug-16	01-Oct-14	30-Sep-16	22	$141,130.97	92
2-W.10.02.03	SMI4100	End Station Procurement Support	90%	480	01-Oct-14 A	30-Aug-16	01-Oct-14	30-Sep-16	22	$87,096.24	92
2-W.10.02.03	SMI4200	End Station Integration Mech Design	100%	415	01-Oct-14 A	27-May-16 A	01-Oct-14	27-May-16	0	$54,034.73	
CRL Focusing Optics			100%	1114	03-Jan-12 A	15-Jun-16 A	03-Jan-12	07-Jun-16	-5	$577,965.94	
CRL Focusing Optics Design			100%	623	03-Jan-12 A	26-Jun-14 A	03-Jan-12	16-Jul-14	12	$16,239.61	
2-W.10.02.03	SMI1240	CRL Focus Optics Preliminary Design - Inclusive	100%	108	03-Jan-12 A	05-Jun-12 A	03-Jan-12	05-Jun-12	0	$0.00	
2-W.10.02.03	SMI1250	AVAIL: SMI ES Controls Specification Document	100%	0	29-Feb-12 A		29-Feb-12		0	$0.00	
2-W.10.02.03	SMI1260	CRL Focus Optics Preliminary Design - 30%	100%	39	03-Jan-12 A	28-Feb-12 A	03-Jan-12	28-Feb-12	0	$0.00	
2-W.10.02.03	SMI1270	CRL Focus Optics Preliminary Design - 60%	100%	33	29-Feb-12 A	13-Apr-12 A	29-Feb-12	13-Apr-12	0	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

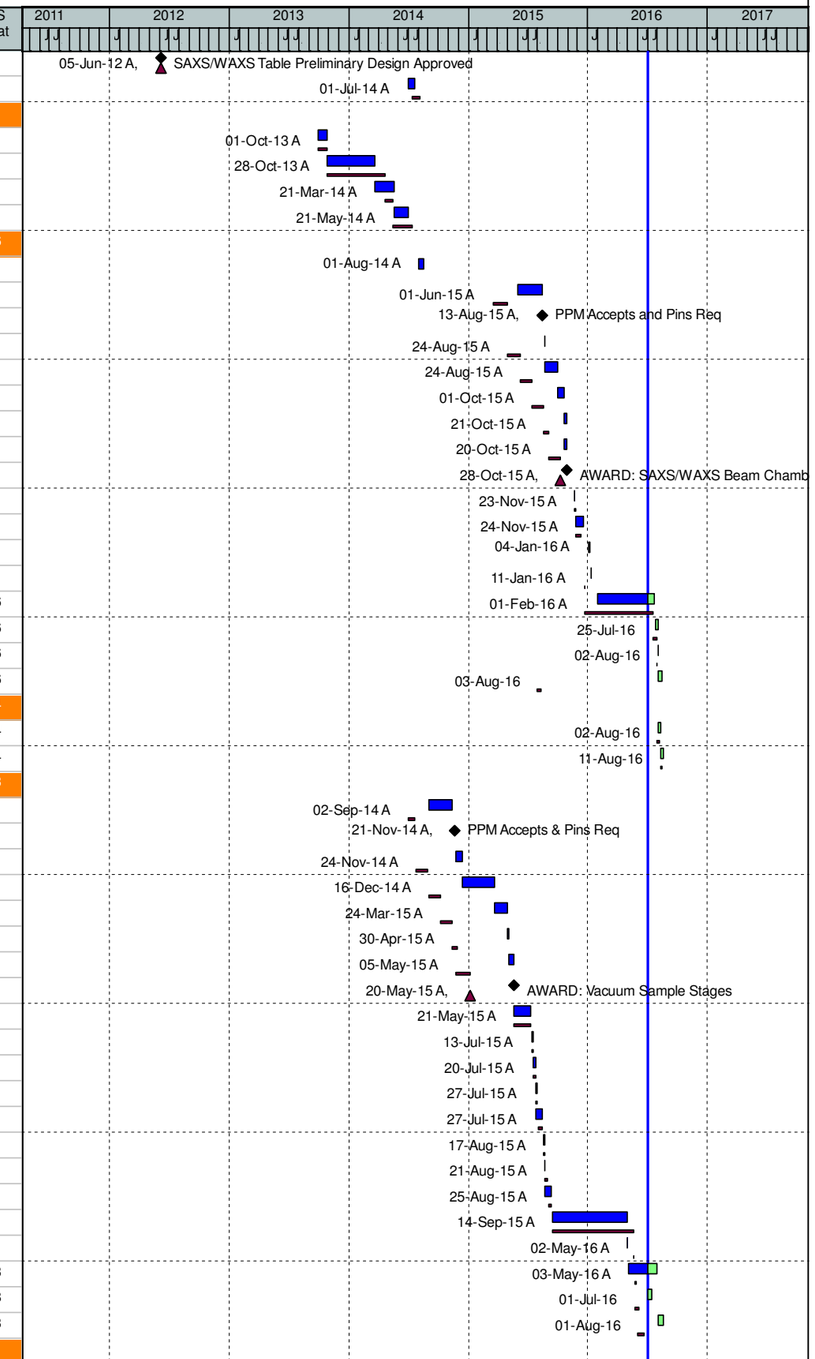
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.03	SMI1280	CRL Focus Optics Preliminary Design - 90%	100%	34	16-Apr-12 A	01-Jun-12 A	16-Apr-12	01-Jun-12	0	$0.00	
2-W.10.02.03	SMI1290	CRL Focus Optics Preliminary Design Review	100%	2	11-Sep-12 A	12-Sep-12 A	11-Sep-12	12-Sep-12	0	$0.00	
2-W.10.02.03	SMI1300	CRL Focus Optics Preliminary Design Approved	100%	0		12-Sep-12 A		12-Sep-12	0	$0.00	
2-W.10.02.03	SMI1310	Final Design CRL - Ray tracing	100%	37	26-Mar-14 A	15-May-14 A	01-Apr-14	24-Apr-14	-15	$4,408.02	
2-W.10.02.03	SMI1320	Final Design CRL - Degrees of freedom	100%	19	25-Apr-14 A	21-May-14 A	25-Apr-14	21-May-14	0	$0.00	
2-W.10.02.03	SMI1330	Final Design CRL - Mechanical design	100%	6	22-May-14 A	30-May-14 A	22-May-14	17-Jun-14	12	$11,831.59	
2-W.10.02.03	SMI1340	Final Design CRL - Define test metrics	100%	19	02-Jun-14 A	26-Jun-14 A	18-Jun-14	16-Jul-14	12	$0.00	
CRL Focusing Optics Fabrication			100%	492	26-Jun-14 A	15-Jun-16 A	17-Jul-14	07-Jun-16	-5	$493,294.47	
2-W.10.02.03	SMI1380	Procurement and Vendor Support CRL Focusing Optics	100%	1	27-Jun-14 A	30-Jun-14 A	17-Jul-14	23-Jul-14	16	$5,368.89	
2-W.10.02.03	SMI1390	CRL Focusing Optics - Write Specs	100%	65	26-Jun-14 A	30-Sep-14 A	24-Jul-14	04-Sep-14	-17	$32,858.09	
2-W.10.02.03	SMI1400	CRL Focusing Optics - PPM Accept Requisition	100%	9	01-Oct-14 A	14-Oct-14 A	05-Sep-14	29-Sep-14	-10	$0.00	
2-W.10.02.03	SMI1410	CRL Focusing Optics - Prepare RFP	100%	8	10-Oct-14 A	22-Oct-14 A	30-Sep-14	21-Oct-14	-1	$0.00	
2-W.10.02.03	SMI1420	CRL Focusing Optics - Call for bid CRL Focusing Optics	100%	39	23-Oct-14 A	19-Dec-14 A	22-Oct-14	25-Nov-14	-15	$0.00	
2-W.10.02.03	SMI1430	CRL Focusing Optics - Receive and Evaluate Vendor Proposals	100%	32	05-Jan-15 A	19-Feb-15 A	01-Dec-14	19-Feb-15	0	$18,825.50	
2-W.10.02.03	SMI1440	AWARD: CRL Focusing Optics	100%	0		23-Feb-15 A		20-Feb-15	-1	$0.00	
2-W.10.02.03	SMI1450	CRL Focusing Optics Receipt of PDR	100%	41	23-Feb-15 A	20-Apr-15 A	23-Feb-15	20-Apr-15	0	$62,400.00	
2-W.10.02.03	SMI1450010	CRL Focusing Optics Approval of PDR	100%	5	21-Apr-15 A	28-Apr-15 A	21-Apr-15	18-May-15	15	$15,600.00	
2-W.10.02.03	SMI1450015	CRL Focusing Optics Receipt of FDR	100%	4	19-May-15 A	25-May-15 A	19-May-15	08-Jun-15	10	$81,120.00	
2-W.10.02.03	SMI1450020	CRL Focusing Optics Approval of FDR	100%	19	01-Jun-15 A	25-Jun-15 A	08-Jun-15	06-Jul-15	6	$34,789.04	
2-W.10.02.03	SMI1450021	CRL Focusing Optics Vendor Fabrication	100%	148	26-Jun-15 A	29-Jan-16 A	07-Jul-15	29-Jan-16	0	$0.00	
2-W.10.02.03	SMI1450025	CRL Focusing Optics Factory Acceptance Test Complete	100%	16	01-Feb-16 A	23-Feb-16 A	01-Feb-16	23-Feb-16	0	$54,600.00	
2-W.10.02.03	SMI1450030	CRL Focusing Optics Receipt of Equipment	100%	6	01-Mar-16 A	08-Mar-16 A	24-Feb-16	02-Mar-16	-4	$35,100.00	
2-W.10.02.03	SMI1450031	CRL Focusing Optics - Bench Test	100%	79	24-Feb-16 A	15-Jun-16 A	24-Feb-16	23-Mar-16	-58	$31,732.95	
2-W.10.02.03	SMI1450035	CRL Focusing Optics Acceptance of Equipment	100%	3	09-Mar-16 A	11-Mar-16 A	24-Mar-16	08-Apr-16	20	$3,900.00	
2-W.10.02.03	SMI1450040	CRL Focusing Optics Installation Complete	100%	8	14-Mar-16 A	24-Mar-16 A	11-Apr-16	22-Apr-16	22	$39,000.00	
2-W.10.02.03	SMI1450045	CRL Focusing Optics Commissioning & Training Complete	100%	8	14-Mar-16 A	24-Mar-16 A	11-Apr-16	22-Apr-16	22	$39,000.00	
2-W.10.02.03	SMI1450050	CRL Focusing Optics Receipt of Commissioning Report	100%	11	02-May-16 A	16-May-16 A	25-Apr-16	09-May-16	-5	$31,200.00	
2-W.10.02.03	SMI1450055	CRL Focusing Optics Approval of Commissioning Report	100%	4	17-May-16 A	23-May-16 A	10-May-16	07-Jun-16	11	$7,800.00	
CRL Focusing Optics Test and Install			100%	46	11-Apr-16 A	15-Jun-16 A	25-Apr-16	12-May-16	-22	$68,431.86	
2-W.10.02.03	SMI1510	CRL Focusing Optics - Assemble and Install	100%	46	11-Apr-16 A	15-Jun-16 A	25-Apr-16	04-May-16	-28	$41,471.67	
2-W.10.02.03	SMI1520	CRL Focusing Optics - Test in place	100%	11	31-May-16 A	15-Jun-16 A	05-May-16	12-May-16	-22	$26,960.19	
KB Mirrors			100%	539	03-Jan-12 A	28-Feb-14 A	03-Jan-12	06-Feb-14	-14	$8,907.97	
2-W.10.02.03	SMI1530	KB Mirrors Preliminary Design - Inclusive	100%	5	03-Jan-12 A	09-Jan-12 A	03-Jan-12	09-Jan-12	0	$0.00	
2-W.10.02.03	SMI1540	KB Mirrors Preliminary Design - 30%	100%	39	03-Jan-12 A	28-Feb-12 A	03-Jan-12	28-Feb-12	0	$0.00	
2-W.10.02.03	SMI1550	KB Mirrors Preliminary Design - 60%	100%	33	29-Feb-12 A	13-Apr-12 A	29-Feb-12	13-Apr-12	0	$0.00	
2-W.10.02.03	SMI1560	KB Mirrors Preliminary Design - 90%	100%	34	16-Apr-12 A	01-Jun-12 A	16-Apr-12	01-Jun-12	0	$0.00	
2-W.10.02.03	SMI1570	KB Mirrors Preliminary Design Review	100%	2	04-Jun-12 A	05-Jun-12 A	04-Jun-12	05-Jun-12	0	$0.00	
2-W.10.02.03	SMI1580	KB Mirrors Preliminary Design Approved	100%	0		05-Jun-12 A		05-Jun-12	0	$0.00	
KB Mirrors Design			100%	201	02-May-13 A	21-Feb-14 A	02-May-13	16-Dec-13	-45	$1,822.71	
2-W.10.02.03	SMI1600	Final Design KB - Ray tracing	100%	84	02-May-13 A	30-Aug-13 A	02-May-13	30-May-13	-64	$0.00	
2-W.10.02.03	SMI1610	Final Design KB - Degrees of freedom	100%	51	01-Oct-13 A	16-Dec-13 A	01-Oct-13	29-Oct-13	-31	$0.00	
2-W.10.02.03	SMI1620	Final Design KB - Mechanical design	100%	6	16-Dec-13 A	23-Dec-13 A	30-Oct-13	18-Nov-13	-23	$0.00	
2-W.10.02.03	SMI1630	KB Mirrors - Final Design KB	100%	40	24-Dec-13 A	21-Feb-14 A	19-Nov-13	16-Dec-13	-45	$1,822.71	
KB Mirrors Fabrication			100%	60	02-Dec-13 A	28-Feb-14 A	19-Nov-13	06-Feb-14	-14	$7,085.26	
2-W.10.02.03	SMI1670	Write Specification and SOW for KB Mirrors	100%	60	02-Dec-13 A	28-Feb-14 A	19-Nov-13	06-Feb-14	-14	$7,085.26	
SAXS/ WAXS Beam Chamber			58.86%	1214	03-Jan-12 A	04-Nov-16	03-Jan-12	16-Aug-16	-56	$970,628.33	10
2-W.10.02.03	SMI1810	SAXS/WAXS Table Preliminary Design - Inclusive	100%	10	03-Jan-12 A	17-Jan-12 A	03-Jan-12	17-Jan-12	0	$0.00	
2-W.10.02.03	SMI1820	SAXS/WAXS Table Preliminary Design - 30%	100%	39	03-Jan-12 A	28-Feb-12 A	03-Jan-12	28-Feb-12	0	$0.00	
2-W.10.02.03	SMI1830	SAXS/WAXS Table Preliminary Design - 60%	100%	33	29-Feb-12 A	13-Apr-12 A	29-Feb-12	13-Apr-12	0	$0.00	
2-W.10.02.03	SMI1840	SAXS/WAXS Table Preliminary Design - 90%	100%	34	16-Apr-12 A	01-Jun-12 A	16-Apr-12	01-Jun-12	0	$0.00	
2-W.10.02.03	SMI1850	SAXS/WAXS Table Preliminary Design Review	100%	2	04-Jun-12 A	05-Jun-12 A	04-Jun-12	05-Jun-12	0	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

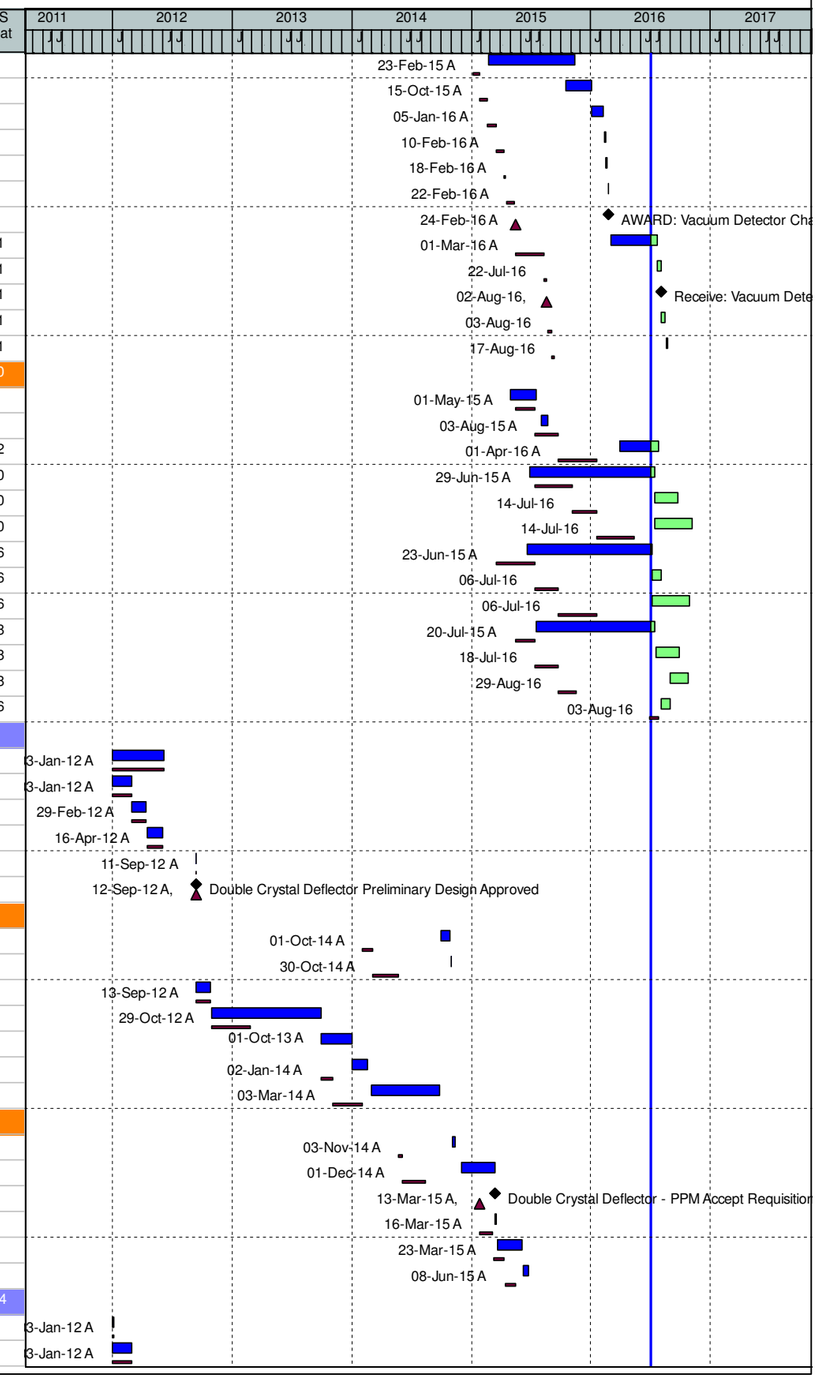
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.03	SMI1860	SAXS/WAXS Table Preliminary Design Approved	100%	0		05-Jun-12 A		05-Jun-12	0	$0.00	
2-W.10.02.03	SMI1870	Final Design Table - Define test metrics	100%	15	01-Jul-14 A	23-Jul-14 A	15-Jul-14	04-Aug-14	8	$0.00	
SAXS/ WAXS Beam Chamber Design			100%	187	01-Oct-13 A	30-Jun-14 A	01-Oct-13	14-Jul-14	8	$27,719.80	
2-W.10.02.03	SMI1880	Final Design Table - Layout	100%	18	01-Oct-13 A	25-Oct-13 A	01-Oct-13	25-Oct-13	0	$0.00	
2-W.10.02.03	SMI1885	Table Design Lag Activity	100%	97	28-Oct-13 A	20-Mar-14 A	28-Oct-13	21-Apr-14	23	$0.00	
2-W.10.02.03	SMI1890	Final Design Table - Beam pipe	100%	43	21-Mar-14 A	20-May-14 A	22-Apr-14	14-May-14	-4	$17,180.38	
2-W.10.02.03	SMI1900	Final Design Table - Mechanical design	100%	28	21-May-14 A	30-Jun-14 A	15-May-14	14-Jul-14	8	$10,539.41	
SAXS/ WAXS Beam Chamber Fabrication			55.37%	512	01-Aug-14 A	16-Aug-16	20-Mar-15	29-Jul-16	-12	$284,586.70	66
2-W.10.02.03	SMI1940	SAXS/WAXS Beam Chamber - General Procurement	100%	12	01-Aug-14 A	18-Aug-14 A				$0.00	
2-W.10.02.03	SMI1950	SAXS/WAXS Beam Chamber - Write Specification and SOW	100%	53	01-Jun-15 A	13-Aug-15 A	20-Mar-15	30-Apr-15	-73	$19,248.06	
2-W.10.02.03	SMI1951	PPM Accepts and Pins Req	100%	0		13-Aug-15 A				$0.00	
2-W.10.02.03	SMI1960	SAXS/WAXS Beam Chamber - Prepare & Submit RFP	100%	0	24-Aug-15 A	24-Aug-15 A	01-May-15	09-Jun-15	-52	$0.00	
2-W.10.02.03	SMI1970	SAXS/WAXS Beam Chamber - Offerors Prepare & Submit RFP	100%	26	24-Aug-15 A	30-Sep-15 A	10-Jun-15	15-Jul-15	-53	$0.00	
2-W.10.02.03	SMI1980	SAXS/WAXS Beam Chamber - Evaluate Proposals	100%	13	01-Oct-15 A	21-Oct-15 A	16-Jul-15	19-Aug-15	-42	$0.00	
2-W.10.02.03	SMI1985	SAXS/WAXS Beam Chamber - Negotiate with Offerors	100%	5	21-Oct-15 A	28-Oct-15 A	20-Aug-15	02-Sep-15	-37	$0.00	
2-W.10.02.03	SMI1990	SAXS/WAXS Beam Chamber - Prepare & Approve Contract Package	100%	6	20-Oct-15 A	28-Oct-15 A	03-Sep-15	08-Oct-15	-12	$11,318.64	
2-W.10.02.03	SMI2000	AWARD: SAXS/WAXS Beam Chamber	100%	0		28-Oct-15 A		08-Oct-15	-13	$0.00	
2-W.10.02.03	SMI2010	SAXS/WAXS Beam Chamber Preliminary Design Review	100%	0	23-Nov-15 A	23-Nov-15 A	23-Nov-15	23-Nov-15	1	$0.00	
2-W.10.02.03	SMI2015	SAXS/WAXS Beam Chamber PDR Receipt and Approval	100%	19	24-Nov-15 A	21-Dec-15 A	24-Nov-15	11-Dec-15	-5	$38,103.00	
2-W.10.02.03	SMI2020	SAXS/WAXS Beam Chamber Final Design Review	100%	5	04-Jan-16 A	08-Jan-16 A				$0.00	
2-W.10.02.03	SMI2025	SAXS/WAXS Beam Chamber FDR Receipt & Approval	100%	2	11-Jan-16 A	12-Jan-16 A	21-Dec-15	22-Dec-15	-13	$88,907.00	
2-W.10.02.03	SMI2030	SAXS/WAXS Beam Chamber Fabrication	70%	122	01-Feb-16 A	22-Jul-16	23-Dec-15	19-Jul-16	-3	$0.00	56
2-W.10.02.03	SMI2040	SAXS/WAXS Beam Chamber - Shipping	0%	7	25-Jul-16	02-Aug-16	20-Jul-16	28-Jul-16	-3	$0.00	56
2-W.10.02.03	SMI2050	RECEIVE: SAXS/WAXS Beam Chamber	0%	1	02-Aug-16	02-Aug-16	29-Jul-16	29-Jul-16	-2	$63,504.48	56
2-W.10.02.03	SMI2055	ACCEPT: SAXS/WAXS Beam Chamber	0%	10	03-Aug-16	16-Aug-16	29-Jul-15	11-Aug-15	-255	$63,505.52	66
SAXS/ WAXS Beam Chamber and Install			0%	13	02-Aug-16	18-Aug-16	29-Jul-16	16-Aug-16	-2	$36,864.51	64
2-W.10.02.03	SMI2060	SAXS/WAXS Beam Chamber - Assemble and Install	0%	7	02-Aug-16	10-Aug-16	29-Jul-16	08-Aug-16	-2	$21,050.93	64
2-W.10.02.03	SMI2070	SAXS/WAXS Beam Chamber - Test	0%	6	11-Aug-16	18-Aug-16	09-Aug-16	16-Aug-16	-2	$15,813.58	64
Vacuum Sample Stages			80.75%	494	02-Sep-14 A	19-Aug-16	01-Jul-14	20-Jun-16	-43	$370,138.41	63
2-W.10.02.03	SMI6010	Vacuum Sample Stages - Write Specification	100%	53	02-Sep-14 A	14-Nov-14 A	01-Jul-14	23-Jul-14	-80	$8,658.52	
2-W.10.02.03	SMI6011	PPM Accepts & Pins Req	100%	0		21-Nov-14 A				$0.00	
2-W.10.02.03	SMI6020	Vacuum Sample Stages - Prepare & Submit RFP	100%	13	24-Nov-14 A	15-Dec-14 A	24-Jul-14	29-Aug-14	-71	$0.00	
2-W.10.02.03	SMI6030	Vacuum Sample Stages - Offerors Prepare & Submit Proposals	100%	65	16-Dec-14 A	23-Mar-15 A	02-Sep-14	06-Oct-14	-112	$0.00	
2-W.10.02.03	SMI6040	Vacuum Sample Stages - Evaluate Proposals	100%	28	24-Mar-15 A	30-Apr-15 A	07-Oct-14	11-Nov-14	-115	$0.00	
2-W.10.02.03	SMI6050	Vacuum Sample Stages - Negotiate with Offerors	100%	2	30-Apr-15 A	04-May-15 A	12-Nov-14	26-Nov-14	-105	$2,134.24	
2-W.10.02.03	SMI6060	Vacuum Sample Stages - Prepare & Approve Contract Package	100%	10	05-May-15 A	19-May-15 A	26-Nov-14	06-Jan-15	-92	$0.00	
2-W.10.02.03	SMI6070	AWARD: Vacuum Sample Stages	100%	0		20-May-15 A		06-Jan-15	-93	$0.00	
2-W.10.02.03	SMI6080	Vacuum Sample Stages - Vendor Preliminary Design	100%	35	21-May-15 A	10-Jul-15 A	21-May-15	10-Jul-15	0	$0.00	
2-W.10.02.03	SMI6090	Vacuum Sample Stages - PDR Meeting	100%	5	13-Jul-15 A	17-Jul-15 A	13-Jul-15	17-Jul-15	0	$14,168.77	
2-W.10.02.03	SMI6100	Vacuum Sample Stages - Receipt of PDR Report	100%	5	20-Jul-15 A	24-Jul-15 A	20-Jul-15	24-Jul-15	0	$54,048.80	
2-W.10.02.03	SMI6101	Vacuum Sample Stages - Approval of PDR Report	100%	5	27-Jul-15 A	31-Jul-15 A	27-Jul-15	31-Jul-15	0	$13,512.72	
2-W.10.02.03	SMI6295	Vacuum Sample Stages - Vendor Final Design	100%	15	27-Jul-15 A	14-Aug-15 A	03-Aug-15	14-Aug-15	0	$0.00	
2-W.10.02.03	SMI6300	Vacuum Sample Stages - FDR Meeting	100%	4	17-Aug-15 A	21-Aug-15 A	17-Aug-15	21-Aug-15	0	$3,697.36	
2-W.10.02.03	SMI6305	Vacuum Sample Stages - Receipt of FDR Report	100%	2	21-Aug-15 A	25-Aug-15 A	24-Aug-15	01-Sep-15	6	$54,048.80	
2-W.10.02.03	SMI6310	Vacuum Sample Stages - Approval of FDR Report	100%	13	25-Aug-15 A	11-Sep-15 A	02-Sep-15	11-Sep-15	0	$13,512.72	
2-W.10.02.03	SMI6315	Vacuum Sample Stages - Vendor Fab & Shipping	100%	157	14-Sep-15 A	29-Apr-16 A	14-Sep-15	19-May-16	15	$0.00	
2-W.10.02.03	SMI6320	Vacuum Sample Stages - Receipt of Equipment & Spares	100%	1	02-May-16 A	02-May-16 A	20-May-16	20-May-16	14	$135,123.04	
2-W.10.02.03	SMI6325	Vacuum Sample Stages - Acceptance of Equipment & Spares	0%	62	03-May-16 A	29-Jul-16	23-May-16	27-May-16	-44	$33,781.28	63
2-W.10.02.03	SMI6330	Vacuum Sample Stages - Assemble & Install	0%	10	01-Jul-16	15-Jul-16	23-May-16	06-Jun-16	-28	$3,670.88	88
2-W.10.02.03	SMI6335	Vacuum Sample Stages - Receipt & Acceptance of Commissioning Report	0%	15	01-Aug-16	19-Aug-16	31-May-16	20-Jun-16	-43	$33,781.28	63
SAXS Detector Chamber			74.41%	380	23-Feb-15 A	23-Aug-16	05-Jan-15	11-Sep-15	-238	$37,056.13	61



(O) NEXT - Detail Schedule

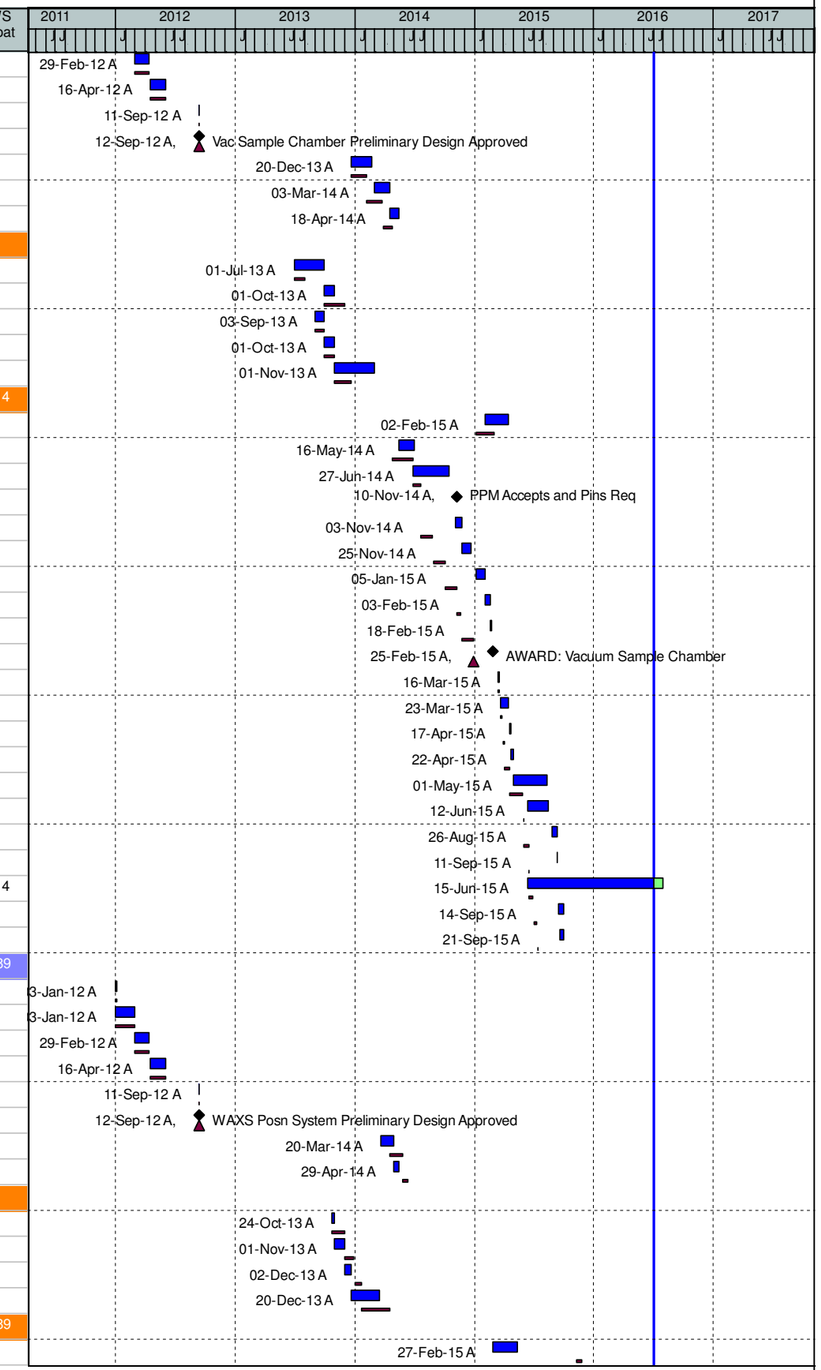
Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.03	SMI6015	Vacuum Detector Chamber - Write Specs	100%	186	23-Feb-15 A	13-Nov-15 A	05-Jan-15	26-Jan-15	-204	$9,542.75	
2-W.10.02.03	SMI6025	Vacuum Detector Chamber - Prepare & Submit RFQ	100%	54	15-Oct-15 A	04-Jan-16 A	27-Jan-15	19-Feb-15	-219	$0.00	
2-W.10.02.03	SMI6035	Vacuum Detector Chamber - Offerors Prepare & Submit Proposals	100%	25	05-Jan-16 A	09-Feb-16 A	20-Feb-15	19-Mar-15	-224	$0.00	
2-W.10.02.03	SMI6045	Vacuum Detector Chamber - Evaluate Proposals	100%	4	10-Feb-16 A	17-Feb-16 A	20-Mar-15	09-Apr-15	-213	$0.00	
2-W.10.02.03	SMI6055	Vacuum Detector Chamber - Negotiate with Offerors	100%	1	18-Feb-16 A	19-Feb-16 A	10-Apr-15	16-Apr-15	-210	$2,134.24	
2-W.10.02.03	SMI6065	Vacuum Detector Chamber - Prepare & Approve Contract Package	100%	2	22-Feb-16 A	24-Feb-16 A	17-Apr-15	14-May-15	-193	$0.00	
2-W.10.02.03	SMI6075	AWARD: Vacuum Detector Chamber	100%	0	24-Feb-16 A		15-May-15		-193	$0.00	
2-W.10.02.03	SMI6085	Vacuum Detector Chamber - Fabrication	70%	101	01-Mar-16 A	21-Jul-16	15-May-15	10-Aug-15	-238	$22,711.35	61
2-W.10.02.03	SMI6095	Vacuum Detector Chamber - Shipping	0%	8	22-Jul-16	02-Aug-16	11-Aug-15	20-Aug-15	-238	$0.00	61
2-W.10.02.03	SMI6105	Receive: Vacuum Detector Chamber	0%	0		02-Aug-16		20-Aug-15	-238	$0.00	61
2-W.10.02.03	SMI6115	Vacuum Detector Chamber - Assembly & Installation	0%	10	03-Aug-16	16-Aug-16	21-Aug-15	03-Sep-15	-238	$1,778.53	61
2-W.10.02.03	SMI6125	Vacuum Detector Chamber - Test	0%	5	17-Aug-16	23-Aug-16	04-Sep-15	11-Sep-15	-238	$889.26	61
SAXS Support Mechanics			27.8%	382	01-May-15 A	04-Nov-16	20-Mar-15	27-Jul-16	-70	$214,262.77	10
2-W.10.02.03	SMI6170	SAXS table support structure: detail design	100%	54	01-May-15 A	20-Jul-15 A	15-May-15	13-Jul-15	-4	$13,185.70	
2-W.10.02.03	SMI6175	SAXS table support structure: RFQ activities	100%	15	03-Aug-15 A	24-Aug-15 A	14-Jul-15	22-Sep-15	21	$0.00	
2-W.10.02.03	SMI6180	SAXS table support structure: vendor fab	70%	80	01-Apr-16 A	25-Jul-16	23-Sep-15	20-Jan-16	-130	$16,667.69	82
2-W.10.02.03	SMI6185	SAXS table rail with Z trans: detail design	80%	262	29-Jun-15 A	13-Jul-16	14-Jul-15	04-Nov-15	-172	$16,903.49	10
2-W.10.02.03	SMI6190	SAXS table rail with Z trans: RFQ activities	0%	50	14-Jul-16	22-Sep-16	05-Nov-15	20-Jan-16	-172	$0.00	10
2-W.10.02.03	SMI6195	SAXS table rail with Z trans: vendor fab	0%	80	14-Jul-16	04-Nov-16	21-Jan-16	12-May-16	-122	$47,459.99	10
2-W.10.02.03	SMI6200	SAXS table XY det trans: detail design	95%	260	23-Jun-15 A	05-Jul-16	20-Mar-15	13-Jul-15	-246	$16,742.76	16
2-W.10.02.03	SMI6205	SAXS table XY det trans: RFQ activities	0%	20	06-Jul-16	02-Aug-16	14-Jul-15	22-Sep-15	-216	$0.00	16
2-W.10.02.03	SMI6210	SAXS table XY det trans: vendor fab	0%	80	06-Jul-16	27-Oct-16	23-Sep-15	20-Jan-16	-196	$75,029.00	16
2-W.10.02.03	SMI6215	SAXS table cable drag chain: detail design	40%	250	20-Jul-15 A	15-Jul-16	15-May-15	13-Jul-15	-254	$13,185.70	18
2-W.10.02.03	SMI6220	SAXS table cable drag chain: RFQ activities	0%	50	18-Jul-16	26-Sep-16	14-Jul-15	22-Sep-15	-254	$0.00	18
2-W.10.02.03	SMI6225	SAXS table cable drag chain: vendor fab	0%	40	29-Aug-16	25-Oct-16	23-Sep-15	18-Nov-15	-234	$6,718.15	18
2-W.10.02.03	SMI6230	SAXS table top assembly	0%	20	03-Aug-16	30-Aug-16	29-Jun-16	27-Jul-16	-24	$8,370.29	56
Double Crystal Deflector ES1			100%	871	03-Jan-12 A	26-Jun-15 A	03-Jan-12	15-May-15	-28	$131,483.19	
2-W.10.02.03	SMI2080	Double Crystal Deflector Preliminary Design - Inclusive	100%	108	03-Jan-12 A	05-Jun-12 A	03-Jan-12	05-Jun-12	0	$0.00	
2-W.10.02.03	SMI2090	Double Crystal Deflector Preliminary Design - 30%	100%	39	03-Jan-12 A	28-Feb-12 A	03-Jan-12	28-Feb-12	0	$0.00	
2-W.10.02.03	SMI2100	Double Crystal Deflector Preliminary Design - 60%	100%	33	29-Feb-12 A	13-Apr-12 A	29-Feb-12	13-Apr-12	0	$0.00	
2-W.10.02.03	SMI2110	Double Crystal Deflector Preliminary Design - 90%	100%	34	16-Apr-12 A	01-Jun-12 A	16-Apr-12	01-Jun-12	0	$0.00	
2-W.10.02.03	SMI2120	Double Crystal Deflector Preliminary Design Review	100%	2	11-Sep-12 A	12-Sep-12 A	11-Sep-12	12-Sep-12	0	$0.00	
2-W.10.02.03	SMI2130	Double Crystal Deflector Preliminary Design Approved	100%	0		12-Sep-12 A		12-Sep-12	0	$0.00	
Double Crystal Deflector ES1 Design			100%	532	13-Sep-12 A	31-Oct-14 A	13-Sep-12	22-May-14	-110	$21,707.73	
2-W.10.02.03	SMI2140	Final Design DC Deflector - Mechanical design 90%	100%	20	01-Oct-14 A	29-Oct-14 A	04-Feb-14	04-Mar-14	-166	$14,615.55	
2-W.10.02.03	SMI2150	Final Design DC Deflector - Define test metrics	100%	1	30-Oct-14 A	31-Oct-14 A	05-Mar-14	22-May-14	-110	$0.00	
2-W.10.02.03	SMI2170	Final Design DC Deflector - Design Comparison	100%	31	13-Sep-12 A	26-Oct-12 A	13-Sep-12	26-Oct-12	0	$0.00	
2-W.10.02.03	SMI2180	Final Design DC Deflector - Ray tracing	100%	230	29-Oct-12 A	30-Sep-13 A	29-Oct-12	25-Feb-13	-151	$0.00	
2-W.10.02.03	SMI21851	DC Deflector Lag	100%	62	01-Oct-13 A	31-Dec-13 A				$0.00	
2-W.10.02.03	SMI2190	Final Design DC Deflector - Feedback	100%	33	02-Jan-14 A	19-Feb-14 A	01-Oct-13	04-Nov-13	-71	$0.00	
2-W.10.02.03	SMI2200	Final Design DC Deflector - Mechanical design 50%	100%	145	03-Mar-14 A	25-Sep-14 A	05-Nov-13	03-Feb-14	-163	$7,092.18	
Double Crystal Deflector ES1 Fabrication			100%	161	03-Nov-14 A	26-Jun-15 A	23-May-14	15-May-15	-28	$109,775.46	
2-W.10.02.03	SMI2230	Double Crystal Deflector - General Procurement	100%	9	03-Nov-14 A	13-Nov-14 A	23-May-14	05-Jun-14	-111	$24,525.58	
2-W.10.02.03	SMI2240	Double Crystal Deflector - Write Specification and SOW	100%	70	01-Dec-14 A	13-Mar-15 A	06-Jun-14	15-Aug-14	-141	$72,594.67	
2-W.10.02.03	SMI2250	Double Crystal Deflector - PPM Accept Requisition	100%	0		13-Mar-15 A		27-Jan-15	-32	$0.00	
2-W.10.02.03	SMI2255	Double Crystal Deflector - Prepare & Submit RFP	100%	4	16-Mar-15 A	20-Mar-15 A	28-Jan-15	06-Mar-15	-9	$0.00	
2-W.10.02.03	SMI2260	Double Crystal Deflector - Offerors Prepare & Submit Proposals	100%	54	23-Mar-15 A	05-Jun-15 A	09-Mar-15	10-Apr-15	-39	$0.00	
2-W.10.02.03	SMI2265	Double Crystal Deflector - Evaluate Offeror Proposals	100%	14	08-Jun-15 A	26-Jun-15 A	13-Apr-15	15-May-15	-28	$12,655.20	
Vacuum Sample Chamber			90.53%	1146	03-Jan-12 A	29-Jul-16	03-Jan-12	13-Jul-15	-264	$352,159.21	114
2-W.10.02.03	SMI2380	Vac Sample Chamber Preliminary Design - Inclusive	100%	3	03-Jan-12 A	05-Jan-12 A	03-Jan-12	05-Jan-12	0	$0.00	
2-W.10.02.03	SMI2390	Vac Sample Chamber Preliminary Design - 30%	100%	39	03-Jan-12 A	28-Feb-12 A	03-Jan-12	28-Feb-12	0	$0.00	



(O) NEXT - Detail Schedule

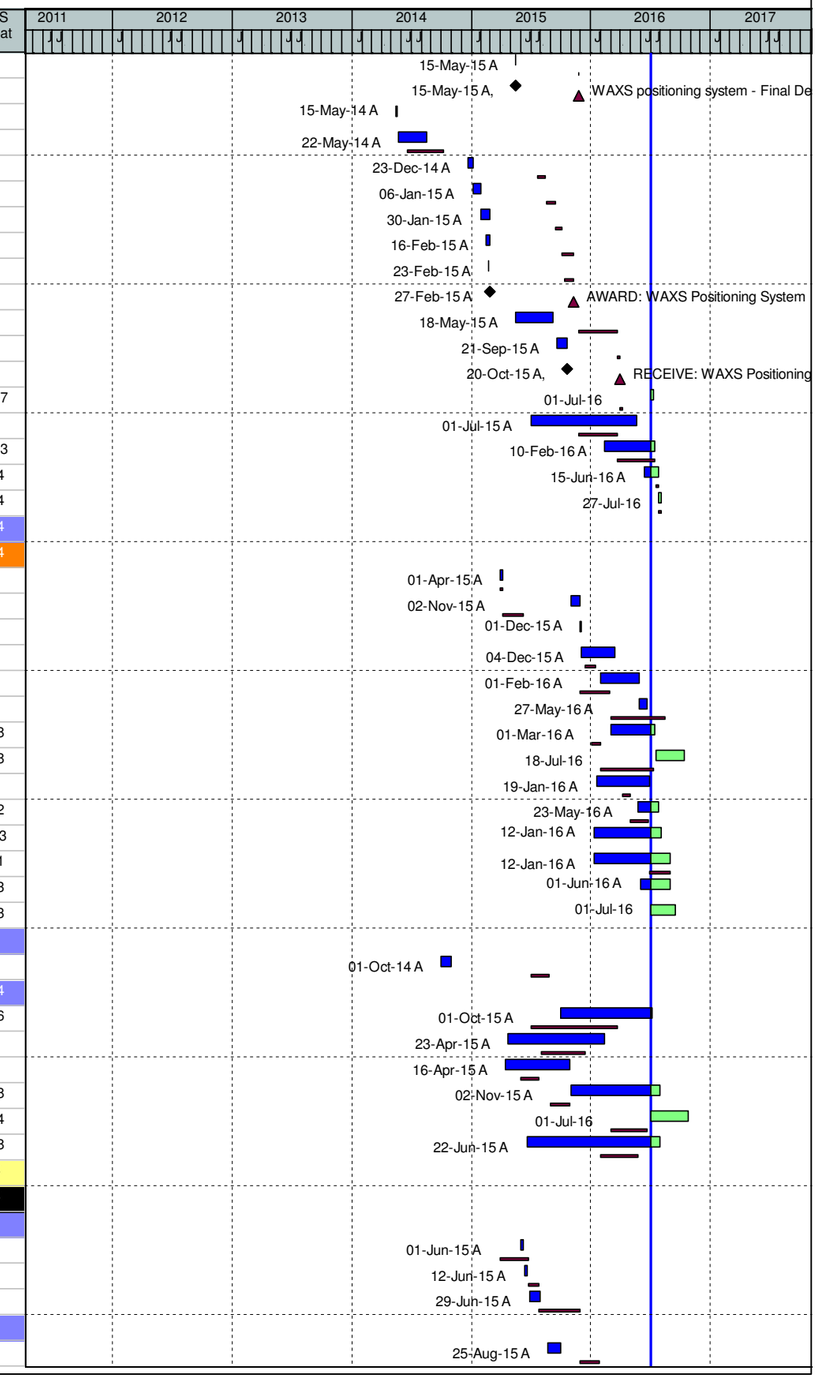
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.03	SMI2400	Vac Sample Chamber Preliminary Design - 60%	100%	33	29-Feb-12 A	13-Apr-12 A	29-Feb-12	13-Apr-12	0	$0.00	
2-W.10.02.03	SMI2410	Vac Sample Chamber Preliminary Design - 90%	100%	34	16-Apr-12 A	01-Jun-12 A	16-Apr-12	01-Jun-12	0	$0.00	
2-W.10.02.03	SMI2420	Vac Sample Chamber Preliminary Design Review	100%	2	11-Sep-12 A	12-Sep-12 A	11-Sep-12	12-Sep-12	0	$0.00	
2-W.10.02.03	SMI2430	Vac Sample Chamber Preliminary Design Approved	100%	0		12-Sep-12 A		12-Sep-12	0	$0.00	
2-W.10.02.03	SMI2440	Final Design Vac Chamber - Sample manipulators	100%	41	20-Dec-13 A	20-Feb-14 A	20-Dec-13	06-Feb-14	-9	$13,832.48	
2-W.10.02.03	SMI2450	Final Design Vac Chamber - Mechanical design 90%	100%	34	03-Mar-14 A	17-Apr-14 A	07-Feb-14	27-Mar-14	-15	$12,361.65	
2-W.10.02.03	SMI2460	Final Design Vac Chamber - Define test metrics	100%	20	18-Apr-14 A	15-May-14 A	28-Mar-14	24-Apr-14	-15	$7,290.83	
Vacuum Sample Chamber Design			0%	165	01-Jul-13 A	28-Feb-14 A	01-Jul-13	19-Dec-13	-47	$0.00	
2-W.10.02.03	SMI2480	Final Design Vac Chamber - Design Comparison	100%	63	01-Jul-13 A	30-Sep-13 A	01-Jul-13	31-Jul-13	-42	$0.00	
2-W.10.02.03	SMI2490	Final Design Vac Chamber - Ray tracing	100%	22	01-Oct-13 A	31-Oct-13 A	01-Oct-13	02-Dec-13	20	$0.00	
2-W.10.02.03	SMI2500	Final Design Vac Chamber - Modular	100%	19	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	1	$0.00	
2-W.10.02.03	SMI2500FA	Final Design Vac Chamber - Modular	100%	22	01-Oct-13 A	31-Oct-13 A	01-Oct-13	31-Oct-13	0	$0.00	
2-W.10.02.03	SMI2510	Final Design Vac Chamber - Mechanical design 50%	100%	80	01-Nov-13 A	28-Feb-14 A	01-Nov-13	19-Dec-13	-47	$0.00	
Vacuum Sample Chamber Fabrication			89.53%	552	16-May-14 A	29-Jul-16	25-Apr-14	13-Jul-15	-264	$318,674.26	114
2-W.10.02.03	SMI2470	Vacuum Sample Chamber - Vendor Final Design	100%	53	02-Feb-15 A	16-Apr-15 A	05-Jan-15	03-Mar-15	-32	$7,319.13	
2-W.10.02.03	SMI2540	General Procurement Vacuum Sample Chamber	100%	31	16-May-14 A	30-Jun-14 A	25-Apr-14	26-Jun-14	-2	$7,854.78	
2-W.10.02.03	SMI2550	Vacuum Sample Chamber - Write Specs & SOW	100%	75	27-Jun-14 A	16-Oct-14 A	27-Jun-14	21-Jul-14	-60	$39,179.50	
2-W.10.02.03	SMI2551	PPM Accepts and Pins Req	100%	0		10-Nov-14 A				$0.00	
2-W.10.02.03	SMI2560	Vacuum Sample Chamber - Prepare & Submit RFP	100%	15	03-Nov-14 A	24-Nov-14 A	22-Jul-14	27-Aug-14	-60	$0.00	
2-W.10.02.03	SMI2570	Vacuum Sample Chamber - Offerors Prepare & Submit Proposals	100%	19	25-Nov-14 A	23-Dec-14 A	28-Aug-14	02-Oct-14	-55	$0.00	
2-W.10.02.03	SMI2580	Vacuum Sample Chamber - Evaluate Proposals	100%	20	05-Jan-15 A	02-Feb-15 A	03-Oct-14	07-Nov-14	-55	$0.00	
2-W.10.02.03	SMI2585	Vacuum Sample Chamber - Negotiate with Offerors	100%	10	03-Feb-15 A	17-Feb-15 A	10-Nov-14	21-Nov-14	-55	$0.00	
2-W.10.02.03	SMI2590	Vacuum Sample Chamber - Prepare & Approve Contract Package	100%	4	18-Feb-15 A	23-Feb-15 A	26-Nov-14	31-Dec-14	-34	$11,232.38	
2-W.10.02.03	SMI2600	AWARD: Vacuum Sample Chamber	100%	0		25-Feb-15 A		31-Dec-14	-36	$0.00	
2-W.10.02.03	SMI2600015	Vacuum Sample Chamber Preliminary Design Review	100%	5	16-Mar-15 A	20-Mar-15 A	16-Mar-15	20-Mar-15	0	$5,458.69	
2-W.10.02.03	SMI2600020	Vacuum Sample Chamber Receive/Approve PDR Report	100%	19	23-Mar-15 A	16-Apr-15 A	23-Mar-15	27-Mar-15	-14	$6,750.33	
2-W.10.02.03	SMI2600025	Vacuum Sample Chamber Final Design Review	100%	3	17-Apr-15 A	21-Apr-15 A	30-Mar-15	01-Apr-15	-14	$0.00	
2-W.10.02.03	SMI2600030	Vacuum Sample Chamber Final Design Approved	100%	6	22-Apr-15 A	30-Apr-15 A	02-Apr-15	17-Apr-15	-8	$10,125.49	
2-W.10.02.03	SMI2600035	Vacuum Sample Chamber Vendor Fab	100%	70	01-May-15 A	10-Aug-15 A	20-Apr-15	29-May-15	-50	$0.00	
2-W.10.02.03	SMI2600040	Vacuum Sample Chamber Factory Acceptance Test Complete	100%	44	12-Jun-15 A	13-Aug-15 A	01-Jun-15	01-Jun-15	-52	$16,875.82	
2-W.10.02.03	SMI2600045	Vacuum Sample Chamber Shipping	100%	11	26-Aug-15 A	10-Sep-15 A	02-Jun-15	16-Jun-15	-60	$0.00	
2-W.10.02.03	SMI2600050	Vacuum Sample Chamber Receipt of Equipment	100%	1	11-Sep-15 A	11-Sep-15 A	17-Jun-15	17-Jun-15	-60	$0.00	
2-W.10.02.03	SMI2660	Vacuum Sample Chamber - Assembly & Installation	70%	284	15-Jun-15 A	29-Jul-16	18-Jun-15	30-Jun-15	-272	$111,179.54	114
2-W.10.02.03	SMI2670	Vacuum Sample Chamber - Test	100%	12	14-Sep-15 A	30-Sep-15 A	01-Jul-15	10-Jul-15	-56	$63,868.63	
2-W.10.02.03	SMI2675	Vacuum Sample Chamber Acceptance of Equipment	100%	7	21-Sep-15 A	30-Sep-15 A	13-Jul-15	13-Jul-15	-55	$38,829.96	
WAXS Positioning System In-Vacuum			54.15%	1150	03-Jan-12 A	04-Aug-16	03-Jan-12	04-Aug-16	0	$253,224.00	289
2-W.10.02.03	SMI2680	WAXS Posn System Preliminary Design - Inclusive	100%	3	03-Jan-12 A	05-Jan-12 A	03-Jan-12	05-Jan-12	0	$0.00	
2-W.10.02.03	SMI2690	WAXS Posn System Preliminary Design - 30%	100%	39	03-Jan-12 A	28-Feb-12 A	03-Jan-12	28-Feb-12	0	$0.00	
2-W.10.02.03	SMI2700	WAXS Posn System Preliminary Design - 60%	100%	33	29-Feb-12 A	13-Apr-12 A	29-Feb-12	13-Apr-12	0	$0.00	
2-W.10.02.03	SMI2710	WAXS Posn System Preliminary Design - 90%	100%	34	16-Apr-12 A	01-Jun-12 A	16-Apr-12	01-Jun-12	0	$0.00	
2-W.10.02.03	SMI2720	WAXS Posn System Preliminary Design Review	100%	2	11-Sep-12 A	12-Sep-12 A	11-Sep-12	12-Sep-12	0	$0.00	
2-W.10.02.03	SMI2730	WAXS Posn System Preliminary Design Approved	100%	0		12-Sep-12 A		12-Sep-12	0	$0.00	
2-W.10.02.03	SMI2740	Final Design WAXS posn - Mechanical design 90%	100%	28	20-Mar-14 A	28-Apr-14 A	17-Apr-14	27-May-14	20	$5,951.71	
2-W.10.02.03	SMI2750	Final Design WAXS posn - Define test metrics	100%	12	29-Apr-14 A	14-May-14 A	28-May-14	12-Jun-14	20	$3,645.42	
WAXS Positioning System In-Vacuum Design			100%	99	24-Oct-13 A	19-Mar-14 A	24-Oct-13	16-Apr-14	20	$3,446.76	
2-W.10.02.03	SMI2770	Final Design WAXS posn - Design Comparison	100%	6	24-Oct-13 A	31-Oct-13 A	24-Oct-13	29-Nov-13	19	$0.00	
2-W.10.02.03	SMI2780	Final Design WAXS posn - Ray tracing	100%	19	01-Nov-13 A	29-Nov-13 A	02-Dec-13	30-Dec-13	20	$0.00	
2-W.10.02.03	SMI2790	Final Design WAXS posn - Feedback	100%	14	02-Dec-13 A	19-Dec-13 A	31-Dec-13	21-Jan-14	20	$0.00	
2-W.10.02.03	SMI2800	Final Design WAXS posn - Mechanical design 50%	100%	60	20-Dec-13 A	19-Mar-14 A	22-Jan-14	16-Apr-14	20	$3,446.76	
WAXS Positioning System In-Vacuum Fabrication			51.66%	557	15-May-14 A	04-Aug-16	20-Jun-14	04-Aug-16	0	$240,180.11	289
2-W.10.02.03	SMI2760	WAXS positioning system - Vendor Final Design	100%	55	27-Feb-15 A	14-May-15 A	11-Nov-15	25-Nov-15	133	$0.00	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.03	SMI2810	WAXS positioning system - Final Design Review	100%	1	15-May-15 A	15-May-15 A	26-Nov-15	26-Nov-15	133	$0.00	
2-W.10.02.03	SMI2820	WAXS positioning system - Final Design Approved	100%	0		15-May-15 A		26-Nov-15	133	$0.00	
2-W.10.02.03	SMI2840	Procurement and Vendor Support - WAXS Positioning System In-Vacuum	100%	5	15-May-14 A	21-May-14 A				$0.00	
2-W.10.02.03	SMI2850	WAXS positioning system - Write Specification and SOW	100%	60	22-May-14 A	18-Aug-14 A	20-Jun-14	07-Oct-14	35	$24,324.34	
2-W.10.02.03	SMI2860	WAXS positioning system - Prepare & Submit RFQ	100%	6	23-Dec-14 A	05-Jan-15 A	23-Jul-15	14-Aug-15	156	$0.00	
2-W.10.02.03	SMI2870	WAXS positioning system - Offerors Prepare & Submit Proposals	100%	16	06-Jan-15 A	29-Jan-15 A	17-Aug-15	14-Sep-15	159	$0.00	
2-W.10.02.03	SMI2880	WAXS positioning system - Evaluate Proposals	100%	20	30-Jan-15 A	27-Feb-15 A	15-Sep-15	05-Oct-15	153	$0.00	
2-W.10.02.03	SMI2890	WAXS positioning system - Negotiate with Offerors	100%	8	16-Feb-15 A	27-Feb-15 A	06-Oct-15	10-Nov-15	179	$32,247.63	
2-W.10.02.03	SMI2895	WAXS positioning system - Prepare & Approve Contract Award	100%	2	23-Feb-15 A	25-Feb-15 A	14-Oct-15	10-Nov-15	181	$0.00	
2-W.10.02.03	SMI2900	AWARD: WAXS Positioning System	100%	0	27-Feb-15 A		11-Nov-15		179	$0.00	
2-W.10.02.03	SMI2920	WAXS positioning system - Fabrication	100%	80	18-May-15 A	09-Sep-15 A	27-Nov-15	23-Mar-16	133	$41,927.70	
2-W.10.02.03	SMI2930	WAXS positioning system - Shipping	100%	21	21-Sep-15 A	20-Oct-15 A	24-Mar-16	30-Mar-16	110	$0.00	
2-W.10.02.03	SMI2940	RECEIVE: WAXS Positioning System	100%	0		20-Oct-15 A		30-Mar-16	110	$0.00	
2-W.10.02.03	SMI2950	WAXS positioning system - Bench Test	0%	6	01-Jul-16	11-Jul-16	31-Mar-16	07-Apr-16	-65	$13,872.35	307
2-W.10.02.03	SMI2955	WAXS brackets build to print activities	100%	222	01-Jul-15 A	18-May-16 A	27-Nov-15	23-Mar-16	-40	$10,474.70	
2-W.10.02.03	SMI2956	WAXS brackets materials and fabrication	11%	110	10-Feb-16 A	15-Jul-16	24-Mar-16	15-Jul-16	0	$83,854.23	303
2-W.10.02.03	SMI2960	WAXS positioning system - Assembly & Installation	30%	29	15-Jun-16 A	26-Jul-16	18-Jul-16	26-Jul-16	0	$19,606.79	74
2-W.10.02.03	SMI2970	WAXS positioning system - Test	0%	7	27-Jul-16	04-Aug-16	27-Jul-16	04-Aug-16	0	$13,872.35	74
Small Valued Procurements			79.32%	386	01-Apr-15 A	11-Oct-16	01-Apr-15	31-Aug-16	-27	$129,277.04	64
Small Valued Procurements Fabrication			79.32%	386	01-Apr-15 A	11-Oct-16	01-Apr-15	31-Aug-16	-27	$129,277.04	64
2-W.10.02.03	SMI3030	ESE SVP - General Procurement	100%	5	01-Apr-15 A	07-Apr-15 A	01-Apr-15	07-Apr-15	0	$5,336.08	
2-W.10.02.03	SMI3040	ESE SVP - Source and Sole Source Packages	100%	19	02-Nov-15 A	30-Nov-15 A	08-Apr-15	08-Jun-15	-120	$0.00	
2-W.10.02.03	SMI3100	WAXS Chamber Support Granite - Spec & Procure	100%	2	01-Dec-15 A	03-Dec-15 A				$0.00	
2-W.10.02.03	SMI3110	WAXS Chamber Support Granite - Fab & Receive	100%	67	04-Dec-15 A	14-Mar-16 A	16-Dec-15	15-Jan-16	-38	$10,400.00	
2-W.10.02.03	SMI3115	Bounce Down Mirror - Spec & Procure	100%	83	01-Feb-16 A	26-May-16 A	01-Dec-15	29-Feb-16	-63	$0.00	
2-W.10.02.03	SMI3125	Bounce Down Mirror - Fab & Receive	100%	15	27-May-16 A	20-Jun-16 A	01-Mar-16	15-Aug-16	40	$36,468.64	
2-W.10.02.03	SMI3135	SMI Filters - Spec & Procure	50%	97	01-Mar-16 A	15-Jul-16	04-Jan-16	29-Jan-16	-117	$0.00	28
2-W.10.02.03	SMI3145	SMI Filters - Fab & Receive	0%	60	18-Jul-16	11-Oct-16	01-Feb-16	11-Jul-16	-64	$15,600.00	28
2-W.10.02.03	SMI3155	SMI Shutter Cross - Spec & Procure	100%	116	19-Jan-16 A	30-Jun-16 A	08-Apr-16	29-Apr-16	-43	$0.00	
2-W.10.02.03	SMI3165	SMI Shutter Cross - Fab & Receive	90%	44	23-May-16 A	25-Jul-16	02-May-16	24-Jun-16	-20	$51,072.32	82
2-W.10.02.03	SMI3176	SMI Tools and Spares - Spec & Procure	47%	141	12-Jan-16 A	01-Aug-16				$0.00	113
2-W.10.02.03	SMI3180	SMI Tools and Spares - Fab & Receive	42%	163	12-Jan-16 A	31-Aug-16	28-Jun-16	31-Aug-16	0	$10,400.00	91
2-W.10.02.03	SMI3185	SMI Beam Stop Spec & Procure	10%	65	01-Jun-16 A	31-Aug-16				$0.00	83
2-W.10.02.03	SMI3195	SMI Beam Stop Fab & Receipt	0%	51	01-Jul-16	13-Sep-16				$0.00	83
SAXS/WAXS Detectors			100%	21	01-Oct-14 A	31-Oct-14 A	01-Jul-15	26-Aug-15	205	$5,074.96	
2-W.10.02.03	SMI3333	Write Spec and SOW SAXS/WAXS Detectors	100%	21	01-Oct-14 A	31-Oct-14 A	01-Jul-15	26-Aug-15	205	$5,074.96	
Beamline Documenation			61.91%	385	16-Apr-15 A	25-Oct-16	01-Jun-15	21-Jun-16	-87	$43,699.99	54
2-W.10.02.03	SMI3450	Beamline Raytracing	70%	190	01-Oct-15 A	05-Jul-16	01-Jul-15	21-Mar-16	-74	$9,185.61	96
2-W.10.02.03	SMI3455	Utilities Layouts	100%	203	23-Apr-15 A	12-Feb-16 A	05-Aug-15	14-Dec-15	-41	$9,160.01	
2-W.10.02.03	SMI3460	As-built: PDS	100%	138	16-Apr-15 A	30-Oct-15 A	01-Jun-15	27-Jul-15	-67	$6,332.22	
2-W.10.02.03	SMI3465	As-built: Sample Vacuum Chamber	85%	187	02-Nov-15 A	29-Jul-16	01-Sep-15	28-Oct-15	-189	$4,117.01	78
2-W.10.02.03	SMI3470	As-built: SAXS Station	0%	80	01-Jul-16	25-Oct-16	01-Mar-16	21-Jun-16	-87	$8,101.31	54
2-W.10.02.03	SMI3480	Instrument Readiness	24%	279	22-Jun-15 A	29-Jul-16	01-Feb-16	23-May-16	-47	$6,803.82	78
Data Acquisition			70.55%	338	01-Jun-15 A	30-Sep-16	01-Apr-15	06-Sep-16	-18	$171,880.97	5
SMI Data Acquisition			70.55%	338	01-Jun-15 A	30-Sep-16	01-Apr-15	06-Sep-16	-18	$171,880.97	5
Design			100%	42	01-Jun-15 A	30-Jul-15 A	01-Apr-15	27-Nov-15	83	$20,613.21	
2-W.10.02.04	SMI3140	Basic DAQ - Preliminary Design	100%	8	01-Jun-15 A	11-Jun-15 A	01-Apr-15	24-Jun-15	10	$0.00	
2-W.10.02.04	SMI3150	Basic DAQ - Final Design & Spec	100%	6	12-Jun-15 A	22-Jun-15 A	25-Jun-15	27-Jul-15	25	$10,672.15	
2-W.10.02.04	SMI3160	Basic DAQ - Procurement	100%	22	29-Jun-15 A	30-Jul-15 A	28-Jul-15	27-Nov-15	83	$9,941.06	
Basic DAQ			100%	26	25-Aug-15 A	30-Sep-15 A	30-Nov-15	27-Jun-16	185	$43,527.24	
2-W.10.02.04	SMI3170	Fab - Basic DAQ	100%	26	25-Aug-15 A	30-Sep-15 A	30-Nov-15	27-Jan-16	79	$43,527.24	



(O) NEXT - Detail Schedule

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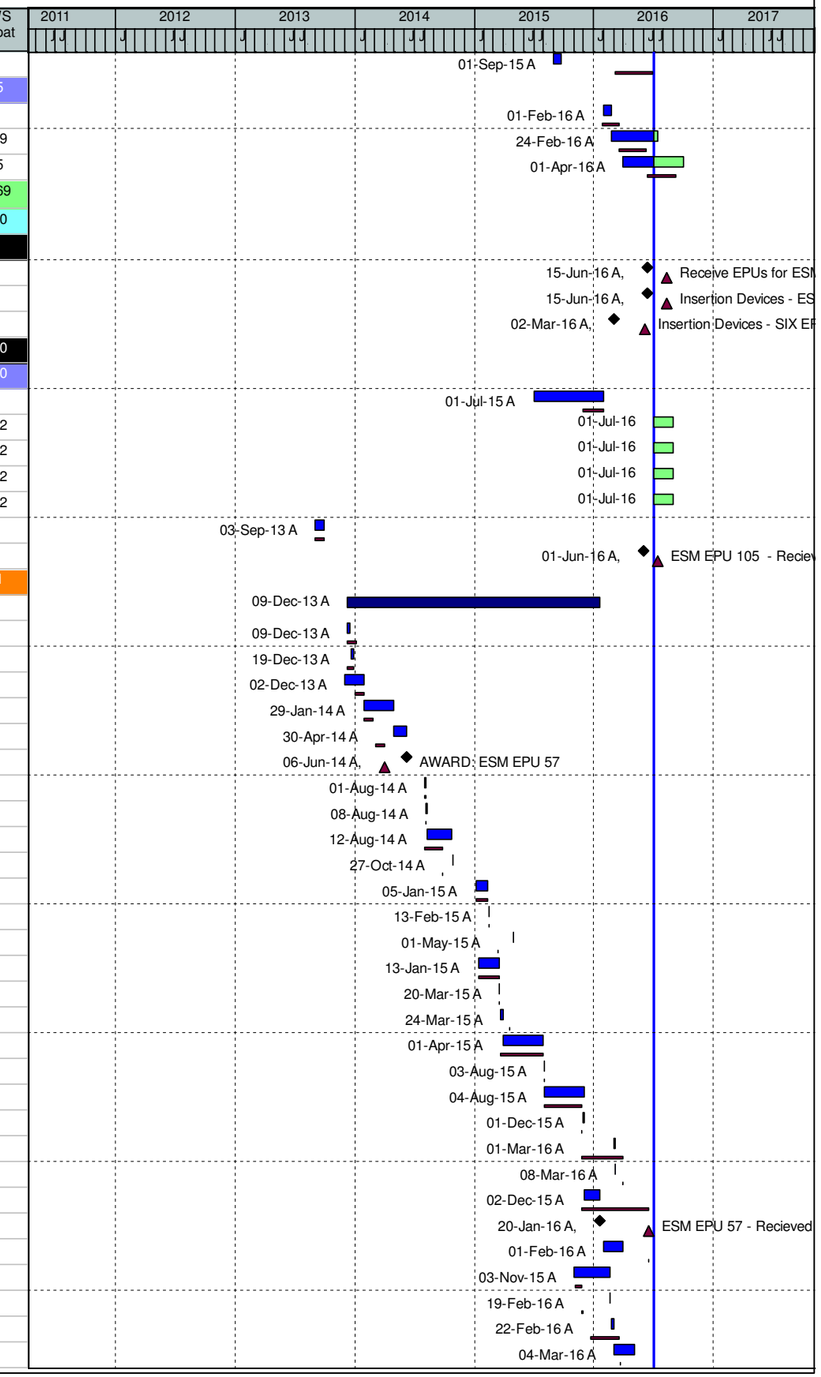
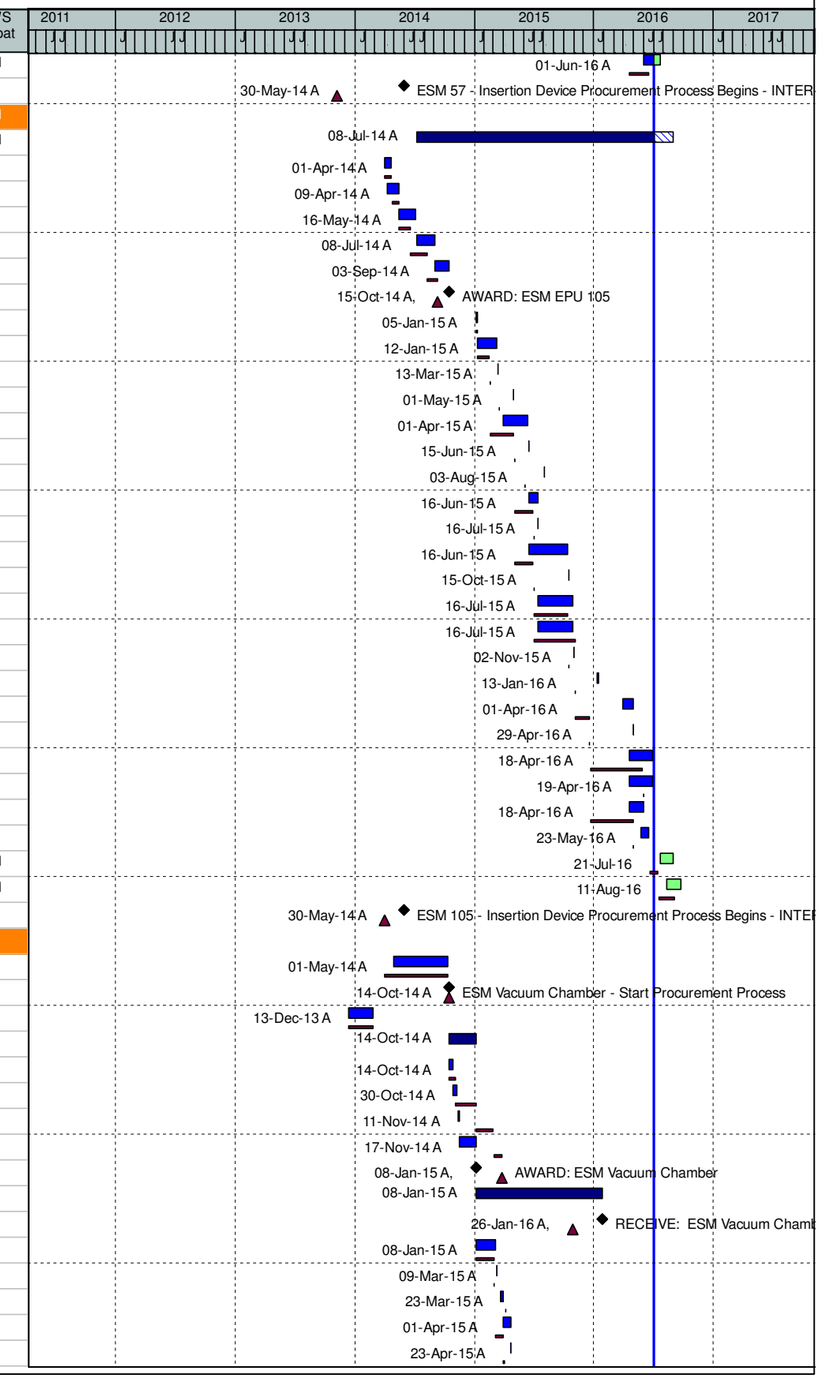
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.10.02.04	SMI3175	EAC Activity - FAB Basic DAQ	100%	15	01-Sep-15 A	23-Sep-15 A	07-Mar-16	27-Jun-16	191	$0.00	
Install & Test			53.02%	171	01-Feb-16 A	30-Sep-16	28-Jan-16	06-Sep-16	-18	$107,740.52	5
2-W.10.02.04	SMI3190	Basic DAQ - Assembly and Installation	100%	16	01-Feb-16 A	23-Feb-16 A	28-Jan-16	17-Mar-16	17	$47,922.03	
2-W.10.02.04	SMI3200	Basic DAQ - Test - EAC Adj	15%	101	24-Feb-16 A	15-Jul-16	18-Mar-16	10-Jun-16	-24	$52,053.57	59
2-W.10.02.04	SMI3210	Basic DAQ - Controls Integration	18%	128	01-Apr-16 A	30-Sep-16	13-Jun-16	06-Sep-16	-18	$7,764.91	5
Insertion Devices			92.01%	852	03-Sep-13 A	30-Jan-17	03-Sep-13	31-Jan-17	1	$4,733,415.75	169
ESM EPU Insertion Device			91.99%	772	03-Sep-13 A	30-Sep-16	03-Sep-13	02-Sep-16	-19	$4,515,818.74	70
Top Level Milestones			0%	74	02-Mar-16 A	15-Jun-16 A	06-Jun-16	12-Aug-16	42	$0.00	
2-W.11.01	M2050	Receive EPUs for ESM and SIX	100%	0		15-Jun-16 A		12-Aug-16	42	$0.00	
2-W.11.01	M3245	Insertion Devices - ESM EPU 105 Received	100%	0		15-Jun-16 A		12-Aug-16	42	$0.00	
2-W.11.01	M3250	Insertion Devices - SIX EPU 57 Received	100%	0		02-Mar-16 A		06-Jun-16	68	$0.00	
ESM Procurement Work Package			91.99%	772	03-Sep-13 A	30-Sep-16	03-Sep-13	02-Sep-16	-19	$4,515,818.74	70
EPU			91.99%	772	03-Sep-13 A	30-Sep-16	03-Sep-13	02-Sep-16	-19	$4,515,818.74	70
2-W.11.01	EPU1090	ID Contract Monitoring	100%	145	01-Jul-15 A	29-Jan-16 A	01-Dec-15	29-Jan-16	0	$35,388.00	
2-W.11.01	EPU2311	EPU Connectors	0%	42	01-Jul-16	30-Aug-16				$0.00	92
2-W.11.01	EPU2312	Cabinet	0%	42	01-Jul-16	30-Aug-16				$0.00	92
2-W.11.01	EPU2313	Magnets (magic fingers)	0%	42	01-Jul-16	30-Aug-16				$0.00	92
2-W.11.01	EPU2314	Shims for ESM	0%	42	01-Jul-16	30-Aug-16				$0.00	92
2-W.11.01	ESMEPUFY1	ESM EPU FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$0.00	
2-W.11.01	MEPU015	ESM EPU 105 - Recieved at BNL	100%	0		01-Jun-16 A		15-Jul-16	32	$0.00	
EPU Insertion Device 57 (LONG LEAD PROCUREMENT)			91.26%	660	02-Dec-13 A	20-Jul-16	06-Nov-13	17-Jun-16	-22	$1,330,284.68	1
2-W.11.01	EPU1020	ESM EPU 57 - Vendor Support	100%	526	09-Dec-13 A	19-Jan-16 A	06-Nov-13	03-Jun-16	97	$201,594.82	
2-W.11.01	EPU1030	ESM EPU 57 - PPM Accept Requisition	100%	8	09-Dec-13 A	18-Dec-13 A	09-Dec-13	07-Jan-14	12	$0.00	
2-W.11.01	EPU1040	ESM EPU 57 - Prepare RFP	100%	7	19-Dec-13 A	30-Dec-13 A	09-Dec-13	30-Dec-13	0	$0.00	
2-W.11.01	EPU1050	ESM EPU 57 - Call for Bid	100%	38	02-Dec-13 A	28-Jan-14 A	02-Jan-14	30-Jan-14	3	$0.00	
2-W.11.01	EPU1060	ESM EPU 57 - Receive and Evaluate Vendor Proposal	100%	64	29-Jan-14 A	30-Apr-14 A	29-Jan-14	26-Feb-14	-44	$0.00	
2-W.11.01	EPU1070	ESM EPU 57 - Vendor Negotiations	100%	27	30-Apr-14 A	06-Jun-14 A	05-Mar-14	01-Apr-14	-47	$0.00	
2-W.11.01	EPU1080	AWARD: ESM EPU 57	100%	0		06-Jun-14 A		01-Apr-14	-47	$0.00	
2-W.11.01	EPU1100010	ESM EPU 57 - Conceptual Design	100%	4	01-Aug-14 A	07-Aug-14 A	01-Aug-14	07-Aug-14	1	$0.00	
2-W.11.01	EPU1100015	ESM EPU 57 - Conceptual Design Reviewed & Approved	100%	1	08-Aug-14 A	11-Aug-14 A	07-Aug-14	07-Aug-14	-1	$52,000.00	
2-W.11.01	EPU1100020	ESM EPU 57 - Prelimanry Design	100%	51	12-Aug-14 A	24-Oct-14 A	01-Aug-14	26-Sep-14	-18	$0.00	
2-W.11.01	EPU1100025	ESM EPU 57 - Prelimnary Design Reviewed & Approved	100%	3	27-Oct-14 A	30-Oct-14 A	26-Sep-14	26-Sep-14	-22	$104,000.00	
2-W.11.01	EPU1100030	ESM EPU 57 - Magnetic and Mechanical Final Design	100%	28	05-Jan-15 A	12-Feb-15 A	05-Jan-15	12-Feb-15	0	$60,889.92	
2-W.11.01	EPU1100035	ESM EPU 57 - Magnetic and Mechanical FDR	100%	1	13-Feb-15 A	13-Feb-15 A	13-Feb-15	13-Feb-15	0	$17,397.12	
2-W.11.01	EPU1100038	ESM EPU 57 - Magnetic and Mechanical FDR Approval	100%	1	01-May-15 A	01-May-15 A	16-Mar-15	16-Mar-15	-34	$8,698.56	
2-W.11.01	EPU1100040	ESM EPU 57 - Control System Final Design	100%	46	13-Jan-15 A	19-Mar-15 A	13-Jan-15	19-Mar-15	0	$56,696.64	
2-W.11.01	EPU1100045	ESM EPU 57 - Control System FDR	100%	1	20-Mar-15 A	20-Mar-15 A	20-Mar-15	20-Mar-15	0	$16,199.04	
2-W.11.01	EPU1100048	ESM EPU 57 - Control System FDR Approval	100%	5	24-Mar-15 A	31-Mar-15 A	20-Apr-15	20-Apr-15	15	$8,099.52	
2-W.11.01	EPU1100050	ESM EPU 57 - ESM EPU Mech & CS Real	100%	86	01-Apr-15 A	31-Jul-15 A	23-Mar-15	31-Jul-15	0	$107,993.60	
2-W.11.01	EPU1100055	ESM EPU 57 - ESM PMAT	100%	1	03-Aug-15 A	03-Aug-15 A	03-Aug-15	03-Aug-15	0	$26,998.40	
2-W.11.01	EPU1100060	ESM EPU 57 - Magnetic Assembly & Charac.	100%	85	04-Aug-15 A	04-Dec-15 A	04-Aug-15	23-Nov-15	-9	$107,993.60	
2-W.11.01	EPU1100065	ESM EPU 57 - BSA Approval of FAT for ESM EPU	100%	1	01-Dec-15 A	01-Dec-15 A	24-Nov-15	24-Nov-15	-5	$26,998.40	
2-W.11.01	EPU1100070	ESM EPU 57 - Staff Training	100%	5	01-Mar-16 A	07-Mar-16 A	25-Nov-15	30-Mar-16	17	$0.00	
2-W.11.01	EPU1100075	ESM EPU 57 - Staff Training Complete	100%	1	08-Mar-16 A	08-Mar-16 A	31-Mar-16	31-Mar-16	17	$33,748.00	
2-W.11.01	EPU1100076	ESM EPU 57 - Vendor Storage and Shipping	100%	32	02-Dec-15 A	19-Jan-16 A	25-Nov-15	16-Jun-16	105	$0.00	
2-W.11.01	EPU1100077	ESM EPU 57 - Recieved at BNL	100%	0		20-Jan-16 A		17-Jun-16	106	$0.00	
2-W.11.01	EPU1100080	ESM EPU 57 - BSA Rec't and acceptance of ESM EPU and Spares at BNL	100%	42	01-Feb-16 A	31-Mar-16 A	17-Jun-16	17-Jun-16	56	$47,247.20	
2-W.11.01	EPU1117250	SIX EPU 57 - BSA Review of FAT for SIX EPU	100%	72	03-Nov-15 A	18-Feb-16 A	06-Nov-15	26-Nov-15	-56	$0.00	
2-W.11.01	EPU1117260	SIX EPU 57 - BSA Approval of FAT for SIX EPU	100%	1	19-Feb-16 A	19-Feb-16 A	27-Nov-15	27-Nov-15	-56	$62,031.84	
2-W.11.01	EPU1117310	SIX EPU 57 - Vendor Package & Shipping SIX EPU	100%	9	22-Feb-16 A	03-Mar-16 A	21-Dec-15	18-Mar-16	11	$0.00	
2-W.11.01	EPU1117320	SIX EPU 57 - BSA Rec't and acceptance of SIX EPU and Spares at BNL	100%	46	04-Mar-16 A	06-May-16 A	21-Mar-16	21-Mar-16	-34	$225,576.00	



(O) NEXT - Detail Schedule

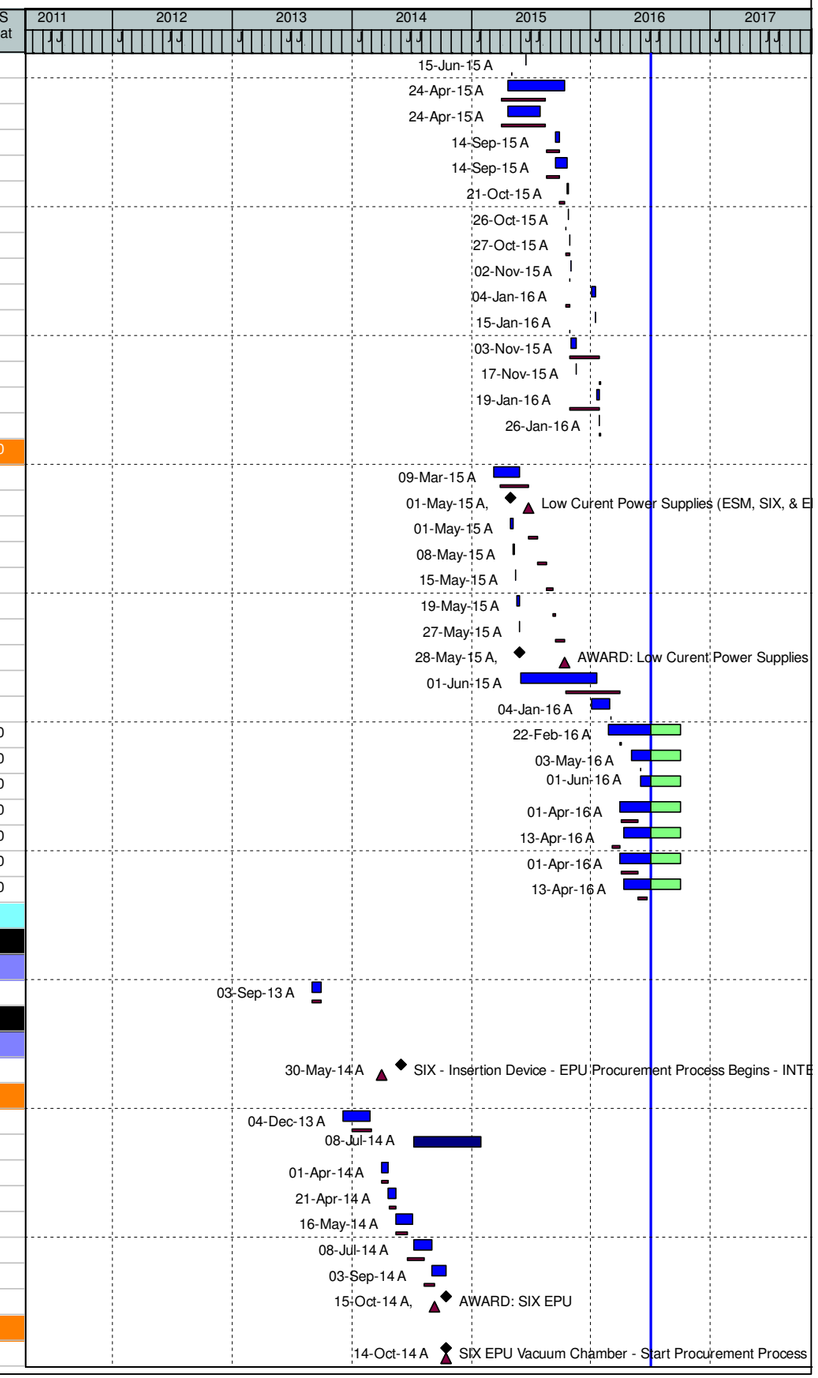
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.11.01	EPU1117350	SIX EPU 57 - Shimming	30%	35	01-Jun-16 A	20-Jul-16	18-Apr-16	17-Jun-16	-22	$166,122.02	1
2-W.11.01	MEPU010	ESM 57 - Insertion Device Procurement Process Begins - INTER-PROJECT L	100%	0	30-May-14 A		06-Nov-13		-140	$0.00	
EPU Device105 (LONG LEAD PROCUREMENT)			89.51%	623	01-Apr-14 A	22-Sep-16	06-Jan-14	02-Sep-16	-13	$1,958,131.31	1
2-W.11.01	EPU1025	ESM EPU 105 & SIX 57 - Vendor & Procurement Support	99%	541	08-Jul-14 A	31-Aug-16	06-Jan-14	31-Mar-16	-107	$162,089.11	1
2-W.11.01	EPU1035	ESM EPU 105 - PPM Accept Requisition	100%	15	01-Apr-14 A	21-Apr-14 A	01-Apr-14	23-Apr-14	2	$0.00	
2-W.11.01	EPU1045	ESM EPU 105 - Prepare RFP	100%	26	09-Apr-14 A	15-May-14 A	24-Apr-14	14-May-14	0	$0.00	
2-W.11.01	EPU1055	ESM EPU 105 - Call for Bid	100%	34	16-May-14 A	07-Jul-14 A	15-May-14	19-Jun-14	-10	$0.00	
2-W.11.01	EPU1065	ESM EPU 105 - Receive and Evaluate Vendor Proposal	100%	40	08-Jul-14 A	02-Sep-14 A	20-Jun-14	11-Aug-14	-15	$0.00	
2-W.11.01	EPU1075	ESM EPU 105 - Vendor Negotiations	100%	30	03-Sep-14 A	15-Oct-14 A	12-Aug-14	09-Sep-14	-25	$0.00	
2-W.11.01	EPU1085	AWARD: ESM EPU 105	100%	0		15-Oct-14 A		09-Sep-14	-24	$0.00	
2-W.11.01	EPU1117100	EPU 105 - Conceptual Design CDR and Approval	100%	5	05-Jan-15 A	09-Jan-15 A	05-Jan-15	09-Jan-15	0	$62,031.84	
2-W.11.01	EPU1117110	EPU 105 & 57 - Preliminary Design	100%	42	12-Jan-15 A	12-Mar-15 A	12-Jan-15	13-Feb-15	-18	$86,844.58	
2-W.11.01	EPU1117120	EPU 105 & 57 - PDR	100%	1	13-Mar-15 A	13-Mar-15 A	17-Feb-15	17-Feb-15	-18	$24,812.74	
2-W.11.01	EPU1117130	EPU 105 & 57 - PDR Approval	100%	1	01-May-15 A	01-May-15 A	17-Mar-15	17-Mar-15	-33	$12,406.37	
2-W.11.01	EPU1117140	EPU 105 & 57 - Final Design	100%	52	01-Apr-15 A	12-Jun-15 A	18-Feb-15	01-May-15	-29	$86,844.58	
2-W.11.01	EPU1117150	EPU 105 & 57 - FDR	100%	1	15-Jun-15 A	15-Jun-15 A	04-May-15	04-May-15	-29	$24,812.74	
2-W.11.01	EPU1117160	EPU 105 & 57 - FDR Approval	100%	1	03-Aug-15 A	03-Aug-15 A	04-Jun-15	04-Jun-15	-41	$12,406.37	
2-W.11.01	EPU1117170	EPU 57 - SIX Magnet Production and Shipping	100%	21	16-Jun-15 A	15-Jul-15 A	05-May-15	30-Jun-15	-10	$0.00	
2-W.11.01	EPU1117180	EPU 57 - Vendor Receive SIX Magnet	100%	1	16-Jul-15 A	16-Jul-15 A	01-Jul-15	01-Jul-15	-10	$93,047.76	
2-W.11.01	EPU1117190	EPU 105 - ESM Magnet Production	100%	84	16-Jun-15 A	14-Oct-15 A	05-May-15	30-Jun-15	-73	$0.00	
2-W.11.01	EPU1117200	EPU 105 - Vendor Receive ESM Magnet	100%	1	15-Oct-15 A	15-Oct-15 A	01-Jul-15	01-Jul-15	-73	$93,047.76	
2-W.11.01	EPU1117210	EPU 57 - SIX Mechanical Realization	100%	72	16-Jul-15 A	27-Oct-15 A	02-Jul-15	14-Oct-15	-9	$186,095.52	
2-W.11.01	EPU1117220	EPU 105 - ESM Mechanical Realization	100%	73	16-Jul-15 A	29-Oct-15 A	02-Jul-15	04-Nov-15	5	$186,095.52	
2-W.11.01	EPU1117230	EPU 57 - SIX PMAT	100%	1	02-Nov-15 A	02-Nov-15 A	15-Oct-15	15-Oct-15	-12	$124,063.68	
2-W.11.01	EPU1117240	EPU 105 - ESM PMAT	100%	1	13-Jan-16 A	13-Jan-16 A	05-Nov-15	05-Nov-15	-45	$124,063.68	
2-W.11.01	EPU1117270	ESM EPU 105 - BSA Review of FAT for ESM EPU	100%	21	01-Apr-16 A	29-Apr-16 A	06-Nov-15	17-Dec-15	-92	$0.00	
2-W.11.01	EPU1117280	ESM EPU 105 - BSA Approval of FAT for ESM EPU	100%	1	29-Apr-16 A	29-Apr-16 A	18-Dec-15	18-Dec-15	-91	$62,031.84	
2-W.11.01	EPU1117290	ESM EPU 105 - Staff Training	100%	53	18-Apr-16 A	30-Jun-16 A	21-Dec-15	27-May-16	-23	$0.00	
2-W.11.01	EPU1117300	ESM EPU 105 - Completion of Staff Training at BNL	100%	52	19-Apr-16 A	30-Jun-16 A	31-May-16	31-May-16	-22	$187,980.00	
2-W.11.01	EPU1117330	ESM EPU 105 - Vendor Package & Shipping ESM EPU	100%	31	18-Apr-16 A	01-Jun-16 A	21-Dec-15	29-Apr-16	-21	$0.00	
2-W.11.01	EPU1117340	ESM EPU 105 - BSA Rec't and acceptance of ESM EPU and Spares at BNL	100%	17	23-May-16 A	15-Jun-16 A	02-May-16	02-May-16	-31	$225,576.00	
2-W.11.01	EPU1117355	ESM EPU 105 - Assembly	0%	30	21-Jul-16	31-Aug-16	20-Jun-16	15-Jul-16	-33	$71,723.97	1
2-W.11.01	EPU1117360	ESM EPU 105 - Shimming	0%	30	11-Aug-16	22-Sep-16	18-Jul-16	02-Sep-16	-13	$132,157.27	1
2-W.11.01	MEPU020	ESM 105 - Insertion Device Procurement Process Begins - INTER-PROJECT	100%	0	30-May-14 A		01-Apr-14		-42	$0.00	
EPU Vacuum Chamber			100%	528	13-Dec-13 A	26-Jan-16 A	13-Dec-13	29-Jan-16	3	$612,749.76	
2-W.11.01	EPU1894	ESM Vacuum Chamber - Waiting for Requirements	100%	113	01-May-14 A	10-Oct-14 A	01-Apr-14	10-Oct-14	0	$0.00	
2-W.11.01	EPU1895	ESM Vacuum Chamber - Start Procurement Process	100%	0	14-Oct-14 A		14-Oct-14		0	$0.00	
2-W.11.01	EPU1905	ESM Vacuum Chamber - Vendor Support Part 1	100%	51	13-Dec-13 A	28-Feb-14 A	13-Dec-13	27-Feb-14	0	$9,664.72	
2-W.11.01	EPU19051	ESM Vacuum Chamber - Vendor Support	100%	57	14-Oct-14 A	08-Jan-15 A	14-Oct-14	26-Jan-15	12	$9,604.06	
2-W.11.01	EPU1910	ESM Vacuum Chamber - PPM Accept Requisition	100%	11	14-Oct-14 A	29-Oct-14 A	14-Oct-14	05-Nov-14	6	$0.00	
2-W.11.01	EPU1915	ESM Vacuum Chamber - repare RFP & Call for bids	100%	8	30-Oct-14 A	10-Nov-14 A	06-Nov-14	07-Jan-15	37	$0.00	
2-W.11.01	EPU1920	ESM Vacuum Chamber - Receive and Evaluate Vendor Proposal	100%	4	11-Nov-14 A	17-Nov-14 A	08-Jan-15	27-Feb-15	68	$0.00	
2-W.11.01	EPU1925	ESM Vacuum Chamber - Contract Negotiations	100%	34	17-Nov-14 A	08-Jan-15 A	02-Mar-15	27-Mar-15	54	$0.00	
2-W.11.01	EPU1930	AWARD: ESM Vacuum Chamber	100%	0		08-Jan-15 A		27-Mar-15	55	$0.00	
2-W.11.01	EPU1937	Vacuum Chamber Support	100%	263	08-Jan-15 A	26-Jan-16 A	08-Jan-15	29-Jan-16	3	$76,600.98	
2-W.11.01	EPU1945	RECEIVE: ESM Vacuum Chamber 1 & 2	100%	0		26-Jan-16 A		29-Oct-15	-58	$0.00	
2-W.11.01	EPU2030	Vacuum Chamber - Preliminary Design	100%	40	08-Jan-15 A	06-Mar-15 A	08-Jan-15	03-Mar-15	-3	$54,272.40	
2-W.11.01	EPU2033	Vacuum Chamber - PDR	100%	1	09-Mar-15 A	09-Mar-15 A	04-Mar-15	04-Mar-15	-3	$15,506.40	
2-W.11.01	EPU2037	Vacuum Chamber - PDR Approval	100%	6	23-Mar-15 A	31-Mar-15 A	06-Apr-15	06-Apr-15	5	$7,753.20	
2-W.11.01	EPU2040	Vacuum Chamber - Final Design	100%	16	01-Apr-15 A	22-Apr-15 A	05-Mar-15	31-Mar-15	-16	$54,272.40	
2-W.11.01	EPU2043	Vacuum Chamber - FDR	100%	1	23-Apr-15 A	23-Apr-15 A	01-Apr-15	01-Apr-15	-16	$15,506.40	



(O) NEXT - Detail Schedule

Data Date: 01-Jul-16 14-Jul-16 - 12:13 -

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.11.01	EPU2047	Vacuum Chamber - FDR Approval	100%	1	15-Jun-15 A	15-Jun-15 A	04-May-15	04-May-15	-29	$7,753.20	
2-W.11.01	EPU2050	Vacuum Chamber - Stand and taper transition realization	100%	120	24-Apr-15 A	14-Oct-15 A	02-Apr-15	14-Aug-15	-41	$38,766.00	
2-W.11.01	EPU2060	Vacuum Chamber - Production & Machining of extrusion	100%	67	24-Apr-15 A	30-Jul-15 A	02-Apr-15	14-Aug-15	12	$51,688.00	
2-W.11.01	EPU2070	Vacuum Chamber - Vacuum Chamber NEG coating	100%	11	14-Sep-15 A	29-Sep-15 A	17-Aug-15	25-Sep-15	-1	$51,688.00	
2-W.11.01	EPU2080	Vacuum Chamber - Flat Wire production	100%	26	14-Sep-15 A	20-Oct-15 A	17-Aug-15	25-Sep-15	-16	$38,766.00	
2-W.11.01	EPU2090	Vacuum Chamber - FAT at vendor facility	100%	3	21-Oct-15 A	23-Oct-15 A	28-Sep-15	14-Oct-15	-7	$0.00	
2-W.11.01	EPU2095	Vacuum Chamber - BSA Approval FAT at vendor facility	100%	1	26-Oct-15 A	26-Oct-15 A	15-Oct-15	15-Oct-15	-7	$51,688.00	
2-W.11.01	EPU2100	Vacuum Chamber - Shipment of the 1st vacuum Chamber	100%	3	27-Oct-15 A	30-Oct-15 A	16-Oct-15	28-Oct-15	-1	$0.00	
2-W.11.01	EPU2105	Vacuum Chamber - Receipt of the 1st vacuum Chamber	100%	1	02-Nov-15 A	02-Nov-15 A	29-Oct-15	29-Oct-15	-2	$25,844.00	
2-W.11.01	EPU2110	Vacuum Chamber - Shipment of the 2nd vacuum Chamber	100%	9	04-Jan-16 A	14-Jan-16 A	16-Oct-15	28-Oct-15	-52	$0.00	
2-W.11.01	EPU2113	Vacuum Chamber - Delivery & Receipt of the 2nd vacuum Chamber	100%	1	15-Jan-16 A	15-Jan-16 A	29-Oct-15	29-Oct-15	-52	$25,844.00	
2-W.11.01	EPU2115	Vacuum Chamber - BSA Review of 1st Chamber	100%	10	03-Nov-15 A	16-Nov-15 A	30-Oct-15	28-Jan-16	48	$0.00	
2-W.11.01	EPU2120	Vacuum Chamber - Approved - 1st Vac. Chamber at BNL	100%	1	17-Nov-15 A	17-Nov-15 A	29-Jan-16	29-Jan-16	48	$38,766.00	
2-W.11.01	EPU2125	Vacuum Chamber - BSA Review of 2nd Chamber	100%	5	19-Jan-16 A	25-Jan-16 A	30-Oct-15	28-Jan-16	3	$0.00	
2-W.11.01	EPU2130	Vacuum Chamber - Approved - 2nd Vac. Chamber at BNL	100%	1	26-Jan-16 A	26-Jan-16 A	29-Jan-16	29-Jan-16	3	$38,766.00	
EPU Power Supply			93.07%	397	09-Mar-15 A	30-Sep-16	01-Apr-15	22-Jun-16	-70	$579,264.98	70
2-W.11.01	EPU2200	All EPU Power Supplies (ESM, SIX, & EPU 105) - Design & Write Spec/SOW	100%	57	09-Mar-15 A	28-May-15 A	01-Apr-15	24-Jun-15	20	$109,568.83	
2-W.11.01	EPU2230	Low Curent Power Supplies (ESM, SIX, & EPU 105) - PPM Accept Requisition	100%	0		01-May-15 A		24-Jun-15	38	$0.00	
2-W.11.01	EPU2240	Low Curent Power Supplies (ESM, SIX, & EPU 105) - Prepare & Submit RFQ	100%	5	01-May-15 A	07-May-15 A	25-Jun-15	20-Jul-15	50	$0.00	
2-W.11.01	EPU2250	Low Curent Power Supplies (ESM, SIX, & EPU 105) - Offerors Prepare & Sut	100%	5	08-May-15 A	14-May-15 A	21-Jul-15	17-Aug-15	65	$0.00	
2-W.11.01	EPU2260	Low Curent Power Supplies (ESM, SIX, & EPU 105) - Evaluate Offerors Prop	100%	2	15-May-15 A	18-May-15 A	18-Aug-15	08-Sep-15	78	$0.00	
2-W.11.01	EPU2270	Low Curent Power Supplies (ESM, SIX, & EPU 105) - Negotiate with Offerors	100%	5	19-May-15 A	26-May-15 A	09-Sep-15	15-Sep-15	78	$0.00	
2-W.11.01	EPU2280	Low Curent Power Supplies (ESM, SIX, & EPU 105) - Prepare & Approve Cor	100%	2	27-May-15 A	28-May-15 A	16-Sep-15	14-Oct-15	96	$0.00	
2-W.11.01	EPU2290	AWARD: Low Curent Power Supplies (ESM, SIX, & EPU 105)	100%	0		28-May-15 A		14-Oct-15	96	$0.00	
2-W.11.01	EPU2300	Power Supplies (ESM, SIX, & EPU 105) - Support Fabrication of Ctl & Racks	100%	160	01-Jun-15 A	20-Jan-16 A	15-Oct-15	31-Mar-16	50	$15,097.13	
2-W.11.01	EPU2310	Power Supplies (ESM, SIX, & EPU 105) - Delivery of PS, Ctl & Racks	100%	38	04-Jan-16 A	29-Feb-16 A	01-Mar-16	01-Mar-16	2	$117,020.98	
2-W.11.01	EPU2315	Purchased Electronics	95%	157	22-Feb-16 A	30-Sep-16	01-Apr-16	01-Apr-16	-127	$158,780.48	70
2-W.11.01	EPU2317	Parts for Interface Chassis	82%	106	03-May-16 A	30-Sep-16	01-Jun-16	01-Jun-16	-85	$70,778.82	70
2-W.11.01	EPU2318	Design & Modify Machine Chassis	82%	86	01-Jun-16 A	30-Sep-16				$0.00	70
2-W.11.01	EPU2320	Power Supplies (ESM, SIX, & EPU 105) - Installation	82%	128	01-Apr-16 A	30-Sep-16	04-Apr-16	25-May-16	-89	$63,689.38	70
2-W.11.01	EPU2330	Power Supplies (ESM, SIX, & EPU 105) - Integrated Test	82%	120	13-Apr-16 A	30-Sep-16	07-Mar-16	28-Mar-16	-131	$0.00	70
2-W.11.01	EPU2340	Power Supplies (ESM, SIX, & EPU 105) - Installation (Material)	82%	128	01-Apr-16 A	30-Sep-16	04-Apr-16	25-May-16	-89	$26,564.59	70
2-W.11.01	EPU2345	Power Supplies (ESM, SIX, & EPU 105) - Integrated Test (Material)	82%	120	13-Apr-16 A	30-Sep-16	26-May-16	22-Jun-16	-70	$17,764.78	70
SIX EPU Insertion Device			100%	350	03-Sep-13 A	30-Jan-15 A	03-Sep-13	27-Mar-15	40	$117,136.78	
ESM Procurement Work Package			100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$98.39	
EPU			100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$98.39	
2-W.11.02	SIXEPUFY13	SIX EPU FY13	100%	20	03-Sep-13 A	30-Sep-13 A	03-Sep-13	30-Sep-13	0	$98.39	
SIX Procurement Work Package			100%	287	04-Dec-13 A	30-Jan-15 A	13-Dec-13	27-Mar-15	40	$117,038.39	
SIX EPU			100%	287	04-Dec-13 A	30-Jan-15 A	13-Dec-13	27-Mar-15	40	$117,038.39	
2-W.11.02	MEPU025	SIX - Insertion Device - EPU Procurement Process Begins - INTER-PROJEC	100%	0	30-May-14 A		01-Apr-14		-42	$0.00	
SIX EPU Insertion Device (LONG LEAD PROCUREMENT)			100%	287	04-Dec-13 A	30-Jan-15 A	02-Jan-14	30-Jan-15	1	$97,769.61	
2-W.11.02	EPU1790	SIX EPU - Vendor Support Part 1	100%	58	04-Dec-13 A	28-Feb-14 A	02-Jan-14	28-Feb-14	1	$8,219.00	
2-W.11.02	EPU17901	SIX EPU - Vendor & Procurement Support	100%	140	08-Jul-14 A	30-Jan-15 A	01-Apr-14	30-Jan-15	1	$89,550.61	
2-W.11.02	EPU1800	SIX EPU - PPM Accept Requisition	100%	15	01-Apr-14 A	21-Apr-14 A	01-Apr-14	23-Apr-14	2	$0.00	
2-W.11.02	EPU1810	SIX EPU - Prepare RFP	100%	18	21-Apr-14 A	15-May-14 A	24-Apr-14	14-May-14	0	$0.00	
2-W.11.02	EPU1820	SIX EPU - Call for Bid	100%	34	16-May-14 A	07-Jul-14 A	15-May-14	19-Jun-14	-10	$0.00	
2-W.11.02	EPU1830	SIX EPU - Receive and Evaluate Vendor Proposal	100%	40	08-Jul-14 A	02-Sep-14 A	20-Jun-14	11-Aug-14	-15	$0.00	
2-W.11.02	EPU1840	SIX EPU - Vendor Negotiations	100%	29	03-Sep-14 A	15-Oct-14 A	12-Aug-14	09-Sep-14	-24	$0.00	
2-W.11.02	EPU1850	AWARD: SIX EPU	100%	0		15-Oct-14 A		09-Sep-14	-24	$0.00	
SIX EPU Vacuum Chamber			100%	276	13-Dec-13 A	26-Jan-15 A	13-Dec-13	27-Mar-15	44	$19,268.78	
2-W.11.02	EPU1900	SIX EPU Vacuum Chamber - Start Procurement Process	100%	0	14-Oct-14 A		14-Oct-14		0	$0.00	



(O) NEXT - Detail Schedule

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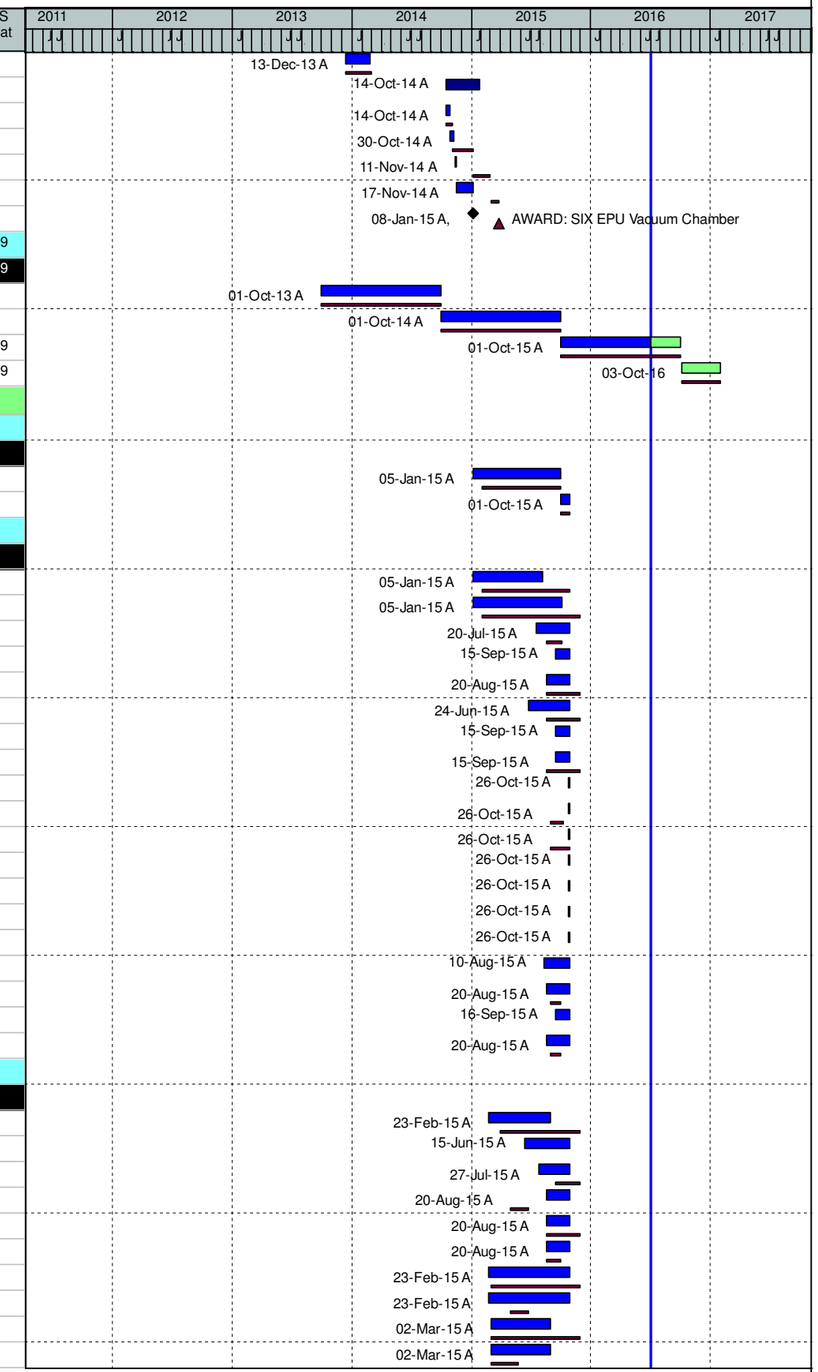
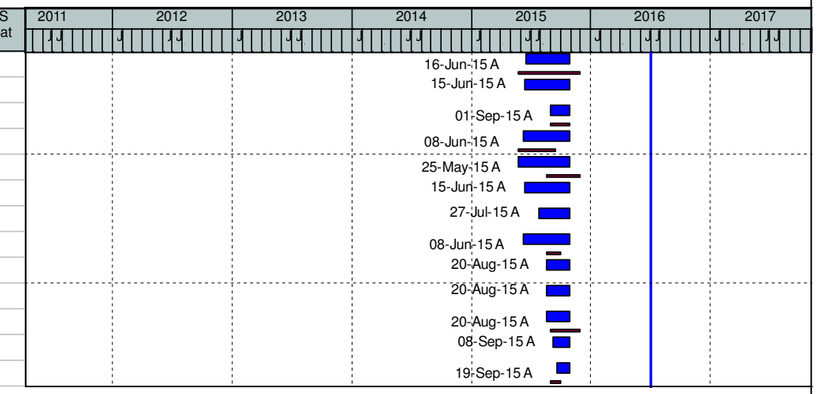
WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.11.02	EPU1955	SIX EPU Vacuum Chamber - Vendor Support Part 1	100%	51	13-Dec-13 A	28-Feb-14 A	13-Dec-13	28-Feb-14	1	$9,664.72	
2-W.11.02	EPU19551	SIX EPU Vacuum Chamber - Procurement Support	100%	68	14-Oct-14 A	26-Jan-15 A	14-Oct-14	26-Jan-15	1	$9,604.06	
2-W.11.02	EPU1960	SIX EPU Vacuum Chamber - PPM Accept Requisition	100%	11	14-Oct-14 A	29-Oct-14 A	14-Oct-14	05-Nov-14	6	$0.00	
2-W.11.02	EPU1965	SIX EPU Vacuum Chamber - Prepare RFP/RFQ - Call for Bids	100%	7	30-Oct-14 A	10-Nov-14 A	06-Nov-14	07-Jan-15	38	$0.00	
2-W.11.02	EPU1970	SIX EPU Vacuum Chamber - Receive and Evaluate Vendor Proposal	100%	4	11-Nov-14 A	17-Nov-14 A	08-Jan-15	27-Feb-15	68	$0.00	
2-W.11.02	EPU1975	SIX EPU Vacuum Chamber - Contract Negotiations	100%	34	17-Nov-14 A	08-Jan-15 A	02-Mar-15	27-Mar-15	54	$0.00	
2-W.11.02	EPU1980	AWARD: SIX EPU Vacuum Chamber	100%	0		08-Jan-15 A		27-Mar-15	54	$0.00	
Insertion Devices Management			83.65%	832	01-Oct-13 A	30-Jan-17	01-Oct-13	31-Jan-17	1	$100,460.23	169
Management			83.65%	832	01-Oct-13 A	30-Jan-17	01-Oct-13	31-Jan-17	1	$100,460.23	169
2-W.11.03	EPU2010	Insertion Devices Management FY14	100%	250	01-Oct-13 A	30-Sep-14 A	01-Oct-13	30-Sep-14	0	$29,731.04	
2-W.11.03	EPU2015	Insertion Devices Management FY15	100%	250	01-Oct-14 A	30-Sep-15 A	01-Oct-14	30-Sep-15	0	$30,682.43	
2-W.11.03	EPU2020	Insertion Devices Management FY16	74.6%	252	01-Oct-15 A	30-Sep-16	01-Oct-15	30-Sep-16	0	$31,664.26	169
2-W.11.03	EPU2335	Insertion Devices Management FY17	0%	80	03-Oct-16	30-Jan-17	03-Oct-16	31-Jan-17	1	$8,382.50	169
ID & FE Installation & Testing			100%	208	05-Jan-15 A	30-Oct-15 A	02-Feb-15	30-Nov-15	20	$1,452,816.13	
ID & FE Installation & Testing Management			100%	208	05-Jan-15 A	30-Oct-15 A	02-Feb-15	30-Oct-15	1	$20,792.96	
No Procurement Work Packages - Glb			100%	208	05-Jan-15 A	30-Oct-15 A	02-Feb-15	30-Oct-15	1	$20,792.96	
2-W.12.01	IDIS1000	ID & FE Installation & Testing Management - FY15	100%	188	05-Jan-15 A	30-Sep-15 A	02-Feb-15	30-Sep-15	0	$19,185.88	
2-W.12.01	IDIS1110	ID & FE Installation & Testing Management - FY16	100%	20	01-Oct-15 A	30-Oct-15 A	01-Oct-15	30-Oct-15	1	$1,607.08	
ID Installation & Testing			100%	208	05-Jan-15 A	30-Oct-15 A	02-Feb-15	30-Nov-15	20	$583,970.36	
No Procurement Work Packages - Glb			100%	208	05-Jan-15 A	30-Oct-15 A	02-Feb-15	30-Nov-15	20	$583,970.36	
2-W.12.02	IDIS1010	IVU Measurement & Bakeout	100%	150	05-Jan-15 A	06-Aug-15 A	02-Feb-15	28-Oct-15	57	$91,116.01	
2-W.12.02	IDIS1015	IVU Measurement & Bakeout (Material)	100%	192	05-Jan-15 A	06-Oct-15 A	02-Feb-15	30-Nov-15	36	$11,263.85	
2-W.12.02	IDIS1020	IVU Installation	100%	72	20-Jul-15 A	30-Oct-15 A	17-Aug-15	06-Oct-15	-16	$99,561.34	
2-W.12.02	IDIS10201	IVU Installation - extra support	100%	32	15-Sep-15 A	30-Oct-15 A				$0.00	
2-W.12.02	IDIS1025	IVU Installation (Material)	100%	49	20-Aug-15 A	30-Oct-15 A	17-Aug-15	30-Nov-15	20	$11,263.85	
2-W.12.02	IDIS1030	Straight Section Installation	100%	89	24-Jun-15 A	30-Oct-15 A	17-Aug-15	30-Nov-15	20	$144,939.83	
2-W.12.02	IDIS10301	Straight Section Installation - extra support	100%	32	15-Sep-15 A	30-Oct-15 A				$0.00	
2-W.12.02	IDIS1035	Straight Section Installation (Material)	100%	32	15-Sep-15 A	30-Oct-15 A	17-Aug-15	30-Nov-15	20	$22,527.70	
2-W.12.02	IDIS10351	EPU Inspection, testing & magnetic measurement (ESM EPU57 only)	100%	4	26-Oct-15 A	30-Oct-15 A				$0.00	
2-W.12.02	IDIS10352	Vacuum installation & bake (ESM EPU57 only)	100%	4	26-Oct-15 A	30-Oct-15 A	01-Sep-15	08-Oct-15	-14	$57,089.23	
2-W.12.02	IDIS10353	Vacuum installation & bake (ESM EPU105 & SIX EPU57)	100%	4	26-Oct-15 A	30-Oct-15 A	01-Sep-15	30-Oct-15	1	$34,070.15	
2-W.12.02	IDIS10354	EPU Insertion device installation (ESM EPU57 only)	100%	4	26-Oct-15 A	30-Oct-15 A				$0.00	
2-W.12.02	IDIS10355	EPU Insertion device installation (ESM EPU105 & SIX EPU57)	100%	4	26-Oct-15 A	30-Oct-15 A				$0.00	
2-W.12.02	IDIS10356	RF BPM install & testing (ESM EPU57 only)	100%	4	26-Oct-15 A	30-Oct-15 A				$0.00	
2-W.12.02	IDIS10357	RF BPM install & testing (ESM EPU105 & SIX EPU57)	100%	4	26-Oct-15 A	30-Oct-15 A				$0.00	
2-W.12.02	IDIS10358	Procurement of misc. cables, hardware & vacuum components	100%	57	10-Aug-15 A	30-Oct-15 A				$0.00	
2-W.12.02	IDIS1040	Final bake, survey & test	100%	49	20-Aug-15 A	30-Oct-15 A	31-Aug-15	30-Sep-15	-20	$106,587.01	
2-W.12.02	IDIS10401	Final bake, survey & test - extra support	100%	31	16-Sep-15 A	30-Oct-15 A				$0.00	
2-W.12.02	IDIS1045	Final bake, survey & test (Material)	100%	49	20-Aug-15 A	30-Oct-15 A	31-Aug-15	30-Sep-15	-20	$5,551.39	
FE Installation & Testing			100%	175	23-Feb-15 A	30-Oct-15 A	02-Mar-15	30-Nov-15	20	$848,052.81	
No Procurement Work Packages - Glb			100%	175	23-Feb-15 A	30-Oct-15 A	02-Mar-15	30-Nov-15	20	$848,052.81	
2-W.12.03	IDIS1050	Stand Assembly Installation	100%	133	23-Feb-15 A	31-Aug-15 A	01-Apr-15	30-Nov-15	62	$203,118.60	
2-W.12.03	IDIS10501	Stand Assembly Installation - extra support - ETC	100%	96	15-Jun-15 A	30-Oct-15 A				$0.00	
2-W.12.03	IDIS105011	Stand Assembly Installation - Future support - ETC	100%	67	27-Jul-15 A	30-Oct-15 A	16-Sep-15	30-Nov-15	20	$36,225.01	
2-W.12.03	IDIS1055	Stand Assembly Installation - Material	100%	49	20-Aug-15 A	30-Oct-15 A	01-May-15	26-Jun-15	-86	$32,635.95	
2-W.12.03	IDIS1060	Exit Pipe Installation	100%	49	20-Aug-15 A	30-Oct-15 A	17-Aug-15	30-Nov-15	20	$67,856.57	
2-W.12.03	IDIS1065	Exit Pipe Installation (Material)	100%	49	20-Aug-15 A	30-Oct-15 A	17-Aug-15	30-Sep-15	-20	$2,342.95	
2-W.12.03	IDIS1070	X-ray Flag Manufacture & Installation	100%	175	23-Feb-15 A	30-Oct-15 A	02-Mar-15	30-Nov-15	20	$84,946.88	
2-W.12.03	IDIS1075	X-ray Flag Manufacture & Installation - Material	100%	175	23-Feb-15 A	30-Oct-15 A	01-May-15	26-Jun-15	-86	$92,615.53	
2-W.12.03	IDIS1080	Cable Pulling	100%	128	02-Mar-15 A	31-Aug-15 A	02-Mar-15	30-Nov-15	62	$77,498.58	
2-W.12.03	IDIS1083	Cable Pulling (Material)	100%	128	02-Mar-15 A	31-Aug-15 A	02-Mar-15	22-May-15	-68	$3,514.43	



(O) NEXT - Detail Schedule

WBS	Activity ID	Activity Name	% Comp	Dur	WS Start	WS Finish	BL Start	BL Finish	Var - BL Finish	BL Project Cost	WS Float
2-W.12.03	IDIS1085	Cable Terminating	100%	95	16-Jun-15 A	30-Oct-15 A	26-May-15	30-Nov-15	20	$77,737.94	
2-W.12.03	IDIS10851	Cable Pulling & Terminating - extra support - ETC	100%	96	15-Jun-15 A	30-Oct-15 A				$0.00	
2-W.12.03	IDIS108511	Cable Pulling & Terminating - Future support - ETC	100%	41	01-Sep-15 A	30-Oct-15 A	01-Sep-15	30-Oct-15	1	$30,553.46	
2-W.12.03	IDIS1087	Cable Terminating (Material)	100%	101	08-Jun-15 A	30-Oct-15 A	26-May-15	15-Sep-15	-31	$3,514.43	
2-W.12.03	IDIS1090	Plumbing & Connections	100%	110	25-May-15 A	30-Oct-15 A	17-Aug-15	30-Nov-15	20	$36,082.88	
2-W.12.03	IDIS10901	Plumbing & Connections - extra support - ETC	100%	96	15-Jun-15 A	30-Oct-15 A				$0.00	
2-W.12.03	IDIS109011	Plumbing & Connections - Future support - ETC	100%	67	27-Jul-15 A	30-Oct-15 A				$0.00	
2-W.12.03	IDIS1095	Plumbing & Connections (Material)	100%	101	08-Jun-15 A	30-Oct-15 A	17-Aug-15	30-Sep-15	-20	$4,685.90	
2-W.12.03	IDIS10951	Ratchet Wall Collimator Installation	100%	49	20-Aug-15 A	30-Oct-15 A				$0.00	
2-W.12.03	IDIS10952	Procurement of misc. cables, hardware & vacuum components	100%	49	20-Aug-15 A	30-Oct-15 A				$0.00	
2-W.12.03	IDIS1100	Final bake, survey & test	100%	49	20-Aug-15 A	30-Oct-15 A	31-Aug-15	30-Nov-15	20	$92,380.75	
2-W.12.03	IDIS11001	Final bake, survey & test - extra support	100%	37	08-Sep-15 A	30-Oct-15 A				$0.00	
2-W.12.03	IDIS1105	Final bake, survey & test (Mateiral)	100%	28	19-Sep-15 A	30-Oct-15 A	31-Aug-15	30-Sep-15	-20	$2,342.95