Activity ID	Activity Name or task description	Percentage of Activity (tasks only)	Original Duration	Remaining Duration	Start (schedule)	Finish (schedule)	Total Float	Budgeted Labor Units	Budgeted Labor Cost	Budgeted Total Cost	Percent Complete Task	Percent Complete Activity	Behindedness (Labor units)
1.5.3 COMPUTING			149.8	149.8	4/1/11	4/8/14	12.2	704.3	$1,612,747	$1,694,633			
1.5.3.2 ONLINE COMPUTING			149.8	149.8	4/1/11	4/8/14	12.2	704.3	$1,612,747	$1,694,633			
1532005	**Proc Trigger Electrnc's PR**		12.4	12.4	1/3/12	3/30/12	34.4	3	$8,212	$8,212			
1532007	**Proc Trigger Electrnc's**		12.6	12.6	4/2/12	6/29/12	34.4	0	$0	$40,000			
1532010	**Proc L3 Farm infrastructure PR**		11.6	11.6	10/3/11	12/30/11	31.8	4	$10,562	$10,562			
1532010a	**Proc L3 Farm infrastructure Phase 1**		24.6	24.6	1/3/12	6/27/12	31.8	0	$0	$12,000			
1532010b	**Proc L3 Farm infrastructure Phase 2**		17	17	6/28/12	10/25/12	31.8	0	$0	$25,000			
1532011E	**FY11 Travel (ONLINE COMP)**		12.8	12.8	7/1/11	9/30/11	25.6	0	$0	$386			
1532012E	**FY12 Travel (ONLINE COMP)**		49.6	49.6	10/3/11	10/1/12	25.6	0	$0	$1,500			
1532013E	**FY13 Travel (ONLINE COMP)**		49.4	49.4	10/2/12	9/30/13	25.6	0	$0	$1,500			
1532014E	**FY14 Travel (ONLINE COMP)**		11.8	11.8	10/1/13	12/31/13	25.6	0	$0	$1,500			
1532015	**Install L3 Farm infrastructure**		32.2	32.2	6/28/12	2/22/13	31.8	8	$20,736	$20,736			
1532020	**DUMMY**		0.2	0.2	10/1/12	10/1/12	49.4	0	$0	$0			
1532025	**Plan Front-End Software**		36.8	36.8	8/1/11	4/27/12	9	16.5	$45,164	$45,164		**28%**	12.27
	Determine format that front-end configurations will be kept in (XML files, Database, ...)	*10%*						*1.65*			*50%*		
	How the front end will interface to the translation table used in offline	*15%*						*2.48*			*10%*		
	Authentication/configuration integrity assurance system	*15%*						*2.48*			*10%*		
	How users will switch between configurations	*15%*						*2.48*			*50%*		
	Map board layout in crates with expected bandwidth for each crate	*25%*						*4.13*			*50%*		
	Planning document in DocDB	*20%*						*3.30*			*0%*		
1532030	**Plan DAQ Software Event Unblocking**		36.8	36.8	8/1/11	4/27/12	27.4	9	$24,635	$24,635		**59%**	3.92
	For plan for where and how often disentangling will occur (EB, L3 farm, offline, ...?)	*10%*						*0.90*			*50%*		#DIV/0!
	CPU/memory/bandwidth resources	*10%*						*0.90*			*50%*		#DIV/0!
	Proposal for code structure	*30%*						*2.70*			*50%*		#DIV/0!
	Translation table	*35%*						*3.15*			*75%*		#DIV/0!
	Planning document in DocDB	*15%*						*1.35*			*50%*		#DIV/0!
1532030a	**Plan DAQ Software Scripts**		36.8	36.8	8/1/11	4/27/12	27.4	6	$16,423	$16,423		**100%**	0.14
	Decide Language Policy (including preferred languages)	*20%*						*1.20*			*100%*		#DIV/0!
	Establish directory structure in repository/disk	*20%*						*1.20*			*100%*		#DIV/0!
	Decide on access restriction policy (repository and disk) and how it is implemented	*25%*						*1.50*			*100%*		#DIV/0!
	Planning document in DocDB	*35%*						*2.10*			*100%*		#DIV/0!
1532030b	**Plan DAQ Software Run Control**		36.8	36.8	8/1/11	4/27/12	27.4	5	$13,686	$13,686		**0%**	5.12
	Remote access plan	*10%*						*0.50*			*0%*		#DIV/0!
	List of suggested customization for Hall-D	*30%*						*1.50*			*0%*		#DIV/0!
	Links to DAQ Group documentation on RC in Hall-D documentation system	*20%*						*1.00*			*0%*		#DIV/0!
	Planning document in DocDB	*40%*						*2.00*			*0%*		#DIV/0!
1532030c	**Plan DAQ Software Code Management**		36.8	36.8	8/1/11	4/27/12	27.4	4	$10,949	$10,949		**100%**	0.09
	Decide on versioning system, host location, and access mechanisms	*10%*						*0.40*			*100%*		#DIV/0!
	Plan for integration with offline	*15%*						*0.60*			*100%*		#DIV/0!
	Choose build system (autoconf, make, scons,...?) and form initial plan for implementation	*25%*						*1.00*			*100%*		#DIV/0!
	Source code directory structure	*20%*						*0.80*			*100%*		#DIV/0!
	Planning document in DocDB	*30%*						*1.20*			*100%*		#DIV/0!
1532035	**Plan Monitoring Framework**		49.8	49.8	6/1/11	5/31/12	4.4	6	$16,423	$16,423		**36%**	3.37
	Develop overall monitoring, archiving and display philosophy and determine requirements	*15%*						*0.90*			*30%*		#DIV/0!
	Determine overall database requirements	*15%*						*0.90*			*25%*		#DIV/0!
	Determine computer and network monitoring requirements	*10%*						*0.60*			*30%*		#DIV/0!
	Determine farm management requirements	*10%*						*0.60*			*100%*		#DIV/0!
	Evaluate use of IRMIS for controls configuration database	*15%*						*0.90*			*50%*		#DIV/0!
	Test concepts as needed	*25%*						*1.50*			*30%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.60*			*0%*		#DIV/0!
1532035a	**Plan Monitoring Scalers**		49.8	49.8	6/1/11	5/31/12	4.4	3	$8,212	$8,212		**100%**	0.00
	Determine monitoring, display, archive and alarm requirements	*30%*						*0.90*			*100%*		#DIV/0!
	Design monitoring system	*40%*						*1.20*			*100%*		#DIV/0!
	Test concepts	*20%*						*0.60*			*100%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.30*			*100%*		#DIV/0!
1532035b	**Plan Monitoring Histograms**		49.8	49.8	6/1/11	5/31/12	4.4	4	$10,949	$10,949		**41%**	2.06
	Determine monitoring, display, archive and alarm requirements	*35%*						*1.40*			*10%*		#DIV/0!
	Design monitoring framework	*35%*						*1.40*			*50%*		#DIV/0!
	Test monitoring concepts	*20%*						*0.80*			*75%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.40*			*50%*		#DIV/0!
1532035c	**Plan Monitoring Remote**		49.8	49.8	6/1/11	5/31/12	4.4	3	$8,212	$8,212		**0%**	2.77
	Evaluate remote monitoring requirements	*30%*						*0.90*			*0%*		#DIV/0!
	Evaluate security issues	*10%*						*0.30*			*0%*		#DIV/0!
	Design remote monitoring system	*30%*						*0.90*			*0%*		#DIV/0!

	Test remote monitoring and security concepts	*20%*						*0.60*			*0%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.30*			*0%*		#DIV/0!
1532035d	**Plan Monitoring Hardware Status**		49.8	49.8	6/1/11	5/31/12	4.4	4	$10,949	$10,949		**22%**	2.82
	Determine monitoring, display, archive and alarm requirements	*40%*						*1.60*			*30%*		#DIV/0!
	Design hardware monitoring system	*30%*						*1.20*			*20%*		#DIV/0!
	Test hardware monitoring concepts	*20%*						*0.80*			*20%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.40*			*0%*		#DIV/0!
1532035f	**Plan Monitoring Process Status**		49.8	49.8	6/1/11	5/31/12	4.4	3	$8,212	$8,212		**27%**	1.96
	Evaluate monitoring, display, archive and alarm requirements	*35%*						*1.05*			*30%*		#DIV/0!
	Design monitoring system	*35%*						*1.05*			*30%*		#DIV/0!
	Test concepts	*20%*						*0.60*			*30%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.30*			*0%*		#DIV/0!
1532035g	**Plan Monitoring Trigger**		49.8	49.8	6/1/11	5/31/12	4.4	2	$5,474	$5,474		**18%**	1.50
	Determine monitoring, display, archive and alarm requirements	*35%*						*0.70*			*50%*		#DIV/0!
	Design monitoring system	*35%*						*0.70*			*0%*		#DIV/0!
	Test concepts	*20%*						*0.40*			*0%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.20*			*0%*		#DIV/0!
1532040	**Plan Alarm Sys**		36.2	36.2	10/3/11	6/27/12	0.8	11	$15,055	$15,055		**90%**	0.00
	Determine alarm system requirements	*30%*						*3.30*			*100%*		#DIV/0!
	Evaluate existing alarm packages	*30%*						*3.30*			*100%*		#DIV/0!
	Choose and test alarm package	*30%*						*3.30*			*100%*		#DIV/0!
	Planning document in DocDB	*10%*						*1.10*			*0%*		#DIV/0!
1532045	**Plan Archiving DAQ Configuration**		32	32	10/3/11	5/25/12	5	3	$8,212	$8,212		**100%**	0.00
	Determine archiving requirements	*35%*						*1.05*			*100%*		#DIV/0!
	Design archiving system	*35%*						*1.05*			*100%*		#DIV/0!
	Test archiving concepts	*20%*						*0.60*			*100%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.30*			*100%*		#DIV/0!
1532045a	**Plan Archiving Run Info**		32	32	10/3/11	5/25/12	5	5	$13,686	$13,686		**63%**	1.41
	Determine archiving requirements	*35%*						*1.75*			*75%*		#DIV/0!
	Design archiving system	*35%*						*1.75*			*75%*		#DIV/0!
	Test archiving concepts	*20%*						*1.00*			*25%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.50*			*50%*		#DIV/0!
1532045b	**Plan Archiving Controls**		32	32	10/3/11	5/25/12	5	5	$13,686	$13,686		**83%**	0.41
	Determine archiving requirements	*30%*						*1.50*			*100%*		#DIV/0!
	Evaluate existing controls archiving packages	*30%*						*1.50*			*100%*		#DIV/0!
	Choose and test archiving package	*30%*						*1.50*			*75%*		#DIV/0!
	Planning document in DocDB	*10%*						*0.50*			*0%*		#DIV/0!
1532050	**Plan Event Display**		36.2	36.2	7/1/11	3/27/12	13.6	13	$5,474	$5,474		**50%**	8.30
	Create list of requirements including list of features, data format, and I/O	*75%*						*9.75*			*50%*		#DIV/0!
	Decide on framework/drawing package	*25%*						*3.25*			*50%*		#DIV/0!
1532055	**Plan Storage Mngmnt**		24	24	10/3/11	3/30/12	13	11.3	$29,227	$29,227		**100%**	2.16
	Decide on hardware and filesystem	*30%*						*3.39*			*100%*		#DIV/0!
	Detailed plan for connection to computing center	*20%*						*2.26*			*100%*		#DIV/0!
	Reading and writing bandwidth requirements from disk	*10%*						*1.13*			*100%*		#DIV/0!
	Slow controls archiving to tape silo	*10%*						*1.13*			*100%*		#DIV/0!
	Planning document in DocDB	*30%*						*3.39*			*100%*		#DIV/0!
1532060	**Plan Experiment Controls Framework**		49.6	49.6	4/1/11	3/30/12	13	4	$10,949	$10,949		**56%**	2.16
	Design a directory structure and a makefile scheme.	15%						*0.6*			100%		#DIV/0!
	Create an EPICS IOC application and compile the libraries and executables within that directory scheme.	10%						*0.4*			100%		#DIV/0!
	Study the possibility and practicality of code management system for PLC programs and HMIs.	10%						*0.4*			80%		#DIV/0!
	Create a small PLC-based test application, interface it with PLC and test it.	10%						*0.4*			100%		#DIV/0!
	Create a small Labview program and interface it with EPICS and evaluate the reliability of such a combined system.	10%						*0.4*			100%		#DIV/0!
	Incorporate the aforementioned sample applications into AFECS framework.	30%						*1.2*			0%		#DIV/0!
	Define guidelines for most efficient interface between different types of control systems.	5%						*0.2*			50%		#DIV/0!
	Create the planning document in DocDB.	10%						*0.4*			0%		#DIV/0!
1532060a	**Plan Experiment Controls Display management**		49.6	49.6	4/1/11	3/30/12	13	3	$8,212	$8,212		**80%**	0.88
	Identify applications which need control and monitoring, and for each such application determine what screens they will require.	25%						*0.75*			100%		#DIV/0!
	Study a few of most eligible frameworks and evaluate their applicability to Hall D systems.	25%						*0.75*			100%		#DIV/0!
	Make a prototype application utilizing the most favorable display management framework to identify the possible diffculties which we may encounter using it.	30%						*0.9*			100%		#DIV/0!
	Create the planning document in DocDB.	20%						*0.6*			0%		#DIV/0!
1532060b	**Plan Experiment Controls Backup/Restore**		49.6	49.6	4/1/11	3/30/12	13	3	$8,212	$8,212		**10%**	2.98
	Study existing backup/restore options for EPICS-based applications.	10%						*0.3*			100%		#DIV/0!
	Design a framework for configuring backing and restoring the large number of EPICS PVs.	20%						*0.6*			0%		#DIV/0!
	Create a prototype EPICS application requiring backing and restoring variables, and thoroughly test it the chosen framework.	10%						*0.3*			0%		#DIV/0!
	Study how PLC-based applications restore the value of its control tags, and how we could configure the applications such that the desired values are restored.	10%						*0.3*			0%		#DIV/0!

	Design a framework for configuring backing and restoring the large number of tags.	15%						*0.45*			0%		#DIV/0!
	Create a prototype PLC application requiring backing and restoring variables, and thoroughly test it the chosen approach.	15%						*0.45*			0%		#DIV/0!
	Study the needs for backup/restore for other type of control systems used in the hall, such as LabView.	10%						*0.3*			0%		#DIV/0!
	Create the planning document in DocDB.	10%						*0.3*			0%		#DIV/0!
1532060c	**Plan Experiment Controls Magnet PS**		49.6	49.6	4/1/11	3/30/12	13	4	$10,949	$10,949		**0%**	4.38
	Study power supplies for four magnets in terms of hardware and the available software	20%						*0.8*			0%		#DIV/0!
	Develop general plan for controlling each magnet power supply	70%						*2.8*			0%		#DIV/0!
	Write DocDB Document	10%						*0.4*			0%		#DIV/0!
1532060d	**Plan Experiment Controls HV**		49.6	49.6	4/1/11	3/30/12	13	3	$8,212	$8,212		**100%**	0.28
	Study available options for CAEN SY1527 mainframe EPICS drivers with A1535N, A1535SN and A1535P	25%						*0.75*			100%		#DIV/0!
	Obtain one CAN-bus/Ethernet bridge and the software used by IU and evaluate the work required for implementing it into EPICS	25%						*0.75*			100%		#DIV/0!
	Determine what set of HV-related parameters for CAEN and CAN-bas systems need to be accessed	15%						*0.45*			100%		#DIV/0!
	Draft a set of HV GUIs	15%						*0.45*			100%		#DIV/0!
	Understand how HV alarms should be included into common alarm handling system	5%						*0.15*			100%		#DIV/0!
	Plan integration of HV parameters values into Hall D archiving scheme	5%						*0.15*			100%		#DIV/0!
	Write DocDB Document	10%						*0.3*			100%		#DIV/0!
1532060f	**Plan Experiment Controls LV**		49.6	49.6	4/1/11	3/30/12	13	4	$10,949	$10,949		**100%**	0.38
	Identify and study hardware that provides/distributes preamp low voltages and SiPM bias voltages	30%						*1.2*			100%		#DIV/0!
	Search for the best options for LV control system fitting Hall D needs	30%						*1.2*			100%		#DIV/0!
	Draft a set of LV GUIs	30%						*1.2*			100%		#DIV/0!
	Write DocDB Document	10%						*0.4*			100%		#DIV/0!
1532060g	**Plan Experiment Controls Motors**		49.6	49.6	4/1/11	3/30/12	13	4	$10,949	$10,949		**55%**	2.18
	Identify all applications requiring controlling motors	20%						*0.8*			100%		#DIV/0!
	Select the hardware required for each application	35%						*1.4*			75%		#DIV/0!
	Plan software which will need to be developed for each application	35%						*1.4*			25%		#DIV/0!
	Write DocDB Document	10%						*0.4*			0%		#DIV/0!
1532060h	**Plan Experiment Controls Gas Systems**		49.6	49.6	4/1/11	3/30/12	13	4	$10,949	$10,949		**48%**	2.46
	Identify the hardware components in the drift chamber gas systems that need to be directly controlled	20%						*0.8*			60%		#DIV/0!
	Determine the best framework for controlling different components of the gas system	40%						*1.6*			60%		#DIV/0!
	Draft a plan for the control system based on the available gas system design	20%						*0.8*			60%		#DIV/0!
	Write DocDB Document	20%						*0.8*			0%		#DIV/0!
1532060j	**Plan Experiment Controls Temperature**		49.6	49.6	4/1/11	3/30/12	13	4	$10,949	$10,949		**2%**	4.32
	Identify control points for various Hall D systems requiring temperature control	15%						*0.6*			10%		#DIV/0!
	Determine the hardware required for temperature control	40%						*1.6*			0%		#DIV/0!
	Design control system based on available description of the problems	25%						*1*			0%		#DIV/0!
	Write DocDB Document	20%						*0.8*			0%		#DIV/0!
1532060k	**Plan Experiment Controls Target**		49.6	49.6	4/1/11	3/30/12	13	5	$13,686	$13,686		**39%**	3.52
	Communicate with the Jlab target group and determine the scope of the work and the control points	30%						*1.5*			80%		#DIV/0!
	Decide on the hardware required and the framework to be used for the target controls	30%						*1.5*			50%		#DIV/0!
	Design a work plan for creating a control system	25%						*1.25*			0%		#DIV/0!
	Write DocDB Document	15%						*0.75*			0%		#DIV/0!
1532060n	**Plan Experiment Controls Interface with DAQ**		49.6	49.6	4/1/11	3/30/12	13	3	$8,212	$8,212		**0%**	3.28
	Create initial list of controls/monitoring variables DAQ should be aware of	*25%*						*1.50*			*0%*		#DIV/0!
	Plan for storing configurations in repository and on disk	*20%*						*1.20*			*0%*		#DIV/0!
	Planning document in DocDB	*55%*						*3.30*			*0%*		#DIV/0!
1532065	**Trigger Board Initialization**		74	74	7/1/11	12/31/12	38.2	27	$72,452	$72,452			15.12
1532067	**Level 1 Verification/debugging**		86.4	86.4	7/1/11	4/1/13	7.4	24	$63,370	$63,370			11.53
1532070	**Write Front-End Software**		44	44	4/30/12	3/20/13	9	22	$60,218	$60,218			0.25
1532075	**Write DAQ Software Event Unblocking**		44	44	4/30/12	3/20/13	27.4	12	$32,846	$32,846			0.14
1532075a	**Write DAQ Software Scripts**		44	44	4/30/12	3/20/13	27.4	10	$27,372	$27,372		**0%**	0.11
	Create Scripts directory structure in repository	*5%*						*0.50*			*0%*		
	Create special accounts with appropriate permissions on HDCC (Hall-D Computing Cluster)	*5%*						*0.50*					
	Document scripts directory structure and access restrictions in Operator's Manual	*5%*						*0.50*					
	Write online utility scripts (command-line)	*45%*						*4.50*					
	Write GUI scripts	*40%*						*4.00*					
1532075b	**Write DAQ Software Run Control**		44	44	4/30/12	3/20/13	27.4	8	$21,898	$21,898			0.09
1532075c	**Write DAQ Software Code Management**		44	44	4/30/12	3/20/13	27.4	4	$10,949	$10,949			0.05
1532080	**Write Monitoring Framework**		44	44	6/1/12	4/22/13	4.4	14	$21,898	$21,898			0.00
1532080a	**Write Monitoring Scalers**		44	44	6/1/12	4/22/13	4.4	6	$16,423	$16,423			0.00
1532080b	**Write Monitoring Histograms**		44	44	6/1/12	4/22/13	4.4	14	$16,423	$16,423		**0%**	0.00
	Install DB Server in CH	*4%*						*0.56*			*0%*		

	Define DB tables and implement automatic backups	*4%*						*0.56*				*0%*		
	Install/Configure Farm Management System on all monitoring nodes	*14%*						*1.96*				*0%*		
	Write command line tools for starting/stopping histogram monitoring processes	*7%*						*0.98*				*0%*		
	Write accumulator/archiver program	*14%*						*1.96*				*0%*		
	Write GUI for managing farm processes	*22%*						*3.08*				*0%*		
	Write Monitoring Farm DAQ Component	*14%*						*1.96*				*0%*		
	Add section to Operator's Manual	*7%*						*0.98*				*0%*		
	Test system	*14%*						*1.96*				*0%*		
1532080c	**Write Monitoring Remote**		44	44	6/1/12	4/22/13	4.4	12	$10,949	$10,949				0.00
1532080d	**Write Monitoring Hardware Status**		44	44	6/1/12	4/22/13	4.4	4	$10,949	$10,949				0.00
1532080f	**Write Monitoring Process Status**		44	44	6/1/12	4/22/13	4.4	6	$16,423	$16,423				0.00
1532080g	**Write Monitoring Trigger**		44	44	6/1/12	4/22/13	4.4	5	$13,686	$13,686				0.00
1532085	**Write Alarm Sys**		44	44	6/28/12	5/16/13	0.8	13	$20,529	$20,529				0.00
1532090	**Write Archiving DAQ Configuration**		44	44	5/29/12	4/17/13	5	6	$15,262	$15,262				0.00
1532090a	**Write Archiving Run Info**		44	44	5/29/12	4/17/13	5	8	$20,349	$20,349				0.00
1532090b	**Write Archiving Controls**		44	44	5/29/12	4/17/13	5	10	$25,436	$25,436				0.00
1532095	**Write Event Display**		44	44	3/28/12	2/14/13	13.6	44	$0	$0				4.99
1532100	**Write Storage Mngmnt**		44	44	4/2/12	2/20/13	13	11.5	$29,348	$29,348				1.12
1532105	**Write Experiment Control Framework**		44	44	4/2/12	2/20/13	13	8	$21,898	$21,898				0.78
1532105a	**Write Experiment Display Management**		44	44	4/2/12	2/20/13	13	10	$27,372	$27,372				0.98
1532105b	**Write Experiment Display Backup/Restore**		44	44	4/2/12	2/20/13	13	3	$8,212	$8,212				0.29
1532105c	**Write Experiment Magnet PS**		44	44	4/2/12	2/20/13	13	10	$27,372	$27,372				0.98
1532105d	**Write Experiment HV**		44	44	4/2/12	2/20/13	13	23	$41,058	$41,058				2.25
1532105f	**Write Experiment LV**		44	44	4/2/12	2/20/13	13	16	$43,795	$43,795				1.56
1532105g	**Write Experiment Motors**		44	44	4/2/12	2/20/13	13	13	$24,635	$24,635				1.27
1532105h	**Write Experiment Gas Systems**		44	44	4/2/12	2/20/13	13	15	$30,109	$30,109				1.46
1532105j	**Write Experiment Control Temerature**		44	44	4/2/12	2/20/13	13	8	$21,898	$21,898				0.78
1532105k	**Write Experiment Control Target**		44	44	4/2/12	2/20/13	13	14	$38,321	$38,321				1.37
1532105n	**Write Experiment Control Interface with DAQ**		44	44	4/2/12	2/20/13	13	4	$10,949	$10,949				0.39
1532109	**DUMMY**		0.2	0.2	10/1/12	10/1/12	49.4	0	$0	$0				0.00
1532110	**Check-out Front-End Software**		44	44	3/21/13	2/7/14	9	11	$30,109	$30,109				0.00
1532115	**Check-out DAQ Software**		25.6	25.6	5/24/13	11/22/13	18.2	11	$30,109	$30,109				0.00
1532120	**Check-out Monitoring**		44	44	4/23/13	3/13/14	4.4	22	$60,218	$60,218				0.00
1532125	**Check-out Alarm Sys**		44	44	5/17/13	4/8/14	0.8	15	$41,058	$41,058				0.00
1532130	**Check-out Archiving Sys**		44	44	4/18/13	3/10/14	5	11	$30,109	$30,109				0.00
1532135	**Check-out Event Displays**		44	44	2/15/13	1/6/14	13.6	11	$16,423	$16,423				0.00
1532140	**Check-out L3 Farm infrastructure**		16.8	16.8	5/31/13	9/27/13	18.2	11	$28,754	$28,754				0.00
1532145	**Check-out Storage Mngmnt Software**		44	44	2/21/13	1/9/14	13	11	$28,754	$28,754				0.00
1532150	**Check-out Experiment Control Software Framework**		44	44	5/2/13	3/24/14	3	4	$10,949	$10,949				0.00
1532155	**Check-out Experiment Control Software Displaye Manegement**		44	44	2/21/13	1/9/14	13	3	$8,212	$8,212				0.00
1532160	**Check-out Experiment Control Software Backup/Restore**		44	44	2/21/13	1/9/14	13	2	$5,474	$5,474				0.00
1532165	**Check-out Experiment Control Software Magnet PS**		44	44	2/21/13	1/9/14	13	4	$10,949	$10,949				0.00
1532170	**Check-out Experiment Control Software HV**		44	44	2/21/13	1/9/14	13	4	$10,949	$10,949				0.00
1532175	**Check-out Experiment Control Software LV**		44	44	2/21/13	1/9/14	13	3	$8,212	$8,212				0.00
1532180	**Check-out Experiment Control Software Motors**		44	44	2/21/13	1/9/14	13	4	$10,949	$10,949				0.00
1532185	**Check-out Experiment Control Software Gas Systems**		44	44	2/21/13	1/9/14	13	3	$8,212	$8,212				0.00
1532190	**Check-out Experiment Control Software Temperature**		44	44	2/21/13	1/9/14	13	3	$8,212	$8,212				0.00
1532195	**Check-out Experiment Control Software Target**		44	44	2/21/13	1/9/14	13	4	$10,949	$10,949				0.00
1532200	**Check-out Experiment Control Software DAQ Interface**		44	44	2/21/13	1/9/14	13	2	$5,474	$5,474				0.00
1532205	**Level 1 Expert Software**		44	44	4/2/13	2/20/14	7.4	11	$29,916	$29,916				0.00
1532075b	**Write DAQ Software Run Control**		44	44	4/30/12	3/20/13	31.8	6.4	$18,076	$18,076			**0%**	0.08
	Create Run Control GUI using CSS/BOY	40%						*2.56*				0%		#DIV/0!
	Interface between AFECS and EPICS state machines	30%						*1.92*				0%		#DIV/0!
	Design and implement trigger control GUI	30%						*1.92*				0%		#DIV/0!
1532105	**Write Experiment Control Framework**		44	44	4/2/12	2/20/13	17.4	6.4	$18,076	$18,076			**0%**	0.63
	Design a directory structure and a makefile scheme for EPCS	20%						*1.28*				0%		#DIV/0!
	Setup PLC framework	30%						*1.92*				0%		#DIV/0!
	Create CSS product for Hall D	30%						*1.92*				0%		#DIV/0!
	Setup gateway for EPICS	10%						*0.64*				0%		#DIV/0!
	Create scripts for automatic booting oF IOCs	10%						*0.64*				0%		#DIV/0!
1532105g	**Write Experiment Control Motors**		44	44	4/2/12	2/20/13	17.4	12	$22,595	$22,595			**0%**	1.19
	Install EPICS support for motion controllers	25%						*3*				0%		#DIV/0!
	Applicaton for collimator motion	20%						*2.4*				0%		#DIV/0!
	Applicaton for PS converter motion	20%						*2.4*				0%		#DIV/0!
	Applicaton for harp scans	20%						*2.4*				0%		#DIV/0!
	Create control GUIs	15%						*1.8*				0%		#DIV/0!
1532105n	**Write Experiment Control Interface with DAQ**		44	44	4/2/12	2/20/13	17.4	3.2	$9,038	$9,038			**0%**	0.32
	Write C-message/ChannelAccess interface	30%						*0.96*				0%		#DIV/0!
	Create a prototype application with C-message/CA interface and test it	20%						*0.64*				0%		#DIV/0!
	Define and implement states for slow controls in EPICS	30%						*0.96*				0%		#DIV/0!
	Alarms system from AFECS components	20%						*0.64*				0%		#DIV/0!