

1.03 Construction Accelerator Systems								01/29/2013		10:34		Rollup		1148	
DESCRIPTION: This summary WBS covers the construction of the cyromodules, power systems, cyrogenic systems, beam transport systems, extraction systems, and instrumentation, controls, & safety systems of the 12 GeV Upgrade accelerator.															
INHOUSE LABOR (MANWEEKS)															
	Weekly Rate	ETC	ETC Total		Weekly Rate	ETC	ETC Total		Weekly Rate	ETC	ETC Total				
Plant Eng	2.8992			Mech Dsgn	1.9884	24.9175	49.5460	Office	1.1784	-3.7125	-4.3748				
Skilled Trades	1.3808	46.8175	64.6456	Mech Tech	1.8344	703.9755	1291.3726	Directorate	7.8832						
Elect Engr	2.9124	232.1321	676.0615	Senior Staff	4.6640	18.0076	83.9875	Contrib Univ Labor							
Elect Dsgn	2.0848	110.9926	231.3973	Scientists	2.9144	10.3575	30.1858	Visiting Users	0.7980						
Elect Tech	1.8216	584.8319	1065.3298	Comp Scientist	2.7084	202.2236	547.7024	Paid Univ Staff	2.3192						
Mech Eng	2.8944	178.7000	517.2294	Admin	2.4244	-0.1750	-0.4243	Paid Univ Student	0.4404						
	FY04-10 Actuals + Committed	FY11 Actuals + Committed	FY12 Actuals + Committed	FY13 Actuals + Committed	Cost + Committed To Date Total	ETC in FY13 \$	Estimate at Completion	Lehman 2011, Esc to FY12\$	Variance						
Labor Manweeks	2,687.285	4,316.365	3,619.565	1,000.563	11,623.778	2,109.068	13,732.846	11,858.355	1,874.490						
FTE Years	61.075	98.099	82.263	22.740	264.177	47.933	312.110	269.508	42.602						
TOTAL LABOR \$	5,899.515	8,524.551	7,278.607	1,995.995	23,698.667	4,552.659	28,251.326	24,520.992	3,730.334						
\$ per Jlab FTE YEAR	96.595	86.897	88.480	87.774	89.708	94.979	90.945	91.097	-0.152						
Supplies & Materials	3,622.706	2,541.435	2,669.625	428.459	9,262.226	-184.784	9,077.442	4,737.723	4,339.719						
Travel	95.116	55.825	26.611	4.982	182.534	17.726	200.260	242.104	-41.844						
Consult & Prch Labor	448.394	1,150.532	834.029	189.222	2,622.177	38.541	2,660.718	855.497	1,805.221						
Machine Shop Labor	82.082	129.785	446.190	117.945	776.002	-34.025	741.977	514.530	227.447						
TOTAL EXPENSES	4,248.298	3,877.578	3,976.454	740.609	12,842.938	-162.542	12,680.396	6,349.853	6,330.543						
Major Components/A&E < \$50K	3,258.589	1,446.498	990.179	244.775	5,940.041	998.960	6,939.000	10,937.418	-3,998.417						
Major Components/A&E > \$50K	41,081.801	2,240.692	2,787.955	24.312	46,134.759	149.283	46,284.042	46,635.214	-351.172						
TOTAL PROCUREMENTS	44,340.389	3,687.190	3,778.134	269.087	52,074.800	1,148.243	53,223.043	57,572.632	-4,349.589						
Total Costs (No overhead)	54,488.203	16,089.318	15,033.195	3,005.690	88,616.406	5,538.359	94,154.765	88,443.477	5,711.288						
Labor w/overhead	6,553.006	9,422.538	8,086.566	2,235.514	26,297.623	5,098.978	31,396.601	27,409.060	3,987.542						
Expenses w/overhead	4,718.034	4,282.185	4,419.165	829.482	14,248.865	-182.047	14,066.818	7,071.776	6,995.042						
Procurement w/overhead	44,700.430	3,835.246	3,889.981	298.459	52,724.117	1,268.118	53,992.234	58,854.132	-4,861.897						
GRAND TOTAL	55,971.469	17,539.969	16,395.712	3,363.455	93,270.605	6,185.049	99,455.654	93,334.967	6,120.687						
YEAR	FY 2004/09	FY 2010	FY 2011	FY 2012	Actuals	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	
LABOR - Obligation	902.208	5,650.798	9,422.538	8,086.566	2,235.514	6,888.100	446.392							31,396.601	
EXPENSES - Obligation	501.913	4,216.120	4,282.185	4,419.165	829.482	624.194	23.240							14,066.818	
PROCUREMENTS - Obligation	23,326.302	21,374.128	3,835.246	3,889.981	298.459	1,564.266	2.311							53,992.234	
TOTAL	24,730.423	31,241.046	17,539.969	16,395.712	3,363.455	9,076.559	471.944							99,455.654	
ESCL TOTAL	24,730.423	31,241.046	17,539.969	16,395.712	3,363.455	9,076.559	486.999							99,470.709	
MANWEEKS	FY 2004/09	FY 2010	FY 2011	FY 2012	Actuals	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	
Plant Eng			3.878 MW	1.565 MW										5.443 MW	
Skilled Trades, Electrician		17.950 MW	66.363 MW	40.000 MW	16.850 MW	60.407 MW	3.261 MW							187.980 MW	
Elect Engr	23.098 MW	344.943 MW	493.595 MW	488.008 MW	123.895 MW	321.795 MW	34.232 MW							1,705.670 MW	
Elect Dsgn	0.575 MW	24.863 MW	38.388 MW	35.213 MW	15.525 MW	95.214 MW	31.304 MW							225.555 MW	
Elect Tech	5.663 MW	234.265 MW	705.535 MW	652.168 MW	211.585 MW	716.092 MW	80.325 MW							2,394.047 MW	
Mech Eng	166.645 MW	661.500 MW	743.545 MW	541.575 MW	118.900 MW	297.600 MW								2,410.865 MW	
Mech Dsgn	56.225 MW	438.373 MW	421.933 MW	279.100 MW	52.003 MW	76.920 MW								1,272.550 MW	
Mech Tech	26.475 MW	436.220 MW	1,600.360 MW	1,384.178 MW	414.803 MW	1,118.778 MW								4,566.010 MW	
Senior Staff	38.363 MW	101.323 MW	91.688 MW	68.433 MW	16.003 MW	34.010 MW								333.815 MW	
Scientists	4.163 MW	32.688 MW	25.243 MW	38.635 MW	3.013 MW	11.315 MW	2.055 MW							114.097 MW	
Comp Scientist		34.170 MW	73.840 MW	58.380 MW	23.000 MW	196.870 MW	28.354 MW							391.614 MW	
Admin		11.488 MW	22.788 MW	14.250 MW	0.175 MW									48.525 MW	
Office	0.250 MW	2.713 MW	9.000 MW	18.063 MW	4.813 MW	1.100 MW								31.125 MW	
Directorate															
Contributed University Labor															
Visiting Users															
Paid University Staff															
Paid University Students	3.700 MW	21.638 MW	20.213 MW											45.550 MW	
TOTAL MANWEEKS	325.155 MW	2,362.130 MW	4,316.365 MW	3,619.565 MW	1,000.563 MW	2,930.100 MW	179.530 MW							13,732.846 MW	
TOTAL FTES	7.390 FTES	53.685 FTES	98.099 FTES	82.263 FTES	22.740 FTES	66.593 FTES	4.080 FTES							312.110 FTES	
Supplies & Materials	\$415.060 K	\$3,207.646 K	\$2,541.435 K	\$2,669.625 K	\$428.459 K	\$225.303 K	\$18.372 K							\$9,077.442 K	
Travel	\$27.336 K	\$67.780 K	\$55.825 K	\$26.611 K	\$4.982 K	\$20.644 K	\$2.064 K							\$200.260 K	
Purch Labor	\$7.077 K	\$441.316 K	\$1,150.532 K	\$834.029 K	\$189.222 K	\$227.449 K	\$0.315 K							\$2,660.718 K	
Machine Shop Labor	\$1.522 K	\$80.560 K	\$129.785 K	\$446.190 K	\$117.945 K	\$83.920 K								\$741.977 K	
PROCUREMENTS <50K	\$793.321 K	\$2,465.268 K	\$1,446.498 K	\$990.179 K	\$244.775 K	\$1,241.670 K	\$2.064 K							\$6,939.000 K	
PROCUREMENTS >50K	\$22,443.413 K	\$18,638.388 K	\$2,240.692 K	\$2,787.955 K	\$24.312 K	\$173.595 K								\$46,284.042 K	
	\$23,687.729 K	\$24,900.959 K	\$7,564.767 K	\$7,754.588 K	\$1,009.695 K	\$1,972.581 K	\$22.814 K							\$65,903.439 K	
\$\$\$\$\$\$\$\$	FY 2004/09	FY 2010	FY 2011	FY 2012	Actuals	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	
Plant Eng			\$13.089 K	\$5.599 K										\$18.688 K	
Skilled Trades, Electrician		\$27.707 K	\$106.909 K	\$65.295 K	\$27.882 K	\$88.025 K	\$4.503 K							\$292.439 K	
Elect Engr	\$67.468 K	\$873.643 K	\$1,292.285 K	\$1,314.473 K	\$336.655 K	\$913.017 K	\$99.699 K							\$4,560.585 K	
Elect Dsgn	\$1.166 K	\$47.872 K	\$79.047 K	\$74.491 K	\$32.838 K	\$198.973 K	\$65.262 K							\$466.812 K	
Elect Tech	\$11.438 K	\$410.990 K	\$1,198.437 K	\$1,121.639 K	\$366.932 K	\$1,285.941 K	\$146.320 K							\$4,174.767 K	
Mech Eng	\$411.949 K	\$1,638.294 K	\$1,859.415 K	\$1,403.436 K	\$313.822 K	\$831.051 K								\$6,144.145 K	
Mech Dsgn	\$104.974 K	\$787.424 K	\$772.183 K	\$505.945 K	\$95.700 K	\$145.246 K								\$2,315.772 K	
Mech Tech	\$43.632 K	\$655.375 K	\$2,503.215 K	\$2,188.524 K	\$673.973 K	\$1,965.345 K								\$7,356.091 K	
Senior Staff	\$153.168 K	\$420.324 K	\$376.975 K	\$285.257 K	\$66.719 K	\$150.706 K								\$1,386.430 K	
Scientists	\$14.547 K	\$104.312 K	\$82.063 K	\$111.649 K	\$11.637 K	\$35.835 K	\$5.988 K							\$354.394 K	
Comp Scientist		\$85.250 K	\$184.469 K	\$158.881 K	\$63.618 K	\$534.528 K	\$76.793 K							\$1,039.922 K	
Admin		\$16.195 K	\$33.010 K	\$21.021 K	\$0.260 K	-\$0.164 K								\$70.061 K	
Office	\$0.287 K	\$3.203 K	\$10.944 K	\$22.396 K	\$5.960 K	\$1.585 K								\$38.415 K	
Directorate															
Contributed University Labor															
Visiting Users															
Paid University Staff															
Paid University Students	\$2.050 K	\$18.245 K	\$12.509 K											\$32.805 K	
TOTAL	\$810.680 K	\$5,088.835 K	\$8,524.551 K	\$7,278.607 K	\$1,995.995 K	\$6,									