

## Proton Plan Cost Table

8/11/2006

WBS	Name	Esc SWF	Esc M&S	M&S + SWF Esc	SWF Cont %	M&S Cont %	SWF W/ Cont.	M&S W/Cont.
<b>1</b>	<b>Proton Plan</b>	<b>\$8,504,146</b>	<b>\$8,637,399</b>	<b>\$17,141,546</b>	<b>20%</b>	<b>22%</b>	<b>\$10,215,449</b>	<b>\$10,535,100</b>
<b>1.1</b>	<b>Linac Upgrades</b>	<b>\$893,047</b>	<b>\$1,744,895</b>	<b>\$2,637,941</b>	<b>80%</b>	<b>21%</b>	<b>\$1,603,517</b>	<b>\$2,114,559</b>
1.1.1	Linac PA Vulnerability	\$70,486	\$1,475,623	\$1,546,110	38%	0%	\$97,177	\$1,476,182
1.1.2	Linac Quad Power Supplies	\$261,899	\$114,860	\$376,759	50%	227%	\$393,547	\$375,464
1.1.4	200 Mhz LLRF Upgrade	\$560,661	\$154,411	\$715,072	98%	70%	\$1,112,792	\$262,912
<b>1.2</b>	<b>Booster Upgrades</b>	<b>\$3,660,250</b>	<b>\$5,098,403</b>	<b>\$8,758,653</b>	<b>7%</b>	<b>21%</b>	<b>\$3,914,956</b>	<b>\$6,157,506</b>
1.2.1	Booster RF Duty Cycle Limits	\$35,415	\$816	\$36,231	27%	27%	\$45,035	\$1,040
1.2.2	OrBump System	\$273,758	\$138,618	\$412,376	-5%	25%	\$261,172	\$173,865
1.2.3	Corrector System	\$2,590,035	\$3,561,451	\$6,151,485	11%	14%	\$2,864,375	\$4,050,837
1.2.4	30 Hz Harmonic	\$69,452	\$24,797	\$94,250	0%	0%	\$69,452	\$24,797
1.2.5	Gamma-t System	\$288,363	\$210,330	\$498,693	5%	95%	\$303,478	\$410,400
1.2.7	Booster RF Cavity Cooling	\$6,007	\$3,078	\$9,085	26%	36%	\$7,582	\$4,200
1.2.11	Booster Dump Relocation	\$249,133	\$429,195	\$678,328	-32%	-17%	\$169,646	\$357,459
1.2.12	Booster Chopper	\$110,019	\$170,957	\$280,976	27%	98%	\$140,097	\$338,580
1.2.13	Booster RF Reliability Improvements	\$38,069	\$559,160	\$597,229	42%	42%	\$54,120	\$796,327
<b>1.3</b>	<b>Main Injector Upgrades</b>	<b>\$2,264,379</b>	<b>\$1,778,392</b>	<b>\$4,042,771</b>	<b>10%</b>	<b>26%</b>	<b>\$2,496,668</b>	<b>\$2,243,535</b>
1.3.1	Large Aperture Quads - WQB	\$1,114,631	\$490,932	\$1,605,563	7%	7%	\$1,196,743	\$524,861
1.3.2	Collimation Systems	\$354,724	\$699,888	\$1,054,612	107%	69%	\$734,768	\$1,180,081
1.3.3	NuMI Multibatch Operation	\$274,310	\$388,802	\$663,112	96%	38%	\$536,740	\$536,593
1.3.4	Main Injector RF Upgrade	\$520,714	\$198,770	\$719,484	-95%	-99%	\$28,416	\$2,000
<b>1.4</b>	<b>Management</b>	<b>\$1,675,109</b>	<b>\$15,710</b>	<b>\$1,690,819</b>	<b>30%</b>	<b>24%</b>	<b>\$2,185,538</b>	<b>\$19,500</b>
<b>1.5</b>	<b>Proton Plan Study Group</b>	<b>\$11,362</b>	<b>\$0</b>	<b>\$11,362</b>	<b>30%</b>	<b>0%</b>	<b>\$14,770</b>	<b>\$0</b>
		<b>Dated 8/15/06 withh CRs 1 through 19</b>						