

	WBS	Activity Name	Duration (Days)	Start Date	Finish Date	2014	2015				2016	
						Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	
1	1	Project Management...										
6	2	Civil Infrastructure	293.00	1/1/15	2/15/16							
7	2.1	Selective demolition work in existing injector test cave...	262.00	1/1/15	1/1/16							
12	2.2	Concept & basis of design...	64.00	2/2/15	4/30/15							
18	2.3	Civil/structural work...	205.00	3/4/15	12/15/15							
23	2.4	Relocation of existing utilities...	109.00	5/1/15	9/30/15							
28	2.5	Target & Dewar pit ...	207.00	5/1/15	2/15/16							
33	2.6	Mechanical, electrical, fire protection & roof structure...	65.00	6/1/15	8/28/15							
38	2.7	Cryogenics	193.00	1/5/15	9/30/15							
39	2.7.1	<i>Cryogen Requirements</i>										
40	2.7.2	<i>Transferline mechanical design</i>										
41	2.7.3	<i>Transferline drawings</i>										
42	2.7.4	<i>Transferline fabrication</i>										
43	2.7.5	<i>Transferline installation</i>										
44	2.7.6	<i>Supply line connection to CTF</i>										
45	2.7.7	<i>HDIce dewar modification</i>										
46	2.8	LCW	66.00	5/1/15	7/31/15							
47	2.8.1	<i>LCW design</i>										
48	2.8.2	<i>LCW connections to cave</i>										
49	2.8.3	<i>LCW connection to RF/mezzanine</i>										
50	3	Personnel Safety Systems	162.00	2/2/15	9/15/15							
51	4	Accelerator Systems	232.00	12/11/14	10/30/15							
52	4.1	Electron source	131.00	3/2/15	8/31/15							
53	4.1.1	<i>Gun Chamber</i>										
54	4.1.2	<i>HV Power supply...</i>										
59	4.2	Buncher	173.00	2/2/15	9/30/15							
60	4.2.1	<i>Cavity</i>										
61	4.2.2	<i>Water skid</i>										
62	4.2.3	<i>Instrumentation & controls</i>										
63	4.3	Chopper Assembly										
64	4.3.1	<i>2 chopper cavities</i>										
65	4.3.2	<i>RF Cabling</i>										
66	4.3.3	<i>LCW connections</i>										
67	4.4	Injector to 1/4 beam line...	123.00	12/11/14	6/1/15							
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71	4.5	1/4 Cryomodule...	88.00	7/1/15	10/30/15							
73	4.6	1/4 to HDIce beam line										
74	4.7	Diagnostics										
75	4.7.1	Beam viewers										
76	4.7.2	Wire scanners										
77	4.7.3	Beam position monitors										
78	4.8	Vacuum										
79	4.9	Stands & supports										
80	4.10	Installation										
81	4.11	Alignment										
82	5	Drive laser...										
87	6	RF Systems	132.00	4/1/15	10/1/15							
88	6.1	HPA	89.00	4/1/15	8/3/15							
89	6.1.1	Power supply for 3 klystrons										
90	6.1.2	"Siedman" interface										
91	6.2	Klystrons	67.00	6/1/15	9/1/15							
92	6.2.1	3 Tubes										
93	6.2.2	Waveguide, couplers & circulators										
94	6.3	2 - 200 watt SS amps for Chopper										
95	6.4	Low level RF control	89.00	6/1/15	10/1/15							
96	6.5	Master oscillator	88.00	6/1/15	9/30/15							
97	6.6	Interfaces, interlocks & cabling	44.00	4/1/15	6/1/15							
98	7	Controls	196.00	3/2/15	11/30/15							
99	7.1	Software	196.00	3/2/15	11/30/15							
100	7.2	Machine protection	77.00	6/1/15	9/15/15							
101	7.3	Cryogenic interface & control	120.00	4/1/15	9/15/15							
102	7.4	Diagnostics controls	120.00	4/1/15	9/15/15							
103	8	Commissioning	71.00	9/15/15	12/22/15							
104	8.1	Gun through buncher	34.00	9/15/15	10/30/15							
105	8.2	1/4 Cryomodule commissioned	30.00	10/1/15	11/11/15							
106	8.3	10 MeV beam to Faraday cup	59.00	10/1/15	12/22/15							
107	9	Experiment installation	22.00	2/1/16	3/1/16							
108	10	Operations	262.00	3/1/16	3/1/17							
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