

SSRL ACCELERATOR - 2009 SHUTDOWN

9/22

ID	Task Name	Safety Forms	Notes	Duration	Start	Finish	Predecessors	Project manager	Task person or shop	Oct '09							N
										14	21	28	5	12	19	26	
1	Key Dates			66 d	8/10	10/26				[Gantt bar from 8/10 to 10/26]							
3	Down time tunnel access			34 d	8/10	9/23	2			[Gantt bar from 8/10 to 9/23]							
4	Startup			25 d	9/24	10/18	3			[Gantt bar from 9/24 to 10/18]							
5	User-beam commissioning			7 d	10/19	10/25	4			[Gantt bar from 10/19 to 10/25]							
6	Deliver beam to users			0 d	10/26	10/26	5			[Gantt bar from 10/26 to 10/26]							
10	Projects			41 d	8/10	9/30				[Gantt bar from 8/10 to 9/30]							
18	BTS PR1 replacement			0 d	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
23	SPEAR BL13 ID - absolute encoders on row phase - postponed			0 d	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
24	SPEAR Spare RF HVPS - install subframe - postponed			0 d	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
27	SSRL Facility Group:			39 d	8/12	9/30				[Gantt bar from 8/12 to 9/30]							
28	Chiller Chilled Piping Installation:			32 d	8/21	9/30				[Gantt bar from 8/21 to 9/30]							
31	SLAC Facility Department:			26 d	8/10	9/14				[Gantt bar from 8/10 to 9/14]							
32	SSRL Erosion Control Project:			21 d	8/17	9/14	34			[Gantt bar from 8/17 to 9/14]							
33	Sanitary Sewer Line Relocation:			5 d	8/10	8/14				[Gantt bar from 8/10 to 8/14]							
34	Compressed Air Line Repair:			5 d	8/10	8/14				[Gantt bar from 8/10 to 8/14]							
37	LONG-DOWN									[Gantt bar from 8/10 to 9/30]							
68	PROJECTS									[Gantt bar from 8/10 to 9/30]							
70	INJECTOR			40 d?	8/10	9/29				[Gantt bar from 8/10 to 9/29]							
80	LINAC			0 d	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
82	LINAC Chopper Trigger			15 d	9/8	9/24				[Gantt bar from 9/8 to 9/24]							
83	Redesign as part of BCS (pending RP approval)			15 d	9/8	9/24		Schmerge		[Gantt bar from 9/8 to 9/24]							
94	Booster Extraction Kickers - G47			26.5 d	8/10	9/15				[Gantt bar from 8/10 to 9/15]							
109	High Voltage Testing			3 d	9/3	9/9				[Gantt bar from 9/3 to 9/9]							
110	Pulser #1 HV Testing			1.5 d	9/3	9/4	108		G. Johnson, F. Rafael	[Gantt bar from 9/3 to 9/4]							
111	Pulser #2 HV Testing			1.5 d	9/8	9/9	110		G. Johnson, F. Rafael	[Gantt bar from 9/8 to 9/9]							
112	Noise EMI studies			5 d	9/9	9/15	111		F. Rafael, D. Martin	[Gantt bar from 9/9 to 9/15]							
123	BTS Toroid			38 d	8/12	9/29				[Gantt bar from 8/12 to 9/29]							
126	Caen module commissioning	Gierman		2 d	9/28	9/29				[Gantt bar from 9/28 to 9/29]							
127	BTS Quads			5 d	8/10	8/14				[Gantt bar from 8/10 to 8/14]							
128	LCW circuit mods. ???			0 d	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
129	Specify changes - eg. to magnet max. current if air cooled.			5 d	8/10	8/14	128	Dellorco		[Gantt bar from 8/10 to 8/14]							
136	Tune-Up Dump Installation			20.5 d	8/19	9/16		Scott		[Gantt bar from 8/19 to 9/16]							
141	Install Tune Dump pneumatics/test			4 hrs	8/20	8/20	140		MSG-3	[Gantt bar from 8/20 to 8/20]							
150	Re-connect kicker cables			2 hrs	9/14	9/14	148		Martin	[Gantt bar from 9/14 to 9/14]							
153	Connect/test tune dump controls			2 d	9/14	9/16	152		Lessard	[Gantt bar from 9/14 to 9/16]							
154	Dump completed - handover to controls			0 d	9/16	9/16	153			[Gantt bar from 9/16 to 9/16]							
156	SPEAR									[Gantt bar from 8/10 to 9/30]							
157	Install 1 ECD power supply (3 installed 2008)			0 d	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
170	BCS - Interlock Chassis Installation			6 d	9/18	9/25				[Gantt bar from 9/18 to 9/25]							
175	Verify Cabling			1 d	9/23	9/24	174		S. Wallters	[Gantt bar from 9/23 to 9/24]							
176	Connect Intlk Chassis with Fan In Chassis			1 d	9/24	9/25	175		S. Wallters	[Gantt bar from 9/24 to 9/25]							
197	ECD MAGNETS Installation Order - BL 2, 1, 8, 14			0 d	8/10	8/10	54			[Gantt bar from 8/10 to 8/10]							
370	MPS/PPS			42 d?	8/10	10/1				[Gantt bar from 8/10 to 10/1]							
372	Add new BTS Diagnostic e-beam stopper control to SPEAR MPS.			1 d?	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
373	Create and installed a new SPEAR PPS audio warning module.			1 d?	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
375	Add more Alarm annunciation to the B117 SPEAR MPS Global Pane			1 d?	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
380	Commission the new MPS/PPS server.			1 d?	10/1	10/1				[Gantt bar from 10/1 to 10/1]							
381	Do modification on the BCS TOSOIC ion chamber HV electronics.			1 d?	8/10	8/10				[Gantt bar from 8/10 to 8/10]							
386	BL BCS installation weeks 3 thru 5			10 d	8/24	9/4	385	Horton		[Gantt bar from 8/24 to 9/4]							
387	BL 8-1 8-2 10-1 IP cable replacement week 6			5 d	9/8	9/12	386	Horton	Vac	[Gantt bar from 9/8 to 9/12]							
391	FACILITIES			41 d	8/10	9/30				[Gantt bar from 8/10 to 9/30]							
392	SSRL Facility Group:			39 d	8/12	9/30				[Gantt bar from 8/12 to 9/30]							
393	Chiller Chilled Piping Installation:			23 d	9/3	9/30				[Gantt bar from 9/3 to 9/30]							
397	SLAC Facility Department:			34 d	8/10	9/23				[Gantt bar from 8/10 to 9/23]							
398	SSRL Erosion Control Project:			29 d	8/17	9/23	400			[Gantt bar from 8/17 to 9/23]							
402	B120 Sump Pump installation:			1 d	8/28	8/28				[Gantt bar from 8/28 to 8/28]							
404	SYSTEM MAINTENANCE			198.25 d?	1/1	10/1				[Gantt bar from 1/1 to 10/1]							
405	Electrical Systems Group			195 d?	1/1	9/28				[Gantt bar from 1/1 to 9/28]							
406	B140 RF Breaker (480V, 500A) replacement			6 d	9/8	9/14		Rafael		[Gantt bar from 9/8 to 9/14]							
407	Procure breaker			1 d?	1/1	1/1				[Gantt bar from 1/1 to 1/1]							
408	Schedule through CEF			1 d?	1/1	1/1				[Gantt bar from 1/1 to 1/1]							
409	B118			23 d	8/26	9/24				[Gantt bar from 8/26 to 9/24]							
410	Replace Power Supplies Fans			2.5 d	8/26	8/28			C. Taylor, G. .	[Gantt bar from 8/26 to 8/28]							

ID	Task Name	Safety Forms	Notes	Duration	Start	Finish	Predecessors	Project manager	Task person or shop	14	21	28	Oct '09	5	12	19	26	N
411	Clean Filters			2 d	9/23	9/24			R. Theobald									
412	Repair, test and install echotek			15 d	8/28	9/17			J. Wachter									
413	SPEAR RF maintenance			2 d	9/18	9/19			J. Wachter									
414	B140			195 d?	1/1	9/28												
415	Booster readness			0 d	9/18	9/18												
416	Clean the filters			2 d	9/16	9/18	415FF		R. Theobald									
417	Booster RF Maintenance			1.67 d	9/15	9/18	415FF		S. Park, J. Wa									
418	Modulator Maintenance			13 d	9/14	9/28												
421	Testing - need LCW, PPS			0 d	9/28	9/28												
422	Peaking Strip			171 d?	1/1	8/27												
428	Beam line floor			30 d?	8/10	9/18												
430	Clean the electronic modules and equipment for the SPEAR Scrap			1 d	8/25	8/25			T. Dao, S. Wal									
431	Electrical checkouts of IDs for Startup			3 d	9/16	9/18			T. Dao, S. Wal									
447	Mechanical			27.5 d	8/12	9/18												
450	SYSTEM MAINTENANCE - MECHANICAL			0 d	8/12	8/12												
451	Mechanical			0 d	8/12	8/12	450											
459	SPEAR Preventive Maintenance:			0 d	8/31	8/31	457											
464	PM BL12-ID lube			2 hrs	9/8	9/8	463		MSG -2									
466	Startup Accelerator Utilities			0 d	9/8	9/8	464											
477	Vacuum Maintenance			198 d	1/1	9/30												
484	PR1 - Beam Stopper			11 d	9/19	9/30												
485	Fabricate and assemble			10 d	9/19	9/29												
486	Install tentative			1 d	9/30	9/30	485											
488	Vacuum Beamline			196 d	1/1	9/28												
489	BL4 boiloff installation.			6 d	9/14	9/19			Vac									
496	13 SGM grating holder installations and alignments.			24 d	8/17	9/17			Vac									
499	14-3 Mono assembly and installation of all BL14-3 hardware from the			0 d	1/1	1/1			Vac									
501	Complete installation of View Port Covers and Valve tag installation:			2 d	9/21	9/22			Vac									
503	INSERTION DEVICES			3.25 d	9/28	10/1												
504	ID checks - mechanical			3 d	9/28	9/30	431		MSG -2									
505	RF mechanical interlock test			2 hrs	10/1	10/1	504		MSG -2									
507	RF			27 d	8/10	9/15		Park										
508	SPEAR RF			27 d	8/10	9/15												
514	HVPS Spare Installation			27 d	8/10	9/15												
521	Pre-Startup Checks			11 d	9/16	9/27												
522	Pumpdown Vacuum Systems			9 d	9/16	9/25			Vac									
528	Prestart checks			3 d	9/21	9/23												
530	Magnets			1 d	9/27	9/27												
531	Check ECDs polarity			1 d	9/27	9/27			Huang, Rafael									
536	Project Link			225 d?	1/1	10/27												
1	STARTUP			225 d?	1/1	10/27												
2				1 d?	1/1	1/1												
3	Vacuum			10 d	9/14	9/25												
4	Injector pre-run checklist	SAPE-132		0 d	9/14	9/14		Neal										
5	SPEAR pre-run checklis	SAPE-131		0 d	9/21	9/21		Neal										
6	BL hardware pre-run checklist	SAPE-252		0 d	9/25	9/25		Neal										
7	BL Controls pre-start checklist	SAPE-251		0 d	9/25	9/25		Neal										
8	LINAC & LTB			32 d	8/31	10/6												
9	LCW ON	MSG-001, 010		3 d	8/31	9/2		Ernst										
10	PPS - mechanical checks (rolling doors, stoppers, etc)	SAPE-059, , 065, 066		3 d	8/31	9/2		Ernst										
11	Control system ready	SAPE-125	2hr task	1 d	9/14	9/14												
12	MPS ready for system tests			12 hrs	9/14	9/15												
13	Provide Linac BAS.		BAS - received with hand editing	0 d	9/11	9/11		Padilla										
14	BAS Checks	SLAC-010-86G34-021, section		1.5 d	9/14	9/15	13	Ops										
15	BAS pre-run checks	SLAC-I-010-86G21-006		1.5 d	9/14	9/15	13	Ops										
16	Linac PPS Interlock Checklist	SLAC-I-010-86G34-021, sec-3		1 d	9/15	9/16	11, 12	Ops										
17	BSOIC's Checks			1 d	9/15	9/16	15	OHP										
18	Prep PS's for PPS Cert.	SAPE-147, 148		4 hrs	9/15	9/15	9, 11, 12	Rafael										
19	Prep RF for PPS Cert.	???	Crash tests of modulators at low lev	4 hrs	9/15	9/15	9, 11, 12	Schmerge										
20	Heat and smoke detectors for the linac			1 d	9/18	9/18												
21	PPS Certification	SAPE-104		1 d	9/16	9/16	18, 19	Horton										
22	PS's Itlk and power Checks	SAPE-???		2 d	9/24	9/25	21	Rafael										
23	Check Alpha-I MPS interlock/ LINAC mag. polarity verification	xxx, SAPE-106		1 d	9/24	9/24	21											

SSRL ACCELERATOR - 2009 SHUTDOWN

ID	Task Name	Safety Forms	Notes	Duration	Start	Finish	Predecessors	Project manager	Task person or shop	Oct '09							N
										14	21	28	5	12	19	26	
24	ACM checks (No Beam)	SAPE-077		1 d	9/18	9/18	21	Schmerge									
25	RF Itlk and pwr checks			2 d	9/24	9/25	40	Schmerge									
26	Process Linac RF			3 d	9/26	9/28	23,25										
27	Process Linac (Beam)	SAPE-128, SLAC-I-010-86G34-		2 d	9/29	9/30	26	Ops,Schmerge									
28	LTB BPM system check			1 d	10/3	10/3	27	Martin									
29	Rad survey Linac			2 d	10/5	10/6	27	RP,OHP									
30	ACM Cert. (with beam)	SAPE-078	BAS completion	2 d	10/5	10/6	27	Schmerge									
31	BEAM to Booster			0 d	10/1	10/1	27	Ops									
32	BOOSTER & BTS			26 d	9/11	10/8											
33	Provide Booster BAS			0 d	9/11	9/11		Padilla									
34	BAS Checks	SLAC-010-86G34-011, section		2 d	9/14	9/15	33	Ops									
35	BAS pre-run checks	SLAC-I-010-86G21-006		2 d	9/14	9/15	33	Ops									
36	Booster PPS Interlock Checklist	SLAC-I-010-86G34-011, sectic		1 d	9/15	9/16	11, 12	Ops									
37	BCS (BSOIC's) Checks			1 d	9/21	9/21		OHP									
38	Prep PSs for PPS Cert.	SAPE-147, 148		1 d	9/16	9/16		Rafael									
39	Prepare RF for PPS Cert			1 d	9/16	9/16		Park									
40	PPS Certification	SAPE-103		2 d	9/17	9/18	38,39,35,36	Horton									
41	358 RF interlock Tests	SAPE-054		1 d	9/24	9/24	40	Park									
42	358 RF Processing	SAPE-145		1 d	9/25	9/25	40	Park									
43	PS's Itlk and Power Tests	SAPE-031, 032, 033		2 d	9/24	9/25	40	Rafael									
44	Kicker Tests & Timing			2 d	9/24	9/25	40	Rafael									
45	Heat & Smoke det test			1 d	9/24	9/24	40	Ortiz									
46	Control checks	SAPE-125		1 d	9/28	9/28	40	Wermelsk									
47	BTS ACM test - pre beam	SAPE-097		1 d	9/30	9/30	40	Gierman?									
48	Establish Booster Beam	SLAC-I-010-86G23-101		4 d	10/1	10/4	46,47,41,42,43,4	Ops,Safranek									
49	Injector Rad. Survey			4 d	10/5	10/8	48	RP,OHP									
50	BTS ACM test - with beam	SAPE-098		2 hrs	10/5	10/5	48	Gierman									
51	Beam to SPEAR (swing)			0 d	10/5	10/5	48	Ops									
52	SPEAR Startup 2008			24 d	9/10	10/5											
53	Radiation Monitors - anchor remaining 7 (locations per RP approval)			3 d	10/1	10/3		Schmerge	MSG								
54	LCW flow checks, check to MPS (SPEAR All)	MSG-007, 003, 001		6 d	9/10	9/16		Ernst									
55	Vacuum System Pumped Down - Zones 1, 2, 3, 4			0 d	9/17	9/17											
56	PPS - mechanical checks (ST1, ST2)	SAPE-066		4 hrs	9/22	9/22		Ernst									
57	ID checks - electrical	SAPE-139		3 d	9/14	9/16		Dao									
58	ID check - mechanical	MSG-002		5 d	9/17	9/22	57	Ernst									
59	Provide SPEAR BAS			0 d	9/21	9/21		Padilla									
60	Kicker Readiness Checks			2 d	9/24	9/25		Rafael									
61	Control system ready	SAPE-126		1 d	9/21	9/21		Wermelskirch									
62	Top Off Summary Chassis functioning correctly			0 d	9/21	9/21	61										
63	Top-Off Rad Mon Cert.	SAPE-234		1 d	9/22	9/22	62,61	Rarback									
64	Test Top-Off Non BCS Intlck	SAPE-239		1 d	9/23	9/23	63,62	Rarback									
65	MPS ready for system tests	PLC Certification		1 d	9/24	9/24		Lessard									
66	Magnet klixon tests	SAPE-186		1 d	9/25	9/25	65	Ortiz									
67	Close rolling blocks			2 hrs	9/21	9/21		Kerr									
68	Ring doors closed (4 pm)			0 d	9/21	9/21		Kerr,Ops									
69	BAS Checks	SLAC-010-86G34-001, section		2 d	9/26	9/27	59,67,68	Ops									
70	SPEAR PPS Interlock Checklist	SLAC-I-010-86G34-001, sectic		1 d	9/21	9/21		Ops									
71	Ensure PSs for PPS Cert.	SAPE-130, 110		2 d	9/26	9/27	54,65,70,66,67,6	Rafael									
72	Ensure RF for PPS Cert.			1 d	9/21	9/21		Park									
73	Top-Off BCS (Beamline Septum Interlock Interface PPS Certification)	SAPE 238		2 d	9/21	9/22		Horton									
74	PPS Certification	SAPE-057		2 d	9/28	9/29	71,72,73,70	Horton									
75	BCS (BSOIC's) Checks			1 d	9/30	9/30	74	RPFO									
76	BL PPS - HPS	BL OPS 30 proc.		5 d	9/25	9/29	55,54	Horton									
77	BL BCS (waiting RP approval)	SAPE-XXX		4 d	9/30	10/3	74	Horton									
78	No Beam in SPEAR			0 d	9/21	9/21											
79	Bremsstrahlung interlock verification	SAPE-175		2 hrs	9/30	9/30	78,74,61	Rarback									
80	Dipole Interlock Verification	SAPE-174		4 hrs	10/1	10/1	75	Rarback									
81	Check Zero Voltage Verification Program			4 hrs	10/1	10/1	75	Wermelsk									
82	Tunnel inspection (ensure all is clear)			4 hrs	10/1	10/1	75	Ops									
83	Hi Pot and Polarity measurements	SAPE-233		1 d	10/1	10/1	75	Huang, Rafae									
84	RF checks & process	SAPE-091, 092, 093, 094		2 d	10/1	10/2	75	Park, Sebek									
85	PS's Intlk & Pwr tests	SAPE-144, 143, Kicker Intlck		2 d	10/2	10/3	84SS+1 d	Rafael									
86	BTS ACM Certification (no beam)	SAPE-097		1 d	10/2	10/2	84SS+1 d	Schmerge									

ID	Task Name	Safety Forms	Notes	Duration	Start	Finish	Predecessors	Project manager	Task person or shop	Oct '09							N
										14	21	28	5	12	19	26	
87	Global PPS certification			1 d	10/2	10/2	84SS+1 d	Horton									
88	Flash TSPs, scrub	???		2 d	10/4	10/5	85,86,87										
89	Configuration Development			218 d?	1/1	10/20											
90				1 d?	1/1	1/1											
91				1 d?	1/1	1/1											
92	Develop Injection(<18mA)	SLAC-I-010-86G23-001		2 d	10/6	10/7	88,51	Ops,Safranek									
93	BTS ACM Certification (with beam)	SAPE-098		1 d	10/8	10/8	92	Schmerge									
94	QMS			2 d	10/8	10/9	92	Terebilo									
95	LOCO			1 d	10/10	10/10	94	Huang									
96	Orbit interlock			0.3 d	10/10	10/10	94	Corbett									
97	BL12 Interlock Verification	SAPE-178		0.3 d	10/10	10/10	94	Rarback									
98	Current Intlick tests (200mA)			0.3 d	10/10	10/10	94	Martin									
99	Misc and Scrub 200mA			2 d	10/11	10/12	98,97,96,95	Ops									
100	Match kicker bump			1 d	10/13	10/13	99	Safranek									
101	FOFB set up			1 d	10/13	10/13	99	Corbett									
102	Dynamic aperture meas.			1 d	10/14	10/14	101,100	Safranek									
103	Radiation Measurements			2 d	10/14	10/15	101,100	RP									
104	AP final checks			2 d	10/16	10/17	102,103	Safranek									
105	BL13 Trim and quad tabel checks			1 d	10/16	10/16	102,103	Rarback, Safr									
106	Initial BL setup			1 d	10/17	10/17	105										
107	BL dynamic steering			1 d	10/18	10/18	106	Huang									
108	Final tests and scrub			2 d	10/19	10/20	107										
109	Beamline Commissioning			7 d	10/21	10/27											
110	BLA Chks & Rad Surveys			5 d	10/21	10/25	108	Padilla									
111	Beamline commissioning			7 d	10/21	10/27	108										
112	<i>Deliver Beam to users (6am)</i>			<i>0 d</i>	<i>10/27</i>	<i>10/27</i>	<i>111</i>										10/27