BSSB PULSE SHIFT SCENARIOS
Version 8.9

Beam Destination	BSSB S#	Description (25 Total)	Beam Permits																Beam Switches												Necessary [& Rltd] Events	Notes
			LU	LD	NT	MT	BO	L3	BDS	MB	MI	RR	PB	TV	P1	P2	SW	NM	MS	MTS	L	MT	B	MB	R	PB	MI	TV	SW	NM		
400 MeV Dump	L1	Linac 400 MeV Studies	1	1	0	x	x	x	x	x	x	x	x	x	x	x	x	x	1	0	1	x	x	x	x	x	x	x	x	x	**11 0A**	Linac Studies - non-HEP Pulse Shift
MTA	L2	MTA 400 MeV Studies	1	1	0	1	x	x	x	x	x	x	x	x	x	x	x	x	1	1	x	1	x	x	x	x	x	x	x	x	**11 0A 04**	MTA Linac Studies - non-HEP Pulse Shift
		Booster Study Scenarios																														
Booster Dump	B1	Booster Studies	1	1	0	x	1	x	x	x	x	x	x	x	x	x	x	x	1	x	x	x	1	x	x	x	x	x	x	x	**17**	Beam to Long 13 Dump.
Booster Dump	B2	Booster Studies	1	1	0	x	1	1	0	x	x	x	x	x	x	x	x	x	1	x	x	x	1	x	x	x	x	x	x	x	**13+14+15+16+19+1C+1D**	Beam to Long 13 Dump.
MB TGT	B3	Protons B->MB	1	1	0	x	1	0	1	1	x	x	x	x	x	x	x	x	1	x	x	x	x	1	x	x	x	x	x	x	**1D**	Beam to MiniBooNE
		$2D Scenarios																														
ACC	A1	Protons: B->MI->ACC	1	1	0	x	1	0	1	x	1	x	1	x	1	1	x	x	1	x	x	x	x	x	x	1	x	x	x	x	2D 93 **16**	MI Reverse Protons to ACC via P1, P2, AP-1, AP-3
ACC	A2	Protons: B->MI->RR->MI->ACC	1	1	0	x	1	0	1	x	1	1	1	x	1	1	x	x	1	x	x	x	x	x	x	1	x	x	x	x	2D E2 96 **16**	RR Reverse Protons to ACC, Tune-Up Acc w/ RR Protons via P1, P2, AP-1, AP-
DEB	D2	Protons: B->MI->DEB	1	1	0	x	1	0	1	x	1	x	1	x	1	1	x	x	1	x	x	x	x	x	x	1	x	x	x	x	2D 85 **16**	MI Forward Protons to DEB via P1, P2, AP-1, AP-2
RR ABT	R1	Protons: B->MI->RR->RR Abort, partial turn and circulating	1	1	0	x	1	0	1	x	1	1	x	x	x	x	x	x	1	x	x	x	x	x	1	x	x	x	x	x	2D E2 [E7] **16+1C /96**	MI32 Tune. Beam to Recycler Dump. S# S3 in RR TDR.
MI ABT	M9	MI 8 GeV Studies	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	x	1	x	x	x	x	x	x	x	1	x	x	x	2D **13+14+15+19**	Beam to Main Injector Abort.
		$29 Scenarios																														
PBAR TGT	D1	Protons: B->MI->AP0	1	1	0	x	1	0	1	x	1	x	1	x	1	1	x	x	1	x	x	x	x	x	x	1	x	x	x	x	29 **14** 80	P-Bar Production, Stacking
MI ABT	M5	Tune MI for P-Bar Production	1	1	0	x	1	0	1	x	1	x	0	x	x	x	x	x	1	x	x	x	x	x	x	0	1	x	x	x	29 **14** 80	Transfer Kickers Won't Fire Because P-Bar Permit is Down.
MI ABT	M12	MI $29 Studies	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	x	1	x	x	x	x	x	x	x	1	x	x	x	29 **14** /80	Beam to Main Injector Abort.
		$2B Scenarios																														
TEV ABT	TV2	Protons: B->MI->TEV	1	1	0	x	1	0	1	x	1	x	x	1	1	x	x	x	1	x	x	x	x	x	x	x	x	1	x	x	[C1] 2B 4D **15**	Collider P Injection *or* P Coalescing Tune. Multiple $15 and $2B Cycles Necessary to Fill the Tevatron.
MI ABT	M7	Protons: B->MI	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	x	1	x	x	x	x	x	x	x	1	x	x	x	2B /4D **15**	Proton tune MI for CP. Beam to Main Injector Abort.
MI ABT	M8	Tune MI for CP	1	1	0	x	1	0	1	x	1	x	x	0	x	x	x	x	1	x	x	x	x	x	x	x	1	0	x	x	2B 4D **15**	Transfer Kickers Won't Fire Because Tev Permit is Down.
		$2A Scenarios																														
MI ABT	M6	Tune MI for P-Bars w/ Protons	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	x	1	x	x	x	x	x	x	x	1	x	x	x	2A /40 /4D /5D **15+1C**	$1C is Desirable to Avoid Messing With $15 Intensity.
		$23 Scenarios																														
NuMI TGT	M2	Protons: B->MI->NUMI	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	1	1	x	x	x	x	x	x	x	x	x	x	1	23 **19** A5 /8D	NUMI
PBAR & NUMI	M19b	Protons: B->MI->AP0 & NUMI	1	1	0	x	1	0	1	x	1	x	1	x	1	1	x	1	1	x	x	x	x	x	x	1	x	x	x	1	23 8D A5 **14+19**	NUMI & P-Bar Production Mixed Mode
MI ABT	M13a	MI $23 Studies	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	x	1	x	x	x	x	x	x	x	1	x	x	x	23 **19** /A5	Beam to Main Injector Abort.
MI ABT	M13b	MI $23 Studies	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	x	1	x	x	x	x	x	x	x	1	x	x	x	23 **14** /8D	Beam to Main Injector Abort.
		$21 Scenarios																														
SWYD	M1	Protons: B->MI->SWYD	1	1	0	x	1	0	1	x	1	x	x	x	1	1	1	x	1	x	x	x	x	x	x	x	x	x	1	x	21 **13** 30	120GeV FT - Long Flattop
MI ABT	M3	Tune MI for FT	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	x	1	x	x	x	x	x	x	x	1	x	x	x	21 **13** /30	Beam to Main Injector Abort.
		$20 Scenarios																														
SWYD	M1b	Protons: B->MI->SWYD	1	1	0	x	1	0	1	x	1	x	x	x	1	1	1	x	1	x	x	x	x	x	x	x	x	x	1	x	20 **13** 32	120GeV FT - Short Flattop
MI ABT	M10	Tune MI for FT	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	x	1	x	x	x	x	x	x	x	1	x	x	x	20 **13 /32**	Beam to Main Injector Abort.
		$2E Scenarios																														
MI ABT	M11	MI $2E Wildcard Studies	1	1	0	x	1	0	1	x	1	x	x	x	x	x	x	x	1	x	x	x	x	x	x	x	1	x	x	x	2E **13+14+15+16+19+1C**	Beam to Main Injector Abort.