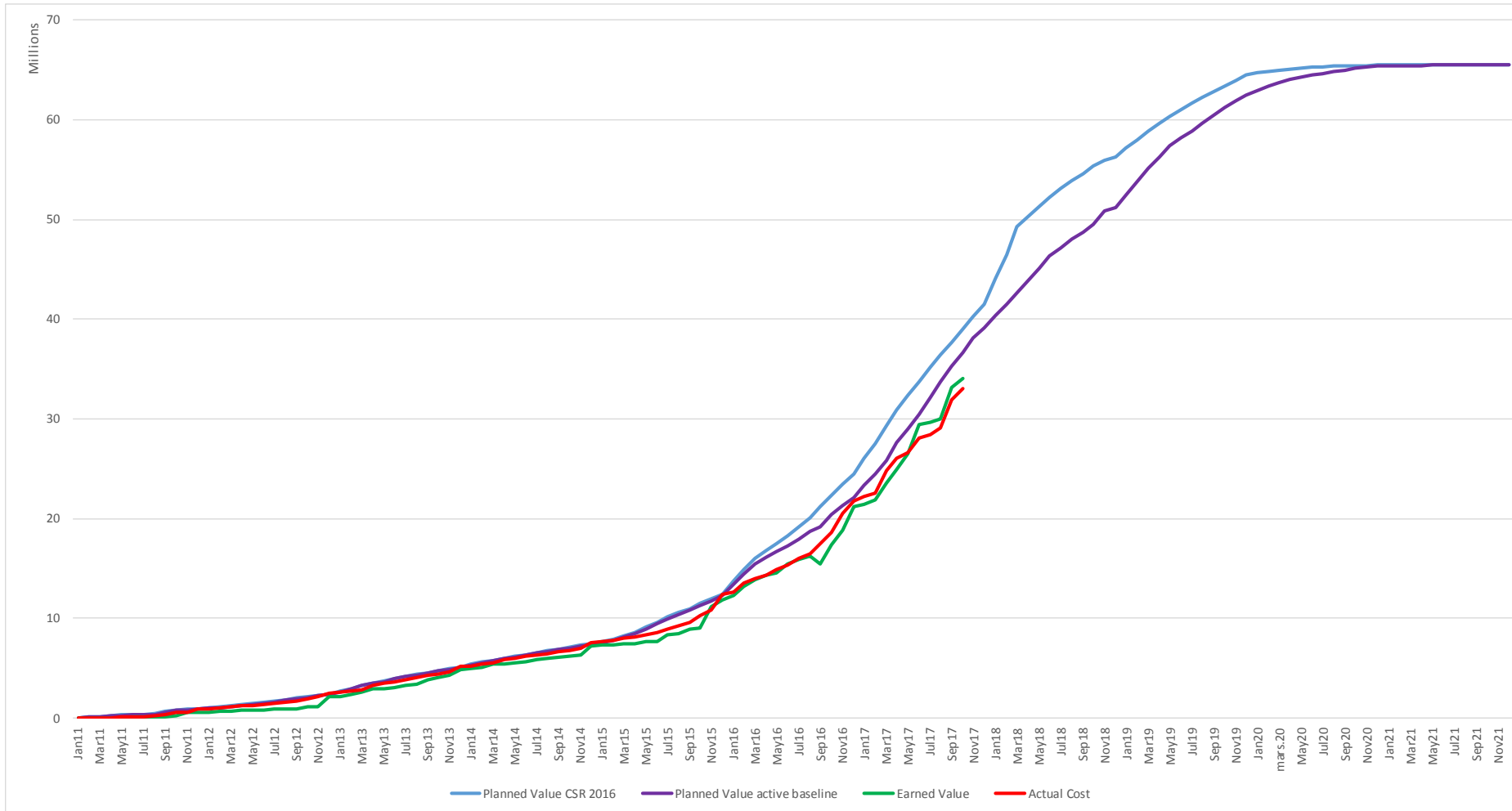




LIU-PSB EVM Status

Data extraction: 24 October 2017

LIU-PSB Dashboard



Cost variance

in kCHF
1,001

Schedule variance

	in kCHF	in month
Active baseline	-2,377	-1.6
CSR baseline	-4,682	-3.6

LIU-PSB Crosstab by Group

Group	EVM Cost Variance	EVM Schedule Variance	EVM Planned Value	EVM Earned Value	EVM Actual Cost	EVM Total Planned Value	CET Charged to Budget Code 2017	CET Annual Commitment 2017	CET Payment Budget 2017	CET % charged	CET % committed
BE	256	-1,069	13,174	12,106	11,850	20,279	4,550	6,206	6,324	72%	98%
ABP	2	-5	17	12	10	35	0	0	9	4%	4%
BI	-16	-37	3,184	3,147	3,162	4,155	431	547	520	83%	105%
CO	-15	-6	239	234	249	330	6	6	1	629%	629%
OP	-108	-15	236	221	328	2,475	224	231	149	150%	155%
RF	391	-1,006	9,497	8,491	8,099	13,282	3,888	5,422	5,645	69%	96%
HDO	0	0	2	2	2	2	0	0	0		
EN	961	-519	2,065	1,546	585	7,060	808	2,660	2,865	28%	93%
ACE	-24	-47	310	263	287	455	17	17	53	31%	31%
CV	1,051	48	1,199	1,246	195	2,351	76	1,368	1,456	5%	94%
EL	50	-431	-168	-599	-649	2,616	583	1,097	1,152	51%	95%
HE	17	-41	441	400	383	1,015	88	127	169	52%	75%
STI	-132	-48	284	236	368	623	45	51	35	128%	147%
HSE	0	0	9	9	9	9	0	0	0	0%	0%
RP	0	0	9	9	9	9	0	0	0	0%	0%
SMB	-100	-223	2,107	1,884	1,984	2,234	222	311	561	40%	55%
SE	-100	-223	2,107	1,884	1,984	2,234	222	311	561	40%	55%
TE	-116	-526	18,970	18,443	18,559	35,872	5,640	7,389	8,458	67%	87%
ABT	-159	-145	8,040	7,894	8,053	10,290	1,705	2,357	2,801	61%	84%
EPC	146	-202	8,215	8,013	7,867	20,214	3,032	3,582	4,094	74%	87%
MPE	-10	-16	181	165	174	243	0	0	9	0%	0%
MSC	7	-59	1,360	1,301	1,294	3,017	403	853	783	51%	109%
VSC	-101	-104	1,174	1,070	1,171	2,108	500	596	771	65%	77%
Grand Total	1,000	-2,337	36,325	33,988	32,987	65,455	11,220	16,565	18,208	62%	91%



26/10/2017

CET objective 1st November

Charges

64%

Commitments

92%

Budget after PRE

Machine	Depart	Group	Description	Budget code	Charged up to 2015	Charged 2016	2017	2018	2019	2020	2021	Total CtC pr 2015 (kCHF)		
LIU-L2B	TE	ABT	LIU-PSB - injection distributor pulse generator (BI.DIS)	65734	950	407	109	0	20	18	0	1,504		
			LIU-PSB - injection stripping foil & absorber blocks E+C	65739	37	95	39	0	12	11	0	195		
			LIU-PSB - PSB injection painting bumpers (BI.KSW)	65736	336	26	24	-1	4	4	0	393		
			LIU-PSB H- injection stripping foil unit	65732	278	192	113	45	15	6	0	648		
			LIU-PSB injection bumpers (BI.BS)	65735	562	466	814	11	63	59	0	1,974		
			LIU-PSB injection distributor magnet (BI.DIS)	65730	0	6	-7	0	0	0	0	0		
			LIU-PSB injection kicker electronics & controls	65737	146	271	79	0	13	12	0	521		
			LIU-PSB injection paint bump (BI.KSW) electr. & contr.	65740	101	320	137	6	18	17	0	601		
			LIU-PSB injection septa electronics & controls	65738	5	50	27	1	14	13	0	109		
			LIU-PSB injection septum (BI.SMV)	65731	1,010	145	90	0	5	4	0	1,255		
			LIU-PSB Injection Zone Support Structure	65733	113	93	27	0	5	4	0	242		
			EPC	LIU PSB Injection - Converter Controls	68743	352	227	13	0	0	0	0	592	
				LIU PSB Injection - Injection Septa Converters	68734	465	42	54	0	0	0	0	560	
		LIU PSB Injection - Measurement		68744	24	206	2	0	0	0	0	233		
		LIU PSB Injection - Stripping Foil Chicane Converters		68741	267	660	855	0	0	0	0	1,782		
					LIU PSB Injection-Qstrip Converters for Chicane Compens	68742	222	30	2	0	0	0	0	253
					TE Total		4,869	3,238	2,379	62	168	148	0	10,862
LIU-L2B Total					4,869	3,238	2,379	62	168	148	0	10,862		

Budget after PRE

Machine	Depart	Group	Description	Budget code	Charged up to 2015	Charged 2016	2017	2018	2019	2020	2021	Total CtC pr 2015 (kCHF)		
LIU-PSB	BE	ABP	LIU-PSB Beam Dynamics	61020	7	2	9	6	6	6	0	35		
		BI	LIU-HST Beam Instrumentation	64025	46	16	0	0	0	0	0	62		
			LIU-PSB BLM Upgrades	64020	683	355	60	0	58	0	0	1,155		
			LIU-PSB Profile Measurement Upgrades	64022	193	172	84	10	27	0	0	486		
			LIU-PSB PU & BCT Upgrades	64021	207	693	195	109	40	0	0	1,244		
			LIU-PSB Wire scanners upgrade	64023	21	345	102	0	0	0	0	468		
			LIU-PSB mechanical production and installation	64024	0	0	32	287	41	31	0	391		
			LIU-PSB mechanical commercial components	64028	0	0	5	54	0	0	0	59		
			LIU-PSB electronics production and cables	64026	0	0	8	51	76	0	0	135		
			LIU-PSB control electronics	64027	0	0	31	97	27	0	0	155		
			CO	LIU-PSB Controls	66020	200	42	1	22	22	22	22	330	
			HDO	LIU-PSB General	62020	2	0	0	0	0	0	0	2	
			OP	LIU-HST Management, Planning and Operation	67025	4	1	2	0	0	0	0	7	
				LIU-PSB management	67020	85	15	147	100	1,901	76	0	2,323	
				LIU-PSB Operation and Commissioning Activities	67021	0	0	0	33	56	56	0	145	
			RF	25YR-PSB HLRF CO4	69234	1,183	1,784	5,508	605	1,288	1,422	0	11,790	
				LIU-PSB Low Level RF	69020	565	29	42	35	35	28	7	741	
				LIU-PSB Transverse Damper	69021	497	154	95	0	6	0	0	751	
		BE Total				3,693	3,607	6,319	1,408	3,582	1,641	29	20,279	
	EN	ACE	HST WP 23.2 Design, integration, installation & services		89135	130	74	21	0	0	0	0	225	
			LIU-PSB Integration studies		89122	52	15	32	28	28	28	0	182	
			LIU-PSB Survey		61021	0	0	0	17	31	0	0	48	
			CV	LIU-PSB Cooling & Ventilation		53661	77	42	1,456	208	568	0	2,351	
		EL	LIU-PSB / DC cables for LIU-PSB		54254	0	0	13	130	372	0	0	515	
			LIU-PSB Electrical system		54247	186	740	902	273	0	0	0	2,101	
			LIU-PSB / Controls cables for LIU-PSB		54253	0	-2,157	297	120	1,740	0	0	0	
			HE	LIU-PSB Transport & Handling		54360	278	18	169	174	248	128	0	1,015
		STI	HST WP 23.4 Dumps		63127	10	10	0	0	0	0	0	0	20
			LIU-PSB STI Beam Intercepting devices		63125	168	136	-26	147	178	0	0	0	603
	EN Total				900	-1,123	2,864	1,098	3,164	156	0	7,060		

Budget after PRE

Machine	Depart	Group	Description	Budget code	Charged up to 2015	Charged 2016	2017	2018	2019	2020	2021	Total CtC pr 2015 (kCHF)
	HSE	RP	RP for LIU - Half Sector test	57388	5	4	0	0	0	0	0	9
	HSE Total				5	4	0	0	0	0	0	9
	SMB	SE	LIU-PSB new MPS building	76805	864	899	471	0	0	0	0	2,234
	SMB Total				864	899	471	0	0	0	0	2,234
	TE	ABT	LIU-HST - BSW Magnets, Stripping Foil & Controls	99232	35	48	3	0	0	0	0	86
			Provide electronics & controls for ABT (LIU-PSB)	65741	18	0	0	0	0	0	0	18
			PSB Upgrade: Extraction, Transfer Kickers	65743	93	55	1,307	343	140	0	0	1,937
			PSB Upgrade: Extraction, Transfer Septa	99236	185	310	161	132	19	0	0	807
		EPC	BI DHZ.DVT 50.70 Corrector power converters	99229	74	185	-19	72	46	0	0	357
			BI.BVT Power converters	99228	7	251	3	0	0	0	0	262
			LIU-HST - BSW Power Converters & Transformers	99227	50	66	1	0	0	0	0	117
			LIU-PSB - ALG 1& 2 Upgrade and MidiDiscap	99239	7	230	115	150	76	0	0	579
			LIU-PSB - Booster MPS & MPS Trims	99238	360	503	2,170	5,884	2,164	419	0	11,500
			LIU-PSB - Converter Controls	99233	135	263	349	0	0	0	0	747
			LIU-PSB - New MPS Building	99237	139	1	-1	0	0	0	0	139
			LIU-PSB - Transfer bendings	99240	0	68	70	897	1,153	568	0	2,755
			LIU-PSB Booster injection power converters installation	68813		0	0	0	265	72	0	337
		MPE	LIU-PSB Machine Interlocks	99290	130	44	9	15	35	10	0	243
		MSC	LIU-PSB Magnetic Measurement	99284	83	13	31	200	10	10	0	347
			PSB Upgrade: Magnets	99281	354	441	571	1,204	100	0	0	2,670
		VSC	VSC Prj: LIU - Half Sector Test	99811	74	17	5	0	0	0	0	96
			VSC Prj: LIU - PSB	99271	298	282	553	567	312	0	0	2,012
	TE Total				2,042	2,778	5,329	9,462	4,320	1,079	0	25,010
LIU-PSB Total					7,504	6,165	14,983	11,969	11,066	2,876	29	54,592
Grand Total					12,373	9,403	17,362	12,030	11,234	3,024	29	65,455

Spare Slides

LIU-PSB Crosstab – BE Department

Depart.	Group	Code	Budget Code Description	EVM Cost Variance	EVM Schedule Variance	EVM Planned Value	EVM Earned Value	EVM Actual Cost	EVM Total Planned Value	CET Charged to Budget Code 2017	CET Annual Commitment 2017	CET Payment Budget 2017
BE	ABP	61020	LIU-PSB Beam Dynamics	2	-5	17	12	10	35	0	0	9
	ABP Total			2	-5	17	12	10	35	0	0	9
	BI	64020	LIU-PSB BLM Upgrades	1	11	1,086	1,097	1,096	1,155	59	59	59
		64021	LIU-PSB PU & BCT Upgrades	19	12	1,083	1,095	1,076	1,244	176	201	195
		64022	LIU-PSB Profile Measurement Upgrades	-25	-35	435	400	426	486	61	95	88
		64023	LIU-PSB Wire scanners upgrade	1	0	468	468	467	468	101	106	102
		64025	LIU-HST Beam Instrumentation	0	0	62	62	62	62	0	0	0
		64024	LIU-PSB mechanical production and installat	-18	-18	18	1	18	391	18	21	32
		64026	LIU-PSB electronics production and cables	4	0	8	8	4	135	4	17	8
		64027	LIU-PSB control electronics	-4	-12	21	9	13	155	13	16	31
		64028	LIU-PSB mechanical commercial component	7	3	4	7	0	59	0	32	5
	BI Total			-16	-37	3,184	3,147	3,162	4,155	431	547	520
	CO	66020	LIU-PSB Controls	-15	-6	239	234	249	330	6	6	1
	CO Total			-15	-6	239	234	249	330	6	6	1
	OP	67020	LIU-PSB management	-107	-14	229	214	322	2,323	222	229	147
		67021	LIU-PSB Operation and Commissioning Activ	0	0	0	0	0	145	0	0	0
		67025	LIU-HST Management, Planning and Operati	0	-1	7	6	7	7	1	1	2
	OP Total			-108	-15	236	221	328	2,475	224	231	149
	RF	69020	LIU-PSB Low Level RF	-2	-31	629	599	601	741	7	21	42
		69021	LIU-PSB Transverse Damper	-55	-58	716	659	713	751	63	132	96
		69234	25YR-PSB HLRF CO4	448	-918	8,151	7,233	6,785	11,790	3,818	5,269	5,507
	RF Total			391	-1,006	9,497	8,491	8,099	13,282	3,888	5,422	5,645
	HDO	62020	LIU-PSB General	0	0	2	2	2	2	0	0	0
	HDO Total			0	0	2	2	2	2	0	0	0
BE Total				256	-1,069	13,174	12,106	11,850	20,279	4,550	6,206	6,324

LIU-PSB Crosstab – EN Department

Depart.	Group	Code	Budget Code Description	EVM Cost Variance	EVM Schedule Variance	EVM Planned Value	EVM Earned Value	EVM Actual Cost	EVM Total Planned Value	CET Charged to Budget Code 2017	CET Annual Commitment 2017	CET Payment Budget 2017
EN	ACE	61021	LIU-PSB Survey	0	0	0	0	0	48	0	0	0
		89122	LIU-PSB Integration studies	18	-7	91	84	66	182	0	0	32
		89135	HST WP 23.2 Design, integration, installation	-42	-40	218	179	221	225	17	17	21
	ACE Total			-24	-47	310	263	287	455	17	17	53
	CV	53661	LIU-PSB Cooling & Ventilation	1,051	48	1,199	1,246	195	2,351	76	1,368	1,456
	CV Total			1,051	48	1,199	1,246	195	2,351	76	1,368	1,456
	EL	54247	LIU-PSB Electrical system	43	-431	1,679	1,248	1,205	2,101	279	792	902
		54253	LIU-PSB / Controls cables for LIU-PSB	7	0	-1,860	-1,860	-1,867	0	290	291	220
		54254	LIU-PSB / DC cables for LIU-PSB	0	0	13	13	13	515	13	13	30
	EL Total			50	-431	-168	-599	-649	2,616	583	1,097	1,152
	HE	54360	LIU-PSB Transport & Handling	17	-41	441	400	383	1,015	88	127	169
	HE Total			17	-41	441	400	383	1,015	88	127	169
	STI	63125	LIU-PSB STI Beam Intercepting devices	-133	-48	264	216	348	603	45	51	35
		63127	HST WP 23.4 Dumps	0	0	20	20	20	20	0	0	0
	STI Total			-132	-48	284	236	368	623	45	51	35
EN Total				961	-519	2,065	1,546	585	7,060	808	2,660	2,865

LIU-PSB Crosstab – SMB Department

Depart.	Group	Code	Budget Code Description	EVM Cost Variance	EVM Schedule Variance	<i>EVM Planned Value</i>	<i>EVM Earned Value</i>	<i>EVM Actual Cost</i>	<i>EVM Total Planned Value</i>	CET Charged to Budget Code 2017	CET Annual Commitment 2017	CET Payment Budget 2017
<input type="checkbox"/> SMB	<input type="checkbox"/> SE	<input type="checkbox"/> 76805	LIU-PSB new MPS building	-100	-223	2,107	1,884	1,984	2,234	222	311	561
	SE Total			-100	-223	2,107	1,884	1,984	2,234	222	311	561
SMB Total				-100	-223	2,107	1,884	1,984	2,234	222	311	561

LIU-PSB Crosstab – TE Department

Dept.	Group	Code	Budget Code Description	EVM Cost Variance	EVM Schedule Variance	EVM Planned Value	EVM Earned Value	EVM Actual Cost	EVM Total Planned Value	CET Charged to Budget Code 2017	CET Annual Commitment 2017	CET Payment Budget 2017
TE	ABT	65730	LIU-PSB injection distributor magnet (BI.DIS)	0	0	0	0	0	0	0	0	-6
		65731	LIU-PSB injection septum (BI.SMV)	-55	-74	1,224	1,150	1,205	1,255	49	95	91
		65732	LIU-PSB H- injection stripping foil unit	30	16	570	586	556	648	87	106	77
		65733	LIU-PSB Injection Zone Support Structure	17	6	220	227	210	242	4	39	27
		65734	LIU-PSB - injection distributor pulse generat	-79	-29	1,404	1,375	1,454	1,504	97	106	109
		65735	LIU-PSB injection bumpers (BI.BS)	-72	-24	1,710	1,686	1,758	1,974	730	833	684
		65736	LIU-PSB - PSB injection painting bumpers (BI	0	-6	373	367	366	393	4	7	24
		65737	LIU-PSB injection kicker electronics & contrc	-6	-2	491	490	495	521	78	85	79
		65738	LIU-PSB injection septa electronics & contro	19	0	81	80	62	109	7	11	27
		65739	LIU-PSB - injection stripping foil & absorber	-9	0	172	172	181	195	48	48	39
		65740	LIU-PSB injection paint bump (BI.KSW) elect	-30	-12	538	526	556	601	134	152	137
		65741	Provide electronics & controls for ABT (LIU-F	0	0	18	18	18	18	0	0	0
		65743	PSB Upgrade: Extraction, Transfer Kickers	4	-10	508	498	493	1,937	345	737	1,307
		99232	LIU-HST - BSW Magnets, Stripping Foil & Con	0	0	86	86	86	86	3	3	3
		99236	PSB Upgrade: Extraction, Transfer Septa	21	-10	644	634	613	807	117	128	203
		65746	PSB Upgrade: Extraction, Transfer Kickers (C	0	0	0	0	0	0	1	7	0
	ABT Total			-159	-145	8,040	7,894	8,053	10,290	1,705	2,357	2,801

LIU-PSB Crosstab – TE Department

Depart.	Group	Code	Budget Code Description	EVM Cost Variance	EVM Schedule Variance	EVM Planned Value	EVM Earned Value	EVM Actual Cost	EVM Total Planned Value	CET Charged to Budget Code 2017	CET Annual Commitment 2017	CET Payment Budget 2017
	EPC	68734	LIU PSB Injection - Injection Septa Converter	8	0	564	564	555	560	49	58	54
		68741	LIU PSB Injection - Stripping Foil Chicane Converter	163	-15	1,734	1,719	1,556	1,782	629	761	855
		68742	LIU PSB Injection-Qstrip Converters for Chicane	6	0	259	259	253	253	1	2	2
		68743	LIU PSB Injection - Converter Controls	-2	0	591	591	594	592	15	15	13
		68744	LIU PSB Injection - Measurement	0	0	233	233	233	233	3	3	2
		99227	LIU-HST - BSW Power Converters & Transformers	0	0	117	117	117	117	0	0	0
		99228	BI.BVT Power converters	-7	0	262	262	269	262	11	11	3
		99229	BI DHZ.DVT 50.70 Corrector power converter	6	-4	226	221	215	357	-43	-43	-19
		99233	LIU-PSB - Converter Controls	9	-90	684	594	586	747	188	193	349
		99237	LIU-PSB - New MPS Building	-1	0	139	139	140	139	0	0	-1
		99238	LIU-PSB - Booster MPS & MPS Trims	-238	-51	2,937	2,887	3,125	11,500	2,261	2,618	2,170
		99239	LIU-PSB - ALG 1& 2 Upgrade and MidiDiscap	183	-4	352	348	165	579	-72	-72	266
		99240	LIU-PSB - Transfer bendings	21	-38	117	79	58	2,755	-10	37	400
		68813	LIU-PSB Booster injection power converters	0	0	0	0	0	337	0	0	0
	EPC Total			146	-202	8,215	8,013	7,867	20,214	3,032	3,582	4,094
	MPE	99290	LIU-PSB Machine Interlocks	-10	-16	181	165	174	243	0	0	9
	MPE Total			-10	-16	181	165	174	243	0	0	9
	MSC	99281	PSB Upgrade: Magnets	-18	-63	1,239	1,176	1,193	2,670	399	849	752
		99284	LIU-PSB Magnetic Measurement	25	4	121	126	101	347	5	5	31
	MSC Total			7	-59	1,360	1,301	1,294	3,017	403	853	783
	VSC	99271	VSC Prj: LIU - PSB	-84	-88	1,080	992	1,075	2,012	495	591	766
		99811	VSC Prj: LIU - Half Sector Test	-17	-16	94	79	96	96	5	5	5
	VSC Total			-101	-104	1,174	1,070	1,171	2,108	500	596	771
TE Total				-116	-526	18,970	18,443	18,559	35,872	5,640	7,389	8,458