



# LIU-PSB EVM Status

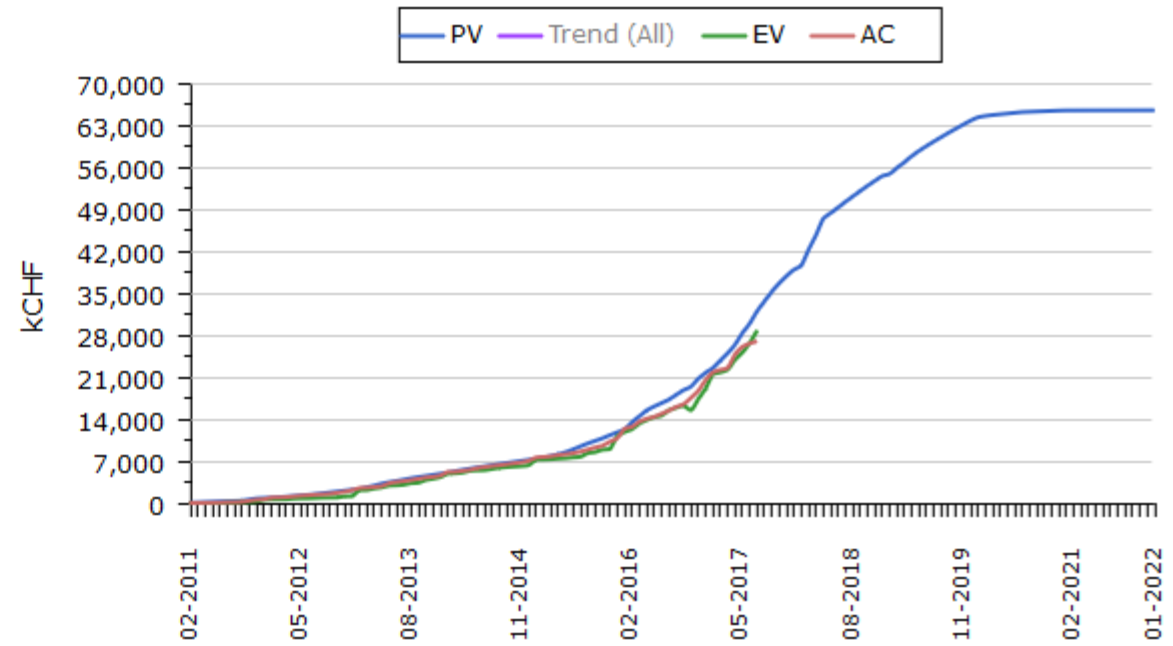
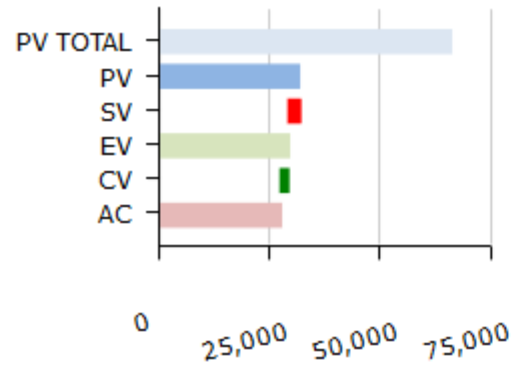
Data extraction: 20 June 2017

# EVM changes since last meeting

Version	Machine	Group	Budget code	2017	2018	2019	2020	Comment
4.0	LIU-PSB	Various		-211				Closure of HST budget codes
4.0	LIU-PSB	BE-OP	67020	211				Closure of HST budget codes
4.0	LIU-PSB	TE-MSC	99284	-126	106	10	10	Reprofiling workunit
4.0	LIU-PSB	TE-MSC	99281	283	-321	36		Reprofiling workunit
4.0	LIU-PSB	EN-EL	54253	220	80	-300		Reprofiling workunit
4.0	LIU-PSB	EN-EL	54254	-125	30	95		Reprofiling workunit
5.0	LIU-PSB	SMB-SE	76805	-942				Savings to project management
5.0	LIU-PSB	TE-VSC	99271	95				Additional allocation for BOM
5.0	LIU-PSB	BE-OP	67020	-95		942		Savings to project management
5.0	LIU-PSB	TE-MPE	99290	-7	-38	35	10	Reprofiling workunit
6.0	LIU-PSB	BE-OP	67020			-238		Cost overrun from project management
6.0	LIU-PSB	BE-BI	64023	-132	-370			BE-BI wire-scanner adjustment
6.0	LIU-PSB	BE-BI	64024	14	305	41	31	BE-BI wire-scanner adjustment
6.0	LIU-PSB	BE-BI	64028	5	54			BE-BI wire-scanner adjustment
6.0	LIU-PSB	BE-BI	64026	8	51	76		BE-BI wire-scanner adjustment
6.0	LIU-PSB	BE-BI	64027	31	97	27		BE-BI wire-scanner adjustment
6.0	LIU-PSB	TE-MSC	99281	134	-134			Reprofiling workunit
7.0	LIU-PSB	EN-ACE	89122		28	28	28	Additional allocation for integration
7.0	LIU-PSB	BE-OP	67020			-84		Cost overrun from project management

# LIU-PSB Dashboard

## LIU-PSB - LIU-PSB



[Download Chart Data](#)

### Metrics on the 20-Jun-2017

PV (kCHF)	EV (kCHF)	AC (kCHF)	PV Total (kCHF)	Trend (All) (kCHF)	SV (kCHF)	SPI (%)	CV (kCHF)	CPI (%)	SV(t) (months)
31,349	28,735	26,948	65,455	32,056	-2,614	92	1,787	107	-1.37



# 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
<b>BE</b>	<b>1,611</b>	<b>-358</b>	<b>10,794</b>	<b>10,436</b>	<b>8,824</b>	<b>19,029</b>	<b>1,524</b>	<b>5,374</b>	<b>6,385</b>	<b>24%</b>	<b>84%</b>
ABP	3	-3	15	12	9	35	0	0	9	0%	0%
BI	87	12	3,091	3,103	3,017	4,085	286	414	581	49%	71%
CO	-15	2	232	234	249	330	6	6	1	629%	629%
OP	61	-4	179	175	114	1,295	10	31	149	6%	21%
RF	1,476	-366	7,275	6,910	5,434	13,282	1,223	4,923	5,645	22%	87%
HDO	0	0	2	2	2	2	0	0	0		
<b>EN</b>	<b>3</b>	<b>-422</b>	<b>817</b>	<b>396</b>	<b>393</b>	<b>7,060</b>	<b>615</b>	<b>2,395</b>	<b>3,233</b>	<b>19%</b>	<b>74%</b>
ACE	-38	-37	286	249	287	455	16	17	53	31%	31%
CV	16	-140	330	190	174	2,351	55	1,306	1,692	3%	77%
EL	98	-163	-505	-668	-767	2,616	465	967	1,152	40%	84%
HE	31	-7	397	390	359	1,015	63	75	301	21%	25%
STI	-105	-74	309	235	340	623	16	32	35	46%	90%
<b>HSE</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0%</b>
RP	0	0	9	9	9	9	0	0	0	0%	0%
<b>SMB</b>	<b>-104</b>	<b>-287</b>	<b>1,950</b>	<b>1,663</b>	<b>1,767</b>	<b>2,324</b>	<b>5</b>	<b>279</b>	<b>561</b>	<b>1%</b>	<b>50%</b>
SE	-104	-287	1,950	1,663	1,767	2,324	5	279	561	1%	50%
<b>TE</b>	<b>277</b>	<b>-1,548</b>	<b>17,779</b>	<b>16,232</b>	<b>15,955</b>	<b>37,033</b>	<b>3,035</b>	<b>5,401</b>	<b>7,966</b>	<b>38%</b>	<b>68%</b>
ABT	-118	-779	7,756	6,977	7,095	10,363	746	1,673	3,050	24%	55%
EPC	686	-274	7,539	7,265	6,579	21,363	1,744	2,401	3,353	52%	72%
MPE	-10	-13	178	165	174	243	0	0	9	0%	0%
MSC	-9	-27	1,161	1,134	1,143	2,956	252	831	783	32%	106%
VSC	-272	-454	1,146	691	964	2,108	293	497	771	38%	64%
<b>Grand Total</b>	<b>1,787</b>	<b>-2,615</b>	<b>31,349</b>	<b>28,735</b>	<b>26,948</b>	<b>65,455</b>	<b>5,179</b>	<b>13,450</b>	<b>18,145</b>	<b>29%</b>	<b>74%</b>



CET objective 1 <sup>st</sup> June	Charges	25%
	Commitments	62%

CET objective 1 <sup>st</sup> July	Charges	32%
	Commitments	68%

# 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	3	-3	15	12	9	35	0	0	9
	<b>ABP Total</b>			<b>3</b>	<b>-3</b>	<b>15</b>	<b>12</b>	<b>9</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>9</b>
	BI	64020	LIU-PSB BLM Upgrades	2	32	1,065	1,097	1,095	1,155	58	58	59
		64021	LIU-PSB PU & BCT Upgrades	94	4	1,077	1,081	987	1,174	87	174	274
		64022	LIU-PSB Profile Measurement Upgrades	-14	-16	411	395	409	486	44	60	88
		64023	LIU-PSB Wire scanners upgrade	7	0	468	468	461	468	95	102	102
		64025	LIU-HST Beam Instrumentation	0	0	62	62	62	62	0	0	0
		64024	LIU-PSB mechanical production and installat	0	-4	4	0	0	391	0	0	14
		64026	LIU-PSB electronics production and cables	0	-1	1	0	0	135	0	16	8
		64027	LIU-PSB control electronics	-2	-3	3	0	2	155	2	4	31
		64028	LIU-PSB mechanical commercial component	1	0	0	1	0	59	0	0	5
	<b>BI Total</b>			<b>87</b>	<b>12</b>	<b>3,091</b>	<b>3,103</b>	<b>3,017</b>	<b>4,085</b>	<b>286</b>	<b>414</b>	<b>581</b>
	CO	66020	LIU-PSB Controls	-15	2	232	234	249	330	6	6	1
	<b>CO Total</b>			<b>-15</b>	<b>2</b>	<b>232</b>	<b>234</b>	<b>249</b>	<b>330</b>	<b>6</b>	<b>6</b>	<b>1</b>
	OP	67020	LIU-PSB management	61	-3	172	169	108	1,143	8	29	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
	<b>OP Total</b>			<b>61</b>	<b>-4</b>	<b>179</b>	<b>175</b>	<b>114</b>	<b>1,295</b>	<b>10</b>	<b>31</b>	<b>149</b>
	RF	69020	LIU-PSB Low Level RF	2	-18	617	600	597	741	4	4	42
		69021	LIU-PSB Transverse Damper	-85	-1	602	601	686	751	36	118	96
		69234	25YR-PSB HLRF CO4	1,559	-347	6,056	5,709	4,150	11,790	1,183	4,802	5,507
	<b>RF Total</b>			<b>1,476</b>	<b>-366</b>	<b>7,275</b>	<b>6,910</b>	<b>5,434</b>	<b>13,282</b>	<b>1,223</b>	<b>4,923</b>	<b>5,645</b>
	HDO	62020	LIU-PSB General	0	0	2	2	2	2	0	0	0
	<b>HDO Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>BE Total</b>				<b>1,611</b>	<b>-358</b>	<b>10,794</b>	<b>10,436</b>	<b>8,824</b>	<b>19,029</b>	<b>1,524</b>	<b>5,374</b>	<b>6,385</b>

# LIU-PSB Crosstab – EN 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
EN	ACE	61021	LIU-PSB Survey	0	0	0	0	0	48	0	0	0
		89122	LIU-PSB Integration studies	4	-9	80	71	66	182	0	0	32
		89135	HST WP 23.2 Design, integration, installation	-42	-28	207	179	221	225	16	17	21
	<b>ACE Total</b>			<b>-38</b>	<b>-37</b>	<b>286</b>	<b>249</b>	<b>287</b>	<b>455</b>	<b>16</b>	<b>17</b>	<b>53</b>
	CV	53661	LIU-PSB Cooling & Ventilation	16	-140	330	190	174	2,351	55	1,306	1,692
	<b>CV Total</b>			<b>16</b>	<b>-140</b>	<b>330</b>	<b>190</b>	<b>174</b>	<b>2,351</b>	<b>55</b>	<b>1,306</b>	<b>1,692</b>
	EL	54247	LIU-PSB Electrical system	150	-161	1,405	1,244	1,094	2,101	168	665	902
		54253	LIU-PSB / Controls cables for LIU-PSB	-64	0	-1,937	-1,937	-1,873	0	284	288	220
		54254	LIU-PSB / DC cables for LIU-PSB	12	-2	27	25	13	515	13	13	30
	<b>EL Total</b>			<b>98</b>	<b>-163</b>	<b>-505</b>	<b>-668</b>	<b>-767</b>	<b>2,616</b>	<b>465</b>	<b>967</b>	<b>1,152</b>
	HE	54360	LIU-PSB Transport & Handling	31	-7	397	390	359	1,015	63	75	301
	<b>HE Total</b>			<b>31</b>	<b>-7</b>	<b>397</b>	<b>390</b>	<b>359</b>	<b>1,015</b>	<b>63</b>	<b>75</b>	<b>301</b>
	STI	63125	LIU-PSB STI Beam Intercepting devices	-105	-74	289	215	320	603	16	32	35
		63127	HST WP 23.4 Dumps	0	0	20	20	20	20	0	0	0
	<b>STI Total</b>			<b>-105</b>	<b>-74</b>	<b>309</b>	<b>235</b>	<b>340</b>	<b>623</b>	<b>16</b>	<b>32</b>	<b>35</b>
<b>EN Total</b>				<b>3</b>	<b>-422</b>	<b>817</b>	<b>396</b>	<b>393</b>	<b>7,060</b>	<b>615</b>	<b>2,395</b>	<b>3,233</b>

# 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	-104	-287	1,950	1,663	1,767	2,324	5	279	561
	<b>SE Total</b>			<b>-104</b>	<b>-287</b>	<b>1,950</b>	<b>1,663</b>	<b>1,767</b>	<b>2,324</b>	<b>5</b>	<b>279</b>	<b>561</b>
<b>SMB Total</b>				<b>-104</b>	<b>-287</b>	<b>1,950</b>	<b>1,663</b>	<b>1,767</b>	<b>2,324</b>	<b>5</b>	<b>279</b>	<b>561</b>



# 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
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)	-79	-80	1,180	1,100	1,179	1,255	24	45	91
		65732	LIU-PSB H- injection stripping foil unit	-50	-26	492	466	516	568	46	69	77
		65733	LIU-PSB Injection Zone Support Structure	15	-8	230	222	207	242	1	8	27
		65734	LIU-PSB - injection distributor pulse generat	-64	-31	1,379	1,348	1,412	1,504	54	75	109
		65735	LIU-PSB injection bumpers (BI.BS)	56	-232	1,677	1,445	1,389	1,844	361	721	684
		65736	LIU-PSB - PSB injection painting bumpers (BI	3	-6	373	367	365	393	2	8	24
		65737	LIU-PSB injection kicker electronics & contro	-13	-27	469	442	455	521	38	44	79
		65738	LIU-PSB injection septa electronics & contro	21	-1	78	77	57	109	2	3	27
		65739	LIU-PSB - injection stripping foil & absorber	-52	-10	139	128	180	195	47	48	15
		65740	LIU-PSB injection paint bump (BI.KSW) elect	-49	-35	502	467	516	601	95	103	137
		65741	Provide electronics & controls for ABT (LIU-F	0	0	18	18	18	18	0	0	0
		65743	PSB Upgrade: Extraction, Transfer Kickers	-39	-281	449	168	207	2,149	59	525	1,501
		99232	LIU-HST - BSW Magnets, Stripping Foil & Con	1	0	86	86	85	86	2	2	3
		99236	PSB Upgrade: Extraction, Transfer Septa	133	-42	684	642	509	878	13	21	282
	<b>ABT Total</b>			<b>-118</b>	<b>-779</b>	<b>7,756</b>	<b>6,977</b>	<b>7,095</b>	<b>10,363</b>	<b>746</b>	<b>1,673</b>	<b>3,050</b>

# 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
	EPC	68734	LIU PSB Injection - Injection Septa Converter	9	-20	540	520	511	530	5	53	23
		68741	LIU PSB Injection - Stripping Foil Chicane Co	312	42	1,635	1,677	1,365	1,758	437	651	831
		68742	LIU PSB Injection-Qstrip Converters for Chic	1	0	254	254	253	470	1	2	-13
		68743	LIU PSB Injection - Converter Controls	-21	-30	600	570	591	635	12	13	56
		68744	LIU PSB Injection - Measurement	147	0	380	380	233	380	2	2	150
		99227	LIU-HST - BSW Power Converters & Transform	1	0	117	117	116	117	0	0	0
		99228	BI.BVT Power converters	-19	-1	241	240	259	244	0	3	-14
		99229	BI DHZ.DVT 50.70 Corrector power converter	102	-48	363	315	213	360	-45	-43	101
		99233	LIU-PSB - Converter Controls	49	24	570	594	545	747	147	153	349
		99237	LIU-PSB - New MPS Building	-1	0	139	139	140	139	0	0	-1
		99238	LIU-PSB - Booster MPS & MPS Trims	-133	-3	2,036	2,033	2,165	12,649	1,302	1,647	1,205
		99239	LIU-PSB - ALG 1& 2 Upgrade and MidiDiscap	183	-75	423	348	165	579	-72	-72	266
		99240	LIU-PSB - Transfer bendings	56	-163	242	79	22	2,755	-45	-8	400
	<b>EPC Total</b>			<b>686</b>	<b>-274</b>	<b>7,539</b>	<b>7,265</b>	<b>6,579</b>	<b>21,363</b>	<b>1,744</b>	<b>2,401</b>	<b>3,353</b>
	MPE	99290	LIU-PSB Machine Interlocks	-10	-13	178	165	174	243	0	0	9
	<b>MPE Total</b>			<b>-10</b>	<b>-13</b>	<b>178</b>	<b>165</b>	<b>174</b>	<b>243</b>	<b>0</b>	<b>0</b>	<b>9</b>
	MSC	99281	PSB Upgrade: Magnets	-10	-15	1,050	1,035	1,045	2,609	250	828	752
		99284	LIU-PSB Magnetic Measurement	1	-12	111	99	98	347	2	2	31
	<b>MSC Total</b>			<b>-9</b>	<b>-27</b>	<b>1,161</b>	<b>1,134</b>	<b>1,143</b>	<b>2,956</b>	<b>252</b>	<b>831</b>	<b>783</b>
	VSC	99271	VSC Prj: LIU - PSB	-261	-442	1,054	612	873	2,012	293	492	766
		99811	VSC Prj: LIU - Half Sector Test	-12	-13	91	79	91	96	0	5	5
	<b>VSC Total</b>			<b>-272</b>	<b>-454</b>	<b>1,146</b>	<b>691</b>	<b>964</b>	<b>2,108</b>	<b>293</b>	<b>497</b>	<b>771</b>
<b>TE Total</b>				<b>277</b>	<b>-1,548</b>	<b>17,779</b>	<b>16,232</b>	<b>15,955</b>	<b>37,033</b>	<b>3,035</b>	<b>5,401</b>	<b>7,966</b>