



## 12 GeV Upgrade VARIANCE ANALYSIS REPORT

**WBS: 1.3.6.4 - Construction Accelerator IC&S Safety Systems**

**Control Account Manager: M. Spata**

**For Period Ending: Oct 13**

12 GeV 1.3.6.4	SCHEDULE FLAG				COST FLAG			
	(A)	(B)	(B-A)	(B/A)	(C)	(D)	(C-D)	(C/D)
	Planned Value	Earned Value	Schedule Variance	Schedule Perform Index	Earned Value	Actual Cost	Cost Variance	Cost Perform Index
	BCWS	BCWP	SV	SPI	BCWP	ACWP	CV	CPI
Month of Oct-13	109	65	-44	0.60	65	67	-2	0.97
Cumulative	196	105	-91	0.54	105	121	-17	0.86

<b>Yellow Flag: Index &lt;.9 / &gt;1.1 OR Variance &gt; \$25K</b>
<b>Red Flag: Index &lt;.8 / &gt;1.2 AND Variance &gt; \$50K</b>

### 1. Cause (Address Variances Individually)

#### 13641 MPS

SV.1: MPS resources diverted to repair/replace of damaged CEBAF MPS equipment in support of HCO. Work is progressing but not complete.

SV.2: MPS Cards undergoing revision to FPGA design to add required heartbeat function

SV3: Procurements delayed by changing rules on how to purchase materials; e.g. PR vs Webstock vs PCard. Some PRs and Webstock requests bounced back.

#### 13642 BELS

SV.4: Lower priority, lower cost, long-float activities postponed to address higher impact SV issues.

#### 13643 PSS

SV.5 Some Tagger/Hall D cable installation delayed due to higher priorities for Electrician resource. Other SSG team members working on issue SV.1 Otherwise, work progresses and small cable pulls continue.

SV.6: Re-specifying PSS secure industrial network equipment. Original PSS networking equipment out of date. PSS Networking equipment undergoing final review and scrub before purchase. This is estimated to result in an upcoming CV of ~30k\$ for this equipment purchase.

SV.7: PSS BCM RF equipment is still in fab and test. Engineer working PSS BCM electronics left the laboratory. Re-valuating status. OK for beam runs I and II.

SV7b: Designated additional engineering resource working on CHL stability and I&C equipment issues. Those tasks had higher priority for JLab goals than the BCM issues.

### 2. Proposed Solutions (Corrective Actions)

SV.1; SV.5: Using Operators when available as well as consolidating cable installation activities with RadCon and Facility Management.

SV.2: Essentially resolved. New FPGA program in test.

SV.3: Request better communication on changes to purchasing criteria.

SV.4 BELS work will move into December 2013. Equipment off-the shelf. No impact to ETC.

SV.6: Change request? Equipment is off-the-shelf; delivery is not an issue.

SV.7a: BCM RF Components under final test. BCM electronics review complete 3 Dec, 2013. Electronics Integration January 31, 2014.

SV.7b: Engineering Resource should be available starting December, 2013.

**Estimated Resolution By (Date): 3/15/2014**

### 3. Impact on Project Cost/ Schedules

Schedule Variance Projection					
Nov	Dec	Jan	Feb	Mar	Apr
-91	-60	-30	-15	0	0

### 4. Comments

Winter PSS Certification is moved into March 2014. PSS Complete milestone will follow this date.

**Control Account Manager:**

Mike Spata

**Project Manager:**

Leigh Harwood  
D. Miner for C. Rode

Oct	Planned Value	Earned Value	Schedule Variance	Schedule Perform Index	Earned Value	Actual Cost	Cost Variance	Cost Perform Index
	BCWS	BCWP	SV	SPI	BCWP	ACWP	CV	CPI
<b>12 GeV 1.3.6.4.1</b>								
Month of Oct-13	37	40	3	1.09	40	23	17	1.72
Cumulative	72	49	-23	0.69	49	35	14	1.39
<b>12 GeV 1.3.6.4.2</b>								
Month of Oct-13	6	1	-5	0.10	1	0	0	1.45
Cumulative	6	1	-5	0.18	1	1	0	1.07
<b>12 GeV 1.3.6.4.3</b>								
Month of Oct-13	66	24	-42	0.37	24	43	-19	0.56
Cumulative	118	54	-63	0.46	54	85	-30	0.64