



12 GeV Upgrade VARIANCE ANALYSIS REPORT

WBS: 1.3.4.1 - Construction Beam Transport Spreaders & Recombiners

Control Account Manager: M. Bevins

For Period Ending: Aug 13

| 12 GeV 1.3.4.1 | 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 Aug-13 | 50 | 50 | 0 | 0.99 | 50 | 267 | -217 | 0.19 |
| Cumulative | 8438 | 8308 | -130 | 0.98 | 8308 | 11337 | -3028 | 0.73 |

| |
|---|
| Yellow Flag: Index <.9 / >1.1 OR Variance > \$25K |
| Red Flag: Index <.8 / >1.2 AND Variance > \$50K |

1. Cause (Address Variances Individually)

CV: The bulk of the negative cumulative CV is the result of:

- 1) An optimistic estimate for the modification of the production drawings to incorporate the changes resulting from the adoption of the "Option B" S/R design. This was rework, so it results in a cost variance.
- 2) Labor costs associated with the receipt inspection/measurement of dipoles. This effort was underestimated in the baseline.

The bulk of the Cv accumulated in Aug was due to higher than baseline costs for completion of installation tasks.

2. Proposed Solutions (Corrective Actions)

CV:

- 1) None. No offsetting corrective actions have been identified.
- 2) Working closely with septa magnet vendor and magnet measurement facility to complete magnet inspection and measurement activities as efficiently as possible.

Estimated Resolution By (Date): NA.

3. Impact on Project Cost/ Schedules

| | CVcum | Cost Variance Projection | | | | | |
|----------------------|---------|--------------------------|---------|---------|-----|--|--|
| | | Sep | Oct | Nov | Dec | | |
| Recoverable | - \$0 | \$0 | \$0 | \$0 | | | |
| Unrecoverable | -\$2990 | -\$3250 | -\$3300 | -\$3300 | | | |
| Error | -\$38 | -\$38 | -\$38 | -\$38 | | | |

4. Comments:

Control Account Manager :
Michael E. Bevins

Project Manager:
Leigh Harwood
D. Miner for C. Rode

| Aug | 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 |
| 12 GeV 1.3.4.1.1 | | | | | | | | |
| Month of Aug-13 | 0 | 0 | 0 | No PV | 0 | 35 | -35 | 0.00 |
| Cumulative | 4169 | 4103 | -65 | 0.98 | 4103 | 5094 | -991 | 0.81 |
| 12 GeV 1.3.4.1.4 | | | | | | | | |
| Month of Aug-13 | 0 | 0 | 0 | No PV | 0 | 0 | 0 | 0.00 |
| Cumulative | 1550 | 1550 | 0 | 1.00 | 1550 | 2059 | -508 | 0.75 |
| 12 GeV 1.3.4.1.6 | | | | | | | | |
| Month of Aug-13 | 0 | 0 | 0 | No PV | 0 | 1 | -1 | 0.00 |
| Cumulative | 466 | 466 | 0 | 1.00 | 466 | 732 | -265 | 0.64 |
| 12 GeV 1.3.4.1.7 | | | | | | | | |
| Month of Aug-13 | 50 | 50 | 0 | 0.99 | 50 | 230 | -181 | 0.22 |
| Cumulative | 2253 | 2189 | -65 | 0.97 | 2189 | 3452 | -1264 | 0.63 |