## 12 GeV Upgrade VARIANCE ANALYSIS REPORT

WBS: 1.4.3.1 - Construction Hall C Magnet<br>Control Account Manager: H. Fenker<br>For Period Ending: Sep 13

| 12 GeV 1.4.3.1 | SCHEDULE FLAG |  |  |  | COST FLAG |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Values are in \$K Dollars (other than SPI \& CPI) | (A) | (B) | (B-A) | (B/A) | (C) | (D) | (C-D) | (CID) |
|  | Planned Value | Earned Value | Schedule Variance | Schedule Perform Index | Earned Value | Actual Cost | Cost <br> Variance | Cost <br> Perform Index |
|  | BCWS | BCWP | SV | SPI | BCWP | ACWP | CV | CPI |
| Month of Sep-13 | 58 | 155 | 96 | 2.65 | 155 | 189 | -34 | 0.82 |
| Cumulative | 58 | 155 | 96 | 2.65 | 155 | 189 | -34 | 0.82 |

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

## 1. Cause (Address Variances Individually)

SV: HB magnet vendor progressed about a month ahead of the project plan; vendor who performed superconducting cable tests completed work a month earlier than expected.

## 2. Proposed Solutions (Corrective Actions)

SV: None. Work was completed ahead of schedule.
Estimated Resolution By (Date): N/A
3. Impact on Project Cost/ Schedules

| Schedule Variance Projection |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Sep | Oct | Nov | Dec | Jan | Feb |
| $+96 k$ | $-280 k$ | $-320 k$ | $-380 k$ | $-330 k$ | $-330 k$ |

## 4. Comments:

Only $50 \%$ of Dipole and Q2Q3 FDR's will finish in October. Dipole FDR punch-list (\$50k) is expected to complete in JAN-2014. Quad FDR punch-list ( $\$ 240 \mathrm{k}$ ) expected to finish APR-2014. It is anticipated that the HB magnet progress will fall behind again by \$50-100k during Nov-Jan.

## Control Account Manager:

H. Fenker 30-Oct-2013

Project Manager:
G. R. Young
D. Miner for C. Rode

| Sep | 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 1.4.3.1.1 |  |  |  |  |  |  |  |  |
| Month of Sep-13 | 5 | 88 | 83 | 17.62 | 88 | 85 | 4 | 1.04 |
| Cumulative | 5 | 88 | 83 | 17.62 | 88 | 85 | 4 | 1.04 |
| 12 GeV 1.4.3.1.2 |  |  |  |  |  |  |  |  |
| Month of Sep-13 | 10 | 11 | 1 | 1.09 | 11 | 19 | -8 | 0.60 |
| Cumulative | 10 | 11 | 1 | 1.09 | 11 | 19 | -8 | 0.60 |
| 12 GeV 1.4.3.1.3 |  |  |  |  |  |  |  |  |
| Month of Sep-13 | 16 | 11 | -5 | 0.70 | 11 | 30 | -18 | 0.38 |
| Cumulative | 16 | 11 | -5 | 0.70 | 11 | 30 | -18 | 0.38 |
| 12 GeV 1.4.3.1.4 |  |  |  |  |  |  |  |  |
| Month of Sep-13 | 5 | 5 | 0 | 1.00 | 5 | 22 | -17 | 0.24 |
| Cumulative | 5 | 5 | 0 | 1.00 | 5 | 22 | -17 | 0.24 |
| 12 GeV 1.4.3.1.5 |  |  |  |  |  |  |  |  |
| Month of Sep-13 | 22 | 39 | 17 | 1.78 | 39 | 34 | 5 | 1.14 |
| Cumulative | 22 | 39 | 17 | 1.78 | 39 | 34 | 5 | 1.14 |

