SynchroPhasor Technology Deployment Project Update

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TOA-AC
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Project Financials: Baseline vs. Reported Spending

Baseline
Reported to DOE

Thousands

$0
$5,000
$10,000
$15,000
$20,000
$25,000


$3,947
$5,912

Baseline
Reported to DOE
Burn Down Chart - Spending Trend

$30,000,000
$25,000,000
$20,000,000
$15,000,000
$10,000,000
$5,000,000
-

Q4/09  Q1/10  Q2/10  Q3/10  Q4/10  Q1/11  Q2/11  Q3/11  Q4/11  Q1/12  Q2/12  Q3/12  Q4/12  Q1/13  Q2/13  Q3/13

-Planned  Trend

End of Project
Performance to Schedule

CPI/SPI by Month

- CPI
- SPI
- UCL
- LCL

Graph showing CPI/SPI by Month from Sep 2010 to Jul 2011.
PMU Installations (Substations) vs. Forecast & Baseline

- **Baseline**
- **Latest Forecast**
- **Completed Installations**
- **Communicating to PJM**

# of Substations chart with data points:
- 2010Q3: Baseline 0, Latest Forecast 5, Completed Installations 5
- 2010Q4: Baseline 10, Latest Forecast 47, Completed Installations 24
- 2011Q1: Baseline 20, Latest Forecast 57, Completed Installations 5
- 2011Q2: Baseline 30, Latest Forecast 70, Completed Installations 5
- 2011Q3: Baseline 40, Latest Forecast 80, Completed Installations 5
- 2011Q4: Baseline 50, Latest Forecast 80, Completed Installations 5
- 2012Q1: Baseline 60, Latest Forecast 80, Completed Installations 5
- 2012Q2: Baseline 70, Latest Forecast 80, Completed Installations 5
- 2012Q3: Baseline 80, Latest Forecast 80, Completed Installations 5
- 2012Q4: Baseline 90, Latest Forecast 80, Completed Installations 5
- 2013Q1: Baseline 90, Latest Forecast 80, Completed Installations 5
- 2013Q2: Baseline 90, Latest Forecast 80, Completed Installations 5
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<th>2010</th>
<th>2011</th>
<th>2012</th>
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**Phasor Data Concentrators (PDC) communicating to PJM**

- **Expected Completion Quarters**
  - Q4 2010
  - Q3 2011
  - Q2 2012

**Planned**
- Q4 2011
- Q2 2012

**Completed**
- Q1 2011
• Receiving data from AEP!
• T1 telecommunications lines installed at five (5) TOs
• Transmitting PJM data out to MISO (20 PMUs)
• Receiving data in from MISO (45 PMUs)
• **Install, Spend, Invoice - ASAP** (before time runs out)
  – Invoices need to be submitted as soon as work is completed

• **Funding is available so the more PMU installations… The better**