



U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

DOE ARRA Program Tracking and Metrics

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Program Metrics

Build Metric

Metric:

The portion of the transmission system visible with synchrophasor technology

Target:

By 2013, 1043 networked PMUs will be installed providing nearly 100% coverage of the transmission system

Impact Metric

Metric:

Reduction in geographic scope, frequency and duration of power outages caused by problems on the bulk power system

Target:

By 2015, 50% of transmission operators will have planning and/or operating procedures that incorporate synchrophasor measurements



Applications

- Multiple applications being developed, e.g.,
 - Real-time situational analysis
 - Post-event analysis
 - Alarming and setting system operating limits
 - State estimation
 - Resource (e.g., wind) integration
 - Congestion management
- Use the DOE-NASPI collaboration to track and report on progress (annually?)
- Share lessons-learned across community



Impacts

- Where should we focus?
- Many projects focused on off-line analysis (e.g., post-event analysis) and monitoring (e.g., oscillation, angle/frequency, voltage stability monitoring)
- Focus impact analysis on how synchro pasor technology improves grid reliability and operations?
- Other focus areas we should consider?

