

## OPTIMIZATION OF WIND RESOURCES

### Optimization of Intermittent Wind Resources Augments Municipal Resource Revenues

Two TEA Partner municipals were managing approximately 230 MWs of demonstrated wind capacity within the Midwest Independent System Operator. Considerable transmission congestion caused unfavorable and even negative pricing conditions at the generators' respective commercial pricing nodes. These factors created a pricing environment conducive to a variety of strategic generation offer alternatives.

**Solution:**

Collaborative efforts were taken by TEA and the partner asset owner to develop offer strategies to market the generation in the most optimal Day Ahead or Real Time market.

**Critical Success Factors**

- Partner provided wind forecasts
- TEA wind forecasts
- TEA Locational Marginal Price forecasting
- TEA transmission congestion analysis
- TEA probabilistic wind price delta tools and analysis

**Results:**

These actions have augmented Partner revenues in excess of \$4 Million and have concurrently reduced MISO Real Time Revenue Sufficiency Guarantee charges.

**Conclusion:**

Through team efforts of affected partners and TEA, the asset owners were able to restructure their market offers to mitigate the effects of congestion pricing at their commercial pricing nodes, while increasing revenue and reducing risk.