



Texas Competitive Power Advocates

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Why South Texas Needs a Nodal Market

Texas Competitive Power Advocates (TCPA) supports the transition to a nodal market design in which electricity prices are calculated on a nodal – or local – basis in Texas according to each local area's actual electricity usage, generation capability and transmission constraints. This allows generation and transmission improvements to be more accurately focused where they are needed.

The current zonal model used by the Electric Reliability Council of Texas (ERCOT) designates five broad zones across the state, but assigns only those congestion costs that occur *between* zones to the power generators and loads that cause the congestion, while ignoring the significant congestion costs that occur *within* the zones. This lack of local pricing masks local congestion problems and passes along congestion costs to others in the system, artificially inflating electricity prices for millions of Texans and prolonging the generation and transmission constraints that trigger congestion problems.

Texas Nodal is being developed through ERCOT in accordance with market rules promulgated by the Public Utility Commission of Texas (PUC), which oversees the Texas electricity market.

A nodal market and the resulting system improvements will lower electricity bills for customers across the state, reduce pollution, ensure long-term electric reliability and enable Texas to better predict and plan for future electricity needs.

Benefits of a Nodal Market

Lowers the cost of providing electricity over the long run

- A nodal market could reduce the costs to serve customers in Texas by more than \$832 million immediately and more than \$8.2 billion over 10 years, according to an independent cost-benefit study filed with the PUC.

In the short-term, the overall cost of providing electricity in the South Zone could climb slightly, but **\$342 million could be saved over a 10-year period.**

An additional \$1.2 billion a year could be saved in electricity production costs statewide by using more efficient plants to generate electricity in a nodal market. **Half of that \$1.2 billion would occur in the South Zone.**

Lowers electricity bills for customers across the state:

- Costs will be assigned fairly and accurately, reducing subsidies currently paid by customers across Texas that artificially prop up inefficient electricity providers. For example, although statewide transmission congestion costs vary each year, in 2003 **consumers in the South Zone paid 229 percent more of \$400 million in statewide congestion costs than they generated.**

- Customers in other parts of the country that have a nodal market have saved hundreds of millions of dollars.

Reduces pollution:

- Resources will be economically dispatched, so that newer, more efficient, and cleaner power plants will run more often.
- Expanding the use of cleaner, more efficient power plants will reduce air emissions and the amount of water and other natural resources needed to produce electricity.
- Nitrogen Oxide (NOx) emissions would be reduced statewide by 32,700 tons over 10 years as some output of steam turbine gas-fired generators is replaced with the output of more efficient combined cycle plants, according to an independent study filed with the PUC.

Improves planning for reliability and future growth:

- Local prices – based on each local area’s electricity usage, generation capability and transmission constraints – will be more accurate to enable companies to construct more generation and/or transmission to resolve local congestion problems.
- By resolving congestion problems, Texas can ensure long-term electric reliability and plan for the power that is essential to economic growth and development.

Requires only a small investment to reap long-term benefits:

- Setting up the statewide nodal market will cost an estimated \$100-150 million – only about *half a percent* of annual retail electricity sales in Texas.

Drawbacks of Current Zonal System

Keeps customer prices high:

- The current zonal system uses artificial subsidies that benefit a few companies and maintain artificially high electricity prices for millions of Texans.
- The current zonal market design does not take advantage of good economic principles that reward efficiency and encourage competition, which would drive down electricity prices.

Perpetuates inefficiency:

- The current zonal system doesn’t provide price signals that could lead to construction of more efficient, cleaner power plants where they are needed.
- Artificial subsidies mask congestion problems and provide no economic incentive to build transmission or generation needed to resolve those congestion problems.