ISO/RTO Council

Myths and Facts About Competitive Wholesale Energy Markets

Myth #1: Competitive wholesale energy markets have led to higher retail prices.

Fact: Numerous independent studies have shown that wholesale competition has reduced costs for millions of retail energy consumers.

Rate increases can be attributed to the cost of natural gas—the primary fuel for many generators and, in some parts of the country, for most generators.

Like the price of other fossil fuels, the price of natural gas has more than doubled since 2001. Importantly, this increase in fuel costs would have had a greater impact on retail prices under the old, regulated monopoly system. Economists Howard Axelrod and David DeRamus recently wrote that without wholesale competition, energy prices would have been up to 15 percent higher in many markets.

In fact, according to a November 2006 *Public Utilities Fortnightly* article written by leading energy economists, retail customers in many regulated states have experienced steady increases over a number of years, often in the form of automatic rate increases. These regular, smaller price hikes can add up to a large percentage increase over time. Between 2000-2005, electricity rates increased 43% in Colorado, 46.7% in Oklahoma, 53% in Mississippi, and 67.3% in Louisiana.

Myth #2: The experts don't agree on the impact of competitive wholesale energy markets.

Fact: Leading economists agree that wholesale competition does benefit consumers.

In the summer of 2006, eight leading economists, including George Mason University Professor and Nobel-Laureate Vernon Smith and Alfred E. Kahn of Cornell University, issued an open letter to policymakers, saying:

> "Among economists, it is almost universally accepted that well functioning competitive electricity markets yield the greatest benefits to consumers in terms of price, investment and innovation especially when regulated alternatives are no longer warranted. And, despite currently high electricity prices in many regions, driven by very high fuel input costs used to generate electricity, we are confident that well structured markets and robust competition are providing substantial benefits to electricity consumers."

The letter was also signed by Paul L. Joskow *(Massachusetts Institute of Technology)*, William W. Hogan *(Harvard University)*, Peter Cramton *(University of Maryland)*, Howard J. Axelrod *(Energy Strategies, Inc.)*, David W. DeRamus *(Bates White, LLC)*, and Gary Hunt *(Global Energy Adviso)r*

Myth #3 Wholesale competition may help big business, but it hurts the little guy.

Fact: A 2005 study by *Cambridge Energy Research Associates* found that wholesale competition resulted in $34 billion in savings for residential customers across the country over seven years, compared to what would have been paid under traditional regulation. Among the study's findings:

- Real prices were 16% lower during the seven years of the wholesale electric restructuring era than during the previous seven years of the regulated era
- Many of the expected gains from introducing more competitive pressures into the wholesale side of the power business resulted from greater efficiencies, more innovation, and cost discipline
- Significant savings were also derived in restructured wholesale markets from reallocating and shifting the costs of overbuilt power generating capacity to investors who held the market risk and away from ratepayers

Myth #4 Competitive wholesale electricity markets are bad for the environment.

Facts: In October, 2006, the New England Energy Alliance reported:

> "While electricity generation within the region increased 25% between 1998 and 2004, associated sulfur dioxide (SO_2) emission rates decreased by 56%, nitrogen oxide (NO_x) by 57%, and carbon dioxide (CO_2) by 22%."

In February 2006, a Public Utility Commission of Texas staff report found that competitive forces resulted in the replacement of older power plants with new, efficient plants, making a major contribution to the reduction of emissions from the electric industry and progress in meeting national air-quality standards in the Houston, Galveston, and Dallas-Fort Worth areas. Wholesale competition also provided an efficient mechanism for meeting goals for renewable energy and energy efficiency, which have contributed to reduced emissions.

Competitive wholesale markets in California have opened up vast areas to development of wind, geothermal, solar, and other renewable resources. The California ISO has proposed a new method for financing the transmission projects needed to move the new "green" power to consumers.

These are only a few examples of how competitive wholesale markets provide access to and can encourage the development of renewable resources.

Myth #5 The single-price auction system used in competitive wholesale energy markets results in higher prices and higher costs because even power from less expensive generators gets the market clearing price.

Fact: Years of market data indicate that prices are no higher under the single priced auction system.

Critics of the single price auction ignore the fact that energy suppliers would bid differently under a different system. Thomas Welch, the former Chairman of the Maine Public Utilities Commission and former Vice President for External Affairs at the PJM Interconnection, writes in the October 2006 *Public Utilities Fortnightly:*

> “A uniform-clearing-price market, the most common electricity market, encourages generators to offer their electricity at the ‘margin,’ their break even point for variable costs. On the other hand, a pay-as-bid market encourages generators to offer their electricity at the expected market price.”

To paraphrase, years of market and bidding data indicate that the single price auction results in lower overall wholesale costs than a system paying each generator the price they bid. Under the single price system, suppliers know they will receive the market clearing price. They bid low so they will be “chosen” in the market. If they knew they would be paid their bid price, undoubtedly their bids would be higher, increasing the overall cost.

Conclusions:

- Since energy restructuring created open, competitive wholesale markets in many parts of the country, tens of billions of dollars in new transmission projects have been approved in those restructured regions.
- The transmission infrastructure that has been built lowers the risk of blackouts, reduces the costs of managing transmission bottlenecks, and provides access to a greater variety of resources for electricity (including renewables).
- Market-based systems foster higher power-plant availability, lower outage rates during peak demand periods, effective demand response programs, transparent price data, and new power plant construction.

All of these factors lead to greater flexibility and reliability on the grid and bring benefits to all electricity consumers.