



Electricity in Texas: Markets, not Manipulation

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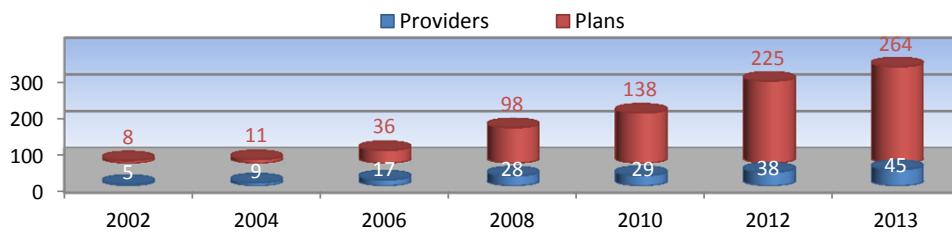
Findings

- The success of Texas' competitive electricity market has been largely due to the willingness of policymakers to let markets work and not manipulate prices.
- The Brattle Group's projections of low reserves are suspect; they assume unchanging market conditions. More than that, they conflict with almost a decade of historical reserve margins.
- If we eliminate the IMM and instruct the PUC to stop attempting to manipulate prices, there would be more willingness to invest in new generation.

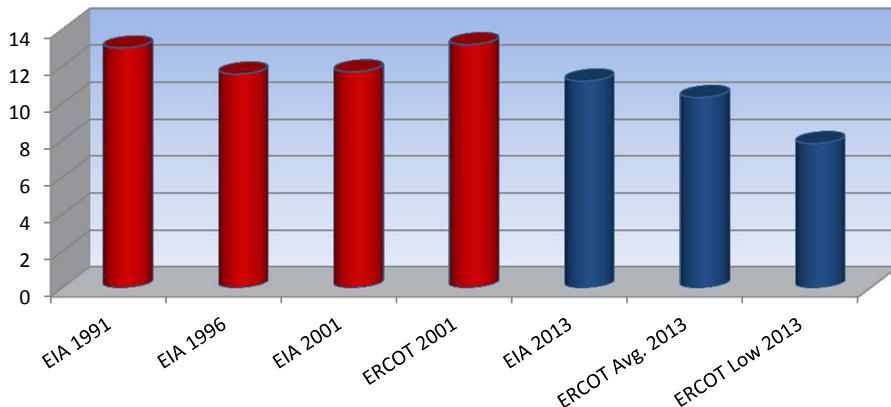
The Key to Texas' Success

In 2007, energy economist Robert Michaels wrote, "Electricity has been the last and most difficult of the great deregulations, thanks to technology, economics, and politics. In contrast, Texas ... stands out among the states for the competitive performance of both its retail and wholesale markets. ... Texas is competitive electricity's greatest success story in the United States, if not the world. The ERCOT area has enjoyed the most successful transition toward deregulation in the U.S." (Michaels 2007) Those words still stand true today, almost 20 years after Texas began the move toward a competitive market in 1995.

For instance, before competition in 2001, consumers had only one retail electric provider (REP) offering one plan. Today, consumers can choose from more than 40 providers offering more than 250 plans.



And the plans from the REPs offer electricity prices that are lower than they were before competition:



Texas' success in ERCOT is largely due to its willingness to let competition work. "Texas' success was largely due to the willingness to let markets work and not manipulate prices or access policies. While the transformation of American electricity has been dominated by a largely political competition to design markets" in a way to control participants' behavior, Texas for the most part set general rules for market participants and allowed them to compete within those rules. (Michaels 2007b)

continued

Re-regulating the Competitive Market

The competitive market in Texas stands out today because other states failed to follow Texas' lead; they couldn't stop interfering with how their markets operate. Unfortunately, the Public Utility Commission of Texas (PUC) has relapsed, and now wants to follow the lead of California and other states by micromanaging the Texas market. In other words, the PUC wants to re-regulate the Texas market and make decisions for producers and consumers that they are able to make for themselves today.

The PUC plans on re-regulating the market by adopting a capacity market, reversing the course of 14 years of policy direction from the Texas Legislature and previous PUC votes. A capacity market consists of a system of payments, or subsidies, to electricity generators who are then supposed to maintain adequate generation capacity to ensure that Texas doesn't run out of electricity during times of peak use.

A majority of the PUC has announced their support for adopting a mandatory reserve margin. Adopting a mandatory reserve margin is adopting a capacity market—it simply leaves the costly details to be worked out later. And they will be costly; a capacity market will require a de facto electricity tax on Texas consumers of \$3 billion to \$5 billion a year.

What the PUC is doing to the Texas electricity market is akin to what the federal government is doing to the health care market. And just like in the health care market, there is no reason for this to happen. Not only is the Texas market working well, but there is no evidence that existing capacity markets operated throughout the U.S. are any more reliable than the Texas market, witnessed by the recent rolling blackouts in the PJM market, which serves many mid-Atlantic and Midwestern states. However, there is plenty of evidence that capacity markets make electricity more expensive. PJM retail customers had to make \$50 billion in capacity payments from 2007 to 2011. (Kleit and Michaels 2013)

Furthermore, the PUC lacks the legal and moral authority to re-regulate Texas' competitive market. A capacity market violates the intent of the Texas Utility Code:

The legislature finds that the production and sale of electricity is not a monopoly warranting regulation of rates, operations, and services and that the public interest in competitive electric markets requires that ... electric services and their prices should be determined by customer choices and the normal forces of competition. (Sec. 39.001(a), Texas Utility Code)

Regulatory authorities ... shall authorize or order competitive rather than regulatory methods to achieve the goals of this chapter to the greatest extent feasible and shall adopt rules and issue orders that are both practical and limited so as to impose the least impact on competition. (Sec. 39.001(d), Texas Utility Code)

Additionally, a capacity market contradicts the implementation of the Utility Code by past commissions:

I am pleased to see the Staff's endorsement of an energy-only market design. For the reasons articulated in Staff's memo, I agree that an energy-only market design is the right one for the ERCOT market. Capacity payments are a costly subsidy paid to generators; like any subsidy, once given, it will be very difficult to take back. In my opinion, capacity payments represent an attempt to re-regulate a market which the Texas Legislature has clearly determined should be deregulated.

– Barry Smitherman (Smitherman 2005)

A Few Questions and Answers

The following Q&A addresses some questions being asked about this issue and highlights the folly of policymakers trying to manipulate market activity to produce results more in line with their preferred outcomes:

Q: Competition was first introduced into the Texas electricity market in the mid-nineties. Since then, electricity companies have been able to secure the capital/financing necessary to build new generation. What has changed? Does a capacity market really need to be created now?

A: A lot has changed since competition was first introduced into Texas. Commodity prices, included natural gas, have risen and fallen. The Texas competitive market has become much more efficient. Consumer choice has risen dramatically. Investment in new generation has saturated the market. Prices are lower today than before competition. As a result of many of these factors, profits are harder to come by than in the early days of competition.

However, these circumstances are not unique to the electricity industry. In any industry, some companies do better than others. However, that doesn't mean that we need to abandon competition and move to a capacity market. In fact, the current energy-only market will provide more than adequate generation to meet Texas' growing need for electricity. Prices will rise when the market is ready to pay more for electricity to increase reserves. On the other hand, the current attempt to increase electricity prices through a capacity market will succeed only in increasing consumer cost; not in increasing reserves.

Q: The Brattle Group report suggests that Texas energy-only market is only capable of sustaining reserves margins under 10 percent? Why is 10 percent unacceptable?

A: ERCOT has been projecting the competitive market's reserve margin since 2005. Not once have we gone into a year with a projected reserve margin of less than 13 percent. That has always been more than enough to handle whatever the peak demand the system faced. However, in 2011, it almost wasn't enough. Texas just squeaked by in the face of record demand from the record heat and drought that year. A 10 percent reserve margin would be adequate in an average year—remember, having a reserve margin means that generation will exceed demand. But there is a possibility that unexpected hot weather might mean 10 percent is not enough.

However, the bigger question is, how did Brattle arrive at its low reserve margin?" As noted above, Texas has never dropped below a projected 13 percent reserve margin after 12 years of competition, and 8 years since we officially adopted an energy-only market. While Brattle did a lot of complex calculations in an attempt to justify this number, it is essentially an imaginary number that has never been seen in real life. It not only contradicts the real life experience in Texas, but also in other energy-only markets in Australia and Canada.

While current ERCOT projections do show reserves dropping near 8 percent in four years, ERCOT's past projections of future reserves have always shown lower levels in the out years. It takes about three years to bring a new gas turbine plant online. There is no reason for the market to produce higher reserves four years or more into the future. Since the beginning of competition, the reserves have increased the closer we get to real time. Additionally, there are many potential generation supplies that ERCOT does not include in its projections. On the other side of the equation, ERCOT has consistently overestimated demand. As a result, ERCOT's projections consistently miss underestimate the reserve margin. ERCOT acknowledges this, and is in fact revising its methodology right now.

Re-regulating an entire market and placing a \$4 billion a year electricity tax on Texans based on ERCOT's and Brattle's projections is a perfect example of what Texas has avoided so far in making Texas' competitive market the most successful in the world. Now is not the time to abandon what got us here.

Q: How will electricity generation companies get the capital/financing needed if the state of Texas does not establish/create a capacity market?

A: ERCOT reports that there has been 47,000 MW new generation added since 1999, there are 10,852 MW of generation committed for the future (with transmission contract and air permit), and that 42,300 MW of active generation requests under review, including more than 21,100 MW of wind. While new investment has slowed down, there is a simple answer for that; low prices and an adequate supply. Generators are still building, simply not at the same frenzied rate as before. As TXU Electric said back in 2001, "It is highly likely that the market itself will address any predicted future shortfall by encouraging generators to build new generation because market prices will likely increase when reserve margins decrease." The Foundation's calculations confirm this, showing that "adding the option of producing non-spin to that of the balancing market can raise a peaking generator's net margin in ERCOT into the range of economic viability." The main barrier in the way of new investment in generation today is regulatory uncertainty caused by the PUC's continued flirtations with a capacity market. The PUC should abandon its attempt to improve profit for generators out of a fear of future resource challenges. The market can do a much better job of resolving these issues.

Q: Why is the price a generation company can charge for electricity "tied" to natural gas prices? How can these prices be "untied?"

A: The connection between electricity prices and natural gas prices is at the margin. In other words, in the auction markets, prices will sometimes trend to the lowest possible price where generators can turn a marginal profit. That price is often tied to natural gas costs. However, the auction markets generally represent only about 10 percent of the total transactions in the market. Additionally, in times of high demand, this normally would not be the case as demand pushes prices much higher than a generators marginal cost.

The real problem here is excessive fixation on marginal cost pricing by the PUC and the Independent Market Monitor (IMM). Both offices operate under the deeply flawed theory that if generators bid into a market at above their marginal costs, there is the potential for market power abuse. The PUC came after TXU a few years ago, seeking fines of \$171 million. While TXU finally settled for \$15 million, there was no proof that TXU had done anything illegal. Yet the constant pressure by the PUC and the IMM continue to depress prices, pressuring generators to bid at their marginal costs. This is one of the main problems in the market today, and one of the main reasons we are facing the specter of a \$4 billion a year capacity market.

One of the main problems the Texas electricity market is facing today is that regulators' attempts to manipulate the market are leading to exactly what they are trying to avoid. If we eliminate the IMM and instruct the PUC to stop manipulating prices, the tie between natural gas and electricity prices would lessen, prices would be more responsive to market conditions, and there would be more willingness to invest in new generation. ★

Bibliography

The Brattle Group 2012, *ERCOT Investment Incentives and Resource Adequacy*.

ERCOT 2012, "New report reinforces future electric resource adequacy concerns."

Kleit, Andrew and Robert Michaels 2013, *Does Competitive Electricity Require Capacity Markets? The Texas Experience*.

About the Author



Bill Peacock is the vice president of research and director of the Texas Public Policy Foundation's Center for Economic Freedom. He has been with the Foundation since February 2005. Peacock has extensive experience in Texas government and policy on a variety of issues including, economic and regulatory policy, natural resources, public finance, and public education. His work has focused on identifying and reducing the harmful effects of regulations on the economy, businesses, and consumers.

Prior to joining the Foundation, Peacock served as the Deputy Commissioner for Coastal Resources for Commissioner Jerry Patterson at the Texas General Land Office. Before he worked at the GLO, he was a legislative and media consultant, working with groups like Citizens for a Sound Economy and Putting Children First. Peacock also served as the Deputy Assistant Commissioner for Intergovernmental Affairs for Commissioner Rick Perry at the Texas Department of Agriculture and as a legislative aide to Rep. John Culberson in the Texas House of Representatives.

