

TEXAS PUBLIC POLICY FOUNDATION

A Tale of Two Markets: Telecommunications and Electricity

A Sunset Report on the Texas Public Utility Commission



March 2013
By BILL PEACOCK
Center for Economic Freedom



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A Tale of Two Markets: Telecommunications and Electricity

A Sunset Report on the Texas Public Utility Commission

By Bill Peacock, Vice President of Research & Director, Center for Economic Freedom

Executive Summary

While the details of the transition to competition for the Texas electricity and telecommunications markets differ somewhat, the rationale for, timeline, and outcomes for each are remarkably similar. Both took a little over a decade to become fully competitive. Both have resulted in exceptional increases in consumer choice and decreases in consumer prices. And both have helped drive economic growth in Texas.

Yet these similar results are viewed quite differently by some.

One example of this disparate view of these similar markets can be found in the Texas Sunset Advisory Commission's Staff Report on the Public Utility Commission. Apparently satisfied with the outcomes in the telecommunications market, the Staff Report recommends only minor tweaks to its regulatory apparatus. On the other hand, the Staff Report portrays the electricity market in a more negative light and thus recommends a significant increase in government intervention via a quadrupling the PUC's administrative penalty authority to \$100,000 per violation per day and authorizing PUC to issue emergency cease-and-desist orders. As discussed later in this paper, the Staff Report presents no evidence of problems or violations within the electricity market to justify its recommendations.

The Staff Report's assessment of the Texas electricity market differs significantly from that of Potomac Economics, ERCOT's Independent Market Monitor, which found "that the ERCOT nodal wholesale market performed competitively in 2011." In fact, the evidence today as Texas struggles with the issue of reliability overwhelmingly supports less intervention by government—not more. The increased fines and emergency cease-and-desist authority proposed in the Staff Report will increase reliability problems by creating even more regulatory risk within the Texas electricity market.

Calls to "fix" Texas' electricity market with more government intervention won't help—in fact, they will make electricity more expensive for consumers and make our market look more like California's market of a decade or so ago. It would be most unfortunate if the Staff Report's recommendations contributed to the demise of the world's best example of competition in electricity markets. If we let it work, Texas' world-class energy-only electricity market will power our future.

ISSUE 1: Government Intervention Decreases Competition and Reduces Reliability in the Texas Electricity Market

Foundation Recommendations

- The Texas Legislature and the PUC should reject recommendations for increased market intervention through a capacity market.
- The PUC should not mandate a hard reserve margin target.
- The PUC should eliminate the high system-wide offer cap.
- The PUC should pursue innovative, market driven demand response to meet future needs.
- Redefine the concept of market power abuse to eliminate the bias against pricing electricity above marginal cost.
- Determine whether the price distortions caused by the deployment of Non-Spinning Reserve Services could be best addressed by eliminating the service.
- Eliminate certain existing PUC authority, such as:
 - Ability to approve mergers and acquisitions, and
 - Ability to disgorge revenue.

Related Sunset Staff Report Recommendations

- Increase PUC's administrative penalty authority to \$100,000 per violation per day for electric industry participants' violations of ERCOT's reliability protocols or PUC's wholesale reliability rules.

Foundation Recommendation: Oppose

- In limited circumstances, authorize PUC to issue emergency cease-and-desist orders to electric industry participants.

Foundation Recommendation: Oppose

ISSUE 2: Renewable Energy Subsidies, Fuel Mandates, and the State's Energy Efficiency Program Harm Reliability, Increase Costs, and Reduce Consumer Welfare

Foundation Recommendations

- Eliminate these renewable energy subsidies:
 - Texas Renewable Portfolio Standard, and
 - Federal Production Tax Credit.
- Require wind, solar, and other renewable generators to meet the same standards as other generators.
- Eliminate Texas' energy efficiency program.
 - If the state's energy efficiency program remains in existence, change the way the state evaluates it to encompass all the costs (including those to the program, consumers, and the Texas economy) involved with energy efficiency.
 - Any future increases to the program's goals should be closely examined to ensure that they will reduce the cost of energy use.
- Eliminate the statutory requirement that 50 percent of new generation be generated by natural gas.

ISSUE 3: High and/or Inequitable Taxes and Fees Assessed in the Electricity and Telecommunications Markets Increase Consumer Prices and Reduce the Competitiveness of these Markets

Foundation Recommendations

- Reduce local franchise fees by levying them on the basis of the marginal costs of managing the public right-of-way.
- Eliminate taxes on production goods that are used to deliver consumer telecommunications services.
- Eliminate the "tax on a tax" application of the sales tax to taxes and fees on a telephone bill.

ISSUE 4: Overlapping Rate Regulation of Electricity (and Natural Gas) is Inefficient and Increases Consumer Costs

Foundation Recommendations

- Eliminate original jurisdiction for municipalities in electricity and natural gas rate setting; instead, shift original jurisdiction to the PUC (for electricity) and the RRC (for natural gas).
- Eliminate the mandated reimbursement of legal fees for municipalities in rate cases before the PUC and RRC.

Introduction

It has been more than 15 years since Texas began the process of restructuring its regulatory system of the telecommunications and electricity markets. In the dual efforts to restructure or deregulate these markets in 1995, Texas was taking part in the move to deregulation that came of age in the United States in the 1970s. By that time, it had become obvious to almost everyone that consumers were demanding products and services that regulated industries couldn't deliver—a perfect example of the problem being the seemingly unending life of the rotary dial telephone.

With this understanding, the country began to move into a new era of competition in the trucking, airline, and telecommunications industries. Electricity was the last and most difficult of the great deregulations, thanks to technology, economics, and politics. The direction Texas was going to take for the electricity and telecommunications markets was spelled out in the Texas Utilities 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, except for transmission and distribution services and for the recovery of stranded costs, electric services and their prices should be determined by customer choices and the normal forces of competition.” Public Utility Regulatory Act (PURA), Chap. 39

“[T]he policy of this state to (1) promote diversity of telecommunications providers and interconnectivity; (2) encourage a fully competitive telecommunications marketplace; and (3) maintain a wide availability of high quality, interoperable, standards-based telecommunications services at affordable rates ... [is] best achieved by legislation that modernizes telecommunications regulation by (1) guaranteeing the affordability of basic tele-phone service in a competitively neutral manner; and (2) fostering free market competition in the telecommunications industry.” PURA, Chap. 51

Texas policymakers made a decision to let these markets work and not manipulate prices or access policies—unlike policymakers in other states where the move to electricity competition almost universally failed.

While the details of the transitions to competition for these two markets differ, the timeline and the results are remarkably similar. Both took a little over a decade to reach today's level of competition. Both have resulted in exceptional increases in consumer choice and similar decreases in consumer prices.

Yet the similar results are viewed quite differently by some.

One example of this disparate view of these similar markets can be found in the Texas Sunset Advisory Commission's Staff Report on the Public Utility Commission. On the one hand, the Staff Report recommends only a system for the renewal of certificates for Competitive Local Exchange Carriers in the telecommunications market. On the other hand, in the electricity market the Staff report recommends quadrupling the PUC's administrative penalty authority to \$100,000 per violation per day and authorizing PUC to issue emergency cease-and-desist orders. As discussed later in this paper, the Staff Report repeats its call from 2010 for increased intervention in the market even though there is no evidence of problems with competition or violations within the electricity market to justify them—and plenty of evidence that the Staff Report recommendations would further harm reliability in the market.

The Staff Report is not alone in calling for increased governmental intrusion into the Texas electricity market. On top of the recent low prices in Texas' wholesale

electricity market, last summer's Capacity, Demand and Reserves Report from ERCOT projected reduced reserve margins for the market in the future. This resulted in concerns by many that Texas' world-class energy-only market is not capable of providing enough electricity to power Texas's robust economic growth. The result was the Brattle Group's report, ERCOT Investment Incentives and Resource Adequacy, which started a movement toward a capacity market in Texas—which involves the government rather than the marketplace setting future prices for electricity. Thus as prices and profits fall and private sector investment slows, we have had calls for the government to step in and once again raise prices to provide reliability.

However, the government, not the market, is the main source of any problems facing Texas today. And since the market has become more efficient each year it has operated, government intervention is having a bigger impact than in the past.

The evidence today as Texas struggles with the issue of reliability overwhelmingly supports less intervention by government—not more. The increased fines and emergency cease and desist authority proposed in the Staff Report will increase problems with reliability by creating even more regulatory risk within the Texas electricity market.

About the turn of the century, California pretended to have a deregulated electricity market, but it was really a poorly-designed, government-controlled system that eventually collapsed under its own weight. Texas' economy is outperforming California's and the rest of the country because we did not follow California's lead.

Nevertheless, Texas' continued success is threatened by current proposals to "fix" the electricity market through more regulation. This paper will analyze four key issues, offering comments on the Sunset Staff Report and recommendations to further power Texas' future.

ISSUE 1: Government Intervention Decreases Competition and Reduces Reliability in the Texas Electricity Market

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- Increase PUC's administrative penalty authority to \$100,000 per violation per day for electric industry participants' violations of ERCOT's reliability protocols or PUC's wholesale reliability rules. **Foundation Recommendation: Oppose**
- In limited circumstances, authorize PUC to issue emergency cease-and-desist orders to electric industry participants. **Foundation Recommendation: Oppose**

Comments on the Sunset Staff Report Recommendations

Issue 1 in the Staff Report is, "PUC Lacks Regulatory Tools Needed to Provide Effective Oversight and Prevent Harm to the Public." Issue 2 is, "Statutory Changes Are Needed to Ensure the Public Utility Commission's Improved Processes of Overseeing the Electric Reliability Council of Texas Continue in the Future." Several of the recommendations related to these issues are directed toward the Texas electricity market. Three common themes run throughout these recommendations. First, the recommendations are based on theoretical, rather than actual, problems in the competitive market. Second, the recommendations are based on the invalid premise that increased regulation of the Texas electricity market is necessary to improve its operations. Third, these regulation-laden recommendations stand in sharp

contrast to the light-handed approach taken toward the telecommunications market.

The complete lack of evidence provided in the Staff Report of any substantive violations or problems in the Texas electricity market to justify the Staff's recommended increased intervention in the market is astonishing—particularly at a time when the primary challenge facing state policymakers is maintaining reliability. In fact, the Staff Report's recommendations are in sharp contrast to the findings of Potomac Economics, the Independent Market Monitor for the ERCOT Wholesale Market, which reports:

Overall pricing outcomes from the nodal real-time market have met expectations for improved efficiency. ... The nodal market has also enabled the higher utilization of transmission facilities... Three areas where the nodal market implementation led to unanticipated outcomes were identified and quickly resolved in 2011. ... In summary, we find that the ERCOT nodal wholesale market performed competitively in 2011.¹

The Staff Report does try to overcome the lack of evidence for its recommendations by pointing to the February 2, 2011 extreme cold weather event which led to a series of rolling blackouts in the state:

The failure to live up to the terms of such an agreement can be serious, as seen on February 2, 2011, when extreme cold weather and an inadequate response by several market participants contributed to an energy emergency alert at ERCOT, resulting in rolling blackouts statewide to avert what could have been a major disaster had the entire grid failed.²

While of course it is important for market participants to "live up to the terms" of their commitments, the Staff report attempts to paint the February 2 event as one in which there were questionable actions by market participants where higher fines either might have led to a different outcome or would have been appropriately levied against some of the participants.

However, once again the Staff Report's findings contrast with the Independent Market Monitor, as well as by the actions taken by the PUC after the event. The Independent Market Monitor found:

Although a wide range of actions were undertaken by generation resource owners in preparation for the extreme weather conditions, it is clear from the unprecedented loss of generation capacity on the morning of February 2nd that many of these preparatory efforts were unsuccessful. This experience will serve to produce lessons learned and specific areas for improvement in the areas of generation resource weatherization and coordinated extreme weather planning. Overall, although the scope and magnitude of the generating unit outages on February 2nd was absolutely unprecedented, we do not find any evidence that indicates that any of the outages were the result of physical withholding.

Another measure to provide additional insight related to this finding is the relative profitability of market participants during these events and how it correlates with unit outages. Although an assessment of profitability in isolation is insufficient to draw conclusions related to market manipulation or market power, increased profitability is the primary motive associated with resource withholding strategies. Hence, a negative correlation between resource outages and profitability would provide increased confidence in the finding that the outages were not the result of market manipulation strategies or market power abuses.³

The Independent Market monitor concluded, "These wholesale market pricing outcomes were consistent with the ERCOT energy-only market design." In other words, even though unprecedented cold weather stressed the system in ways that were completely unanticipated, the system worked as planned, and the events of February 2 are unlikely ever to be repeated. If they ever are, it will be the "lessons learned and specific areas for improvement in the areas of generation resource weatherization" that will keep Texas from again experiencing rolling blackouts, not increases in fines recommended by the Staff Report.

Neither will the Staff Report's recommendation of granting the PUC emergency cease-and-desist authority have any beneficial effects on the electricity market or the public. Here again, the Staff Report provides no evidence of any problems that its recommendation is designed to solve. Instead, it offers conjecture:

A regulatory agency should be able to stop unlicensed or harmful activity immediately. PUC's current authority relating to electric industry participants does not meet this standard. To stop an action, PUC first must issue a notice to the alleged violator and provide an opportunity for a hearing before issuing a cease-and-desist order. By then the harm may have been done.⁴

What harm may have been actually done it does not state. In fact, it cites that the PUC has only used its current cease-and-desist authority *once* since FY 2007.

It is important to note that the PUC already has cease-and-desist authority. What the Staff Report is recommending is *emergency* cease-and-desist authority, apparently because under current law the PUC must "issue a notice to the alleged violator and provide an opportunity for a hearing before issuing a cease-and-desist order."

In other words, the Staff Report finds that current law requiring the PUC to present evidence of a violation in a court is "harmful to the public." Instead, the Staff report would allow the PUC to stop a business from engaging in a commercial activity without providing any evidence of a violation and without the business being able to defend itself until it has lost a significant amount of money, even though there is no evidence of problems in the market and the PUC has availed itself of its current cease-and-desist authority only once in the last five or six years.

Efficiency and Government Regulation are Leading to Lower Prices—and Profit Margins

Texas moved to a competitive electricity market over a period of about 12 years, from 1995 to 2007. The results have been amazing: billions of dollars of new investment in generation, lower prices, and a high level of reliability with robust reserves.

In fact, Texas today has the most competitive electricity market in the United States, if not the world. Robert Michaels attributes the success to the fact that "Texas did not 'design' a retail market in any meaningful sense—it instead set general rules for [market participants] and allowed them to compete as they wished within those rules."

Though the market has been a great success, it hasn't always been pretty. Some segments of industry have had a rocky time of it. That, however, isn't surprising. Consumers

were in part paying higher prices in the regulated market to provide guaranteed returns for the industry. Without those returns, businesses must compete, and some are competing more successfully than others.

Additionally, the market has become much more efficient, especially after the transition to nodal. Profits are harder to come by, and some fear this means that consumers will soon experience more of the pitfalls of competition.

When we take the regulations/subsidies that exist in this market—the federal production tax credit, the state renewable portfolio standard, market power regulation, the state's energy efficiency program, the high system-wide offer cap, PUC approval of mergers and acquisitions, federal environmental laws, PUC disgorgement authority, etc., it is no surprise that the outcomes of this regulated market fail to satisfy.

The answer is not to increase intervention—as proposed by the Staff Report, but to reduce it. In other words, let's let Texas' world class electricity market work.

Reliability Concerns Need Closer Examination

The record shows that we don't need a capacity market. For instance, Texas' growing population and economy combined with record high temperatures and drought in 2011 strained the electricity grid. But it didn't break, despite the harsh conditions and record load from a 50-year weather event. The market worked, supplying all the electricity Texans needed.

Though Texas made it through 2011, there have been concerns expressed that projected reserve margins will put us in danger again as early as 2014 (see **Table 1**). It is true that investment in new generation has slowed in Texas. But two recent reserve margin analysis updates by ERCOT shows a much healthier future supply of electricity than had previously been predicted (see **Table 2**).

The new forecasts are better for two reasons. First, they include new generation announced since the last update, most notably those projects announced since the recent increase in the high system wide offer cap (HCAP). Second, ERCOT uses a more accurate economic forecast to estimate increases in feature load.

The previous forecast suggested that load would increase by 4.2 percent in 2014 and by 4.8 percent in 2015. This

Table 1: ERCOT Reserve Margins 2013-18

	2013	2014	2015	2016	2017	2018
May 2012 Forecast	14.3%	9.8%	6.9%	6.5%	5.8%	5.8%
Oct. 2012 Forecast	16.0%	12.1%	9.7%	9.9%	9.8%	10.4%
Dec. 2012 Forecast	13.2%	10.9%	10.5%	8.5%	8.4%	7.1%

Source: ERCOT Resource Adequacy Update October 2012.

is a very aggressive forecast based on projections that nonfarm employment growth in Texas would increase each year by over 400,000, a level that was not reached even during the boom years of the middle of last decade.

As noted, the resulting reserve margins through 2018 are significantly improved. However, a closer look at the numbers show that it is possible that the reserve margins through 2018 actually might be above the 13.75 percent target.

By adding in potential resources not included in the ERCOT report, i.e., mothballed units and the remaining 50 percent of the non-synchronous ties, this could increase available resources on average by 2400 MW through 2018. Taking this into account, future reserve margins look like this:

If this is the case, the lack of a recent investment in new generation begins to make sense from a market perspective. Prices and thus investment are not depressed because the market is broken. Instead, prices are sending the appropriate signal to investors that expensive new generation is not needed because the load can be handled more efficiently through existing resources, even if this means bringing mothballed plants back online.

Another reason to be cautious about overreaction to ERCOT's forecast is that in an energy-only market, the forecast of future reserves *should* be lower. As PUC Commissioner Ken Anderson has noted, "An efficient, energy-only market should always show a capacity reserve margin shortfall 4-5 years out." This is because the market relies on price signals—rather than government mandates—to determine the need for new generation. And four to five years is an adequate amount of time for market participants to plan and build new generation.

Table 3 (next page) shows how ERCOT's forecasts have shown reserves margins below the target as early as *three years* out. The 2006 forecast, for example, showed an 11.4 percent reserve margin in 2008 and an 8.5 percent reserve margin in 2009—both below ERCOT's target. However, by the time those years came around, the reserve margins had increased to be above the target.

In **Table 4** (next page), we compare ERCOT's 2006 and 2012 Reports on the Capacity, Demand, and Reserves. They look quite similar, even though prices were much higher in 2006 than they are today. And resource adequacy was not the major concern it is today.

Table 2: Updated ERCOT Reserve Margins 2013-18

	2013	2014	2015	2016	2017	2018
May 2012 Forecast	14.3%	9.8%	6.9%	6.5%	5.8%	5.8%
Oct. 2012 Forecast	16.0%	12.1%	9.7%	9.9%	9.8%	10.4%
Dec. 2012 Forecast Plus	20.63%	17.77%	15.59%	16.06%	15.37%	14.29%

Source: ERCOT Resource Adequacy Update October 2012 and calculations of the author.

Table 3: ERCOT Reserve Margins Forecast 2006-11

Load Forecast by Year	2006	2007	2008	2009	2010	2011
2006 Summer CDR	16.4%	14.8%	11.4%	8.5%	6.8%	4.5%
2007 Summer CDR		14.6%	12.6%	10.1%	8.3%	6.7%
2008 Summer CDR			13.8%	16.5%	17.3%	18.8%
2009 Summer CDR				16.8%	20.1%	17.1%
2010 Summer CDR					21.4%	17.5%
2011 Summer CDR						

While it is true that today's short-term outlook is not as good as in 2006, the long-term outlook is better, suggesting that we have a solid base of generation to work from. Additionally, the market is much more efficient today than it was in 2006. Taking this into account with availability capacity from mothballed generation, and the claims that we need to adopt a capacity market are once again called into question; particularly so since the time it would take to transition to a capacity market would provide no help at all in the short run.

We don't claim that future reserves will for certain exceed the target or that there are no challenges in the ERCOT market; indeed, we believe that there are significant challenges to be met—especially challenges brought about by excessive government intervention into the market. These numbers do, however, call into question claims that we need to abandon Texas' world-class, energy-only electricity market and replace it with a capacity market that would bring northeastern-style regulation to Texas.

Brattle may claim that a capacity market will provide more reliability than the demand response alternative it presents. However the immense complexity and regulatory risk inherent in capacity markets suggest that they would have a hard time matching the robust record of reliability to date of Texas' energy-only market. Additionally, capacity markets have not proven in practice to be a panacea for reliability. Finally, importing this model to Texas presents

even more challenges since capacity markets in the U.S. have generally not experienced the load growth that is occurring in Texas due to our nation-leading economic growth.

Who Should Set Reserve Margins?

Going beyond an examination of which market type can best meet our reserve margin targets, we must ask; is the 13.75 percent target set by the ERCOT board the proper reserve margin for the state? Furthermore, we should examine whether the state should be setting the reserve margin in the first place.

Much has been made of the fact that Texas could experience "potential electricity shortages within the coming decade as electric use in Texas continues to hit new records." It is important to remember, though, that these concerns were expressed in the context of ERCOT's forecast that Texas would have actually enough electricity to meet the projected load through the rest of this decade (see ERCOT's May 2012 Capacity, Demand and Reserves (CDR) report).

The concerns over "potential electricity shortages" stem from the fact that future generation sources may not be adequate to meet projected demand plus the administratively set 13.75 percent safety margin. It is quite possible, however, that the reserve margin is set higher than needed to ensure reliability.

Table 4: Comparison of 2006 and 2012 Forecasts

Load Forecast by Year	2006	2007	2008	2009	2010	2011
2006 Summer CDR	16.4%	14.8%	11.4%	8.5%	6.8%	4.5%
Load Forecast by Year	2013	2014	2015	2016	2017	2018
2012 Winter CDR	13.2%	10.9%	10.5%	8.5%	8.4%	7.1%

Until recently, the reserve margin was set at 12.5 percent. Then in 2010, ERCOT increased the target to its current level in part due to the instability that wind has introduced into the system. Past forecasts have usually shown projected supplies unable to keep up with forecast demand plus the reserve margin. However, to date, supply always has been adequate to meet demand.

One of the first decisions the Public Utility Commission of Texas (PUC) may make is whether the state should make the reserve margin the hard target—in other words, should the PUC mandate that enough generation be in place to maintain a reserve margin set by the state. In one sense, this may be the most important decision that the PUC makes. If the PUC sets a hard target, the energy-only market cannot survive in its current form. It would be a mistake for the PUC to do this.

For one thing, as seen above, it is unclear that the projections of future shortages are accurate. Additionally, it may be that participants in the marketplace do not believe that reserve margins in the future need to be as high as 13.75 percent. This is particularly true in light of the smart meter infrastructure in place and the innovations taking place in the market today when it comes to shedding load. It could be very soon that market participants, policymakers, and regulators are much more comfortable with a lower reserve margin because of the enhanced ability to shed load.

However, whether it is comfortable or not, the only way to maintain Texas' energy-only market is to let market participants set the reserve margin. Fortunately, the marketplace has a strong record of maintaining adequate reserve margins.

Market Distortions Caused by Government Intervention

As already noted, there are some significant challenges to be dealt with in ERCOT. While there are certainly market structure improvements that can be made, the truth is that ERCOT is a remarkably efficient market. Its greatest challenges today stem from government intervention.

One intervention leading to reduced investment has been various forms of price regulation. As Texas moved into full-scale competition, fear of consumer angst over high prices has led regulators to gradually increase regulation of wholesale prices.

This began with claims of market power abuse, based on the theory that there is something wrong with selling electricity. Then a “shame cap” on wholesale prices was introduced, using publicity to shame companies into selling electricity at a loss. Finally, there was the hard high system-wide offer cap (HCAP) we have today.

The problem with the cap is that it reduces prices at times of peak demand, when electricity is the most expensive to produce. If generators can't sell electricity at a profit at times of peak demand, they won't build generation plants that will supply electricity when we need it most. The PUC recently took a good first step in raising the price cap, but should take the next step and eliminate it.

We must also reduce the ability of PUC to regulate prices through other means, such as spurious claims of market power abuse, its recently enacted power to disgorge revenues, and current proposals to increase its fines and issue emergency cease-and-desist orders.

These regulatory actions are all based on highly questionable theories about prices in perfect markets that don't exist. Regulators apply them haphazardly in real life and introduce a high level of regulatory risk in Texas markets. It makes perfect sense that investors move billions of dollars in capital from Texas to other states where they can get more predictable returns because of less regulatory uncertainty.

Renewable energy subsidies are another intervention in the marketplace that has caused significant harm to the market, producers, and consumers. This issue will be discussed in the next section.

ISSUE 2: Renewable Energy Subsidies, Fuel Mandates, and the State's Energy Efficiency Program Harm Reliability, Increase Costs, and Reduce Consumer Welfare

Foundation Recommendations

- Eliminate these renewable energy subsidies:
 - Texas Renewable Portfolio Standard, and
 - Federal Production Tax Credit.
- Require wind, solar, and other renewable generators to meet the same standards as other generators.

- Eliminate the state energy efficiency program.
 - If the state’s energy efficiency program remains in existence, change the way the state evaluates it to encompass all the costs (including those to the program, consumers, and the Texas economy) involved with energy efficiency.
 - Any future increases to the program’s goals should be closely examined to ensure that they will reduce the cost of energy use.
- Eliminate the statutory requirement that 50 percent of new generation be generated by natural gas

Related Sunset Staff Report Recommendations

- None

Renewable Energy Subsidies

The Production Tax Credit (PTC), a federal tax credit which subsidizes the production of renewable energy, was set to expire at the end of 2012. The potential loss of the PTC sent shock waves through the renewable industry; for instance, new construction of wind generation slowed to a crawl. This shouldn’t be surprising since the PTC pays renewable energy generators as much as \$22 per megawatt hour (MWh). However, Congress extended the PTC for one year in the budget deal.

The PTC is just one of the subsidies available to renewable energy producers in Texas. Other subsidies available in Texas include Renewable Energy Credits (RECs) under the state’s Renewable Portfolio Standard, federal grants under the 2009 stimulus bill, and access to transmission through the Competitive Renewable Energy Zone (CREZ) program.

As the renewable industry is pushing hard for Congress to extend the PTC, it is worth examining the cost of renewable subsidies in Texas, which in 2011 produced a nation leading total of 28,295,000 MWh from wind.⁵

Our research shows that renewable subsidies in Texas since 2006 have totaled more than \$7.1 billion (see table below). In 2012 alone, the PTC is estimated to cost taxpayers \$567 million while RECs are estimated to increase consumers’ electricity bills by \$69 million.

CREZ costs to date attributable to wind are approximately \$2.45 billion. The completion of the lines is estimated to cost another \$4.1 billion in the years ahead.

Subsidies from the 2009 federal stimulus are also sizable. Approximately \$1.65 billion in federal grants went to wind farms, the production of wind turbine components, or to help Texas deal with the increased amount of wind power on the electrical grid.⁶

Table 5: 10-Year Cost of Renewable Subsidies in Texas: 2006-15* (Total: \$12.91 billion)

Year	Renewable Energy Credits		Production Tax Credit		CREZ Costs	Stimulus
	Retired	Cost	Wind MWh	Cost	To Date/Future	Costs
2006	4,200,975	\$18,904,388	6,341,451	\$126,829,020		
2007	5,025,934	\$22,616,703	8,732,934	\$174,658,688		
2008	13,618,248	\$61,282,116	15,237,876	\$304,757,529		
2009	15,908,404	\$47,725,212	18,522,660	\$377,862,256		\$482,286,859
2010	20,984,518	\$57,707,425	26,225,695	\$545,704,266		\$381,372,435
2011	24,372,369	\$67,024,015	27,146,390	\$597,220,589		\$766,210,170
2012	25,227,839	\$69,376,558	25,802,010	\$567,644,211	\$2,462,064,014	\$21,585,305
2013	26,113,336	\$71,811,675	24,385,082	\$536,471,800	\$4,094,058,032	
2014	27,029,914	\$74,332,265	22,233,904	\$489,145,892		
2015	27,978,664	\$76,941,327	19,037,276	\$418,820,077		
Total	190,460,202	\$567,721,682	193,665,279	\$4,139,114,328	\$6,556,122,046	\$1,651,454,769

Sources: ERCOT; U.S. Department of Energy; and calculations by the author.

* CREZ costs listed in 2012 represent all costs incurred from inception through the July CREZ Progress Report No. 8. Those listed in 2013 represent all future costs scheduled to be incurred after the July report. We attribute 95 percent of CREZ cost to wind, to allow for some general benefit from the CREZ lines through reduced congestion on the grid. Wind MWhs is an estimate of wind generation eligible for the PTC.

Despite the mature nature of the wind industry, the cost of renewable subsidies in Texas has increased. With the PTC extended, the 10-year cost of renewable subsidies in Texas should total about \$12.9 billion, an average cost of \$1.29 billion a year over the period.

The PTC and Resource Adequacy in Texas

The cost of these direct subsidies, however, is only a portion of the total effect of renewable energy subsidies in Texas. Additionally, one must consider the costs imposed on the Texas electricity market.

It is well known that Texas is undergoing a major debate over whether price signals are adequate to maintain resource adequacy; less well known is that a significant portion of the problem with price signals can be laid directly on the doorstep of subsidies for wind generation.

The PTC allows wind generators to bid electricity into the market at negative prices. In other words, generators can use proceeds from the PTC to pay people to take electricity from them and still make a profit. When wind-generated electricity is bid into the market at a negative price, all other sources of generation must match that price or risk getting knocked off the grid. This decreases the profitability of non-wind generation and gives companies fewer resources and incentives to invest in new capacity. Over time, this will serve to degrade the reliability of the Texas grid, increasing the risk of blackouts.

Donna Nelson, chairman of the Public Utility Commission of Texas (PUCT) further explains this:

Federal incentives for renewable energy... have distorted the competitive wholesale market in ERCOT. Wind has been supported by a federal production tax credit that provides \$22 per MWh of energy generated by a wind resource. With this substantial incentive, wind resources can actually bid negative prices into the market and still make a profit. We've seen a number of days with a negative clearing price in the west zone of ERCOT where most of the wind resources are installed... The market distortions caused by renewable energy incentives are one of the primary causes I believe of our current resource adequacy issue... [T]his distortion makes it difficult for other generation types to recover their cost and discourages investment in new generation.⁷

The Northbridge Group recently published a study confirming the distortions in the market caused by the PTC. The Northbridge study (*see next page*) reports that the five-fold increase in wind generation since 2006 parallels an increase in negative pricing. In the ERCOT West Zone, negative pricing occurred between 8 percent and 13 percent of the time from 2008 to 2011.⁸

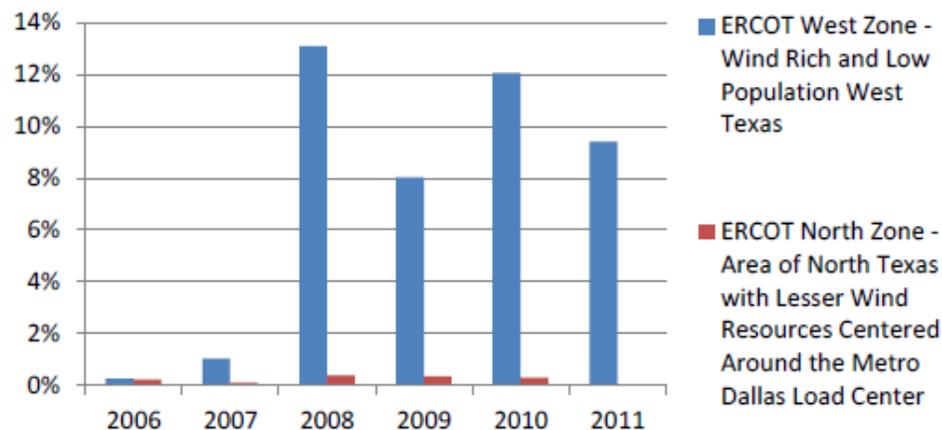
Negative prices cause both short and long term harmful effects. According to Northbridge, negative prices:

- disrupt the operation of physical electricity systems and markets by sending distorted hourly price signals to other market participants whose resources are needed to meet demand reliably and cost-effectively.
- distort competitive markets, disrupt normal operation of the system, raise costs, and imperil reliability.
- undermine essential fossil generation operating at minimum levels during low demand periods [because they] make operating fossil generation at minimum levels extremely expensive as operators must pay not only for their fuel costs, but also just to generate.
- distort the price signals developers and investors rely on to determine what, when and where to build generation and transmission [and] lower the expected future revenues for all types of base load and intermediate generation that does not receive production-based subsidies.⁹

The disruption of the Texas electrical market by negative wind prices is only going to get worse as more transmission lines are built, and frequency of negative pricing throughout the state comes to resemble the West Zone. As the Brattle Group noted in a recent report:

Wind generation puts downward pressure on energy prices in all parts of ERCOT whenever the wind blows. However, the effect is greatest in the West Zone, where more than 70% of ERCOT's wind capacity is located... The CREZ project is primarily designed to move electricity generated by wind and other renewable resources from remote parts of Texas (i.e., West Texas and the Texas Panhandle) to the more heavily-populated areas of Texas (e.g., Austin, Dallas-Fort Worth, and San Antonio). This transmission

Figure 1: Percentage of Hours with Negative Real-Time Electric Energy Prices in ERCOT, 2006-11



Source: The Northbridge Group.

expansion will also increase Texas's ability to build more wind generation, but may in the future erode non-wind generator economics more by depressing energy prices in the other three zones.¹⁰

It is difficult to quantify the cost of the PTC's distortions on the market. But one method of doing so would be of looking at the cost of solving Texas' resource adequacy challenges.

PUCT Commissioner Ken Anderson recently did some "back of the envelope" calculations of the cost of imposing a PJM-style capacity market on ERCOT. He came up with a cost of over \$3.6 billion per year.¹¹ The portion of this cost that can be attributed to renewable energy subsidies is debatable, but these costs could easily exceed the costs of the direct subsidies, more than doubling consumer costs.

The Cost of Wind's and Solar's Unreliability

Wind is free—there is currently no property right to wind—but wind energy is expensive. In fact, it has been called "the most expensive form of generation we have in Texas."

According to Richard Baxter:

Wind is not a typical energy source. It is variable, and the best wind resources generally require longer-distance transmission of the power than for other forms of generation. These considerations raise the

cost of utilizing this resource. Even relatively recent estimates put the cost of integrating wind energy into the grid at 5 percent to 30 percent of the cost of generation.

In a report compiled for Ontario (Canada) electricity consumers, Keith Stelling writes, "Energy experts report that industrial wind power is proving to be exceptionally expensive to consumers once required backup and additional infrastructure are factored in."

Stelling attributes the high cost to (1) the need to maintain backup generating reserve to cover times when the wind does not blow, (2) the need to stabilize the grid when wind produces power that is not needed by current demand, and (3) government subsidization and tax benefits for the wind industry.

The backup generation and grid-related costs of wind energy will be passed on to ERCOT ratepayers. Adding over 11,000 MW of wind generating capacity to take advantage of the CREZ transmission capacity could increase ERCOT's system production costs by \$1.82 billion per year.

One problem in ERCOT with these costs of wind is that they are not paid for by wind generators. When a conventional generator doesn't provide the electricity promised, the costs to the system are paid for by that generator. That is not the case with wind. When the wind

unexpectedly stops blowing and new generation has to be brought immediately online, the costs are socialized. In other words, consumers rather than generators pay for the unreliability of wind.

Wind subsidies, especially the PTC, exacerbate this problem. The below market cost of wind floods the system with more wind than it would otherwise have, increasing the challenge of maintaining system reliability and the costs of ancillary services. Additionally, the below market prices tend to suppress prices system wide. There is growing evidence that this is dampening investment in peaking generation. Not only could this have a detrimental impact on system reliability at peak loads, it could also threaten the success of Texas' energy-only market. The market relies on market incentives to provide the right mix of generation capacity, particularly peaking capacity. If the right signals are not sent, resource adequacy will be a problem, and may lead to political action modifying the energy-only market.

ERCOT has for over a year been working on the development of a Wind Cost Allocation Proposal. The PUCT recently instructed its staff to open a project on this issue. Either ERCOT, the PUCT, or the Legislature should take action resulting in the allocation of wind costs to wind generators.

Energy Efficiency

The Texas Legislature has mandated the state's current energy efficiency program that calls for "each electric utility [to] provide ... incentives sufficient for retail electric providers and competitive energy service providers to acquire additional cost-effective energy efficiency for residential and commercial customers equivalent to at least ... 20 percent of the electric utility's annual growth in demand of residential and commercial customers by December 31, 2009."

Energy efficiency has greatly benefitted society and has been a key part of America's and Texas' economic growth. Energy intensity, the amount of energy it takes to produce a unit of output (i.e., a unit of GDP), has been decreasing steadily. Since at least the Industrial Revolution, the world has been increasingly energy efficient. Yet, at the same time, the world has used more energy.

Ultimately, energy efficiency makes energy less expensive so we can use more energy. The public benefit of energy efficiency is that we are able to use more energy that

produces more economic growth that makes society wealthier and healthier.

However, government-mandated energy efficiency programs today are designed to decrease energy use. They generally do this by increasing the cost of energy, which results in a decrease in energy use, and subsequently in economic growth.

Texas is almost alone among the states in using a Program Administrator Cost Test (PACT) to evaluate its efficiency programs. The PACT ignores the expenses consumers incur in achieving the reduced energy consumption, understating the total costs of the programs and thus overstating the cost savings, i.e., efficiency, of the programs. For instance, the purchase of a refrigerator with an actual cost of \$450 might save future power costs of \$400, with the utility giving the consumer \$75 to make the purchase. The consumer happily pays the remaining \$375 to save \$400 on their power costs. The utility reports that its \$75 investment has passed a PACT test by saving \$400 of power. Society, however, has spent \$450 in order to buy only \$400 of power savings.

The claim that Texans benefit from a state-mandated "increase in energy efficiency services ... and a decrease in overall energy consumption" demonstrates a fundamental economic misunderstanding. An uncompensated decrease in a person's consumption of any economic good is a cost, not a benefit. The fact that the person has chosen not to purchase the "energy efficiency services" and chosen instead to consume electricity is an indication that a program to mandate this change makes them worse off, not better.

Because of the nature of the energy efficiency program, increased gains in efficiency come at progressively higher costs. In other words, each unit of decreased electrical use comes at a higher monetary cost. The PUC's own rules state that "An energy efficiency program is deemed to be cost-effective if the cost of the program to the utility is less than or equal to the benefits of the program." Yet, as noted above, the agency cannot accurately determine at this point whether or not the programs under this rule are actually cost effective. As the goals are increased, it will be increasingly difficult for utilities to implement programs that are not burdensome and inconsistent with the statute. This is particularly true when it comes to the reduced load served by the utilities as the result of the increased goals. While the utilities are mostly compensated for the

Because of the nature of the energy efficiency program, increased gains in efficiency come at progressively higher costs. In other words, each unit of decreased electrical use comes at a higher monetary cost.

expenses of these programs, they are necessarily reducing their overall demand, and thus their revenues. As regulated entities, they have no other means for increasing demand and the associated revenues except through the PUC.

The Natural Gas Mandate

In the 1990s, natural gas' low price and lower emissions made it an attractive fuel source for generating electricity. In 1999, the 76th Texas Legislature passed Senate Bill 7 to deregulate the retail electricity market in Texas. One provision in SB 7 attempted to take advantage of the attributes of natural gas by mandating that 50 percent of all new generation be produced by natural gas. According to its bill analysis, SB 7 mandated that "50 percent of the megawatts of generating capacity installed in this state after January 1, 2000, use natural gas." The law enforces this generation mandate through the natural gas energy credits (NGEC) trading program. According to Sec. 25.172, Title 16, Texas Administrative Code, an NGEC will be issued to a power generation company for each megawatt of new generation capacity fueled by natural gas.

Natural gas prices did not cooperate with the intent of SB 7. The wellhead cost of natural gas per thousand cubic feet (Mcf) increased from an average of \$2.17 in 1999 when SB 7 was passed to \$10.33 in 2005 after Hurricanes Katrina and Rita, and hit its peak in July 2008 at around \$11.32. At these higher prices, electricity produced by natural gas was no longer a bargain when compared to coal- and nuclear-generated electricity. Of course, natural gas prices are much lower today than they were during the last decade's peak. The average wellhead price in February was \$4.89—still twice as high as the 1999 price.

SB 7 also required the Public Utility Commission of Texas to "establish a program to encourage utilities to comply

with this section by using natural gas produced in this state as the preferential fuel." So not only was SB 7 designed to give a preference for natural gas as the best fuel for generating electricity, it was also designed to increase the market share of Texas producers of natural gas.

There are other examples of well-intentioned but ultimately harmful government mandates to secure energy supplies. The oil crisis in 1973 inspired a campaign for conservation among environmental activists and regulators who were afraid that oil and natural gas resources would run out. As a result, in 1978 the Power Plant and Industrial Fuel Use Act (FUA) restricted construction of power plants using oil or natural gas as a primary fuel source. At the same time, the FUA also encouraged the construction of coal and nuclear power as "alternative" energy.

By the mid-1980s it was obvious that we were not going to run out of natural gas for a while, as prices declined and supplies increased. And coal soon became an unpopular fuel source among environmental activists. In 1987, the Natural Gas Utilization Act repealed some of the FUA restrictions on natural gas use. Although some restrictions remained in place (certain operating conditions needed to be met), all power plants built after 1987 were unrestricted and free to use oil and natural gas as a fuel source.

It is not clear that today's mandate has led to Texas' heavy reliance on natural gas for new generation. Regulatory restrictions on coal and nuclear plants, the high price of renewables, and the rapid growth of demand in ERCOT has made natural gas the natural choice for most of the new generation since restructuring began. Yet, low prices or these other factors don't make a mandate for natural gas—or any other fuel—an efficient means of producing electricity.

ISSUE 3: High and/or Inequitable Taxes and Fees Assessed in the Electricity and Telecommunications Markets Increase Consumer Prices and Reduce the Competitiveness of these Markets

Foundation Recommendations

- Reduce local franchise fees by levying them on the basis of the marginal costs of managing the public right-of-way.

- Eliminate taxes on production goods that are used to deliver consumer telecommunications services.
- Eliminate the “tax on a tax” application of the sales tax to taxes and fees on a telephone bill.

Related Sunset Staff Report Recommendations

- None

Franchise Fees

Since 1999, municipal franchise fees have cost Texas consumers over \$5 billion. Municipal franchise fees are levied on a variety of consumer services for the use of the public right-of-way (ROW) including telephone, cable, gas, and electricity. Franchise fees in FY 2012 in the 10 largest Texas cities alone cost consumers over \$500 million.

Local governments have an obligation to maintain and protect public ROWs. The way to fund this work is by levying municipal franchise fees, a form of payment from companies that use or occupy the public ROW. However, there is a vast disparity between the costs of maintaining public ROWs and the volume of revenues taken in from franchise fee collections. Cities divert much of this revenue into their general funds. This redirection of surplus franchise fees is an indicator that cities are imposing too high of a franchise fee for its intended purpose.

Because local governments control the ROW, they have long been able to use franchise fees to grow their general revenues. The Texas Legislature has taken notice of this

situation and has repeatedly stepped in to change the way in which cities manage the ROW and collect revenue from franchise fees. While the Legislature has improved the franchise process, it has unfortunately left franchise fees at high levels. The collection process has become more efficient, yet Texas consumers are still burdened by these fees that continue to rise each year.

Though some courts (and local governments) have said that franchise fees are “essentially a form of rent: the price paid to rent use of public right[s] of way,” it is wrong to think of them in this way. Governments are not private landlords seeking to extract maximum profits from private property, but guardians of the public interest.

As such, governments should not seek to extract maximum rents from the public for the public’s use of the ROW. High rates cost consumers money, disrupt the most efficient use of the ROW, and reduce the quality and availability of services to the public.

Rather than trying to extract the maximum rent from consumers for the use of the public right-of-way, cities should price ROW fees based on their marginal costs. In other words, while the cities’ costs of managing the ROW shouldn’t exceed their revenues, neither should cities turn a profit. Transparency is a key factor here. Fees levied for the use of the ROW should be used for management of the ROW, rather than being used for general revenue. Applying the following principles to franchise fees would make them appropriate and transparent:

Table 6: Municipal Franchise Fee Revenue in Texas’ 10 Largest Cities, 2008-12

City	2008	2009	2010	2011	2012	Total
Houston	\$183,153,695	\$184,221,688	\$183,858,504	\$184,410,797	\$185,721,595	\$921,366,279
San Antonio	\$28,386,813	\$29,299,815	\$28,976,795	\$28,100,000	\$26,410,000	\$141,173,423
Dallas	\$103,823,134	\$100,074,542	\$90,999,559	\$102,352,196	\$102,954,301	\$500,203,732
Austin	\$32,838,832	\$30,850,800	\$32,513,604	\$30,517,389	\$30,644,000	\$157,364,625
Fort Worth	\$39,715,763	\$38,390,140	\$39,787,303	\$41,381,268	\$41,417,189	\$200,691,663
El Paso	\$40,122,253	\$43,815,255	\$41,285,513	\$43,784,209	\$42,421,228	\$211,428,458
Arlington	\$28,925,283	\$28,293,626	\$30,369,380	\$32,702,318	\$31,664,774	\$151,955,381
Corpus Christi	\$17,272,515	\$16,071,288	\$17,054,727	\$16,970,857	\$17,165,935	\$84,535,322
Plano	\$22,628,847	\$23,586,444	\$21,886,667	\$22,770,635	\$22,794,580	\$113,667,173
Laredo	\$6,478,582	\$6,499,106	\$6,387,908	\$6,707,418	\$6,919,674	\$32,992,688
Total	\$503,345,717	\$501,102,704	\$493,119,960	\$509,697,087	\$508,113,276	\$2,515,378,744

- To maximize the availability of cost-effective services available to consumers, franchise fees should be levied on the basis of the marginal costs of managing the public ROW.
- Franchise fees should generally be levied only on the entity that owns the poles or conduits that occupy the ROW.
- Entities that use poles or conduits owned by other entities should pay for the use of the ROW through pole connection charges and associated fees rather than through franchise fees.
- Any reduction in franchise fees under the marginal cost model should be phased in over a period of several years in order to give cities time to adjust their budgets.
- In return for the reduction of franchise fees, entities that occupy the public ROW should bear responsibility for relocation costs associated with municipal projects.

The Foundation estimates that these principles would reduce franchise fees by 50 to 90 percent, depending on the city.

Sales Tax on Production Goods That are Used to Deliver Consumer Telecommunications Service

The Texas sales tax is levied on certain non-retail, or higher order, telecommunications equipment that is not a consumer product. Examples are machinery, equipment, and software purchased by telecommunications companies that are used in delivering consumer-based products and services. Taxing this equipment at various stages along the production process places a hidden tax on consumers.

Examples of such equipment include:

- 1) antennas
- 2) amplifiers
- 3) poles
- 4) wires and cables
- 5) rectifiers
- 6) duplexers and multiplexers
- 7) receivers
- 8) repeaters
- 9) transmitters, modems, and routers
- 10) power equipment and storage devices

Telecommunications companies could not deliver retail consumer services without these items, though they are currently being taxed as though these were themselves retail goods. All in all, consumers are fronting the bill for almost \$400 million per year for equipment taxes. Over a five year period this will cost consumers almost \$2 billion, no small sum.

The “Tax on a Tax” Application of the Sales Tax to Taxes and Fees on a Telephone Bill

Sales taxes levied on telecommunications services function in part as a “tax on a tax” since they are levied on other taxes, including the Federal USF charge, the Texas USF charge, the Utility Gross Receipts Assessment, and the Municipal Franchise Fee. This double-tax costs Texas consumers over \$90 million per year.

Just as consumers are paying a double tax on telecommunications equipment at the time of retail purchase, so too are they paying taxes on charges and fees imposed on telecommunications companies by federal, state, and local governments.

Upon payment for consumer retail services, the sales tax is being levied on charges such as utility gross receipts, the Texas USF, the Federal USF, and municipal franchise fees. Simply put, consumers are paying taxes on taxes and fees which were already built-in and passed down. Over a five year period from FY 2008 through 2012, consumers could have saved an average of \$113 million per year, or, \$500 million.

ISSUE 4: Overlapping Rate Regulation of Electricity (and Natural Gas) is Inefficient and Increases Consumer Costs

Foundation Recommendations

- Eliminate original jurisdiction for municipalities in electricity and natural gas rate setting; instead, shift original jurisdiction to the PUC (for electricity) and the RRC (for natural gas).
- Eliminate the mandated reimbursement of legal fees for municipalities in rate cases before the PUC and RRC.

Related Sunset Staff Report Recommendations

- None

Overlapping Regulation of Rates

In Texas, municipalities and state regulators have overlapping authority in the rate setting process over investor-owned utilities that sell electricity or natural gas in a monopoly setting. The Public Utility Commission (PUC) and the Texas Railroad Commission (RRC) are the state-level regulatory bodies for electricity and natural gas, respectively. Cities have original jurisdiction concerning rate changes; however, they can surrender this authority to the state regulatory body through decree.

In the case of electricity rates, the utility starts off the rate change process by issuing to the municipality or respective regulatory agent a request to alter the rates for the area. This request, also called a statement of intent, needs to be filed to the “appropriate officer”¹² of both the original jurisdiction (i.e. the main municipality serviced, unless the PUC or RRC acts as original jurisdiction), as well as any other affected municipalities 35 days ahead of the intended date that the rate change is to take effect.¹³ After filing the intent statement, the utility must notify the public of the proposed change by publishing notice of the change once a week for four weeks, generally through newspaper advertisements in each affected county.* In addition, rate change notices must be mailed to each person affected by the change.¹⁴

If all parties are satisfied with the outcome at the municipal level, the process ends there. However, this rarely if ever happens. In fact, often the rate request simply goes through the motions at the municipal level since cases most often proceed to the PUC, which may occur when one of the parties is unhappy with the results at the municipal level. The party may appeal the case to the PUC for a further hearing within 30 days of the original jurisdiction’s final decision on the matter.¹⁵ In the case of a utility, they may appeal without any difficulty;¹⁶ for citizens, a threshold (of either 20,000 voters or 10% of registered voters, whichever is lower) must be met on a petition to grant appeal.¹⁷ If the Commission accepts the appeal, they have a 185-day period in which to hold hearings and decide whether to uphold the lower body’s decision, reject it and institute the rates requested by the

utility, or modify the decision. If a decision is not reached and a final order is not filed within the 185 day mark, the rates requested by the utility go into effect regardless of the decision from the lower advisory body.¹⁸

For gas utilities, the process is very much the same. The utility must request an increase 35 days before it would take effect. From that point until 30 days after the rate would take effect, affected municipalities can hold hearings and freeze the rates. At any point, the increase can be denied to the company, requiring them to appeal to the RRC. Once there, the new process can take up to 150 days or longer if the RRC chooses to extend their hearings.¹⁹

An important aspect of all municipal-originating rate cases is that the utilities must reimburse all “reasonable” costs related to the appeal for municipalities.^{20,21} This creates a significant expense for the utilities that is passed on directly to consumers with little to no risk for the municipalities. Furthermore, the appeal to the state bodies requires a *de novo* hearing—that is, the hearing is held as if the other one didn’t happen—meaning that the data and evidence used in the original case proceeding must be gathered again and the length of the proceeding is increased as the parties must familiarize themselves with the issue at hand.

The costs of the extended process can be quite hefty. In one case, TXU Energy spent over \$10 million on gathering information and making their case at the RRC hearing to raise its rates statewide. Atmos Energy similarly spent \$9.7 million on a different rate case. Both cases took over a year and half to process through the entire cycle. These totals do not include the cost of the original cases since the RRC only hears the case after it has been heard in every affected area. The exorbitant cost of the cases must then be recouped later on through additional rate increases.

For example, Centerpoint Energy spent a year working to negotiate a temporary rate increase in Houston meant to cover the expenses from a prior rate case.²² All told, almost 150 cases on the RRC dockets were filed as an “Appeal from City Action” in the last twelve years. In each of these cases, a gas company requested a rate increase and was denied by the city or felt that the process didn’t give them what they needed, necessitating a costly appeal after already having spent money on the initial case with the city.

* An exception is made for rate decreases; in that case, only the mailing is required. The authority holding jurisdiction can also waive requirements in some cases at their discretion.

Texas is the only state in the United States in which municipalities still have original jurisdiction over utility companies. Other states have different processes with varying degrees of state regulation. For example, Georgia has a fairly straightforward process for electrical utility rate changes. Most rate decisions are suggested by the power companies in a rate case and finalized by the Public Service Commission (PSC). The municipalities are not involved in the process, other than perhaps to send an expert witness for which no compensation is provided by the utility. The PSC still has the power to suspend the implementation of rate changes for up to five months after the change is scheduled take effect, but there is no protracted period of uncertainty for the power company as they argue for the increase in rates necessary to maintain profitability.²³

The antiquated system in Texas may have made sense before Texas create the PUC in the 1970s, but now it only creates an incentive for municipalities to get involved in rate setting even though they have little inherent interest in the process and it does nothing to protect consumers.

The cost of reimbursing the legal fees of both parties in the rate change process to utility companies in Texas is unnecessary and excessive. These costs are also passed on to the consumer in the form of higher utility prices, which ultimately disadvantages the group the system originally aimed to protect. The time period of uncertainty for utility companies is also unreasonable. Other states may allow some interference—such as franchise fees on power cables or allowing cities to speak as consumers—but nowhere else in the nation can a state actively block a rate hike or directly influence the proceedings as much as in Texas. This lag creates additional expenses that can be passed on to consumers. Overall, Texas should not allow municipalities to have original jurisdiction in the rate change process for natural gas and electric utilities, and utilities, i.e., consumers, should not be forced to reimburse the legal fees of municipalities. These changes would positively affect utility consumers in Texas and lead to a more streamlined and efficient process. ★

Endnotes

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⁷ Donna Nelson, testimony before the Texas Senate Natural Resources Committee (6 Sept. 2012).

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¹² "Utilities Code. Title 2. Public Utility Regulatory Act. Subtitle B. Electric Utilities. Chapter 36. Rates." Sec. 36.102, 1997.

¹³ Ibid.

¹⁴ Ibid., Sec. 36.103, 1997.

¹⁵ Ibid., Sec. 33.053, 1997.

¹⁶ "Utilities Code. Title 2. Public Utility Regulatory Act. Subtitle B. Electric Utilities. Chapter 33. Jurisdiction And Powers Of Municipalities." Sec. 33.051, 1997.

¹⁷ Ibid., Sec. 33.052, 1997.

¹⁸ Ibid., Sec. 33.054, 1997.

¹⁹ "Utilities Code. Title 3. Gas Regulation. Subtitle A. Gas Utility Regulatory Act. Chapter 104—Rates And Services." Subchapter C, 1997.

²⁰ Ibid.

²¹ "Utilities Code. Title 2. Public Utility Regulatory Act. Subtitle B. Electric Utilities. Chapter 33. Jurisdiction And Powers Of Municipalities." Sec. 33.122, 1997.

²² "Gas Utilities Docket 9954." Railroad Commission of Texas (July 2010).

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Appendix: A Brief History of Market Restructuring in Texas

Electricity

Statewide regulation of electricity came late to Texas, and markets came early. Texas became the last state to regulate retail electric rates when the Texas Legislature created the PUCT in 1975. But it wasn't long before Texas started heading in the other direction.

The move to competition began with 1995 revisions to the Public Utility Regulatory Act (PURA) that required all PUCT-regulated transmission owners to provide open access to wholesale buyers and sellers on terms comparable to those enjoyed by their own retail customers. The law's revisions empowered the PUCT to allow market prices ("market-based rates" rather than cost-based regulated rates) for both wholesale and retail services. It also initiated rulemakings to set transmission rates and to form an independent system operator (ISO) for Electricity Reliability Council of Texas (ERCOT). In 1996, ERCOT was designated by the PUCT as the first ISO authorized to manage wholesale markets in its footprint. Those markets began operating on September 1, 1996.

Texas then successfully transitioned to competition of wholesale power in 1997, requiring the ERCOT transmission owners to offer nondiscriminatory access to their lines. The foundation for retail competition was laid in 1997 when the Legislature said the public interest required that electric services and their prices should be determined by customer choices and the normal forces of competition. In 1999, the Legislature passed Senate Bill 7, which required the start of customer choice by January 2002 and the transition to full competition by January 2007.

When customer choice began, the average consumer had the option of choosing from eight different plans offered by five different Retail Electric Providers (REPs). By the time competition was fully in effect, an average of 17 providers offered 53 plans. Today, the average Texan in ERCOT can choose from about 138 different plans offered by 29 different providers.

Additionally, almost 82 percent of consumers have actively chosen competitive rate plans, while the other 18 percent have benefitted from competition through lowered rates on old plans or getting competitive rates through move-

ins. Almost everyone is participating in Texas' highly competitive electricity market. From the perspective of consumer choice, competition has been an unqualified success.

The road for prices was rougher. The two main factors that influenced prices during the transition to competition were the Price to Beat (PTB) and high natural gas prices.

The PTB was originally the regulatory price—both a price floor and ceiling—at which existing or incumbent providers had to sell their electricity. It was hoped that the floor would provide room for new providers to earn a profit by selling electricity at a lower price, while the ceiling was designed to keep prices from rising too high in the early days of limited competition. The PTB was a uniquely successful transition tool that allowed Texas to make the transition to competition where others failed; yet it also distorted prices and market behavior throughout 2005 and 2006.

The problem was that natural gas prices rose by an average of 49 percent between April and November, 2005, and the PTB was pegged to natural gas prices. However, political factors led to no increase in the PTB during this time. This delay in incorporating natural gas prices into the price of electricity led to extremely high and sticky prices in 2006 because of the PTB.

By the time 2006 rolled around, it was clear there was no longer any need for the PTB. Competition, in place of regulations, was ready to keep prices low. Yet the PTB served as a psychological price floor during that time, keeping prices higher than they would have been if left to competition. Regardless of the challenges of transition, once competition was fully introduced in 2007, the marketplace went to work on prices and produced superior results.

For instance, 2001 regulated rates in Texas' competitive areas (9.98 cents per kWh) averaged 15.8 percent above the national average. In 2010, however, the average competitive price (11.01 cents per kWh) is 8.71 per cent below the national average, while the average of the 15 lowest offers (9.27 cent per kWh) is 23.13 percent below the national average.

continued

More good news for Texas consumers is that competitive prices have fallen not only relative to national prices, but are on average lower in real terms than regulated prices in Texas in 2001. Adjusted for inflation, the average competitive price today is 9.46 percent below the average 2001 regulated price; the average of the 15 lowest prices is 24.39 percent lower; and the lowest average price is 30.5 percent lower. Even without adjusting for inflation, however, most Texans can easily buy electricity today below 2001 regulated prices.

Introducing competition into Texas' retail and wholesale electricity markets has made Texas the greatest success story in the United States—by moving away from the model of heavily regulated public utilities, i.e., government-mandated monopolies. That success is largely due to policymakers' willingness to let markets work and not manipulate prices or other policies for political reasons.

The resulting predictability of Texas markets helps explain why ERCOT territory has seen investment in new generation to a level that continues to maintain reserve margins adequate for powering Texas' future economic growth. Though concerns about reliability have recently been raised, experience shows that the Texas market can still supply an adequate supply of electricity even at times of highest demand. For instance, Texas' growing population and economy combined with record high temperatures and drought in 2011 strained the electricity grid. But the market did not fail, and the grid produced sufficient electricity for Texas, even under these trying circumstances.

Our research clearly shows that critics of the Texas electricity market have missed the mark. Though they claim that deregulation isn't working—either because prices are too high or too low, the results under full deregulation have proven otherwise.

The same pattern of faulty reasoning held true across the country. For instance, deregulation was widely blamed for causing California's power crisis. However, the California electricity market was never deregulated. A poorly designed set of wholesale regulations combined with retail price controls led to that market's collapse when natural gas prices skyrocketed. These problems across the country led to the collapse of what had been a robust movement toward restructuring across the country.

The fact that Texas is still moving forward makes us unique among the 50 states. Lynne Kiesling and Andrew Kleit put the Texas experience in context:

Since the California escapade [of 2000-01], several states have moved backward with electricity restructuring, and no state has moved forward. No state, that is, except Texas. ... Texas, alone among the U.S. states, [has] moved forward into a truly restructured and competitive electricity era.

While restructuring has not always gone smoothly and has generated much debate, the problems—high natural gas prices, special interests, and intense media scrutiny—that in other states stopped restructuring in its tracks did not stop Texas, which is now moving forward into the frontier of electricity markets with very little company.

Telecommunications

Prior to 1995, rates for basic local service were dictated by what regulators deemed to be a “reasonable rate of return” on service providers' investments. The rates also were based on the line density in a given location. That is, higher rates were assigned for major cities, where the number of lines is largest, while rates were lowered in rural areas with fewer lines. This calculation wholly ignored the actual cost of service, which is greatest where line density is lowest.

Texas lawmakers recognized in 1995 that advances in technology and the concomitant changes in the telecom industry warranted regulatory reforms. Whereas past regulation was solely structured to control government-created monopolies, burgeoning competition rendered such regulation obsolete. So in 1995, the Texas Legislature established an “alternative” regulatory framework to allow incumbent service providers a modicum of pricing independence in return for network upgrades and service discounts to public institutions.

The 1995 amendments to the Public Utility Regulatory Act allowed for expedited review of rate adjustments and the pricing of service packages and promotions. Basic service rates remained strictly regulated, but lawmakers partially deregulated the rates of some “non-basic” services, such as speed dialing, three-way calling and paging, and set conditions for eliminating price caps on other non-basic services, such as call forwarding and caller ID.

But as well-intentioned as lawmakers may have been, the reforms were too limited, and regulatory constraints continued to inhibit investment and competition. One of the major advances in telecommunications has been the convergence of voice, video, and data services across all types of telecommunications media. Yet the regulation and taxation of telecommunications services did not keep pace with the technological changes, resulting in regulatory inconsistency between various products and service providers. So the Legislature made more changes in 2005.

In that year, Texas became the first major state to address the disparate treatment of different technologies and services when it passed SB 5. This legislation restructured Texas telecommunication laws in order to foster increased competition throughout the industry, bringing substantial benefits to Texas consumers, businesses, and the economy.

One of the most significant aspects of SB 5 is its provision for a statewide video franchise. Texas was the first major state to allow new entrants to receive a state franchise in order to provide video service that competes with existing cable providers. Companies no longer were required to endure the slow, expensive, and anti-competitive process of receiving franchises from local governments.

SB 5 also greatly reduced price regulation for service to a majority of the state's telephone customers. Local telephone service for more than 15 million Texans was moved into competition as of January 1, 2006. More changes were recently implemented after the passage of telecommunications reform legislation 2011. And no one has looked back since.

Of course, the telecommunications market is facing potential new regulation in the name of net-neutrality. "Proponents of 'net neutrality' offer no explanation of how our government's regulation of the Internet would differ from that of the Chinese government. In fact, the attack of current providers for prioritizing data is odd, considering both sides of the debate generally agree that prioritization is necessary—the FCC has included a 'reasonable network management' exception to each of the proposed rules."

Yet these regulatory interventions are coming from the federal level. State telecommunications policy is still firmly on track toward competition.

About the Author



Bill Peacock is the vice president of research and the director of the Center for Economic Freedom at the Texas Public Policy Foundation. He has been with the Foundation since February 2005.

Peacock directs the research of the Foundation to ensure its accuracy, integrity, and application of free market principles to the issues facing Texas and the nation. His own research focuses on economic freedom and growth, property rights, civil justice, and regulatory issues.

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.

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The Texas Public Policy Foundation is a 501(c)3 non-profit, non-partisan research institute. The Foundation's mission is to promote and defend liberty, personal responsibility, and free enterprise in Texas and the nation by educating and affecting policymakers and the Texas public policy debate with academically sound research and outreach.

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The public is demanding a different direction for their government, and the Texas Public Policy Foundation is providing the ideas that enable policymakers to chart that new course.

