

## Competition in the Texas Electricity Market: A Texas Success Story

by **Bill Peacock**

Vice President of Research & Planning and Director of the Center for Economic Freedom

### Recommendations

- Do not grant the PUC the authority to require disgorgement, issue emergency cease and desist orders, or increase fines.
- Eliminate price caps and market-share caps in the wholesale market.
- Allow retail electric providers to properly assess the creditworthiness of potential customers.
- Streamline the regulation of rates, operations, and services at the PUCT.

Introducing competition into Texas' retail and wholesale electricity markets has made Texas the greatest success story in the United States—if not the world—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 transformation of American electricity markets was dominated elsewhere by a political competition to “design” markets. However, Texas did not “design” a market in any meaningful sense—it instead set general rules for market participants and allowed them to compete.

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. Furthermore, this is why retailers have continued to invest at a level that offers the average ERCOT customer a choice of 138 different plans offered by 29 different providers.

Yet, even as the restructuring continues with the next major step of implementing a nodal transmission market, there have been a significant number of proposed statutory or regulatory changes—some of which have been adopted—that would harm competition and consumers in Texas' uniquely structured and uniquely successful electricity market. (See Table 1, next page)

All of these proposals are solutions in search of a problem. The data clearly shows that Texas

retail and wholesale electricity markets are the most competitive in the world.

### Retail Competition

While other states have competitive wholesale markets, no state comes close to the competition found in Texas' retail market. Three measures detail the high level of competition.

First, the percentage of electricity sold by incumbent REPs has plummeted. None of them has even a 40 percent share in the market where each used to have 100 percent before competition. (See Figure 1, page 3)

Second, 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. (See Figure 2, page 3)

Finally, the average Texan in ERCOT can choose from about 138 different plans offered by 29 different providers. This is up from five providers offering eight plans in 2002.

### Wholesale Competition

Potomac Economics is the independent market monitor for the ERCOT wholesale market. It provides an annual *State of the Market Report for the ERCOT Wholesale Electricity Markets*. The 2008 report, the most recent available, explains the state of wholesale competition in the Texas market.

The report begins by stating, “Our analysis indicates that the market performed competi-

**Table 1: Recent Proposals that Would Reduce Competition in the Texas Electricity Market**

Proposal	Year	Status
Require PUCT approval of mergers and acquisitions	2007	Current law
Require certain REPs to share customer information with competitors	2007	Failed to pass
Fine incumbent REPs unless they increase their market share outside of their home service areas and/or decrease their market share within their home service areas	2007	Failed to pass
Allow the PUC to use customer slamming to force residential customers to switch REPs	2007	Failed to pass
Allow the PUC to reduce rates found to be unreasonable.	2007	Failed to pass
Increase requirements for REP certification	2009	Current law
Require common terms on electricity bill	2009	Current law
Institute a retail electric market monitor	2009	Failed to pass
Reduce defenses against allegations of market power abuse	2009	Failed to pass
Tie the price of electricity to natural gas	2009	Failed to pass
Increase the state’s energy efficiency goals	2009/10	Adopted PUC
Mandate which technologies are subsidized through the Renewable Portfolio Standard	2009/10	Failed to pass
Require REPs to offer deferred payment plans to customers based on income or age	2009/10	Adopted PUC
Authorize PUC to order restitution to market participants under certain circumstances	2009/10	Failed to pass
Increase PUC’s administrative penalty authority to \$100,000 per violation per day	2010/11	Pending SB 661/HB 2134
Authorize PUC to issue emergency cease-and-desist orders	2010/11	Pending SB 661/HB 2134
Authorize PUC to disgorge revenue obtained under certain market behaviors	2011	Pending HB 2133

tively in 2008.”<sup>1</sup> When looking at price spikes, the good news was even more pronounced. Potomac found the data showed “very competitive market outcomes in 2008.”<sup>2</sup> Additionally, the competitiveness of the wholesale market has been improving. The report states that market competition in 2008 showed “significant improvement over 2005 and 2006.”<sup>3</sup> In addition, an examination of real-time load indicates that “the competitiveness of supplier offers improved considerably in 2006 compared to 2005, followed by even more substantial improvement in 2007 and 2008.”<sup>4</sup>

This shouldn’t be a surprise. Market participants learn over time how to function efficiently in a competitive market. For instance, whereas in 2005 only one market participant had a quick start unit qualified to provide balancing energy (about 330 MW), by 2008 several market participants had well over 1,000 MW of quick start capability.<sup>5</sup>

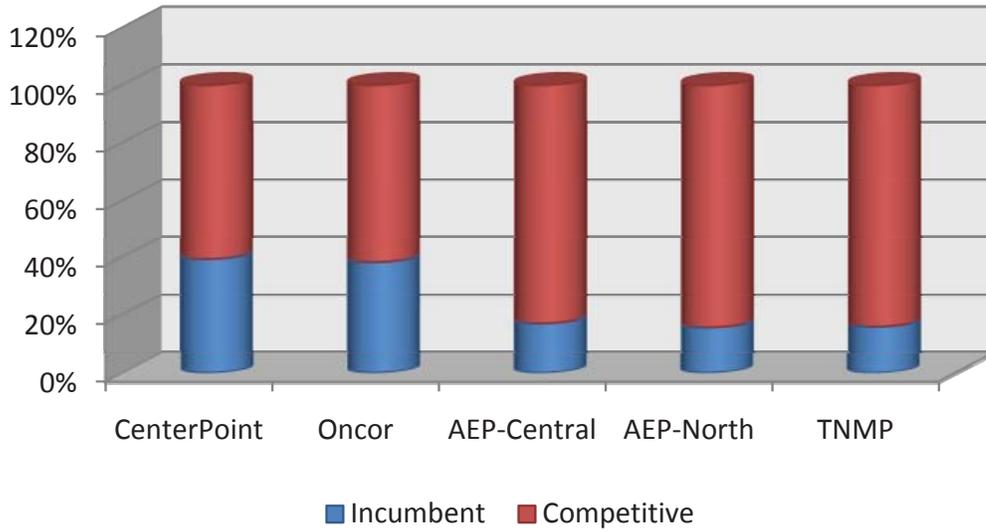
Many of the proposed regulatory measures listed above are based on the assumption that the exercise of market power by market participants has harmed competition in ERCOT’s wholesale electricity market. Yet this is simply not the case. Today’s wholesale market in ERCOT is competitive, more so than it has ever been.

## Introducing competition into Texas’ retail and wholesale electricity markets has made Texas the greatest success story in the United States.

In fact, the Market Monitor’s report makes it clear that the main problem with wholesale competition today is caused by the design of the market. In other words, it is the market structure prescribed in law—not the practices of market participants—that is hindering competition: “[T]he report generally confirms prior findings that the *current market rules and procedures are resulting in systemic inefficiencies*. Many of these findings can be found in six previous reports we have issued regarding the ERCOT electricity markets.” (emphasis added)

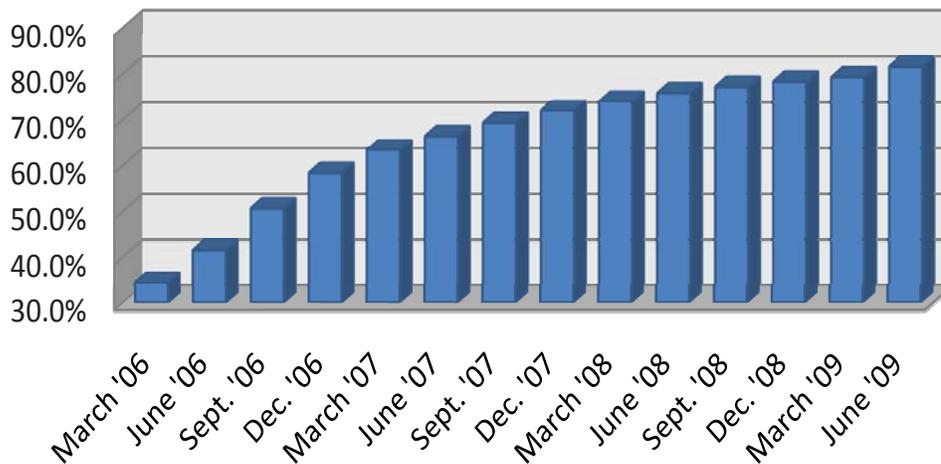
This is nothing new. It is widely known that today’s “zonal market structure is an inherently inefficient model for managing transmission congestion.”<sup>6</sup> ERCOT’s balancing energy auction uses Scheduling, Pricing, and Dispatch (SPD) soft-

**Figure 1: Market Share of Incumbent REPS, 2009**



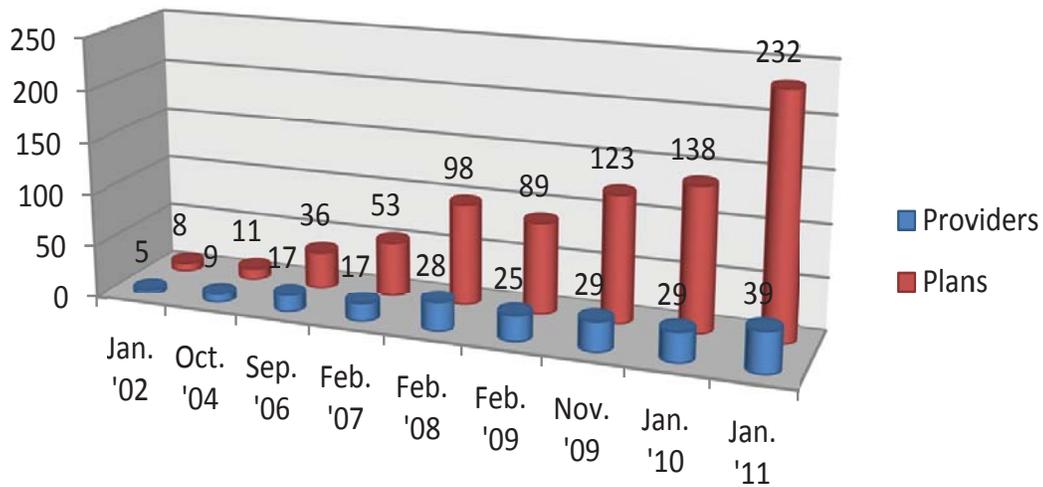
Source: Public Utility Commission, Summary of Retail Competition Market Share Data

**Figure 2: Observable Customer Retail Choice**



Source: Bret J. Slocum, "Second Quarter Data Concerning Customers Exercising Choice" (Aug. 5, 2009)

**Figure 3: Retail Consumer Choice**



Source: Powertochoose.com

ware “that dispatches energy in each zone to serve load and manage congestion between [the four] zones.”<sup>7</sup>

Potomac’s analysis of this system, particularly the flows through the transmission interfaces, or Commercially Significant Constraints (CSCs), indicates that:

- The simplifying assumptions made in the SPD model can result in modeled flows that are considerably different from actual flows.
- A considerable quantity of flows between zones occurs over transmission facilities that are not defined as part of a CSC. When these flows cause congestion, it is beneficial to create a new CSC to better manage congestion over that path.
- The differences between SPD-modeled flows and actual flows on CSCs create operational challenges for ERCOT that result in the inefficient use of scarce transmission resources.<sup>8</sup>

Another problem in the design of the market was identified in 2008, when a “sharp increase in the frequency of occurrence of unresolved congestion on the North to Houston and North to South CSCs.”<sup>9</sup> An “investigation quickly revealed that ERCOT rules permitted certain transmission elements to be managed with zonal balancing energy deployments when, in

## Texas did not “design” a market in any meaningful sense—it instead set general rules for market participants and allowed them to compete.

actuality, the congestion on these elements was neither effectively nor efficiently resolvable with zonal balancing energy deployments.”<sup>10</sup> All told, the inefficient design of the market in the North to Houston and North to South CSCs increased consumer cost by \$87 to \$175 million in 2008.<sup>11</sup>

Thus, rather than adopt any of the proposed changes detailed above—which, in fact, will decrease efficiency and increase consumer costs—the most important thing policymakers can do to increase wholesale competition is ensure that ERCOT completes the transition to the new nodal market:

The wholesale market should function more efficiently under the nodal market design by providing better incentives to market participants, facilitating more efficient commitment and dispatch of generation, and improving ERCOT’s operational control of the system. The congestion on all transmission paths and facilities

## Recent proposals to protect against anti-competitive behavior are solutions in search of a problem. The data clearly shows that Texas retail and wholesale electricity markets are the most competitive in the world.

will be managed through market-based mechanisms in the nodal market. In contrast, under the current zonal market design, transmission congestion is most frequently resolved through non-transparent, non-market-based procedures.<sup>12</sup>

The switch to the nodal system will provide the transparency that is significantly lacking in today's zonal market. Not only will this translate into a more efficient system, but it will provide a substantially increased ability to track individual market transactions that are now hidden from view. It is the transparency of the nodal market, rather than any of the Staff Report's recommendations, that will promote and ensure legal market behavior by market participants—and save consumers money. “In the long-term, these enhancements [of the nodal design] to overall market efficiency should translate into substantial savings for consumers.”<sup>13</sup>

### ***TPPF Recommendation: Eliminate the Price Cap and Market-share Cap in the Wholesale Market Once the Transition to Nodal Is Complete***

Two more design features of today's wholesale market that inhibit competition and decrease efficiency are the price cap and the market share cap.

The engineering requirement that load always equal generation creates a difficulty for electricity markets. Base-load generation with low operating costs will generally run whenever it is available, but power plants needed to equate demand and supply at the system peak will only run for a few hours in a year. A peaking plant must receive prices that cover both its operating and capital costs.

Other regions have introduced administered capacity markets to ensure adequate payments to seldom-used genera-

tors. However, Texas has chosen to encourage investment in peaking capacity by allowing on-peak energy prices to reach extremely high levels. This is known as an “energy-only” market. In its deliberations on capacity vs. energy-only markets, PUCT staff reported that costs were higher in RTOs with capacity payment requirements and there were few, if any, concrete benefits in return for the larger bills. To facilitate ERCOT's energy-only market, the PUCT has raised its bid ceiling over time from \$1,000 per MWh to the current \$2,250 to eventually \$3,000 once the nodal system is fully operational. Along with raising the price cap, the PUCT has required the release of more data on loads and resources in order to facilitate better investment decisions.<sup>14</sup>

In an energy-only market, new capacity will only be built when investors believe that the risk-adjusted returns on it are high enough. A price cap makes this investment much riskier, particularly for plants that only run at peak usage levels. While Texas has certainly been blessed with an abundance of new generation since competition was introduced, the future is less certain. In particular, inefficiencies and distortions being introduced into the system by mandated and subsidized wind-generated electricity are making investment in peaking generation looking less attractive. A price cap exacerbates this problem by limiting the ability of generators to earn sufficient returns in the limited runs that are typical of peaking plants. Efficient shortage pricing is a critical element in an energy-only market. Removing the price cap will help ensure that Texas' long-term resource adequacy requirements are achieved.

Sec. 39.154, Texas Public Utility Code, states “a power generation company may not own and control more than 20 percent of the installed generation capacity located in, or capable of delivering electricity to, a power region.” Some exceptions in the code have allowed certain grand-fathered generators to exceed this level. Whatever the level of ownership is limited to, it will interfere with the efficient operation of the Texas energy-only market.

Texas invites efficient operation of the market by removing most regulatory barriers to entry found in other markets. Market participants are generally able to act quickly on perceived profit opportunities. This efficient entry provides sufficient supply to meet demand and keep prices low. However, once a generator reaches a certain size, the cap on market share within a power region stops this efficient entry in its

## Recommendations to increase the PUC's regulatory authority would likely interfere with the existing robust monitoring and enforcement activities of the Market Monitor and the PUCT enforcement staff that currently serve as further deterrents to anti-competitive behavior.

tracks. In fact, it may often be the case that the generator that is prohibited from new investment, i.e., the generator that is growing by best meeting market demand, is the most efficient generator.

The current 20 percent cap on market share is arbitrary, has no support in sound economic theory, and should be repealed.

### *TPPF Recommendation: Allow Retail Electric Providers to Properly Assess the Creditworthiness of Potential Customers*

When a consumer applies for an auto loan, the finance company checks on that consumer's credit history on all types of transactions, including those that have nothing to do with a car. The decision of whether to make the loan, and the rate at which it is offered, may be based on the customer's past history of credit card and mortgage payments. Yet, Texas REPs are restricted in their ability to similarly assess the creditworthiness of their potential customers.

PUCT Substantive Rule Sec. 25.23(c)(1) states that the "failure to pay for merchandise or charges for non-regulated services, including but not limited to insurance policies, Internet service, or home security services, purchased from the electric utility" are "[i]nsufficient grounds for refusal to serve."<sup>15</sup>

Instead, the REPs are allowed to refuse service on a credit-related basis for only these reasons:

- **Failure to pay guarantee.** The applicant has acted as a guarantor for another customer and failed to pay the guaranteed amount, where such guarantee was made in writing to the electric utility and was a condition of service.
- **For indebtedness.** The applicant owes a debt to any electric utility for the same kind of service as that being requested. In the event an applicant's indebtedness is in dispute, the applicant shall be provided service upon paying a deposit pursuant to §25.24 of this title (relating to Credit Requirements and Deposits).
- **Refusal to pay a deposit.** Refusing to pay a deposit if applicant is required to do so under §25.24 of this title.<sup>16</sup>

While these assist in identifying the ability and willingness of potential customers to pay, they are short of the criteria available to most businesses for this purpose. The results in the market show them to be insufficient.

Uncollectible debt is a problem that continues to grow. The amount of uncollectible debt created by delinquent customers for a group of REPs between January 2008 and July 2009 was over \$229 million.<sup>17</sup> During that time period, 344,624 customers either moved or switched away with a delinquent balance 30 days old or older. In addition, 756,502 of the 1,467,284 customers that were in payment plans or payment arrangements defaulted on their payments.<sup>18</sup> In other words, 52 percent of all payment arrangements resulted in default.

Not all electric retail providers are equal in terms of their invested capital. Some companies may be better equipped to deal with a short-term increase in their debt burdens. Others may experience significant financial stress. Encumbering REPs with this kind of debt burden threatens to decrease competition in the electric market by destabilizing smaller retailers. As noted previously, bad debts will ultimately be passed down to the consumer in the form of higher rates or charges.

Texas REPs should be able to use the entire range of information available regarding creditworthiness when evaluating applications for service. To further reduce their bad debt, they should also use this information when setting rates for customers.

**TPPF Recommendation: Streamline the Regulation of Rates, Operations, and Services at the PUCT**

The PUCT has done a remarkable job of keeping its budget in check for the last decade. Helped by the restructuring of the telecommunications and electricity market, its spending—absent the system benefit fund—has remained essentially flat.

Given the PUCT’s current structure, determining how much of this has been due to decreased workload in telecommunications regulation versus electricity is difficult. Yet, the available evidence points toward greater reductions in telecommunications regulations than for electricity. Several recent rulemaking procedures at the PUCT provide evidence that this is the case:

**Table 2: Selected Recent PUCT Rulemaking Proceedings**

37623	Proceeding to Amend Energy Efficiency Rules
35792	Rulemaking Relating to the Goal for Renewable Energy
36131	Rulemaking Relating to Disconnection of Electric Service and Deferred Payment Plans

As noted above, these PUC proposals are similar to other recent legislative and Sunset proposals that run contrary to the legislative finding that “electric services and their prices should be determined by customer choices and the normal forces of competition.” By eliminating these and related rulemaking proceedings, the PUCT should be able to reduce its staff dedicated to regulation of the electricity market.

The Foundation recommends that the PUCT’s full time employee (FTE) maximum of 188.6 be reduced to 165. While this is a 14 percent reduction from its maximum potential staffing, it is only a 5 percent reduction from the PUCT’s staff level as of August 2008. In its letter to the Legislative Budget Board, the PUCT estimated it could reduce its General Revenue appropriations by \$530,000 by remaining at its current staffing levels. The reduction to 165 FTEs could provide an additional savings of about \$325,000, for a total reduction in funding of at least \$855,000.

The PUCT would be best suited to determine where to make these reductions, but the Market Competition program should be the first place considered. Other options would include Consumer Education and Investigations and Enforcement.

**Sunset Advisory Commission 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.” Several of the recommendations in this section 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 regulating electric markets is somehow analogous to occupational licensing. Third, these regulation-laden recommendations stand in sharp contrast to the market-oriented recommendations in Issue 2 on telecommunications.

**Table 3: Evaluation of Supplier Conduct**

Market Test	Market Monitor Finding
Balancing energy auction offer patterns	We do not find that the un-offered capacity raises potential competitive concerns.
Potential physical withholding	The patterns do not indicate physical withholding by the large suppliers
Potential economic withholding	The results indicate very competitive market outcomes in 2008

*Source: Potomac Economics, LTD, ERCOT 2008 State of the Market Report*

***Sunset Recommendation 1.1: Authorize PUC to order restitution to market participants harmed by market power abuse***

***Sunset Recommendation 1.2: Increase PUC's administrative penalty authority to \$100,000 per violation per day for violations of ERCOT's reliability protocols or PUC's wholesale reliability rules***

***Sunset Recommendation 1.3: Authorize PUC to issue emergency cease-and-desist orders***

The Staff Report begins its discussion of restitution saying, “Regulatory agencies should have the authority to restore harmed parties’ losses as part of an enforcement action, especially in situations where substantial damage can occur.”<sup>19</sup> It goes on to note, “Restitution would be limited to actual amounts overpaid by market participants.”<sup>20</sup> However, nowhere does the report detail any instances of “harmed parties,” “substantial damage,” or “actual amounts overpaid” as a result of market power abuse.

The reason for this shortcoming in the Staff Report is simple: there are no actual examples of market power abuse in the Texas wholesale market. This is obvious from even a cursory review of Potomac’s 2008 *Independent Market Monitor* report. The Foundation has already noted Potomac’s finding that “the competitiveness of supplier offers improved considerably in 2006 compared to 2005, followed by even more substantial improvement in 2007 and 2008.”<sup>21</sup> This finding was based on extensive review and analysis of the competitive performance of the market conducted by Potomac and reported in Section IV of the report.

First, Potomac indicated that it looked at structural market power indicators. The key indicator they used was the pivotal supplier. Potomac postulated that only when a supplier is pivotal can it have the ability to exercise market power.

Potomac employs a structural indicator to identify whether the potential of illegally abusing market power exists. This indicator “does not illuminate actual supplier behavior” or “indicate whether it would have been profitable for a pivotal supplier to exercise market power.” However, “it does identify conditions under which a supplier would have the ability to raise prices significantly by withholding resources.”<sup>22</sup>

Potomac’s findings attest to the structural maturation and increasing competitiveness of the wholesale market:

The frequency with which at least one supplier was pivotal in the balancing energy auction ... has fallen consistently from 29 percent of the hours in 2005, to 21 percent of the hours in 2006, and to less than 11 percent of the hours in 2007 and 2008. These results indicate that the structural competitiveness of the balancing energy auction in 2008 maintained the improvement exhibited in 2007 compared to prior years.

After Potomac confirmed the increasing structural health of the market, it turned to an evaluation of supplier conduct. This analysis encompassed an evaluation of “actual participant conduct to assess whether market participants have attempted to exercise market power through physical or economic withholding.”<sup>23</sup> In this analysis, Potomac evaluated 1) balancing energy auction offer patterns, 2) potential physical withholding, and 3) potential economic withholding. Table 3 shows the results of their findings.

“Overall,” writes Potomac, “we find that the ERCOT wholesale market performed competitively in 2008.”<sup>24</sup> While the report for 2009 has not yet been completed, there are no indications of any problems in 2009—or in 2010. ERCOT’s wholesale market is as competitive as any in the world. There are no instances of illegal use of market power that could be used to justify the Staff Report’s recommendations for the electricity market, including authorizing the PUC to order restitution.

A rapidly improving system that has not provided even a single, debatable example of market power abuse for over four years isn’t likely to provide enough in the future to justify the Staff Report’s recommendations 1.1, 1.2, and 1.3. All of these are significant departures from the policy of the Texas Legislature for the last 15 years. Additionally, all of them would contradict the Legislature’s edict that “electric services and their prices should be determined by customer choices and the normal forces of competition.”

The Staff Report’s recommendations would likely interfere with the existing robust monitoring and enforcement activities of the Market Monitor and the PUCT enforcement staff that currently serve as further deterrents to anti-competitive behavior.

The current system is well focused on identifying and correcting any instances of market power abuse. The Staff Report's recommendations, however, would turn the process away from enforcement to dispute resolution between market participants. In particular, businesses would have the incentive to ask the PUCT to find market power abuse where none existed, as well as attempting to intervene in enforcement disputes.

Additionally, the nature of ERCOT's wholesale market would make it virtually impossible to determine the amount of restitution in any particular case. The best case scenario would involve highly theoretical claims for restitution. The end result would often be electricity purchasers engaged in rent seeking. In other words, they would seek to reduce their electricity bills through the regulatory process instead of in the marketplace.

Given the highly competitive nature of the market, the future shift to nodal that will improve efficiency and competition, the existing regulatory oversight within the parameters of legislative policy, and the likely interference of the Staff Report's recommendations with regulatory oversight, the Staff Report's recommendations should not be adopted. The addition of unneeded restitution and penalty provisions would not improve the competitive market, but would discourage investment—which ultimately *diminishes* competition.

Nonetheless, some critics of market competition may use the alleged market power abuse of TXU in 2005 as justification for these recommendations. There are three responses to this.

First, the theory of market power used to support the allegations was flawed. Market power is a concept that flows from the theory of perfect competition. In the model of perfect competition, producers have no control over prices. They can sell as little or as much as they want and the price never changes.

Of course, no such market has ever existed. And we know that sellers in fact do have control over the prices they charge at some point in time. So a key factor in understanding this issue is that the exercise of market power in and of itself is neither illegal nor undesirable. It is the abuse of market power that is at question.

Texas law puts it this way:

market power abuses are practices by persons possessing market power that are unreasonably discriminatory or tend to unreasonably restrict, impair, or reduce the level of competition, including practices that tie unregulated products or services to regulated products or services or unreasonably discriminate in the provision of regulated services. For purposes of this section, "market power abuses" include predatory pricing, withholding of production, precluding entry, and collusion.<sup>25</sup>

One way of restating this is that for the exercise of market power to be illegal, it must be done in conjunction with some other undesirable activity. In the case of TXU in 2005, the alleged undesirable activity was the withholding of production.

The PUCT's current rule explains withholding of production as follows:

Prices offered by a generation entity with market power may be a factor in determining whether the entity has withheld production. A generation entity with market power that prices its services substantially above its marginal cost may be found to be withholding production; offering prices that are not substantially above marginal cost does not constitute withholding of production.<sup>26</sup>

This takes us back to the model of perfect competition, which economist Art Laffer explains is "the source of the belief that it is inefficient when firms have market power."<sup>27</sup> Under a model of perfect competition, where a producer can sell as much or as little as it desires without impacting prices, it will sell every unit it can sell until its costs exceed the selling price.

However, in the real world, the obsession with marginal costs fails. Increases in output in a competitive market inevitably lead to lower prices. And these lower prices become the price for all output. Eventually, a producer is selling a substantial portion of its output at marginal cost with no hope of recovering its capital investment. That is a good model for going broke.

Laffer explains what happens with these theoretically attractive but empirically deadly theories like the efficiency of selling at marginal cost:

It would be one thing if the strange fascination with the perfectly competitive model were confined to abstruse journals of high theory. However, the bad habits of thought have trickled into other areas, including policy analysis. For example, when deciding whether to allow a proposed merger, a standard practice is to check for the amount of market power the new firm would possess. This mentality comes straight from the textbook model of perfect competition.<sup>28</sup>

An examination of the charges against TXU reveals this is exactly what happened when it comes to marginal cost pricing.

Potomac's report on the situation states that "it is incongruous with competition" to sell electricity at a price reflecting "the full costs of owning, operating, and maintaining the generating units expected to be needed to satisfy forecast load."<sup>29</sup> They say that "the costs are 'sunk' and should have no effect on the offers to produce energy from a resource." Potomac goes on to say:

Therefore, when devising a profit-maximizing strategy for operating those units for a given period of time, there is no basis for an entity that is acting competitively to take into account sunk costs. Rather, a profit-maximizing strategy should be the same regardless of whether TXU won the units in a lottery or TXU paid a large sum to buy the units. Investment is inherently risky and not all investors recoup their initial sunk costs, but a profit-maximizing strategy is the same in the short-run regardless of whether the investment is profitable in the long-run. Thus, the sunk and other fixed costs are not relevant to the determination of a competitive offer.<sup>30</sup>

This, too, is a recipe for a lousy return on investment and an economic disaster for a market.

Potomac offers a final glimpse at the influence of the model of perfect competition when it says, "Hence, offering at marginal cost is profit-maximizing for a supplier in a perfectly competitive, well-functioning market."<sup>31</sup>

Sound economic theory, based on real-world observations, rejects determining the withholding of production, and thus, market power abuse, based on the pricing of goods "substantially above" marginal costs.

The second response to market critics' use of TXU's 2005 market pricing is that since the electricity market itself is designed by the state, Texas government—specifically the PUCT—had substantial influence over the behavior of market participants and market prices in 2005. As Potomac has been saying for years, the zonal system's "market rules and procedures are resulting in systemic inefficiencies."

The state's substantial influence over the Texas wholesale market does not mean it is responsible for all the prices or acts of market participants. However, when these are being analyzed to see if they are inefficient to the point of being illegal, the inefficiencies introduced into the system by the state must also be identified and isolated. But this didn't appear to be the case in 2005, when actions by market participants were analyzed under the theory that "offering at marginal cost is profit-maximizing for a supplier in a perfectly competitive, well-functioning market," when in fact the regulatory design of the market was not functioning so well.

Finally, proponents for increased regulation should note that it is no longer 2005. While this point is obvious, it does not appear that it was taken into account when these recommendations were developed.

The substantial improvement in the competitiveness in the wholesale market since 2005 is why this is important. Once again, we quote Potomac as noting that "the competitiveness of supplier offers improved considerably in 2006 compared to 2005, followed by even more substantial improvement in 2007 and 2008."<sup>32</sup> The competitiveness of the wholesale market today is substantially better than it was in 2005, and will be even more substantially improved once the nodal system is in place. ★

## Endnotes

- <sup>1</sup> Potomac Economics, LTD, *2008 State of the Market Report for the ERCOT Wholesale Electricity Markets* (Aug. 2009) i.
- <sup>2</sup> *Ibid.*, xxxvii.
- <sup>3</sup> *Ibid.*
- <sup>4</sup> *Ibid.*, xxxvi.
- <sup>5</sup> *Ibid.*, xxxvii.
- <sup>6</sup> *Ibid.*, i.
- <sup>7</sup> *Ibid.*, xxvi.
- <sup>8</sup> *Ibid.*, xxvii.
- <sup>9</sup> *Ibid.*, xxviii.
- <sup>10</sup> *Ibid.*
- <sup>11</sup> *Ibid.*, xxxi.
- <sup>12</sup> *Ibid.*, ii.
- <sup>13</sup> *Ibid.*
- <sup>14</sup> PUCT Substantive Rules §25.505. Resource Adequacy in the Electric Reliability Council of Texas Power Region.
- <sup>15</sup> PUCT Substantive Rules §25.23. Refusal of Service.
- <sup>16</sup> *Ibid.*
- <sup>17</sup> Aggregated data from REPs representing 25% of market, Jan. 1 2008 to July 31, 2009.
- <sup>18</sup> *Ibid.*
- <sup>19</sup> Sunset Commission, *Staff Report*, 11.
- <sup>20</sup> *Ibid.*, 17.
- <sup>21</sup> Potomac, *State of the Market*, xxxvi.
- <sup>22</sup> *Ibid.*, 107.
- <sup>23</sup> *Ibid.*, 111.
- <sup>24</sup> *Ibid.*, 121.
- <sup>25</sup> Texas Utilities Code, Sec. 39.157(a)
- <sup>26</sup> PUCT Substantive Rule 25.504(d)
- <sup>27</sup> Arthur Laffer, *The Perfect as the Enemy of the Good: Market Failure or Market Opportunity?*, Texas Public Policy Foundation (Dec. 2008) 7.
- <sup>28</sup> *Ibid.*, 6.
- <sup>29</sup> Potomac Economics LTD, *Investigation of the Wholesale Market Activities of TXU* from June 1 to September 30, 2005 (Mar. 2007) 21.
- <sup>30</sup> *Ibid.*, 22.
- <sup>31</sup> *Ibid.*
- <sup>32</sup> Potomac, *State of the Market*, xxxvi.

## About the Author

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

Bill 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, Bill served as the Deputy Commissioner for Coastal Resources for Commissioner Jerry Patterson at the Texas General Land Office. Before he worked at the GLO, Bill was a legislative and media consultant. He has also served as the Deputy Assistant Commissioner for Intergovernmental Affairs for then-Commissioner Rick Perry at the Texas Department of Agriculture and as a legislative aide to then-State Rep. John Culberson.

Bill has a B.A. in History from the University of Northern Colorado and a M.B.A. with an emphasis in public finance from the University of Houston.

## About the Texas Public Policy Foundation

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.

Funded by thousands of individuals, foundations, and corporations, the Foundation does not accept government funds or contributions to influence the outcomes of its research.

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.

