



ELECTRIC COMPETITION: DEFENDING CONSUMER CHOICE

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A Free Enterprise LIFT Perspective

Summary

Texas' competitive electric market has delivered substantial benefits to consumers and businesses. In most parts of ERCOT, the lowest competitive retail electric prices are lower than the last regulated prices available; this is despite increases in inflation and the cost of generation fuels, as well as the cost of investment in new generation and transmission infrastructure that has occurred since 2001.

Texas must retain and strengthen its competitive market by rejecting legislation that imposes price controls or that seeks to dilute the choice that is currently offered to consumers. In addition, relieving the regulatory burden on electric generation by streamlining permitting procedures and repealing the statutory natural gas generation target may help lower generation costs and facilitate expansion of the state's industrial base.

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For more information about any of the recommendations contained in this document,
please contact the Texas Conservative Coalition Research Institute:

Brent Connett, Task Force Director and Policy Analyst – brent@txccri.org

Tom Aldred, Policy Analyst – tom@txccri.org

Texas Conservative Coalition Research Institute

P.O. Box 2659, Austin, TX 78768

(512) 474-6042

www.txccri.org

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Introduction: The Fallacy of Price Controls

Government regulation of pricing does not work. Yet, remarkably, there is a push in the 81st Legislature to re-regulate a host of economic activities including insurance and electricity. After the successful reform of the insurance market and the partial de-regulation of the electricity market, price competition should be a settled matter.

Despite this, so-called “consumer advocates” and other groups affiliated with the political left continue to push for greater state involvement in the electric market, with the primary goal of lowering prices for consumers. For instance, the Cities Aggregation Power Project (CAPP) complains that:

Even compared to residents in other deregulated states, Texans pay too much. Residential electricity prices have increased by a greater percentage in Texas than residential prices in any other deregulated state with retail competition.ⁱ

There is no definition of “too much” in the analysis of those who oppose competition. In a fully-competitive market, electric consumers cannot pay “too much”, they pay the *market price* for electricity (unless they are being gouged in extraordinary circumstances and there are legal remedies available in current law to deal with those cases). The market price will reflect the cost of supplying the electricity and the demand for electricity. In this way, competitive markets come as close as is possible to selling electricity for what it is actually “worth.”

The same CAPP report points out that “although electric rates are up everywhere, in general rates have increased more steeply in deregulated states.”ⁱⁱ CAPP’s statement is wrong to conclude that higher electricity prices are a consequence of competition. Instead, it is evidence that rates in competitive markets have more closely tracked *the actual cost of producing electricity*, while regulated and partially regulated states have kept prices *artificially low* to the detriment of consumers, specifically in regards to building and upgrading generation capacity, transmission lines and deployment of smart meters.

The fundamental problem with regulating prices is that government regulation ignores what prices mean and why they are important. In his book “Basic Economics,” Dr. Thomas Sowell puts it thusly:

Prices play a crucial role in determining how much of each resource gets used where. Yet this role is seldom understood by the public and it is often disregarded by politicians.ⁱⁱⁱ

This fundamental and inescapable economic truth cannot be ignored. Prices send signals such as the cost of producing a product, the supply of a product, and the total demand for a product (indeed, neither supply nor demand can be determined without knowledge of price; and price helps balance supply and demand). Price regulation overlooks these factors, usually with the intent of enforcing a price that is “affordable” to some government-defined range of potential buyers. This approach is disastrous. Commenting on the system of electricity price control in California, Dr. Sowell noted that:

Since the utility companies have been paying more for electricity than they were allowed to charge their customers, they were operating in the red and the financial markets are downgrading their bonds. Buying high and selling low is the royal road to bankruptcy, and bonds in a bankrupt company are not usually worth much.^{iv}

Prices are a natural market mechanism through which shortages are alleviated and surpluses eroded. According to Sowell:

In the absence of price control, a shortage is usually a passing thing. When prices are free to rise, that causes consumers to buy less and producers to produce more, eliminating the shortage. But when the price is artificially prevented from rising, the shortage is prevented from ending.^v

From Sowell's analysis, it is clear that regulating retail electric prices will have at least two devastating effects on consumers. First, perceived "shortages" will be perpetuated as a large number of people will want to purchase electricity at an artificially low price, while suppliers will be unable to meet that demand because that price may be below their cost basis. In the electric market, these "shortages" are likely to manifest themselves as blackouts or brownouts rather than customers simply being denied service.

Secondly, price controls will drive suppliers out of the market. In the long term, retail electric providers will not be able to function if a regulated price is set close to or below their cost basis. As Texas grows, more electric generating capacity must be added each year; these large capital investments drive up the cost of electricity because the facilities must be built at an enormous cost. If these costs cannot be reflected in the price charged to consumers, electric companies will be unwilling to invest in construction of new capacity.

These concerns are not hyperbolic or speculative: The State of California experienced power supply problems, including rolling blackouts, throughout 2000 and 2001. Similarly, in late July, 2006, a heat wave caused consumption in California to strain the supply that an aging energy infrastructure could support, leaving 1.5 million people temporarily without power across the state.^{vi}

Texas' population growth (estimated by the State Demographer to more than double by 2040^{vii}) puts the state on a similarly disastrous track if additional and dependable generation and transmission capacity is not brought on line. While increasingly efficient use of electricity can slow progress down this track, it nonetheless remains necessary to add additional generation capacity simply due to population growth which leads to more electricity use on a residential and industrial basis. Only through continued increased investment will Texas be able to meet future energy demand with affordable, reliable, innovative and environmentally-sound electricity generation. Hence, the importance of keeping markets free of price controls.

That power shortages affected California only strengthens the argument in favor of Texas' competitive market. In Texas, retail prices are competitive in some areas of the state, allowing retail electric providers (REPs) to sell electricity at or above the cost of providing it. However, in California, *wholesale* prices were deregulated, but retail prices were not. According to the *San Francisco Chronicle*:

Even though the consumer rate freeze was what made deregulation palatable to consumers -- and thus legislators... [it] affected only half the equation -- the amount consumers paid for electricity.^{viii}

Wholesale prices, often set by the highest bidders on this type of commodities market, surged. Prohibited from passing those rising costs on to customers because of the rate freeze, the utilities were forced to bear the financial burden.^{ix}

Or in Thomas Sowell’s words, “when the price is artificially prevented from rising, the shortage is prevented from ending,” which is one reason why California has been in a financial tailspin long before the current economic crisis took hold.

Texas’ Experience

Texas’ experience with regulation and competition is underscored by a survey of electric prices currently available in competitive areas of the state, areas covered by municipally-owned utilities, and areas in which electric co-ops operate:

AVAILABLE MONTHLY ELECTRIC RATES PER 1,000 KWH, (March – April 2009)

| | Competitive Areas | | Non-Competitive Areas | |
|----------------|----------------------------------|-------------------------------|--|------------------------------|
| | Lowest Variable Offer Available* | Lowest 1 Year Rate Available* | Municipally Owned Utilities [†] | Electric Co-ops [‡] |
| Lowest | \$87.00 | \$97.00 | \$88.99 | \$84.65 |
| Highest | \$100.00 | \$110.00 | \$139.99 | \$150.00 |
| Average | \$93.80 | \$104.40 | \$110.98 | \$120.69 |

Source: Public Utility Commission and Phone Survey conducted March 30 to April 2, 2009.

**Rates calculated based on plans available in the following service territories: CenterPoint, Oncor, AEP, and TNMP.*

[†]The following municipally-owned utilities were surveyed: Denton, Weatherford, Garland P&L, New Braunfels, Greenville, Georgetown, Kerrville, College Station, Brownsville, San Marcos, San Antonio, and Austin.

[‡]The following electric co-ops were surveyed: Cooke County, Deep East Texas, Hill County, Wise County, Comanche County, Fort Belknap, Bartlett, Trinity Valley, Central Texas, Navasota Valley, Navarro, Victoria, Upshur Rural, and Magic Valley.

As the survey results show, on average, electric rates available from retail electric providers in competitive areas of the state are lower than the rates available from either municipally-owned utilities or electric co-operatives. While a co-op may be able to provide slightly lower rates in some instances (at \$84.65 the lowest available co-op is \$2.35 lower than the lowest competitive variable rate), co-ops and municipal utilities are far more likely to offer a higher rate than a competitive provider. In fact, a consumer could obtain a one-year locked-in rate from a retail provider for between \$97 and \$110 per 1,000 kwh, while some municipal utilities impose rates as high as \$139.99 and co-ops have rates up to \$150.00.

Most significantly for a consumer, some municipal utilities have rates 40 percent higher than the lowest competitive rate, while some electric co-ops have rates 50 percent higher than the lowest competitive rate.

Unlike California, Texas’ transition to competition employed only limited capping of retail rates – through the “price to beat” – which has now expired. Unregulated retail rates have allowed a competitive market to develop in which consumers can choose their electric provider based on price,

and the prices presented to consumers actually reflect the cost of producing the electricity. In addition, in the competitive market, consumers can also weigh other factors when choosing their provider, such as service quality, reliability, and even the fuel mix used to generate the electricity they purchase. The result is a robust market that attracts investment in transmission and generation infrastructure: Texas has not experienced the electricity supply problems and blackouts that plague California.

The 81st Texas Legislature: Defending Consumer Choice

Among the legislation under consideration by the 81st Legislature, the following bills would set Texas down a dangerous road toward more state intervention in the electric market:

- House Bill 1837 by Davis, Y. – Requires the PUC to establish a price ceiling for REPs.
- House Bill 2282 by Thompson – Reregulates the retail electric market and repeals many of the consumer choice reforms enacted in 1999.
- House Bill 2780 by Keffer/Senate Bill 1481 by Davis, W. – Permits opt-out municipal aggregation so that municipalities can choose one electric provider for all its residents. Residents would have to opt out of municipal aggregation if they want to choose their own electric provider.

Focusing on the last piece of legislation outlined above (HB 2780/SB 1481), it is clear that this type of reactionary legislation does not guarantee benefits for consumers and is anathema to the principles of the free market. There is simply no argument, based on conservative principle, for the government to serve as a third-party intermediary to purchase consumer goods or services.

Rejecting Municipal Aggregation

Under existing law, municipalities can already act as aggregators for electric customers, but customers must opt-in. *Customers are not required to opt-out if they do not wish to participate.* Under the provisions of HB 2780/SB 1481, municipal aggregators would be granted the power to determine the electric provider for all customers who do not affirmatively opt-out of the aggregation. This reform would be a giant leap back toward regulation, and would obstruct consumer choice, resting on the belief that the government can serve people's needs better than the people themselves through the free market and open competition.

Aside from these philosophical concerns, it cannot simply be assumed that municipal aggregation would be a better deal for consumers: while municipal aggregators might attempt to get a better deal for consumers, entering into multi-year contracts with electric providers could lock consumers into high prices in the long-term, even if retail prices decline during that time. There is no reason to believe that government entities will be able to get better deals for consumers than the consumers themselves. This scenario involves enormous financial risks: local governments are not equipped with the necessary knowledge and understanding of the electric market to make effective decisions.

Competitive Electric Prices

Retail electric providers must continually respond to market pressures as they work to attract and retain customers, and remain profitable. Most importantly, customers in Texas' competitive areas have the

power of choice – they have numerous options available to them to select an electric plan with the rates that best fits their needs.

In 2001—the last year before electric competition began—Texas had the 14th-highest average electric rates in the country according to federal energy data. The latest national data shows that Texas ranked one better in 2008. The same national data also shows that Texas has the 5th-lowest average residential electric price relative to the fifteen states that rely on a generation mix similar to ours.

Indeed, a glance at the last electric prices available under electric regulation (December 7, 2001) and the most recent prices available in competitive areas of the state shows that most electric consumers are better-off under the competitive model. The table below compares regulated and competitive prices (not adjusted for inflation) and reveals annual savings based on 1,000kWh per month electric usage over a one-year period:

RETAIL PRICE COMPARISON

| Service Area | Last Regulated Price (per 1,000 kWh; 12.7.01) | Lowest Available Competitive Price (per kWh; 4.6.09) | Annual Savings (1,000 kWh usage per month) |
|---------------------|---|---|---|
| TXU/Oncor | 9.67¢ | 9.2¢ | \$56.40 |
| CenterPoint/Reliant | 10.4¢ | 10.0¢ | \$48.00 |
| AEP South (CPL) | 9.57¢ | 10.0¢ | (\$51.60) |
| AEP North (WTU) | 9.98¢ | 8.7¢ | \$153.60 |
| TNMP | 10.57¢ | 9.6¢ | \$116.40 |

Sources: Public Utility Commission and www.powertochoose.org

As the table shows, only one service area has a lowest competitive price that is higher than its last regulated price. In all other service areas, the lowest available competitive price is lower than the last regulated price. It is also worth pointing out that since electric competition took effect, several factors have driven up the cost of producing electricity since December 2001:

- 19.81 percent inflation (December 2001 to April 2009)
- 23.6 Gigawatts of new generation capacity installed in Texas
- Prices for electric fuel have increased:
 - 117 percent - PRB Coal^x
 - 125 percent - Natural Gas^{xi}

Also worth noting is that since the start of 2002, there have been at least four severe weather incidences that damaged transmission capacity, including Hurricanes Katrina, Rita, Dolly, and Ike, each of which created additional costs for electric providers that are passed on to consumers.

On balance, it is clear that the competitive market has done well to provide affordable prices that are at least comparable to regulated rate in the face of 20 percent inflation and 100+ percent increases in the cost of generation fuels.

It is also evident that Texas consumers support the competitive electric market. According to a 2008 poll, “by a very wide 78 percent to 14 percent margin, Texans favor the current competitive structure of the Texas electricity market.”^{xii} Significantly, customers who currently choose their electric provider in the competitive market demonstrate even higher levels of support for competition:

SUPPORT FOR THE COMPETITIVE ELECTRIC MARKET BY CURRENT ELECTRIC PROVIDER:

| Current Electric Provider | Support for the Competitive Market |
|---------------------------|------------------------------------|
| Competitive market | 84 percent |
| Electric Co-op | 78 percent |
| City-owned utility | 73 percent |
| All | 78 percent |

Source: Survey of Registered Texas Voters, September 9 – October 7, 2008; Baseline & Associates^{xiii}.

Driving New Innovations

As a result of its vibrant competitive market, Texas’ electric industry has been able to invest heavily in renewable generation technologies and other new technologies that have kept Texas a world-leader in the energy sector. In addition, the competitive market has enabled electric providers to develop consumer-friendly tools such as smart meters, and has promoted operational efficiencies that were not evident before SB 7:

1. Renewable generation

Competitive market investment in renewable energy has paid off — in the last five years, Texas’ wind generation growth has skyrocketed more than 700 percent.^{xiv} As a result, Texas has surpassed California as the nation’s leader in wind generation. The latest statistics from the American Wind Energy Association show that Texas – by a wide margin – has the highest installed wind generation capacity of any state in the nation, and far more installed wind capacity than its adjacent states:

WIND POWER GENERATION CAPACITIES BY STATE (2008)

| State | Capacity (MW) | Rank |
|------------|---------------|------|
| Texas | 6,297 | 1 |
| California | 2,493 | 2 |
| Minnesota | 1,377 | 3 |
| Colorado | 1,067 | 6 |
| Oklahoma | 689 | 9 |
| New Mexico | 496 | 10 |
| Arkansas | 0.1 | 35 |
| Louisiana | 0.0 | --- |

Source: The American Wind Energy Association, 3rd Quarter 2008 Market Report.

In July 2008, the Public Utility Commission of Texas (PUCT) approved a nearly \$5 billion plan to expand the state's leadership in renewable energy through new Competitive Renewable Energy Zones, facilitating the development of more than 18,000 megawatts of new wind generation and new transmission infrastructure.

The electric industry is also actively exploring emerging technologies, such as solar, energy storage, and cleaner coal technologies like integrated gasification combined cycle (IGCC), which will produce even cleaner, more efficient power.

Texas has shown that it can build new power plants and expand industrial capacity while improving the environment. This path must be continued and punitive measures that would threaten both the reliability of the electric grid as well as the economic growth driven by many of Texas most robust industries must be rejected by legislators.

2. Consumer tools

Residential customers in Texas' competitive market can choose from nearly 80 retail products available from more than 25 providers, including numerous options for contract terms and renewable content. Integrated utilities, co-ops or municipalities do not offer this range of choice to their customers.

The competitive market is investing hundreds of millions of dollars in new tools for customers to manage their own electricity usage through innovative energy efficiency and conservation approaches.

One such tool is the "smart meters." Two of the Texas competitive market's largest utilities will roll out more than five million smart meters by 2013. These meters will help give customers the infrastructure to control their electricity usage and bills, and will enable retail electric providers to implement countless programs that will drive electricity savings, improve service and help the environment

Consumer-oriented energy conservation measures such as advanced metering and energy-efficient appliances and light bulbs will help Texans make better use of electricity. Advanced metering allows consumers to measure their energy use and link it to the cost of electricity in real time, which is a significant improvement from the current standard monthly or quarterly billing approach.

This provides Texas a unique opportunity for consumer education and energy consumption awareness that could lead to reduced consumption and lower electric prices.

To be effective on a statewide scale, energy conservation requires high levels of participation and genuine competition between providers so that consumers have enough information to make knowledgeable decisions.

3. Improving operational efficiencies

Newly installed generation spurred by competition is cleaner, has better environmental controls and is more fuel efficient. As generators shoulder the risk of building these new plants, they are further encouraged to bring the most efficient, cost-effective units online.

The development of new plants displaces the use of older, less efficient, and more polluting generation sources; even a new coal plant will always be cleaner than an older one. While the competitive market

has created cost savings for consumers and businesses, it has also yielded environmental benefits as a result of spurred investment in new power plants.

As a result, Texas ranks as one of the cleanest in the nation for emissions of key pollutants by electric generators. Emissions of Nitrogen Oxide (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), particulate matter, and volatile organic compounds (VOC_s) in Texas have decreased significantly since 1985, exceeding that of the nation as a whole.

Since 1997, Nitrogen Oxide (NO_x) emissions recorded under the Texas Commission on Environmental Quality (TCEQ) 1-hour ozone State Implementation Plan (SIP) rule have been reduced as follows^{xv}:

- Houston-Galveston: 86 percent NO_x reduction.
- Dallas-Fort Worth: 88 percent NO_x reduction.
- Beaumont-Port Arthur: 45 percent NO_x reduction.
- East Texas: 51 percent NO_x reduction.

In general, when adjusted for the volume of energy generated, Texas' rate of NO_x emissions is lower than the national average: On average the nation as a whole emits 0.255 lbs of NO_x for each mmBtu^{xvi} of energy produced; in Texas, only 0.111 lbs of NO_x is emitted per mmBtu. Looking specifically at Texas' electric generating plants, statistics from the U.S. Environmental Protection Agency (EPA) show that Texas has the seventh cleanest NO_x emissions rate in the nation. Taking NO_x emissions alone, only California, Rhode Island, Maine, Idaho, Connecticut, and Massachusetts have cleaner power plants.

The 81st Texas Legislature: Improving the Competitive Market

As the 81st Legislature considers proposals relating to the state's electric market, there are several sensible approaches to strengthening the market and further lowering costs for consumers:

- **Repeal the Natural Gas Generation Target: House Bill 872 by King, P.**

HB 872 removes the statutory requirement that 50 percent of newly installed generation capacity utilize natural gas as a fuel source. As noted earlier in this report, the state's over-reliance on natural gas has driven the cost of electric generation upward as natural gas prices increased over the past decade.

While the provisions in Senate Bill 7 (76R) that imposed the natural gas generation target were well-intentioned, they are illustrative of the fact that government regulation is no substitute for the free market.

By removing this statutory mandate, HB 872 will allow the most economical generation sources to be built which should lower costs for consumers. The relationship between Texas' reliance on natural gas for electricity generation, the rising cost of natural gas as an input, and wholesale electricity prices in Texas makes a clear case that the state should allow the private sector complete latitude to determine fuel sources for generation of electricity.

- **Expedite Power Plant Permits: House Bill 4012 by Weber**

HB 4012 requires the Texas Commission on Environmental Quality (TCEQ) to expedite the permitting process for new power plants. Specifically, the bill directs TCEQ to implement a streamlined process for handling permit applications efficiently, and requires the Commission to take final action on an application no more than 12 months after receipt of a permit application.

This legislation is important because it will speed up the process of permitting process for new power plants, thereby allowing the electric industry to expand and diversify its generation portfolio with as little regulatory hindrance as possible. Additionally, shortened permitting processes will reduce the cost to electric generation companies, ultimately resulting in lower costs to consumers. In 2008, the Governor’s Competitiveness Council recommended that:

Texas should not institute any new power plant permitting processes, as this would insert costly delay, erect barriers to entry, and eliminate the ability for Texas’ competitive marketplace to respond quickly to changing market signals. Legal and regulatory certainty is critical for the competitive marketplace to function. Numerous states have lengthy and costly permitting processes for wind, and gas- and coal-fired generation; Texas has avoided this by permitting only emission and water aspects of generation plants.^{xvii}

- **Expedite Permits for Nuclear Plants: House Bill 2721 by Flynn**

House Bill 2721 requires TCEQ to implement a “reasonably streamlined” process for the permits and permit renewals that it issues for nuclear power plants.

Although the permitting of new nuclear facilities rests with a federal agency (the Nuclear Regulatory Commission), the state plays a role in the permitting of wastewater as it pertains to nuclear facilities. The Legislature should ensure that this state-level permitting does not impede the development of new nuclear plants in Texas. This was also a recommendation of the Governor’s Competitiveness Council in 2008:

To encourage the development of nuclear power in Texas, the TCEQ should expedite necessary water and wastewater permits associated with new nuclear power plants. While all design and site permits reside with the Nuclear Regulatory Commission, ensuring that these state permits do not delay development is critical.^{xviii}

Through HB 2721, the legislature can play its role in advancing the development of more nuclear power in Texas. Nuclear power has lower fuel costs than both coal and natural gas and also benefits from a large domestic fuel base; as such, expansion of nuclear power can help reduce retail electric rates in Texas in the long term.

- **Bring Municipally-Owned Utilities into Competition**

While House Bill 2780/Senate Bill 1481 seek to create opt-out municipal aggregation, a better approach would be to expose all municipally-owned utilities to competition. If municipal utilities can supply electricity at low retail rates, it makes sense to allow such utilities to compete for business with other retail providers. This will create an incentive for other providers to make their

rates more competitive; however, if municipal rates are not as low as those offered by retail providers, exposing the municipal utilities to competition will encourage them to lower their rates.

Simply forcing consumers into opt-out municipal aggregation will have no direct effect on the cost of supplying electricity, yet it will stifle the competitive market and create virtual monopolies. By bringing municipally-owned utilities into competition, the state can bring competition to all areas of ERCOT, thereby giving consumers and businesses choice of their electric provider.

Conclusion

Texas' competitive electric market works. In most parts of ERCOT, the lowest competitive retail electric prices are lower than the last regulated prices available; this is despite increases in inflation, the cost of generation fuels, and the cost of investment in new generation and transmission infrastructure that has occurred since 2001. That Texas has made the transition to a competitive market while keeping the power flowing and retaining low prices is a remarkable achievement, especially in light of the problems encountered in other states, such as California and New York.

Despite these achievements, there is a range of legislative proposals to pull back from the competitive market by attempting to enforce price controls and to force consumers into municipal aggregation arrangements. These approaches will fail because they ignore the realities of the market in search of short-term political solutions. The competitive market plays a vital role balancing supply and demand; without that balancing role, the following attributes of Texas' electric industry will be jeopardized:

- Competitive and low electric rates;
- Investment in new generation capacity;
- Investment in new transmission infrastructure;
- Consumer and business choice over electric provider; and,
- Investment in renewable and environmentally-friendly sources of electric generation.

Texas must retain and strengthen its competitive market by rejecting legislation that imposes price controls or that seeks to dilute the choice that is currently offered to consumers. In addition, relieving the regulatory burden on electric generation by streamlining permitting procedures and repealing the statutory natural gas generation target will help lower generation costs and make electricity more affordable.

ENDNOTES

ⁱ “Unplugged: High Prices Under Texas Electric Deregulation,” CAPP, November 2008.

ⁱⁱ *Ibid.*

ⁱⁱⁱ Thomas Sowell, “Basic Economics: A Citizens Guide to the Economy,” 3rd Edition, April 7, 2007.

^{iv} Thomas Sowell, “The Cause of the California Electricity Shortages,” *Capitalism Magazine*, January 11, 2001.

^v *Ibid.*

^{vi} Harrison Sheppard, Long Beach Press Telegram, “State is Overdue for Energy Upgrades”, July 30, 2006;

http://www.pressestelegram.com/news/ci_4115790

^{vii} Office of the State Demographer, Texas Population Projections.

^{viii} “The Energy Crunch: A Year Later,” *San Francisco Chronicle*, December 24, 2001.

^{ix} “The Energy Crisis: How We Got Here,” *San Francisco Chronicle*, May 8, 2001.

^x Powder River Basin coal supplies numerous coal-fired power plants in Texas; pricing information from U.S. Energy Information Administration, Average Weekly Coal Commodity Spot Prices.

^{xi} U.S. Energy Administration, Natural Gas (Electric Power Price), January 2002 and December 2008.

^{xii} Poll of Texas voters between Sept. 9 and Oct. 7, 2008, conducted by Baseline & Associates and commissioned by the Texas Competitive Power Advocates

^{xiii} Summary of poll results available online at the Electric Power Supply Association:

<http://www.epsa.org/forms/documents/DocumentFormPublic/view?id=DE1900000026>

^{xiv} ERCOT

^{xv} Association of Electric Companies of Texas, Briefing on Select Environment Issues, February 2007.

^{xvi} “Btu” is an abbreviation for “British Thermal Unit”, which is a unit of heat energy equal to the heat needed to raise the temperature of one pound of water one degree Fahrenheit at one atmosphere pressure (sea level). The abbreviation mmBtu indicates one million British Thermal Units. 3,414 Btu is equal to one kilowatt hour.

^{xvii} “2008 Texas State Energy Plan,” Governor’s Competitiveness Council, July 2008.

^{xviii} *Ibid.*