Florida TaxWatch

A FLORIDA TAXWATCH BRIEFING

Revisiting Efforts to Deregulate Florida's Electric Power Market

What We Learned From Texas' Recent Blackouts

APRIL 2021

Florida's economy depends in large part on the availability of reliable and affordable electric power. Like most states, Florida has a regulated energy market that considers electric power to be an essential service for its economic well-being. The interests of electric utilities and their customers are addressed by the Florida Public Service Commission (PSC) which sets reasonable rates and standards for reliability, ensures quality of services, and protects the consumers. Good regulatory policy promotes the alignments of those interests.

Florida has a number of investor-owned utilities (IOUs) serving specific areas of the state. In addition, state and local governments generate significant revenue from the generation, distribution, and sale of electric power. Florida's regulated electric power system has permitted Florida electricity customers to enjoy an adequate and reliable supply of generation and prices that are below the U.S. average for residential and commercial electricity.

Two years ago, a constitutional amendment was proposed that, if approved by 60 percent of the voters, would have required Florida to "deregulate" its retail market for electric power. Florida's IOUs would have been required to sell their generation assets to companies not regulated by the PSC. In a deregulated market, the price consumers pay for the transmission and distribution of electricity is generally still regulated but the price they pay for the actual electric power generated is not; customers choose their electricity provider from among any number of retail electricity suppliers available in their area who procure from unregulated generating companies the power that those retail electricity suppliers sell to customers.

This would have removed the largest component of a customer's bill from regulatory oversight and subjected it to the prevailing market conditions. Florida's electric power utilities would be limited to building, operating and repairing electrical transmission and distribution systems, effectively preventing them from selling power directly to customers.

In its February 2019 report entitled *"Analyzing the Fiscal Impact of the Energy Deregulation Constitutional Amendment,"* Florida TaxWatch concluded that deregulating Florida's electricity market will likely have a significant negative impact on state and local revenues. This analysis used the best available evidence to estimate that this amendment had the potential to cause a loss of state and local revenue ranging from $426 million to $1.368 billion in 2026, the expected first full year of implementation.

In its review of the proposed constitutional amendment, without having to address other ambiguities and inconsistencies in the proposed amendment, the Florida Supreme Court determined that part of the proposal's wording would mislead voters to believe the amendment grants a right to sell electricity and struck the proposed amendment from the ballot. Since the new constitution was adopted in 1968, Florida voters have approved about three of every four proposed constitutional amendments. This fact underscores the significant risks presented by an ill-conceived amendment. Amendment supporters, including companies that want to supply electricity in Florida, pointed to the competitive structure that Texas has used for nearly two decades as an appropriate model for Florida.

Florida TaxWatch undertakes this independent analysis to look at how Texas' deregulated electric power marketplace responded to the recent winter storm to better understand how the proposed deregulation of Florida's retail market for electric power might have affected the state's ability to respond to and recover from similar large-scale emergencies (e.g., hurricanes).

DEREGULATED ELECTRIC POWER IN TEXAS

Texas passed the Texas Electric Choice Act in 1999 in response to what was perceived as Texans paying too much for electricity. Proponents argued that regulated utilities, operating as monopolies, lacked incentives to keep their costs down and to pursue ways to operate more efficiently. Retail electric providers affiliated with the state's traditional utilities were required to charge six percent less than the regulated rates they charged prior to the start of competition. This became the "Price To Beat," the price that new competitors tried to beat with lower rates. By undercutting the Price To Beat, the new competitors could draw away customers from the legacy electric providers. In theory, competition between the new providers all fighting to undercut the Price To Beat would keep prices down.[1] Electric providers used the Price To Beat mechanism to increase rates to keep pace with increases in natural gas prices.

Under the Texas law, electric utilities were afforded the right to recover (from ratepayers) the stranded costs attributable to generation assets that the utilities had constructed under the regulated system but that were forced to be sold to third parties at a loss under the deregulated system. Stranded costs represent the quantified losses that will be incurred by the IOUs as a direct result of the deregulating policy. In 2004, the Texas Public Utility Commission (TPUC) determined that ratepayers owed the utilities several billion dollars in stranded costs, which meant that those costs would be recovered through pricing increases for years to come.

A 2008 study by the Technology Policy Institute, an independent Washington-based economics think tank, found that deregulated market structures in Texas and elsewhere had failed to produce lower prices. The study demonstrated that, almost without exception, wholesale electricity prices in states with regional transmission organizations (RTOs) like those in Texas had increased more steeply than in markets without them. The researchers confirmed that differences in fuel costs and start-up challenges in newly deregulated markets could not explain the differences.[2]

Residential electricity prices in Texas were lower in 2009 compared to prices in Texas the previous year. Nonetheless, Texans in 2009 under deregulation continued paying more than the national average for electricity. This disparity was in contrast to a long history in Texas of below-national-average prices before the adoption of the retail deregulation law, and in contrast to the below-average rates paid by Texans who resided in areas exempted from deregulation.[3] Electricity prices declined in 2011, continuing the trend that had begun in 2009, related to changes in the commodity cost of natural gas, which fuels many generating plants in Texas. All told, the average residential price of electricity was down a little less than three percent compared to prices during the same period in 2010. Again, however, prices in the deregulated areas of Texas remained above the national average.[4]

A 2016 pricing analysis reaffirmed previous findings that Texans living in deregulated areas had historically paid more for electricity, on average, than Texans living in areas exempt from deregulation. All told, Texans living in deregulated areas would have saved nearly $25 billion dollars in lower residential electricity bills from 2002 through 2014 had they paid the same average prices during that period as Texans living outside deregulation. This "lost savings" amounts to more than $5,100 for a typical household.[5]

1 Texas Coalition for Affordable Power," Deregulated Electricity in Texas, A Market Annual 2018 Edition."

2 Ibid.

3 Ibid.

4 Ibid.

5 Ibid.

THE TEXAS "BLACKOUT"

In February 2021, a winter storm blanketed the state of Texas. Texans faced record low temperatures for days and ice and snow made most if not all of the roadways impassable. The operator of the state's electric power grid, the Electric Reliability Council of Texas (ERCOT), lost control of the supply of electric power, leaving millions of Texas households without electricity for several days.

The electric power grid in Texas is almost entirely self-contained. The ability to import additional power from other states is limited, which permits the state to avoid certain federal regulation and oversight. It has also been designed to accommodate the high demand for electricity during Texas summers. Consequently, some of the power sources that energize the grid during the summer months are offline during the winter.

The inclement weather was responsible for knocking out a number of electric generating facilities that are powered by natural gas, coal, or nuclear energy. Some wind turbines, which produce a limited amount (<18%) of energy for the grid, iced over and became inoperable as well. ERCOT reported that, while the demand for power (69,150 megawatts) set a winter record, 30,000 megawatts of power generation had been forced off the system.[6] At the peak of the blackout, approximately 27,000 megawatts–nearly 40 percent of Texas' entire thermal capacity–were offline.[7]

The basis of the deregulated Texas utility business model is the market–as demand soars in a market with insufficient generation capacity, so too do the price of electricity and the profits earned by the power generation companies. In the blackout, the supply of available electric power could not support the demand. Many Texans, those who were fortunate enough not to lose electricity, have reported skyrocketing electrical bills under Texas' market-driven system.

6 Mitchell Ferman, Sami Sparber, and Eliva Limón, "2 Million Texas Households Without Power as Massive Winter Storm Drives Demand for Electricity," The Texas Tribune, February 15, 2021.

7 Ryan Cooper, "What the Texas Blackout Reveals About America's Climate Vulnerability," The Week, February 16, 2021.

WHAT IF…?

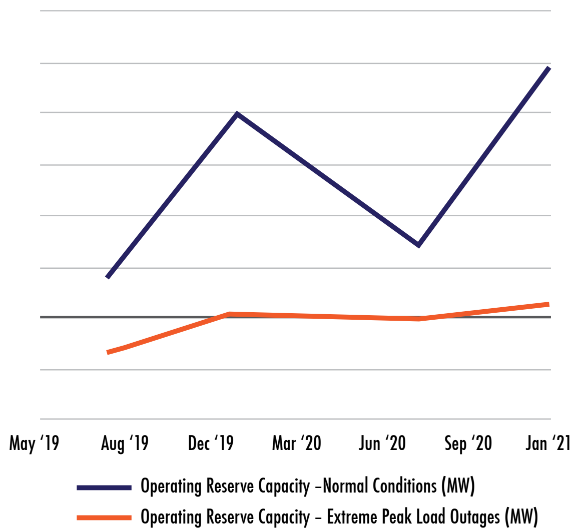
The failure of Texas's market-driven, deregulated electric power network begs the questions "what if the ballot proposal had passed review by the Florida Supreme Court" and "what if Florida voters had voted to deregulate Florida's electric power network?" Granted, the chances of a large winter storm knocking out major portions of the electric power grid are less likely in Florida, but Floridians do frequently experience large coastal storms that are capable of doing exactly that. But Florida's regulated electric power system provides several "safeguards" that will help to make sure Floridians have an adequate supply of reliable and affordable electricity during emergency situations.

Texans rely on a competitive market to supply enough electric power to meet the demand. Electricity providers in Texas base their investment decisions on an expectation of recovering their investment plus earning a return (profit) on that investment. Instead of relying on the market to supply enough electricity to meet demand, Floridians rely on the PSC to oversee the coordinated planning necessary to make sure Florida's electric power providers can reliably provide a supply of power to meet customer demand. It usually takes several years to plan and build new generating capacity, so it is critical that the PSC and the generating utilities work together to predict customer needs for electricity and plan and construct new generating plans to meet customer needs in the future.

The nature of a competitive market suggests that when supply is added, the price drops, thus potentially lowering projected return on investment (profit). Conversely, when less electric power is available, all things equal, electricity prices would increase. So, there is little incentive for Texas electric power providers to ensure adequate back-up (reserve) capacity to meet customer demand during the cold weather event. The "reserve margin" is an industry standard term that reflects the amount of generation in excess of the amount of generation capacity needed to meet expected peak demand available to meet customer demand and is a measure of back-up generation. Nor is there a legislative or regulatory mandate for a reserve margin in Texas.

ERCOT operates an energy-only market, meaning that the Public Utility Commission of Texas does not set a mandatory reserve margin. Instead, generators in the ERCOT market make decisions on entry and exit based on internal assessments of their financial standing and prospects for revenue recovery.[8] The North American Electric Reliability Corporation–the entity that oversees electric reliability in North America–has pointed out that ERCOT's reserve margins were placing Texas in a precarious position.[9] Figure 1 shows ERCOT's projected "razor thin" operating reserve capacity in normal conditions and during periods of extreme peak load outages.

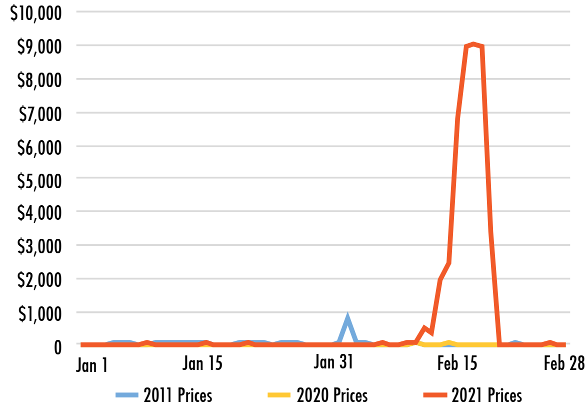
Figure 1. ERCOT – Operating Reserve Capacity



Source: ERCOT Seasonal Assessment of Resource Adequacy reports, available at www.ercot.com/gridinfo/resource

Because electric prices in Texas are not regulated, the real-time price is set by the market. Absent sufficient generation capability and reserves, prices can be expected to increase during severe events. As shown in Figure 2, prices for electricity during the cold weather event skyrocketed, reaching $9,000 per kilowatt hour. One customer reported that his electric bill was $16,752, 70 times what he normally pays for all of his utilities.[10]

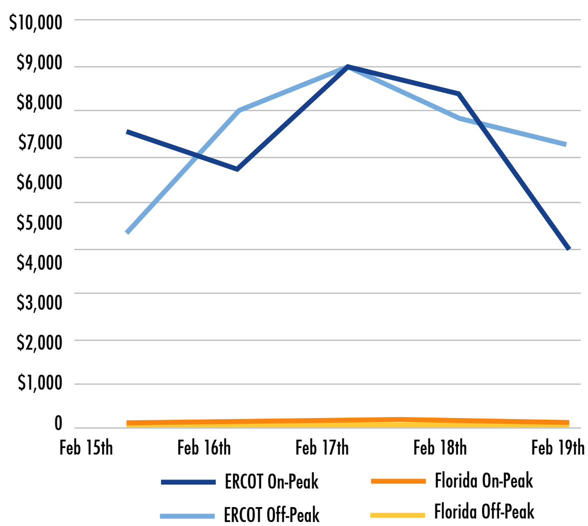
Figure 2. ERCOT North Hub RT Daily Average



Source: ENGIE Resources online data tool. https://www.engieresources.com/historical-data

Figure 3 represents a comparison of real-time peak and off-peak electricity prices in Texas and Florida during February's cold weather event. While Texas' electricity prices reached approximately $9,000 per kilowatt hour and maintained that price for several days, Florida's real-time price was as low as $36 per kilowatt hour and never got above $206 per kilowatt hour.[11]

Figure 3. Next Day Average Clearing Prices



Source: Platts Megawatt Daily

8 Public Utility Commission of Texas Biennial Agency Report to the 87th Texas Legislature at 19 (Jan. 2021).

9 NERC State of Reliability at 13 (July 2020).

10 Giulia McDonnell, Nieto del Rio, Nicholas Bogel-Burroughs, and Ivan Penn, "His Lights Stayed on During Texas' Storm. Now He Owes $16,752," New York Times, February 20, 2021, Updated March1, 2021.

11 Next-Day On-Peak Prices for ERCOT and SOCO, published in Platts Megawatt Daily for February 15-19, 2021. NOTE: Platts did not publish Florida-related data on February 16, 2021.

CONCLUSIONS

The Texas market-based, deregulated approach to providing essential electric service failed miserably during the February 2021 cold weather event. Coal and natural gas generating plants in Texas were not equipped for the cold weather and significantly underperformed or were not available. The amount of electric power generated and available at any given time is not based on coordinated statewide planning with predetermined reliability standards and input and oversight from a regulatory authority—the reliability standards in Texas reflect the level the unregulated generation companies decide is the optimal economic outcome.

The February cold weather event triggered greater than anticipated demand which, coupled with a shorter than necessary supply, dramatically increased the prices paid by Texas consumers and the profits for unregulated power generators. State officials are currently wrestling with whether or to what extent Texans will have to pay these skyrocketing electric bills. Texans were left to the mercy of the elements, which drove up their need for electricity while not having enough capacity to meet that need.

Floridians should be thankful the Florida Supreme Court rejected the language contained in the proposed constitutional amendment and kept the proposed amendment off the 2020 ballot. Since 1968, Florida voters have approved about three of every four proposed constitutional amendments and voters may well have been persuaded to vote to deregulate Florida's electric power system. As pointed out in its February 2019 report entitled *"Analyzing the Fiscal Impact of the Energy Deregulation Constitutional Amendment,"* Florida TaxWatch considers the deregulation of Florida's electric power system to be a huge mistake.

What we have in Florida—sound electric power generation planning coupled with a regulatory framework that ensures there is coordinated planning by utilities charged with keeping the lights on and recovery for the costs associated with electric power generation—has been shown to work exceptionally well. Hopefully, the next time a special interest group proposes the deregulation of Florida's electric power system, Floridians will look at the experience of Texas and vote to keep Florida's regulated system.

ABOUT FLORIDA TAXWATCH

As an independent, nonpartisan, nonprofit taxpayer research institute and government watchdog, it is the mission of Florida TaxWatch to provide the citizens of Florida and public officials with high quality, independent research and analysis of issues related to state and local government taxation, expenditures, policies, and programs. Florida TaxWatch works to improve the productivity and accountability of Florida government. Its research recommends productivity enhancements and explains the statewide impact of fiscal and economic policies and practices on citizens and businesses.

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