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THE NEW FRONTIER FOR TEXAS ELECTRICITY COMPETITION: ENABLING DISTRIBUTED RESOURCES AND AVOIDING PRICE CONTROLS

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Texas has the freest electricity market in the nation. Most of the state operates under its own electric grid, managed by the Electric Reliability Council of Texas (ERCOT). And with a few exceptions, the market for electric generation within ERCOT is wide open to competition. Over the past two decades, competition for wholesale and retail electricity has saved consumers billions and provided reliable power to the state.

This willingness to let prices be set by market forces rather than have regulators stick their fingers on the scale for or against particular energy sources is key to the success of Texas electricity.

Maintaining electric reliability is a major concern for ERCOT and for state regulators such as the state's Public Utilities Commission (PUC). This can be achieved in a variety of ways. Most states, even those that have competitive electric markets, still maintain a separate "capacity market" that makes payments to generators to ensure adequate generation is available to meet peak demand. Capacity markets can help ensure reliability, but they are costly and involve paying some plants to sit idle for most of the year.

By contrast, ERCOT operates as an "energy only" market, meaning that it does not rely on capacity markets to ensure reliability. Instead, ERCOT relies on price signals to ensure that adequate capacity will be available to meet demand. During periods of peak demand, electric prices rise, encouraging new generators to come online (the same price signals also encourage consumers to reduce demand where this makes sense for them).

ORDC

As part of the scarcity pricing system, Texas has instituted an Operating Reserve Demand Curve (ORDC). Under the ORDC, as demand nears overall available capacity, price increases are triggered to help encourage new generation to come online. By design, the ORDC is meant to reflect both the probability of a "loss of load" and the cost of involuntary demand curtailment. While some other states use an equivalent of an ORDC, Texas is the only state that bases its ORDC on market principles of scarcity. When properly designed and implemented, an ORDC does not function as a subsidy to any particular energy source, but helps the market ensure electric reliability in an efficient manner.

Some have raised concerns about the effects that renewable energy has on electric reliability. Renewable electricity may cost less in the short term. But by keeping prices low, it is claimed, renewables will depress needed investment from other energy sources and increase the vulnerability of the grid.

MOPR

To address these supposed problems, some have proposed instituting a Minimum Offer Price Rule (MOPR). A MOPR, which is a form of price control, would raise the bids of certain energy sources, chiefly renewables, that have low marginal costs of power generation. The Federal Energy Regulatory Commission (FERC), which oversees electric reliability for much of the country, recently enacted its own MOPR rule for states with renewable energy subsidies, which is anticipated to cost consumers billions in higher electricity prices over the long term.

Because Texas' ERCOT grid is entirely intrastate, it is exempt from many FERC regulations. Nevertheless, some have suggested that Texas adopt its own MOPR rule to deal with the supposed ill effects of low-cost renewable electricity. A Texas MOPR would be a bad deal for Texas consumers. Price controls would not only raise costs for consumers, but a MOPR would fundamentally undercut the hands-off approach that has led to Texas' success.

DERs

Another option available to Texas is to support the growth of distributed energy resources (DERs). DERs include rooftop solar, energy storage, electric vehicles, demand response and energy efficiency. What makes these resources increasingly important is that they are located close to or behind the customer's meter on the distribution grid. These resources can provide local sources of electricity and provide additional services directly to ERCOT to enhance the flexibility of the system. Energy storage could charge during times of excess generation, and then dispatch during other hours. Energy efficiency and demand response are other resources that can help customers better manage their consumption. Solar PV generates electricity at or close to load, and with additional technology, such as advanced inverters, it can assist with other needed services to maintain the reliability of the system.

With more support for the utilization of DERs, these resources can be deployed and used in a manner that enhances Texas' competitive market to use electricity when prices are low, or to shift consumption to lower price times. For example, electric vehicle charging can be used to charge during times of excess generation or low-cost electricity. Another important policy for Texas to consider is bringing more transparency to the planning and operation of the distribution system. Distribution system planning and hosting capacity analyses are two important actions that can shine a light on the distribution system and show where there are opportunities for more DER use based on data—data that is currently only available to the utility and not the market.

Texas is blessed with a tremendous amount of wind, as well as a great amount of solar potential. It also has a robust competitive market place to allow providers to work directly with customers. Texas should expand the types of resources that it can utilize to meet system needs and expand market opportunities into the distribution grid—increasing the potential and ability of DERs to participate will provide Texas with ever more resources and more flexibility. These can only work, however, if the market is there to provide the signals that generate the opportunity for Texas to remain a leader in the electricity world.

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