



Filing Receipt

Received - 2021-08-16 03:29:17 PM

Control Number - 52373

ItemNumber - 53

PUC PROJECT NO. 52373

REVIEW OF WHOLESALE
ELECTRIC MARKET DESIGN

§ PUBLIC UTILITY COMMISSION
§ OF TEXAS
§

TEXGEN POWER, LLC'S¹ RESPONSE TO COMMISSION QUESTIONS

Executive Summary

1. While improving the ORDC curve *might* create the necessary price signals to spur future and continued investment in dispatchable resources, a better way of achieving the desired reliability results would be to create a functioning forward market for the specific types of products and services that ERCOT needs.
2. A DAM must-offer requirement would not meaningfully address the concerns over a crisis-based energy market because it would not drive additional investment in dispatchable generation. This requirement could instead reduce reliability because it would tend to overuse and unduly damage older and marginal dispatchable units. These units should be used for true scarcity situations and not as an operational cushion on relatively normal operating days.

Question 1: What specific changes, if any, should be made to the Operating Reserve Demand Curve (ORDC) to drive investment in existing and new dispatchable generation? Please consider ORDC applying only to generators who commit in the day-ahead market (DAM). Should that amount of ORDC - based dispatchability be adjusted to specific seasonal reliability needs?

Investments are made when the risk-adjusted rate of return exceeds the relevant investment thresholds. Because the only viable way for dispatchable generation in ERCOT to generate revenue is by selling energy, a critical factor driving investment decisions in the ERCOT energy-only market is the forward price of energy. So higher forward curves, including because of a better-functioning ORDC, *would* tend to drive investment.

But a market design that relies merely on price signals to drive future investment can be risky. How much do forward curves need to rise, and what changes to the ORDC would be necessary to achieve those results? Would the seemingly complex and uncertain proposed changes (e.g., applying the ORDC only to generators who commit in the DAM; adjustments to ORDC-based dispatchability) be sufficient? How will the Commission know whether the changes will achieve the desired result? How do the broader commodity markets come into play? How liquid are the forward markets, and how long must the forward curves be elevated to provide the certainty needed for investment? How do ESG initiatives play into the investment of thermal resources? How will future technology trends impact longer term investment? What certainty is there that the forward curves reflect the revenues

¹ TexGen owns over 2,000 MW of gas-fired generation in ERCOT. TexGen joins the comments filed by TCPA on this topic, but submits these separate comments regarding questions 1-3.

that a resource will actually receive? All of these questions (and many others) create significant uncertainty around new investment in ERCOT.

A much better way to drive investment in dispatchable generation would be to construct a forward market for the products and services that are required to achieve the necessary reliability. If ERCOT, in its role as reliability coordinator, were to define the types of products it needed in the future—dispatchable generation, ramping capacity, inertia, black-start, voltage support, quick-starting reserves, etc.—then a forward market could be created to procure the necessary levels of each product/service in a cost-minimizing and technology-neutral way.

Such a market could and should look forward for several years so that new generation that meets the specific reliability needs can be constructed (or current generation can receive additional investment to meet future needs). Additionally, financing options are much improved when there are more reliable and longer-term cash flow scenarios, as opposed to the boom-and-bust cycles that are endemic to the ERCOT energy-only market. While the capacity markets in other ISOs could provide a reasonable template, the Commission and ERCOT could, consistent with SB3, create a unique forward market for reliability products that is specifically tailored to the needs of the ERCOT system.

Adopting a forward market for the necessary reliability products would be the most efficient and effective way of delivering the reliability products that ERCOT requires. Rather than focusing on creating the necessary underlying conditions (i.e., price signals) to drive investment, the Commission should create a market for the products that specifically meet ERCOT's reliability needs. By way of analogy: If a restaurant owner needed a steady supply of rainbow trout for his feature entrée, would he focus on finding the right lures and the best fishing locations? Or would he go to the seafood market and buy the best fish at the lowest price?

Question 2. Should ERCOT require all generation resources to offer a minimum commitment in the day-ahead market as a precondition for participating in the energy market? a. If so, how should that minimum commitment be determined? b. How should that commitment be enforced?

A must-offer requirement in the DAM would exacerbate, not alleviate, the “crisis-based business model”. The proposed requirement appears designed to commit more units so that ERCOT can have higher reserves during the operating day. But running units, particularly the aging steam turbine fleet, at or below marginal costs will tend to increase major outages and likely lead to earlier retirements. A must-offer DAM requirement would likely materially reduce the economic viability for a significant portion of the thermal dispatchable assets in ERCOT, as increased maintenance costs from running at or near marginal costs could significantly reduce overall net revenue. Instead of driving investment in dispatchable generation, a must-offer DAM requirement would likely do the opposite.

Importantly, ERCOT has recently been forcing many of the system's economically marginal units to run at or below their costs. Many of these units are near the end of their life, but still fulfill a

critical reliability need for ERCOT during periods of high demand. Consistently running these units when they are not truly needed for reliability could result in additional forced outages, increased major outage events, and sooner-than-expected retirements. ERCOT should minimize out-of-market dispatches during non-scarcity events so that the units are available when they are truly needed to keep the lights on. A DAM must-offer requirement would likely do the opposite by committing resources more often, at or below their marginal costs, when they are not truly necessary for grid reliability.

Question 3. What new ancillary service products or reliability services or changes to existing ancillary service products or reliability services should be developed or made to ensure reliability under a variety of extreme conditions? Please articulate specific standards of reliability along with any suggested AS products. How should the costs of these new ancillary services be allocated.

As discussed above in response to Question 1, adopting a forward market for the necessary reliability products would be the most efficient and effective way of delivering the reliability products that ERCOT requires. ERCOT, as the reliability coordinator, should evaluate and recommend the types of reliability products it needs to run the grid reliably. Suggested products, which could and should be procured as reliability products under SB3 through a multi-year forward market construct which assigns the costs to loads, include the following²:

1. Seasonal or monthly baseload dispatchable generation in an amount sufficient to meet a minimum expected amount under various scenarios of minimal IRR output
2. Ramping and quick start generation that can quickly respond within 30 minutes to changes in load or supply
3. Inertia, voltage support, etc. to assist ERCOT in maintaining grid frequency and resilience.

Conclusion

The Commission should create a well-functioning and unique forward market for the products that are needed to ensure reliability in ERCOT. Solutions that attempt to *indirectly* achieve the desired reliability will be less efficient, more uncertain, and potentially not effective.

Respectfully submitted,

By: s/Daniel Booth/s
Daniel Booth
Chief Operating Officer
TexGen Power, LLC
Email: dbooth@texgenpower.com

² Like in the other ISOs, if the above products are procured from a given resource on a forward basis, a requirement to offer that resource's energy/capacity into the day-ahead market would likely be appropriate.