Filing Receipt

Received - 2022-12-15 10:41:01 AM
Control Number - 54335
ItemNumber - 68

PROJECT NO. 54335

REVIEW OF MARKET REFORM ASSESSMENT PRODUCED BY ENERGY AND ENVIRONMENTAL ECONOMICS, INC. (E3)	**§ § § §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

COMMENTS OF CONSERVATIVE TEXANS FOR ENERGY INNOVATION

COMES NOW Conservative Texans for Energy Innovation (CTEI) and files these comments on the report Energy + Environmental Economics (E3) filed in Project No. 52373, *Review of Wholesale Electric Market Design,* on November 10, 2022. On November 15, 2022, the Commission requested comments regarding the Report and questions asked by the Commission be filed by noon on December 15, 2022.[1] Accordingly, these comments are timely filed.

CTEI is a non-profit clean energy education and advocacy organization composed of thousands of Texans seeking to promote energy innovation and clean energy policies grounded in the conservative principle of common sense, market-based solutions that allow fair competition and provide greater access to clean, affordable, and reliable energy.

INTRODUCTION

As a conservative organization, CTEI believes that it is critical that the Commission (like any other branch of local, state, and federal government), clearly identify the problem it is trying to solve when it proposes a potential solution. This step is fundamental to the formulation of sound public policy.[2] In this proceeding, it appears that the potential problem at issue has been

---

1 47 Tex. Reg. 7991 (Nov. 25, 2022).

2 Early in the Commission's deliberations on market design issues, CTEI emphasized the need for the Commission to define the reliability risks that need to be addressed to improve grid reliability. "With a clear definition of the risks, the public and the Commission will be armed with clear metrics to evaluate potential solutions that will provide Texans a more reliable electric grid." Comments of Conservative Texans for Energy Innovation, filed in Project No. 52373, *Review of Wholesale Electric Market Design*, on Aug. 16, 2021, as Item 26.

amorphous and continues to shift over time. Originally, the problem that needed to be solved was preventing a recurrence of the disaster during Winter Storm Uri. Subsequently, it has appeared that the goal is ensuring new "dispatchable" generation resources are built in Texas, and/or possibly retention of existing resources. Any of these problems could be reasonable issues for the Commission to try to address through policy, but different problems have different solutions. There is not a one-size-fits-all solution to the various problem statements that appear to have been raised in this proceeding. Further, any solution adopted by the Commission should reflect conservative Texas principles of minimal regulation and government intrusion, allowing competitive markets to thrive.

Since SB 3 was enacted during the last legislative session in response to Winter Storm Uri, a reasonable person would have the expectation that a proposed change in ERCOT market design is intended to be responsive to SB 3, especially given that the legislature has not provided any legislative direction asking for a market redesign. Nevertheless, based on Chairman Lake's testimony this month before jurisdictional legislative committees, the Phase 2 proposals apparently are *not* intended to address Winter Storm Uri. Rather, the Chairman has said Phase 1 policies addressed that.

In its Request for Comments, the Commission asks for input primarily on the Performance Credit Mechanism (PCM). At the outset, it must be recognized that this label is a misnomer. This proposal should be called the "**Availability Credit Mechanism**" since it will pay generation resources based on when they are **available** regardless of whether there was any actual performance. Based on the questions, it appears that the Commission has already decided to adopt the PCM, even though stakeholders have never seen this proposal before in the past 18 months of market design discussions; indeed, the E3 report makes clear that no one has ever seen this market

design before. Based on Chairman Lake's public comments, CTEI assumes that the purpose of the PCM is to create a mechanism to subsidize some generation companies with the hope that they will not retire existing generation resources and also put more "steel in the ground" to meet growing electricity demand in ERCOT. However, if the PCM is intended to encourage the development of new dispatchable generation, it is not clear how it could achieve that goal, much less how it could "guarantee" new steel in the ground as Chairman Lake promised legislators that it would. Indeed, only traditional cost of service regulation like that which exists outside of ERCOT and existed inside the ERCOT region before it was opened to competition can guarantee new generation through a permit and approval process. Texas policy makers wisely chose to abandon that inefficient regulatory model when the market was restructured in 1999 to move to competition.

In order to argue that the PCM will not cost much additional money, E3 states that the cost of the PCM will be offset by reduced costs in the energy market. If implementing the PCM results in what is essentially a zero-sum change in revenue in the market, where is the additional revenue to encourage new generation, much less retain existing generation? The assertion that the PCM will "guarantee" new steel in the ground simply defies logic. If the PCM is intended to provide significant additional revenue to encourage market entry, then it cannot be a low-cost solution as E3 has argued. If the PCM really is just an effort to inject more money into the competitive market, then the Commission would be wise to heed the recommendation of the independent market monitor (IMM) to wait and see what impact the billions of dollars already added to the cost of wholesale electricity through ERCOT's "conservative" operations since June 2021 has before approving a regulatory mechanism that creates new subsidies.

At a recent interim hearing of the Senate Committee on Business and Commerce, the IMM reported that costs have increased substantially over the past 18 months due to actions taken by the Commission and ERCOT. Specifically, the IMM reported that additional non-spin procurements between August 2021 and July 2022 have cost approximately $800 million to $1 billion, changes to the scarcity pricing mechanism have cost $1.6 billion for January through October 2022, and the changes to the operating reserve demand curve (ORDC) have added an additional $2.8 billion to energy costs.

In prior comments, CTEI has expressed its opposition to the implementation of a capacity market in Texas.[3] Despite its name, the PCM is a capacity market – just in a new form that is even more complicated than capacity markets that have been implemented elsewhere. In short, a capacity market pays generation resources to be **available** in the future. Many other states have found capacity markets to be expensive while also failing to encourage the development of new generation. MISO is the latest example, where years of paying capacity payments to generators did not result in adequate new generation. As a result, while the clearing price for capacity in the 2021-2022 planning year cleared at $5.00 per megawatt day, it increased 4,633% in one year to clear at $236.66 per megawatt day for the 2022-2023 planning year.[4] An assertion that a capacity market "guarantees" the construction of new generation resources is inaccurate.

The PCM form of a capacity market would subject market participants to even greater complexity, requiring them to guess when the highest risk operational hours may occur. Although it may be the case that some of those hours will be at times of peak net load (more properly defined as load minus wind generation minus solar generation), based on an analysis of hours in 2022 that

---

3 See, for example, Project No. 52373, Review of Wholesale Market Design, Comments of CTEI (March 30, 2022).

4 *See*, Ron McNamara, "Lessons and Questions for the PUCT and ERCOT arising from the Recent Results of the MISO Capacity Market," May 9, 2022, at 3 (filed in Project No. 52373, *Review of Wholesale Electric Market Design*, as Item No. 369).

have had the lowest available operating reserves, many of those hours will occur randomly throughout the year, most especially when dispatchable generation resources experience forced outages. Trying to guess the 30 (or whatever number) highest risk hours during the year/season/month/week/etc. will be akin to throwing darts at a dart board and hoping to sometimes hit a bullseye to get the performance credits. Similarly, load serving entities will have to guess when it might be advantageous to have customers reduce consumption, which may or may not correspond to when a rational person might expect tight system conditions (such as on a hot August afternoon or on a cold winter morning). This system unnecessarily injects substantial randomness and lack of predictability to a capacity market construct, making a flawed system even worse.

Texas was wise to adopt an energy-only market that pays generation resources for performance – when they actually generate electricity – not just for being "available." While there are limited aspects where ERCOT pays resources to be available for targeted reliability needs, those generally are competitively procured in the day ahead market. CTEI continues to support the existing energy-only market as a superior market model that is consistent with conservative principles.

The PCM form of a capacity market also depends heavily on government management rather than the competitive market. PURA § 39.001(d) requires the Commission to "authorize or order competitive rather than regulatory methods to achieve the goals of this chapter to the greatest extent feasible and shall adopt rules and issue orders that are both practical and limited so as to impose the least impact on competition." The PCM fails to comply with this statutory directive. The government will forecast when the tightest hours of the compliance period (year/season/month/week/etc.) will occur. The government will use its forecasts to develop a

pricing "curve" to set the price that will be paid for "availability credits" based on an after-the-fact review of what actually happened in the real world. This government intervention in what has become one of the most robust, competitive electricity markets in the United States, if not the world, coupled with the arbitrariness of when pricing events could occur, is a recipe for disaster.

As its name indicates, CTEI supports energy innovation and opposes the government picking technology winners and losers. Yet the PCM appears designed explicitly to discriminate against the newest energy resources – wind, solar, and batteries. Texas should take advantage of all of its natural resources – including natural gas, solar, and wind – by allowing all of these resources to fully participate in competitive markets without the Commission putting its thumb on the scale to advantage one technology over another through wholesale market design. The robust growth Texas is seeing from new energy storage resources is an opportunity to embrace technology to improve grid reliability rather than treat it as a threat to incumbent generation resources.

COMMENTS ON QUESTIONS POSED BY THE COMMISSION

1. The E3's report observes that the Performance Credit Mechanism (PCM) has no prior precedent for implementation, does this fact present a significant obstacle to its operation for the ERCOT market?

As noted previously, capacity markets have been implemented in other regions for decades. What is new here is the added complexity and randomness to a capacity market construct that has been shown to fail to deliver investment in new generation. In the case of PCM, the added complexity – such as market participants having to guess when the hours of lowest incremental available operating reserves will occur -- would make it even more unlikely to promote new generation, while still adding substantial new costs. With the high degree of uncertainty when credits can be earned, it is unlikely that financial institutions will want to lend money necessary to build new generation resources.

2. Would the PCM design incentivize generation performance, retention, and market entry consistent with the Legislature's and the commission's goal to meet demand during times of net peak load and extreme power consumption conditions? Why or why not?

No. CTEI supports the development of innovative technologies. While the PCM as E3 described it is intended to allow all forms of generation to receive credits for being available, comments by Chairman Lake recommending that some forms of generation not receive performance credits when they are providing energy to ensure reliable grid operations will discourage the continued development of those resources in ERCOT to the detriment of Texas consumers and businesses who rely on reliable *and affordable* power. Initial analyses of the PCM have indicated that the hours of lowest marginal reserves are very random and often are caused by unforeseen events like higher than forecast load, greater than expected outages of generation resources, and, at times, lower than expected output of wind and solar generation. For example, May 13, 2022, was a day with four hours of the lowest operating reserves so far this year. The forced outage of numerous thermal generators caused the sudden tight conditions. These outages were not foreseen. If not for the support of wind and solar generation at that time, ERCOT would have experienced rolling outages. Refusing to compensate those resources at the same level as other resources that kept the lights on at that time would be arbitrary and capricious discrimination. CTEI opposes the government picking technology winners and losers which distorts markets and ultimately harms consumers and businesses who must pay for those market inefficiencies.

3. What is the appropriate reliability standard to achieve the goals stated in Question 2? Is 1-in-10 loss of load expectation (LOLE) a reasonable standard to set, or should another standard be used, such as expected unserved energy (EUE). If recommending a different standard, at what level should the standard be set (e.g., how many MWh of EUE per year)?

CTEI does not recommend the Commission adopt an arbitrary "reliability standard." The 1-in-10 LOLE standard has been a long-standing rule of thumb to help guide regulated utility

planning, but, as ERCOT has demonstrated for almost a decade, and Winter Storm Uri highlighted for the people of Texas, whether there is enough capacity in the market to meet a "reliability standard" does not determine how reliable the grid actually is. Prior to Winter Storm Uri, ERCOT forecast that it had a reserve margin of 16.2%. Instead, it suffered a reserve margin of -21.1% on February 15, 2021.[5] Clearly, economic theory cannot stand up to the realities of severe weather and operational failures.

The key is being able to *operate* the grid in a reliable manner, which did not happen during Winter Storm Uri. Achieving a reserve number should not be Texas' goal – operational readiness which was the focus of Phase 1 – is the focus needed to improve reliability. Measures that the Commission has already taken, such as ensuring that generation plants are winterized (and have reliable fuel deliveries), should help address the shortcomings identified as a result of Winter Storm Uri. Further, the independent market monitor has identified that ERCOT's operational difficulties stem from risks related to inaccurate load forecasting, inaccurate forecasting of variable resources, and unplanned thermal generation outages.[6] Reducing these risks through better forecasting and generation maintenance would promote more reliable operation of the grid, regardless of whatever the "reliability standard" might be.

4. The E3 report examines 30 hours of highest reliability risk over a year. Is 30 the appropriate number of hours for this purpose? Should the reliability risk focus on a different measure?

5. Over what period should the hours of highest reliability risk be determined? A year, a season, a month, or some other interval? At what point in time should that determination be made?

---

5 Patrick Milligin, "Winter Storms Wreak Havoc on ERCOT Grid," ICF Insights / Energy, Feb. 23, 2021 (available at https://www.icf.com/insights/energy/winter-storms-ercot-grid).

6 *See* Potomac Economics, 2021 State of the Market Report for the ERCOT Electricity Markets (May 2022) at 3 (available at https://www.potomaceconomics.com/wp-content/uploads/2022/05/2021-State-of-the-Market-Report.pdf).

6. Would a voluntary forward market for generation offers and a mandatory residual settlement process for Load Serving Entity procurement provide additional generation revenue sufficient to incentivize resource availability in a way that improves reliability?

CTEI has no response at this time to Questions 4-6. These questions presuppose a decision by the Commission to adopt the PCM, while also reflecting the fact that the proposal remains relatively undefined. At its most basic level, the PCM is just a more complicated capacity market, for which Texas has no need. Pursuing this path is taking Texas away from fundamental conservative principles embraced by ERCOT market restructuring in the late 1990s.

7. Does a centrally cleared market through ERCOT sufficiently mitigate the risk of market power abuse? Should additional tools be considered?

Any capacity market construct that is developed, including the PCM, will introduce new opportunities for the largest companies in ERCOT that have affiliated generation and retail electric providers to exercise market power. Simply having a centrally-cleared market does not mitigate this risk.

8. If the commission adopts a market design with a multi-year implementation timeline, is there a need for a short-term "bridge" product or service, like the Backstop Reliability Service (BRS), to maintain system reliability equivalent to a 1-in-10 LOLE or another reliability standard? If so, what product or service should be considered?

9. If implementing a short-term design as a "bridge" delays the ultimate solution, should it be considered? Is there an alternative to a bridge solution that could be implemented immediately, using existing products, such as a long-term commitment to buy the additional 5,630 MW of Ancillary services necessary to achieve the 1-in-10 LOLE reliability standard?

CTEI responds to Questions 8 and 9 together. The Commission should retain the current energy-only market design. The way to improve the current design is to focus on reducing load forecasting errors, weather forecast errors, and ensuring that incentives are aligned in a manner to limit forced outages for generators. These are the elements of uncertainty that the IMM has discussed in public testimony as creating the operational issues that are faced in ERCOT today.

The Commission needs to evaluate the impacts to reliability and customer costs for Phase 1 market changes before implementing additional changes that will increase customer costs. In the event the Commission determines that additional reserves are needed to improve reliability, CTEI recommends the Commission ensure that ERCOT procures adequate capacity in its new ERCOT Contingency Reserve Service (ECRS) to compliment the large amounts of Non-Spin Reserve Service that ERCOT already has procured. Since ERCOT is in the final stages of implementing ECRS, this may be the fasted way to implement a "bridge."

10. What is the impact of the PCM on consumer costs?

The PCM is designed to create a new subsidy for certain generation companies based on whether they are "available" (not actually delivering services). Further, a subset of Commissioners has expressed interest in awarding those subsidies only to a subset of the resources available to provide energy and ancillary services by explicitly excluding intermittent resources. By definition, this will raise costs to consumers. As noted previously, those added costs come without any guarantee of reliability. Moreover, even E3 recognized that the growth of renewable energy resources decreases customer costs[7] such that an effort to discourage the growth of renewables will increase customer costs above what they otherwise would have been.

11. What is the fastest and most efficient manner to build a "bridge" product or service, such as the BRS, in order to start sending market signals for investment in new and dispatchable generation, while a multi-year market design is implemented by ERCOT? Please provide specific steps.

See response to Question 9.

12. In what ways could the Dispatchable Energy Credit design be modified through quantity and resource eligibility requirements, e.g., new technology such as small modular nuclear reactors, in such a way that it incentivizes new and dispatchable generation?

---

7 E3 Report at 67-68.

Properly designed, such as how Commissioner McAdams originally proposed it,[8] the DEC program will incentivize any technology that is included in the definition. Thus, if the DEC program were expanded to be available to all new dispatchable generation resources, small modular nuclear reactors would be included in the definition of dispatchable energy resources that can earn credits, and that technology would earn additional revenues through the program. While CTEI generally does not support programs like the DEC program (which is modeled on the existing renewable portfolio standard) because they subsidize specific technologies, a broad application of the program to all new dispatchable technologies would encourage investment in new steel in the ground without picking winners and losers among the dispatchable generation technologies. Further, CTEI disagrees with any assertion that the existing market is broken. However, if the Commission is unwavering in its intent to create a subsidy to provide additional revenues to specific ("dispatchable") generators, then the DEC program would be the most straightforward and transparent way of doing so without interfering with the existing energy-only market. In contrast, if the Commission is trying to solve the problem of incentivizing faster ramping resources to meet intraday operational ramping needs, then the Commission could target the DEC proposal to encourage those resources or, in the alternative, could modify ERCOT's ancillary services procurement methodology to better meet that need, such as by increasing ERCOT's procurement of ECRS when that service is implemented in 2023.

CONCLUSION

It appears that the Commission has already decided to adopt the PCM at its wholesale market design meeting scheduled for January 12, 2023, even though the publication of the E3 report is the first that stakeholders have seen of the proposal. The Commission has failed to clearly

---

[8] Commissioner McAdams Memorandum filed on Nov. 17, 2021, in Project No. 52373, *Review of Wholesale Electric Market Design,* Item No. 250.

articulate the problem to be solved, and as a result risks going down the path to a capacity market "solution" that is not needed, nor that the legislature has directed. CTEI urges the Commission to stay true to Texas conservative values by implementing more targeted, solutions consistent with the energy-only market.

CTEI appreciates the opportunity to provide these comments and looks forward to working with the Commission and stakeholders to ensure ERCOT continues to rely on free markets and robust competition to deliver reliable solutions rather than government central planning and mandates.

Respectfully submitted,

Matt Welch
State Director
Conservative Texans for Energy Innovation
9600 Escarpment Blvd., Suite 745-274
Austin, TX 78749
512.417.8084
matt@conservativetexansforenergyinnovation.org

PROJECT NO. 54335

REVIEW OF MARKET REFORM ASSESSMENT PRODUCED BY ENERGY AND ENVIRONMENTAL ECONOMICS, INC. (E3)	**§ § § §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

EXECUTIVE SUMMARY OF CONSERVATIVE TEXANS FOR ENERGY INNOVATION COMMENTS

- The Commission needs to clearly identify the problem it is trying to solve. The Legislature has not provided any legislative direction asking for a market redesign.
- The PCM is misnamed and should be called the "**Availability Credit Mechanism**" since it will pay generation resources based on when they were **available** regardless of whether there was any actual performance.
- The assertion that the PCM will "guarantee" new steel in the ground defies logic. If the PCM is intended to provide significant additional revenue to encourage market entry, then it cannot be a low-cost solution as E3 has argued.
- If the PCM is not a low-cost solution, then the Commission should heed the recommendation of the IMM to wait and see what impact the billions of dollars already added to the cost of wholesale electricity through ERCOT's "conservative" operations since June 2021 has before approving a regulatory mechanism that creates new subsidies.
- CTEI opposes the implementation of a capacity market. Despite its name, the PCM is a capacity market – just in a new form that is even more complicated than capacity markets that have been implemented elsewhere.
- CTEI continues to support the existing energy-only market as a superior market model that is consistent with conservative principles. The PCM depends heavily on government management rather than the competitive market, in contravention of PURA § 39.001(d).
- CTEI supports energy innovation and opposes the government picking technology winners and losers. The PCM appears designed explicitly to discriminate against the newest energy resources – wind, solar, and batteries. Texas should take advantage of all its natural resources – including natural gas, solar, and wind – by allowing all of these resources to fully participate in competitive markets without the Commission putting its thumb on the scale to advantage one technology over another through wholesale market design.
- CTEI does not support adopting a "reliability standard." Winter Storm Uri highlighted that whether there is enough capacity in the market to meet a "reliability standard" does not determine how reliable the grid actually is. Operational readiness is the focus needed to improve reliability.
- The DEC program as proposed by Commissioner McAdams can easily be modified to incentivize investment in any new dispatchable generation resources, including small modular nuclear.