

# **LEGISLATIVE & REGULATORY UPDATE**

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**Texas Competitive Power Advocates (TCPA)** is a trade association representing twelve power generation companies and wholesale power marketers with investments in Texas and the ERCOT wholesale electric market. TCPA members provide approximately 2/3 of the total non-wind electric generating capacity in ERCOT and comprise approximately 50% of the total ERCOT generation fleet. TCPA members own more than 82% of the natural gas generating capacity in ERCOT. Member companies include publicly traded entities, privately held companies, and private equity funded entities. Some companies have retail affiliates; however, the majority do not.

TCPA member companies include: Calpine, Cogentrix, Constellation (formerly Exelon), EDF Trading North America, Luminant (Vistra), NRG, Rockland Capital, Shell Energy North America, Talen Energy, Tenaska, TexGen Power and WattBridge. Here is a LINK to our website.

If you are interested in knowing what generation resources TCPA member companies have, here is a <u>LINK</u> to our interactive map. The data can be searched by company, fuel type, and county.

# TCPA Lunch and Learn

On February 10<sup>th</sup>, TCPA was honored to host staff from House and Senate offices to discuss the financing of power plants in ERCOT. Daniel Booth, Chief Operating Officer of TexGen Power and a TCPA member, gave a presentation on the topic followed by Q&A. Booth highlighted the need for stable, predictable revenues to support long-term investment in new plants. TCPA welcomes legislators and staffers to join us for future events. Additional events will feature executives from member companies discussing markets and how investment decisions are made.

# The PUC Recommends the Performance Credit Mechanism (PCM)

SB3 directed the PUC to ensure reliability of the grid during times of low non-dispatchable power production. After a lengthy stakeholder process, the PUC concluded that the best way to accomplish this goal is via a reliability service that incentivizes new dispatchable power in the ERCOT market. On January 19, 2023, the PUC unanimously voted to adopt the PCM as the basis



for this new reliability service, taking a "historic step toward building the grid of the future," according to PUC Chairman Peter Lake.

The Commission's order incorporated feedback from each of the five Commissioners and laid out the principles of this new service, including but not limited to requirements that it be centrally cleared, self-correcting, and technology neutral. The order also agreed to delay implementation of the PCM pending consideration and direction of the 88<sup>th</sup> Legislature.

Meanwhile, the Commission instructed ERCOT to begin evaluating short-term bridge options to retain current assets and incentivize new generation builds until the PCM can be fully implemented. TCPA is actively engaged with ERCOT to help develop possible bridge solutions to encourage retention of the state's dispatchable generation resources.

## Senate Committee on Business and Commerce Hearings

Following the PUC's adoption of the PCM, the Senate Committee on Business and Commerce met to discuss the plan in more detail on February 7<sup>th</sup>. Testimony was limited to invited witnesses, including PUC Chairman Peter Lake and Zachary Ming of E3.

During the hearing, Chairman Lake explained that the Commission adopted the PCM after a lengthy stakeholder process and extensive review of the data and policy options showed the PCM will deliver the best reliability product for consumers. Lake stated that ultimately the Commission "followed the math" to get to that conclusion. Lake expressed confidence in the expertise at the PUC and ERCOT to implement the mechanism in a timely manner and again shared his belief that the PCM will result in new dispatchable generation while preserving the working components of the current market.

Ming walked through the six potential market reforms evaluated by E3 on behalf of the PUC, focusing mainly on the PCM. He explained how at a net cost of \$460M (an approximately 2% increase in costs) the PCM would vastly improve reliability of the grid by greatly reducing scarcity pricing. The PCM would also stabilize the market, making it more attractive for new investment. Ming acknowledged that the PCM is "a unique Texas-style design," but clarified that all the elements are familiar to ERCOT and other markets. Lastly, Ming testified that the PCM would incent new generation and improve reliability because it would create an economic signal for new generators to enter the market by adding a reliability service to the existing market framework.

The Committee met again on February 16<sup>th</sup> to resume the discussion of market redesign by taking invited testimony from various stakeholders. Michele Richmond, Executive Director of TCPA, was



called upon to explain why the PCM was the preferred mechanism of TCPA, which represents over 80% of natural gas generation in ERCOT.

Richmond laid out how TCPA evaluated each of the various redesign options based on a set of principles that value reliability, maintain the competitive market, provide stable revenue for dispatchable resources, and place the investment risks on generators, not consumers.

Richmond explained that the volatility of the current market does not encourage investment in dispatchable resources and that the PCM addresses this by reducing scarcity and replacing it with a stable revenue stream based on reliability. By minimizing scarcity, consumers benefit from stable prices and the confidence that their power will flow regardless of weather conditions.

With regulatory and legislative certainty, TCPA members are prepared to invest their own capital in new dispatchable generation and understand that they will be required to perform to earn any revenue from the PCM.

Richmond suggested that a mechanism based on seasonal or monthly reliability hours would provide the most benefit to the grid. Seasonal requirements would best align with the changes in resource needs ERCOT has experienced over recent years. She added that the PCM should be technology neutral and supported the inclusion of any resource that can commit to reliably generate electricity and perform when needed to earn PCM credits. She highlighted that despite repeated attempts to label the PCM as a capacity payment, factually it is a performance payment. Unlike a capacity payment, there is no upfront payment for being available and no payment until after resources perform, with payments based on actual consumer consumption allocated based on that usage.

In response to questions from the Committee, Richmond detailed how recent development announcements from generators were related to regulatory certainty, i.e., the PUC's adoption of the PCM. She clarified that not all of the developments were previously in the interconnection queue and that regardless, many projects that are put in the queue are never built. The queue signals a desire to build, but if the market does not support new development those MWs will not be built. In response to a question about whether those projects would be canceled if the Legislature took a different direction that did not provide stability and reduce scarcity, Richmond responded that the projects would, in fact, be canceled.

Richmond reiterated the need to design a market that will work for 30 years, as opposed to one that will only address the next 3 years. New dispatchable plants are long term investments and need stable revenues. Other mechanisms such as additional ancillary services and low-interest



loans can be beneficial, but alone will not result in new dispatchable resources. In fact, those mechanisms have not resulted in new builds in other markets.

Another witness indicated that ERCOT has had 40,000 MW of new dispatchable generation since the restructuring of the market in 2000. At the February 28, 2023, ERCOT Board of Directors meeting, ERCOT CEO Pablo Vegas provided a breakdown of net new dispatchable resources in ERCOT that accounts for both new investment and retirements. Vegas showed that from 2000-2008, ERCOT saw net new dispatchable generation of approximately 20,000 MW. However, 2008-2022 showed only 1,500 MW of net new dispatchable generation in ERCOT at the same time that more than 48,000 MW of net new solar and wind generation was added. While opponents of the PCM cherry-pick information to support their position, it is important to use factual information that represents a complete representation of ERCOT's resource changes and needs. A link to Vegas' presentation can be accessed <u>HERE</u>.

## North American Energy Standards Board (NAESB) Gas-Electric Harmonization Forum

The NAESB is "an industry forum for the development and promotion of standards which will lead to a seamless marketplace for wholesale and retail natural gas and electricity." One of the current NAESB priorities is a Gas-Electric Harmonization (GEH) Forum aimed at identifying solutions to reliability challenges facing the nation's natural gas and bulk electric systems.

As part of process, the GEH Forum produced a discussion paper entitled "Summary of Comments by Topic Areas Identified by FERC and NERC Staff" and requested comments on the summary by January 31<sup>st</sup>. In response, TCPA made recommendations aimed at creating a transparent, competitive marketplace for gas delivery and storage on intrastate pipelines. Concerns regarding the opacity of intrastate markets was echoed by the Natural Gas Supply Association (NGSA) as well as a representative from the National Manufacturers' Association.

First, TCPA highlighted the significant barrier caused by the lack of transparency of information on intrastate pipelines, which hinders reliable gas supply for natural gas-fired generation resources. The fact that ERCOT only compensates generators for fuel burned to produce power exacerbates this problem. Without a mechanism to compensate generators for gas contracted for but not burned due to lack of dispatch, or a capacity release requirement coupled with transparency of activities on the intrastate pipelines, firm fuel gas commodity and delivery will remain uneconomic up to a generator's high sustained limit.

Further, requiring generators to obtain firm gas service or "back-up" output capability would be a costly endeavor that remains uncompensated in the ERCOT market unless the resource has been cleared to provide firm fuel service and could counterintuitively reduce reliability by causing



premature exits of certain units. If such a policy were pursued, it would be critical that generators have a mechanism to be compensated for the compelled fuel security.

Additionally, TCPA asserted that natural gas information should be aggregated on a regional basis and shared in preparation for and during high-demand events with generators as well as Bulk Electric System operators.

Finally, TCPA shared their belief that non-competitive areas of the state for natural gas service should be subject to a higher standard of review to ensure rates being charged are just and reasonable.

Michele Richmond, TCPA Executive Director, participated in the GEH Forum's conference call on February 2<sup>nd</sup> to discuss TCPA's input. The Forum is still working through all the comments submitted and will discuss further during their next conference call on March 3<sup>rd</sup>. You can keep track of the GEH Forum's activity <u>HERE</u>.

#### Calpine, WattBridge & Solvent Energy Announcements

On February 3<sup>rd</sup>, TCPA member Calpine announced the commencement of development efforts for a new ~425 MW peaking facility adjacent to their current Freestone Energy Center in Freestone County. Calpine's press release stated, "These development efforts are warranted in light of the Public Utility Commission's recent adoption of a framework for implementing a Performance Credit Mechanism (PCM) designed to incent new generation." The release also noted that regulatory certainty on PCM will be critical as they proceed with this project.

On February 8<sup>th</sup>, another TCPA member, WattBridge Energy, LLC announced the commissioning of the Mark One Generating Station in Brazoria County. Mark One will add 288 MW of peaking power to ERCOT. This resource was developed prior to adoption of the PCM and was financed prior to the onset of ERCOT conservative operations in summer 2021.

In their press release, WattBridge President, Mike Alvarado, noted "We now have 2,400 MW operational or under construction, and—with emerging regulatory certainty and effective market structure—have line of sight to execute a further 1,600 MW for ERCOT." The regulatory certainty under the framework adopted for PCM is providing the line of sight to raise capital for an additional 1,600 MW of gas generation that has not been viable with the uncertainty yielded by conservative operations and lack of a reliability service.



Senator Mayes Middleton applauded the project in the release, "This plant is exactly what our Texas grid needs—more reliable, dispatchable thermal power generation that performs when the sun isn't shining, and wind isn't blowing."

Although not a TCPA member, it is notable that Solvent Energy also recently announced the PCM as the impetus for developing new storage projects in ERCOT.

Richard Jouven of Solvent's parent company noted, "this new rate design will bolster our resolve to increase the amount of utility-scale Battery Energy Storage Systems (BESS) to become more of a core component of our strategic plan going forward." Jouven added, "In the next four to five years, Solvent Energy plans to develop renewable energy and storage projects which will produce over 2.3 GWs of electricity from generation and BESS facilities capable of supplying over 6,000 MWhs of dispatchable power for each cycle of the BESS units."

#### House Committee on State Affairs Hearing

On March 1<sup>st</sup>, Chairman Todd Hunter convened the House Committee on State Affairs to discuss Texas's electric grid. The Committee took invited testimony from several panels, the first of which included PUC Chairman Lake, ERCOT CEO Pablo Vegas and Zachary Ming of E3.

Chairman Lake walked the Committee through the implementation of SB3 (87R) and explained how the Commission came to adopt the Performance Credit Mechanism (PCM) after months of technical and economic analysis.

Vegas also gave an update of what had been done to improve the grid since Winter Storm Uri but stated there were still two problems to solve: operational flexibility and long-term resource adequacy. He explained that ERCOT is addressing operational flexibility challenges with ancillary services, with a new service to go live in June. However, Vegas called long-term resource adequacy a tougher challenge.

He explained that Texas is facing growing demand for generation, but the capacity of thermal, dispatchable generation is not growing proportionally to the demand. While for decades Texas enjoyed a comfortable cushion of dispatchable generation, peak demand has now exceeded the peak output of dispatchable resources. Therefore, we have more risk because we are relying on renewable, intermittent resources to help meet the demand. If the output of renewables is insufficient at the time of peak demand, then ERCOT would not be able to serve all Texans.

Vegas clarified that this is a problem of the market not supporting the right resources to keep reliability where it needs to be. He addressed claims that Texas has a healthy market which



supports thermal generation, declaring that is not an accurate depiction of the last few years. He explained that generators do not need a short-term signal, but rather long-term consistency.

While more than 20,000 MWs of dispatchable generation were added to ERCOT between 2000-2008, only 1,500 MWs of net thermal generation were added between 2008-2022. Vegas warned that we are relying on an exceedingly aging thermal fleet for reliability with 41% of thermal plants being 30 years or older.

Vegas called the PCM an "elegant solution" to address this resource problem as it would incentivize new dispatchable generation by providing a revenue source that they could earn for performing when needed most. The PCM would put Texas a step ahead with an innovative model that create a performance incentive, whereas other markets just pay for capacity. Vegas shared his belief that we'll ultimately see other markets follow Texas with this market design.

Ming provided more details about how the PCM would work and why it would lead to new dispatchable generation. The current market incentivizes renewable generation which will further reduce revenues for thermal generators. If left unchanged, E3 believes 11,000 MWs of thermal generation will exit ERCOT leading to the expectation of an electrical outage more than one day per year. However, if the PCM is implemented it would lead to a net 5,600 MWs of new thermal generation and change the expectation to only one outage per decade (the industry standard).

Rep. Rafael Anchia asked about the recent narrative that ERCOT does not have a capacity problem, but rather just a flexibility problem. Both Chairman Lake and Vegas factually rebutted that assertion.

Lake said there is certainly a capacity problem which is why two conservation notices were issued in July and why there were concerns about supply during cold snaps in December and January.

Vegas reiterated his earlier point that there were two separate issues: operational flexibility and long-term resource insufficiency. He explained that operational flexibility is the short-term need for dispatchable power to be available when intermittent renewables underperform the forecast. He contrasted that with the December weather event which highlighted the growing need for more dispatchable resources. In that instance, every available generator was online, but the demand kept going up. Had the demand exceeded supply, there would have been load shed. It was not a flexibility issue, as there was nothing else to turn on.

Anchia also inquired about the assertion that price signals in the market are sufficient to incentivize new dispatchable generation. Lake explained that the Cost of New Entry metric is a



one-year construct, not something you can build a 30-year asset on. Lake noted that last year thermal generators announced a bankruptcy and partial retirement, as opposed to announcing plans for new thermal generation since the recent adoption of the PCM by the Commission.

A link to Vegas' presentation can be found <u>here</u>.

Please feel free to reach out to TCPA with any questions or comments you may have.

Michele Richmond, Executive Director Texas Competitive Power Advocates <u>michele@competitivepower.org</u> cell: 512-653-7447 www.competitivepower.org Eric Woomer Eric Woomer / Policy Solutions eric@ericwoomer.com cell: 512-845-9552 www.ericwoomer.com