Table of Contents

Introduction	1
Energy Efficiency, Demand Response, and Equity	1
Grid Reliability	4
Grid and Community Resilience	5
Robust Stakeholder Process	7

PUC DOCKET NO. 52373

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REVIEW OF WHOLESALE ELECTRIC MARKET DESIGN

PUBLIC UTILITY COMMISSION OF TEXAS

COMMENTS OF [INSERT CITY/COUNTY SIGNATORIES]

COMES NOW [City], [City], [City], [City], [City], (subsequently referred to as "the undersigned"), representing x% of Texans, to respectfully offer these joint-filed Comments responding to the Commission' s October 21, 2021 Market Design Draft Plan in Project No. 52373, the Review of Wholesale Electric Market Design.

Introduction

The undersigned, as local governments, encourage the Commission to consider policy changes to expand the amount of controllable residential and small customer demand response available to support grid reliability. We also encourage the Commission to consider policy changes to enhance community resilience against grid vulnerabilities to reduce the impact of forced and unplanned grid outages. Finally, we encourage the Commission to establish robust stakeholder engagement processes for any proceedings that result from this docket. We appreciate that the Commission has already held a number of open Work Sessions, and encourage them to consider robust stakeholder processes to best understand diverse stakeholder perspectives and priorities moving forward.

Energy Efficiency, Demand Response, and Equity

Guiding Perspective: Energy efficiency and demand response are highly effective and cost-competitive ways to improve ERCOT reliability and the Commission should comprehensively incorporate them in concert with market changes. Increasing residential energy efficiency program budgets—and paying specific attention to weatherization- and low income-focused programs—can effectively reduce peak demand, minimizing grid vulnerabilities, keeping Texans safe and saving customers money, addressing our local governments' equity and community goals.

- 1. **Background: The undersigned** share a vision of a reliable, affordable, resilient, and equitable energy system and **have ambitious goals with respect to enhanced energy efficiency**, **improved demand response (DR) programs, and weatherization**, and community resilience.
- 2. We recommend that the PUCT direct utilities to integrate energy efficiency and demand response programs.
 - a. While energy efficiency measures and price signals can provide longer-term load shaping, DR measures typically move demand away from peak times. Each can be effective on their own, but combined programs can often create stacked benefits by capturing the resources' full value streams, encouraging more efficient administration, and creating a streamlined customer experience.
 - i. Grid reliability, and any proposed demand response programs, will be well complemented from an increase in energy efficiency programs. Specifically, we would like to draw attention to and express agreement with <u>ACEEE's</u> September 9, 2021 comments, where they state, "Combined programs can often reduce peak demand and customer bill savings *beyond what either type of program can deliver alone*; they can increase customer participation, and can better address locational or temporal needs. *Finally, energy efficiency complements demand response by helping to ensure that all of the benefits of flexible technologies are captured, and not lost in leaky buildings.*" (emphasis added.)
 - ii. Robust energy efficiency measures targeted at heating, air conditioning and home weatherization can provide always-on, "baseload" demand reduction while demand response provides predictable, dispatchable reliability services.
 - b. The Commission should increase the goals and funding for transmission and distribution utilities (TDUs)' energy efficiency program efforts directed toward demand response provision. In particular, the Commission could require each TDU to have at least 5% of residential winter and summer peak load demand reduction capability by December 2025 (as proposed in the original filed version of S.B. No. 2019, by Senator Schwertner) and 10% by December 2030.
 - c. To the extent possible, the Commission should review and highly consider the comments submitted by <u>EDF and Alison Silverstein</u> on September 9, 2021, which, amongst other things, suggest designing automated and transparent DR programs, as those greatly improve customer ability and willingness to participate.
 - i. The Commission should improve customer access to real-time data and the flow of customer energy use data and real-time usage (on-demand meter reading and usage alerts) to third-party energy service providers and aggregators.
 - ii. Demand response programs should deliver value and protection to the customers who provide demand shifts as well as to the grid and the market. The Commission should impose a set of minimum provisions on the TDUs, REPs and aggregators.
 - iii. The Commission should review programs annually to evaluate program outreach and impact.
- 3. We recommend that the PUCT raises TDUs' energy efficiency program goals to increase both annual kWh savings and peak demand reduction.
 - a. The Commission could create energy efficiency goals for Texas in line with efficiency goals and programs in other states. Adopting an additional 1% savings goal in the EERS

by the end of 2025 could drive innovation, restore Texas' leadership on energy efficiency, and lower costs for all customers.

- Texas' energy efficiency programs have some of the lowest energy use reduction goals and per capita spending on energy efficiency in the nation. The undersigned cities agree with Alison Silverstein's comments from September 9, 2021: "Texas TDU energy efficiency goals have not been raised in ten years, even though the breadth and value of energy-saving opportunities have increased markedly over that time. Texas utility energy efficiency programs spent only \$6.77 per capita in 2019, far below that national median of \$15.12" and trailing Oklahoma, Arkansas and New Mexico.
- ii. In 2035, Texas' energy efficiency economic potential <u>is estimated to be 87,336</u> <u>GWh</u> – the highest of any state and roughly equal to 18.8% of adjusted annual state sales. Right now, the energy efficiency economic potential in Texas is just 2.5% of adjusted annual state sales.
- iii. Right now, efficiency programs in Texas offset just 0.19% of sales despite the state's previous leadership on energy efficiency. Since the adoption of the first-in-the-nation Energy Efficiency Resource Standard in 1999, Texas has been leapfrogged by 26 other states. The Commission should adopt an additional 1% savings goal in the EERS by the end of 2025.
- b. The Commission could direct utilities to create programs to execute the above increased energy efficiency goals in Texas, and focus on programs that would significantly reduce peak demand. Programs should **place an emphasis on home insulation, smart thermostats, and home heating and cooling**.
 - i. An October 13, 2021 study from the American Council for an Energy-Efficient Economy shows that "a set of seven residential energy efficiency and demand response retrofit measures, deployed aggressively under statewide direction over five years, could offset about 7,650 MW of summer peak load and 11,400 MW of winter peak load approximately equaling the capability of the proposed new gas combined-cycle generators" and costing 39% less.
 - ii. The decisions made now by the PUCT with respect to energy efficiency investments will have a long-term, resounding economic impact. In addition to peak reduction benefits, energy efficiency programs also have significant customer bill saving impacts.

4. We recommend that the PUCT direct TDUs to specifically **increase energy efficiency retrofits** for low- and moderate-income (LMI) and multi-family (MF) housing across Texas.

- a. The Commission could require at least 40% of electric utility energy efficiency program savings to come from retrofits of LMI and MF housing. Instead of the utility paying 50% of the cost of efficiency upgrades as they would typically do, utilities could be required to pay 80% of the cost of efficiency upgrades for families with an income less than 80% of the area median income, as proposed by the American Council for an Energy-Efficient Economy in their October 13, 2021 analysis of the potential of energy efficiency and demand response programs in Texas.
- b. Development of energy efficiency has significant equity impacts and would reduce barriers to affordable energy for our communities confronted with energy burden the most. in Texas are less energy-efficient than other homes and consumers pay a much higher proportion of their incomes for electricity than other households.
- c. Head-to-head, funding energy efficiency programs targeted at home weatherization specifically in low- to moderate-income and multifamily homes—is *faster and far more cost-effective for Texans than building new generating capacity to address the need for peak demand reduction.*

Grid Reliability

Guiding Perspective: The PUCT is not just seeking effective market design in ERCOT; rather, they are solving for an array of factors to protect customers from the risks imposed by weather related crises and other extreme events.

- 1. The undersigned cities encourage the PUCT to consider the following as guiding principles when designing ERCOT market rules:
 - a. Design the grid to be resilient and reliable to avoid another weather-triggered disaster that could harm communities and put Texans' lives at risk;
 - b. Ensure access to safe, reliable, and affordable electricity for all Texans;
 - c. Leverage a diversified resource base to provide various ancillary services;
 - d. Manage dramatic demand growth, especially in the residential sector during cold-weather events.
- 2. The February storm highlighted that while ERCOT is a powerful energy market, it has significant shortcomings that must be resolved to keep Texans safe. The Commission should consider the following changes as prerequisites to a stable wholesale market:
 - a. Expand energy efficiency and demand response to decrease peak load in extreme weather conditions (see section above).
 - i. Energy efficiency and demand response, when programmed effectively, are powerful tools to ensure grid reliability. They can drastically reduce both customer demand and peak load, making the grid less susceptible to blackouts.
 - ii. Demand response resources can provide low cost reliability products ERCOT. Recently, FERC has been passing rules in an attempt to level the playing field between traditional and alternative grid resources such as demand response due to its ability to provide <u>ancillary services</u> to the grid. It follows that ERCOT could emulate these rules and see the same benefits from demand response.

b. All generation, storage, and DERs should have equal access to the grid and markets.

- i. Many local governments in Texas have energy goals which are driving investment in and construction of solar and storage projects. Residents are also investing in DERs.
- ii. These resources should be allowed to participate in ERCOT to provide services when needed and increase grid reliability.
- iii. This should be coupled with better rules for individual customer and DER participation in ERCOT.
- c. Allow individual customers to see and respond to electric prices and demand flexibility.
 - i. Customers should have insight into and tools to respond to increased electric prices and high electricity peaks. This way, they can make the decision to lower their energy usage when electricity rates are high and lower usage if there are high peaks. See demand response section for further details.
 - ii. Regulators can facilitate this by using other authorities and mechanisms to make customer energy data accessible, enhance availability of demand automation and management technologies, and facilitate aggregation of loads and behind-themeter gen and storage.

d. **Connect ERCOT to other regional grids outside of Texas**.

i. An <u>ACORE</u> study conducted in July 2021 found that each additional GW of transmission ties between ERCOT and the Southeastern U.S. could have saved nearly \$1 billion, while keeping the heat on for hundreds of thousands of Texans. Other parts of the Central U.S. also could have avoided power outages while saving consumers over \$100 million.

- ii. This diversifies the resources available to Texans in the event of a disaster, so neighboring grids can support ERCOT's reliability needs. Sharing grid resources can also lower costs to rate payers because utilities in Texas would not be responsible for all necessary services and resulting capital expenditures.
- iii. Texas is already an international leader in oil exports. Interconnecting to other grids would also allow ERCOT to become a leader in wind and solar esports as well. Texas is rich in wind and solar potential, and Texans should be able to benefit from the revenue that could be generated from those projects. Additional projects to export energy could boost local economies in those areas by creating local jobs and boosting tax revenue from land leases and construction.
- e. Ensure fuel supply is weatherized in addition to generation and distribution.
 - i. We support the Commission's decision to require that generation facilities and distribution systems must be weatherized. Fuel supply should be weatherized for the same reason as generation and distribution—it cannot be at risk of failure in the event of a weather-related disaster.
- 3. The Commission should **establish new ancillary services for grid reliability**. These should be technology-agnostic, functionally-based, and fuel-neutral.
 - a. The Commission should establish the standard or define the outcome but not the technology needed to reach it.
 - i. With technology agnostic markets, municipal clean energy projects that may not have been previously considered in ancillary services may be able to meet various standards so long as those standards don't pick winners and losers or predetermine the outcome.
 - ii. Change ERCOT & TDU rules to enable greater, faster DER interconnection and market participation. Allow virtual power plants (VPPs) of aggregated distributed energy resources of all kinds—that many local governments already have—to provide new and existing ancillary services.
 - iii. All ancillary services should be forward-looking and reliability-supporting, not just designed for rotating mass generation.
 - b. Most **ancillary services should receive compensation for their services**. Compensation for energy and ancillary services should bear some relationship to their cost of provision.
- 4. The PUCT should consider designing a market that allows many buyers and sellers to easily enter and exit the market.
 - a. Market competition could result in more affordable electricity prices for customers. It could also allow local governments with renewable energy projects to participate in the market.
 - b. An equitable market should not limit who can participate or exit, and should not place any institutional or procedural barriers on new market participants. As such, do not limit customers' ability to participate in the market (as with artificial limits on load participation or on customer asset aggregation).
 - c. ERCOT should build more transmission and remove transmission constraints so more generation and storage can interconnect and deliver to customers.

Grid and Community Resilience

Guiding Perspective: During Winter Storm Uri, <u>more than two out of three Texans lost electricity for an</u> <u>average of 42 hours</u>. Leaving behind sizable losses of lives and money, Uri shone a light that Texas grid is unprepared and unequipped to handle extreme weather. Further, it is the priority of the undersigned to

ensure that our communities are safe and equipped to handle future weather or other extreme events, and that the grid is durable enough to support community resilience.

- 1. To avoid a repeat of sustained power outages and to enable the grid to quickly recover from outages, our local governments suggest the Commission require TDUs to rotate outages more fairly and distribute outages more equitably by modifying the current distribution circuit design for more granular outage management and modernizing their distribution segmentation strategies to react to February's crisis.
 - a. In February, many homes suffered from multi-day outages because of utility outage management process problems—especially those in low-income areas. Traditionally, when rotating outages to meet the required electricity demand reduction, grid operators prioritize providing energy to circuits that critical facilities and cut power from other areas that do not contain critical facilities. As a result, in February, many customers on circuits without critical facilities continuously stayed out of power for up to several days, while those closer to critical facilities only lost power for short periods of time.
 - b. Grid operators must reform outage management process to enable more granular outage management and outage rotation among customers. They should divide circuits into small sections, with critical facilities on their own or with few customers. This will enable them to rotate what power they have left more equitably amongst other customers. A study conducted by the University of Iowa on Hurricanes Irene, Sandy, and Irma shows that distribution grid sectionalization in emergency and coordinating them could enhance the system resilience.
- 2. We recommend that the PUCT mandates that utilities develop and implement programs that provide program assistance to all critical facilities to equip them with energy storage.
 - a. All critical facilities should have access to backup power for [x hours] in the event of a crisis. We suggest that the PUCT develop and utilities implement program assistance funds or rebate programs to equip critical facilities with energy storage.
- 3. The undersigned suggest the Commission mandate and subsidize large industrial and commercial customers to have 2 days' worth of backup power so that they can participate in mandatory demand response and shed load first in the event of a crisis that would likely harm residential customers.
 - a. Many large commercial and industrial customers already have backup generation to protect industrial processes and commercial operations in the event of an outage. The Commission should leverage these existing backup equipment by mandating that large industrial and commercial customers have 2 days' worth of backup power and creating a program to subsidize investments needed to accomplish that, enabling these customers to participate in demand response and shed load first in the case of a crisis.
 - b. By having large commercial and industrial customers shed load first during a grid emergency, residential customers will have access to electricity longer, thus reducing the impact of outages.
- 4. We request the Commission to direct TDUs better engage local governments in the redesign of outage management processes and tools and look forward to collaborating with and supporting the Commission, ERCOT, and TDUs in the redesign and implementation of outage management strategies.
 - a. Many local governments were <u>unaware</u> of which parts of our cities were losing power, when, and why during Winter Storm Uri. We were not aware of how outages were managed and subsequently unable to answer related questions from our constituents.
 - b. Given that outage management is critical to public health and safety and our economic security, we ask the Commission to direct TDUs to not only keep local governments informed of the outage management process, but also better engage us in the design of outage management processes to ensure the outages are distributed more equitably.

c. We also recognize outage management is or may be directly influenced by Texas legislation, and we will continue to work alongside the Commission to ensure legislation enables and drives truly equitable and resilient outage management solutions.

Robust Stakeholder Process

Guiding Perspective: Local governments are essential voices in any decision that will impact consumer energy usage. Local governments are the closest tie to Texans and should be engaged in regulatory proceedings to uplift community voices and equity considerations.

- 1. Future proceedings that arise from this docket—on topics such as demand response, energy efficiency, weatherization, or low income programs—are directly relevant to our constituents.
 - a. These proceedings have the potential to impact both our residential and non-residential customers.
 - b. As local governments, we are charged with understanding and supporting the wellbeing of our communities through the provision of essential services, and saw first-hand the impacts of Winter Storm Uri on our communities.
 - c. As local governments, we have the interests of our community top of mind—we want to ensure that electricity is affordable for all customers, that customers are safe in their homes and businesses, that are communities are resilient to weather and other extreme events, and ensure our communities are reaching our energy goals.
 - d. It is critical that we are key stakeholders during the planning, design, implementation, and measurement and verification phases of these wholesale market design measures and other projects moving forward.
- 2. We commend ERCOT for recognizing the important role of local governments and creating the <u>Texas Municipal Officers ERCOT Advisory Board</u>, and recommend the PUCT establish a similar body.
 - a. This Board appears to present a unique opportunity for collaboration between local governments and ERCOT around communications needs related to resilience and emergency management.
 - b. We believe that the PUCT could benefit from a similar body to ensure the most robust and informed market reforms possible, and that we would be helpful stakeholders in ensuring the PUCT designs the best programs and practices for Texans.
 - i. If the PUCT were to establish such a board, it should **allow for broader participation of local governments** than the current structure of the ERCOT Advisory Board with more frequent engagements than ERCOT's advisory board. The PUCT could consider collaborating with the <u>Texas Association of Regional</u> <u>Councils</u> to establish this board and its members.
- 3. In addition to an advisory-type board, the PUCT could **also consider pathways for local** governments to engage directly in relevant docketed proceedings.
 - a. PUCT could work directly with local governments to ensure that **local governments** have the tools and pathways to be made aware of proceedings and how stakeholders can be engaged before they begin. The PUCT can facilitate this by:
 - i. Publicizing the goals of the docket publicly in an easy-to-access location on their website. This might be outside of Interchange Filing Search, so that local governments do not need to know project numbers to be aware of proceedings.
 - ii. Establishing the goals of the proceeding early on, so stakeholders know how their inputs will be most helpful.
 - b. The Commission could consider **hosting working groups** to test its ideas with local governments and other stakeholders in proceeding, solicit solutions that are right for

Texans, and further refine new planning, program, or process decisions with the constituents those decisions will impact.

- 4. We appreciate the comments of fellow stakeholders in this docket that also commented on the gap between local governments and the PUCT.
 - a. In their September 9 filing, <u>SPEER</u> stated "we are underutilizing our counties and cities as a piece to the puzzle" when referring to the potential impacts of residential demand response. We concur, and look forward to the assistance we can provide the commission to this effect.
 - b. In their September 30 joint filing, <u>EDF</u>, <u>Texas Consumer Association</u>, and <u>Alison</u> <u>Silverstein</u> stated "The Commission will need to conduct on-going review using regular check-ins to ensure that ERCOT's wholesale market is working effectively. This will assure that we are collectively optimizing use of available resources and fairly promoting competition while protecting grid reliability, so our market can continue to reap the benefits of Texas' rich resource diversity." We concur.
 - c. In their September 9 filing, the Lone Star Chapter of the Sierra Club stated "the PUCT should involve the public more, including by allowing public input at workshops..." We concur, and look forward to the opportunity to elevate public voices in PUCT proceedings.

Conclusion

We appreciate the opportunity to provide these Comments and look forward to working with the Commission and other interested parties on these issues.

[Signatures]