



# SIERRA CLUB

## LONE STAR CHAPTER

To: The Honorable Chairman Todd Hunter, Chair  
The Honorable Ana Hernandez, Vice-Chair  
Members, House Committee on State Affairs

March 1st, 2023

### **In considering wholesale market design, don't forget the "small stuff"**

**Today, House Members will hear from several proponents of changes to the wholesale market ranging from:**

- Adopting a PCM (Performance Credit Mechanism) similar to the initial decision by the PUCT, which could cost consumers \$5.7 billion, or less depending on impacts on prices;
- Providing state financing for dispatchable power plants, providing mainly natural gas power plant tax incentives and adopting a new ancillary service known as the DRRS;
- State financing for a backup service advocated by Berkshire Hathaway and others;
- Potentially charging variable resources like renewables ancillary services or even requiring them to purchase energy from dispatchable resources through "firming"; and
- Other "supply-side" solutions.

**Our view.** Many of these could be very expensive – particularly to residential consumers – not guarantee the grid is fixed, and treat some resources unfairly, such as requiring "firming" requirements. In general, with the exception of a new ancillary-reliability service such as the **Dispatchable Reliability Reserve Service**, which Sierra Club supports as an operational solution to our grid issues, we are not convinced of the need for these large supply-side solutions.

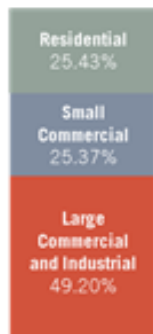
Instead, we need to look at market changes and other measures that will help make the grid more reliable, resilient and ultimately better for Texans, whether large industrial customers, or your constituents living in homes or apartments. We are happy to provide our views on the solutions listed above, but will wait until proponents have had their chance to present them.

### Supply vs. Demand

Texas set 11 peak records in the last few years within ERCOT. That demand is increasing, but much of that peak demand both in the winter and summer is due primarily to demand in older homes and apartments built before modern energy codes were adopted. ***The fact is that the climate is changing, driving more extreme heat, record droughts, and sudden cold snaps. ERCOT consistently underestimates winter and summer peaks.*** A recent ERCOT slide shows an example of this phenomena, showing how a cold winter day in the Dallas area drove incredible demand. This phenomena was also seen during Winter Storm Uri, the recent ice storms and cold temperatures in this current winter, and high summer temperatures in July of 2022.

## DOES RESIDENTIAL ENERGY MATTER?

**Thursday,  
Nov. 16, 2017  
7:15 a.m.  
ERCOT Load:  
36,795 MW  
Temperature  
in Dallas: 63°**



**← Wednesday,  
Jan. 17, 2018  
7:15 a.m.  
ERCOT Load:  
65,904 MW  
Temperature  
in Dallas: 15°**



### Winter Weather Impacts on GRID by Customer Type

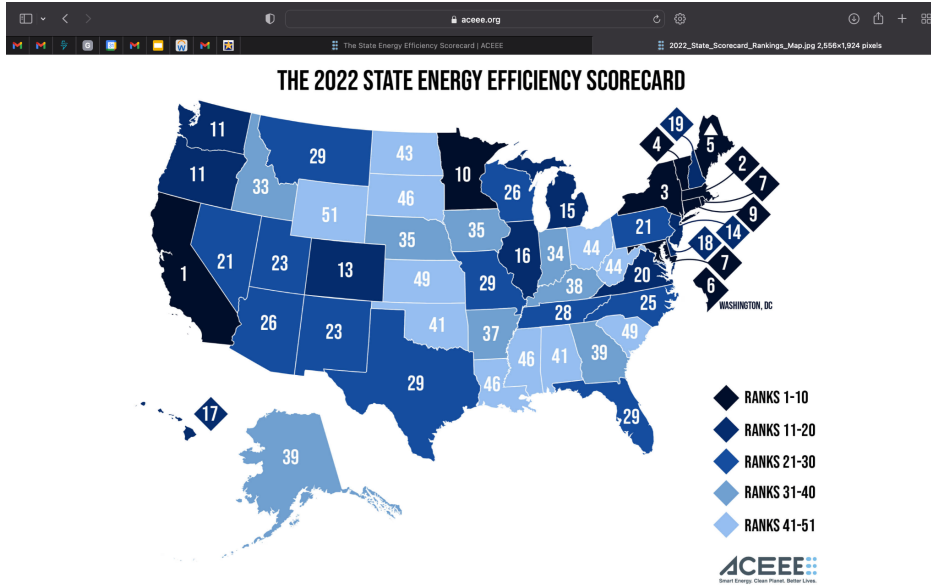
While additional supplies are needed in Texas - particularly smaller, flexible and dispatchable resources – we can not grow our way out of our current predicament.

**ERCOT Facts, Summer vs Winter Peak**

<b>Summer Peak</b>	<b>Winter Peak</b>
<p>80,038 MW</p> <p>Record peak demand (July 20, 2022)</p>	<p>69,871 MWs Winter Storm Uri (Feb 21) but didn't account for outages so would have been roughly 10,000 MWs more</p>
<p>Set 11 Records in Summer Peak over last two years</p>	<p>December 23, 2022 - Roughly 74,000 MWs, about 7,000 MWs more than expected</p> <p>We have consistently underestimated the residential and small commercial winter demand</p>

**Texas is Not Considered a Leader on Energy Efficiency and Demand-Side Solutions**

Every year the American Council for an Energy Efficient Economy (ACEEE) releases a state policy guidebook. In the 2022 edition, Texas ranked 29th for all state policy and last on energy efficiency programs for those states with a stated energy efficiency goal.



## Our Seven Fixes to Make the Grid More Reliable. Less Expensive and Help Residential Consumers

### 1. PUC Sunset and Funding Request

The Public Utility Commission of Texas is under-resourced and does not adequately represent the public. Their website is poor, it is nearly impossible for the public to know how to engage on rates or rules, and people are confused about our electric market. We need a strong sunset bill, including adequate funding for the agency through the appropriations process. They are asking for 61 additional employees, including those for data analysis and market design, energy efficiency programs and an Office of Public Engagement. The Sunset recommendations can not be implemented without these additional resources, which are currently not contained in HB 1 as filed.

### 2. Increase Energy Efficiency Goals and Programs at the Private Investor Owned Utilities (SB 258 by Eckhardt)

Texas was the first state in the nation to adopt an Energy Efficiency Resource Standard, but today is the state with the lowest energy efficiency goals among those with statutory goals. Currently those programs only save roughly 0.23 percent per year. Other states like Arkansas, Oklahoma and New Mexico have much higher goals.

Establishing a goal of one percent energy savings by 2027 is achievable, would save Texans money and make our system more reliable. The one percent goal is however just one approach, and making peak demand goal measures cover both summer and winter peaks could be another way to achieve reductions that will help Texans. Thus, in addition to the one percent goal, the Legislature could consider additional requirements on peak winter savings programs and *assure that all electric cooperative and municipally-owned utilities also offer energy efficiency and demand response programs through improved reporting requirements to SECO.*

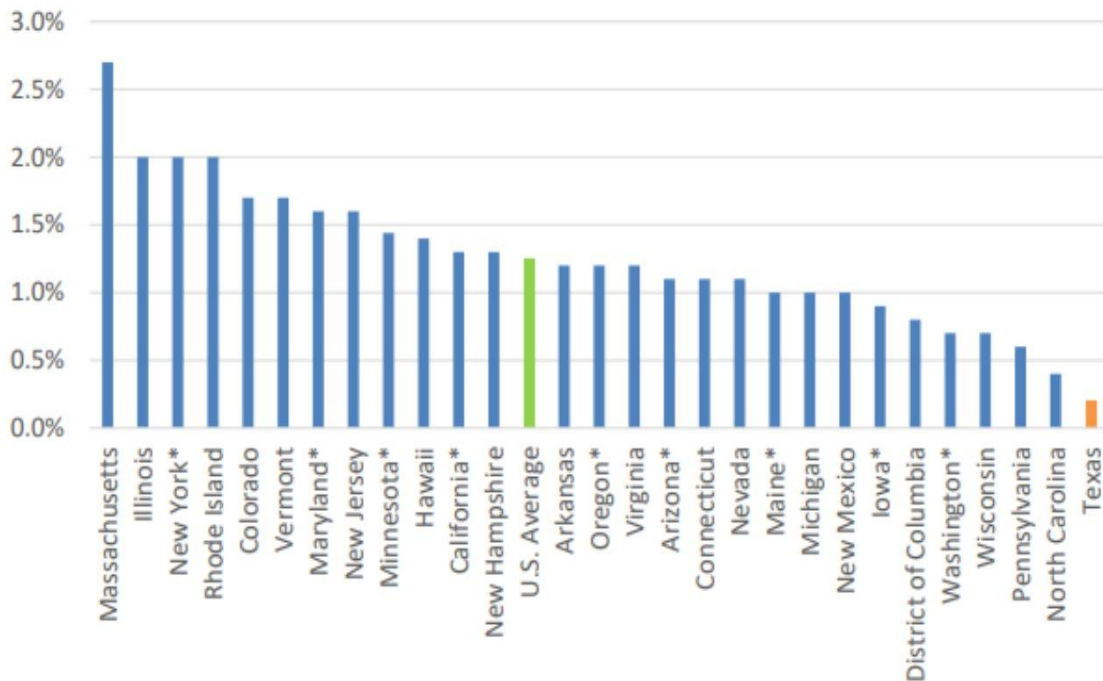


Figure 2. Annual electricity savings as a percent of state energy MWh sales per state EERS policies. For the purpose of comparison, ACEEE estimated an average annual savings target by calculating each state's EERS savings over the years specified in the EERS policy. \*State savings are reported on a gross basis; a net adjustment was applied to compare with states' reporting net savings.

- 3. Create a Texas Energy Efficiency Council made up of several state agencies and utility and other representatives, to coordinate energy efficiency and demand response programs, and better coordinate state, utility and federal programs and SPEND FEDERAL MONEY!**

Private and Public Utility Energy Efficiency Programs, programs runs by the PUCT, programs run by the State Energy Conservation Office, programs administered by the Texas Department of Housing and Community Affairs, the State Facilities Commission and others are not well coordinated, and with potentially nearly \$1 billion that could be available to Texas due to federal congressional action, creating a Texas Energy

Efficiency Council - as recommended by the Commission - would be a way to make our grid more reliable by reducing demand and coordinating best practices. It is important to note that the federal funding could also help Texas reduce air pollution and we should be credited for any efforts to help meet ozone reduction requirements implemented by the EPA.

### Some Examples of Recent Federal Funding That Should Be Coordinated

Program	Potential Agency	Amount and Funding Source
Weatherization Assistance Program (WAP)	TDHCA	\$174 million through Bipartisan Infrastructure Fund
Section 40109. State Energy Plan	SECO	\$35 million over five years (BIL)
Grid Modernization	PUCT	\$5 billion in competitive grants through BIL and IRA
Section 40552. Energy Efficiency and Conservation Block Grant Program	SECO	Estimated \$15 million over 5 years through BIL
Section 40511. Cost-Effective Codes for Efficiency and Resilience	SECO	Competitive grant could be \$10 million over five years for modern code implementation through BIL
Section 40502. Energy Efficiency Revolving Loan Fund Capitalization Program	SECO	Allocation possible of up to \$15 million for revolving loan program for public and potentially private buildings
Section 18795. Home energy performance-based, whole-house rebates	SECO (or potentially PUCT)	Up to \$345 million available over several years for grants for residential home energy rebates through IRA

18795a. High-efficiency electric home rebate program	SECO (or potentially PUCT)	Up to \$344 million available for grants for homes using electric appliances or improvements such as electric and geothermal heat pumps.

**Note: This is only a small section of potential federal funding that could come to SECO, TDHCA and PUCT among others.**

**4. Create a residential demand response requirement in the state such as authorized in SB 114 (Menendez) or through a trading program for all Load Serving Entities**

While industrial customers have access to sophisticated demand response programs to shift energy use, Texas has not taken advantage of our “Smart” meters, smart appliances and competitive energy market to bring residential demand response to scale. Studies have shown that there are thousands of MWs of peak demand shifting that could be accomplished with some targeted efforts by our retail electric providers, municipally-owned utilities and electric cooperatives. Requiring Retail Electric Providers to provide voluntary DR programs, or creating a statewide goal and trading program are two approaches to build out this technology in Texas. When the state set a modest goal for renewable energy many years ago, we met those goals 10 years early and for a fraction of the cost. A statewide goal for residential demand response - such as reaching five percent residential reduction through demand response within four or five years - could reduce our peak by some four thousand MWs, and help residential customers avoid price spikes.

**5. Require that new buildings constructed in Texas meet the 2021 IECC. Currently SECO has not adopted the 2021 IECC as the state minimum construction standard, and most cities continue on the 2015 IECC, which is 8 percent less energy efficient.**

Texas law allows the State Energy Conservation Office to update the minimum energy codes for new commercial and residential construction. Currently, Texas is on the 2015 codes, but SECO has not moved forward due to a conflict between two laws in Texas. Specifically, a law passed by the Legislature - HB 2439 - authored by Speaker Dade Phelan in 2019 on building products had the unintended consequence of freezing action by SECO. Legislation is needed to allow SECO to move forward on adopting the 2021 codes, which are roughly five to 10 percent more energy efficient than the previous codes. Texas could also adopt other codes like the 2021 IBC, IRC and IPC through

separate legislation to make our buildings more resilient. While energy demand from new buildings is only a fraction of our energy, as more and more Texans move here, assuring that new buildings are as energy efficient as possible is a way to mitigate that growth in energy use and energy demand. Filing and passing legislation to create an exception to HB 2439 would also open up additional federal funding opportunities for Texas as a leader on energy efficient construction standards.

#### **6. Authorize the inclusion of Distributed Energy Resources in our wholesale market, including through aggregation of smaller resources**

In Texas the law is somewhat unclear on how distributed energy resources such as distributed storage, smaller gas plants, solar panels and other resources can provide both ancillary services and energy to our wholesale market. With more than 3,000 MWs of DG within ERCOT alone, these resources are growing exponentially. New legislation is needed - as has been requested by the PUCT - to establish the rules, improve visibility and bring these resources to market, including through aggregation of these resources.

A bill by Rep Rafael Anchia (HB 2793) and Senator Nathan Johnson (SB 1212) is an important contribution to making sure consumers with backup generators, onsite solar and storage, as well as other distributed generation could be part of the market if they quality and in a way that protects consumers. We believe it is a good bill, though some tweaks are needed to assure visibility of the distributed market to ERCOT and better protect consumers.

#### **7. Don't Forget those Least Able to Pay their Bills**

Texas is fairly unique in that as a state we do not have a required low-income discount program. We used to but the System Benefit Fund was effectively abolished several years ago through legislative action. It is important to note that there are assistance programs provided through some REPS, some utilities, some electric cooperatives and some municipally-owned utilities, and federal funds, mainly the LIHEAP (Low Income Heating and Energy Assistance Program), WAP (Weatherization Assistance Program) and other programs. However, Texas should consider a new low income assistance program for bill assistance, education and weatherization. The program should be voluntary and paid for through a combination of federal funding and state funding from surplus funds. Many states have programs designed to help those to assure they do not spend more than a certain percentage of their income on energy bills.



We believe that focusing on the “small stuff,” including energy efficiency, demand response, modern building codes and distributed energy resources – and assistance for those least able to pay - could make our grid more reliable and must be part of any larger solutions. The grid is not just composed of supply but also of demand. ***Focusing on these resources can help make our system less costly and more reliable.***

**To recap:**

- 1. Pass Robust PUCT Sunset Bill, with Adequate Funding***
- 2. Raise Energy Efficiency Goals at Private Transmission and Distribution Utilities, and Enhance Reporting Requirements of Municipally-Owned Utilities and Electric Cooperatives***
- 3. Create a Texas Energy Efficiency Council and Prioritize Federal Funding Opportunities***
- 4. Create a residential demand response requirement or trading program to help shift peak demand during the summer and winter;***
- 5. Allow SECO to move forward on adoption of the 2021 energy codes for new construction for residential, commercial and state-financed buildings;***
- 6. Expand opportunities for Distributed Energy Resources to participate in our wholesale market and ancillary services, including through aggregation of small distributed resources;***
- 7. Create a voluntary state-funded low income discount program for residential consumers who have trouble paying their electric bills.***