



# SIERRA CLUB

## LONE STAR CHAPTER

**To: The Honorable Charles Schwertner, Co-Chair  
The Honorable Todd Hunter, Co-Chair  
Members, The Grid Reliability Legislative Oversight Committee**

From: Cyrus Reed, Legislative and Conservation Director, Lone Star Chapter of the Sierra Club,  
[cyrus.reed@sierraclub.org](mailto:cyrus.reed@sierraclub.org), 512-888-9411 (O)

December 3rd, 2024

***Review of the implementation of legislation related to the regulation of the electricity market in Texas enacted by the 87th and 88th Legislatures.***

The Sierra Club is pleased to offer brief written comments on the charge of the Grid Reliability Legislative Oversight Committee to review implementation of the electricity market. There have been literally dozens of bills passed by the Legislature during the 87th and 88th legislative session, in addition to budgetary increases for the main agency overseeing the electricity market in Texas, the Public Utility Commission of Texas. While we will not cover every legislative action we will highlight a few of the most important ones. Finally we will highlight a few areas where we find that additional attention by the legislature may be required.

**SB 3: Weatherization and Reliability Standard**

One key component of the major electric market reform bill includes required weatherization of the gas supply, power plants and transmission infrastructure. The PUCT had adopted comprehensive rules and required inspections through ERCOT that have significantly improved the reliability of the grid by making our infrastructure more resistant to high and low extremes. Those standards have been implemented in two phases and it appears that the decision to require more robust weatherization standards, along with a stronger enforcement regime is working. For their part, the Texas Railroad Commission has required some updated weatherization as well for the gas supply connected to the power grid. ***Sierra Club believes there still may need to be further improvements in this area, including the presence of a gas***

***desk at ERCOT and generally more oversight of the way in which gas suppliers can make it difficult for power plants to access available gas supply.***

Another major provision of SB 3 was to require the development of a reliability standard. It took longer than expected - some three years - but recently the PUCT did adopt a new reliability standard that considers the size (in MWs), duration (in hours) and frequency (such as 1 in 10). The Sierra Club generally supported the reliability standard adopted by the Commission. Importantly, the reliability standard is not a required standard placed on loads - which could be expensive and administratively burdensome for consumers - but a target for the market to achieve, with several tools available to the commission to assure we reach that standard.

### **SB 1281: Implementing Economic Transmission**

Sierra Club supported SB 1281 by Hancock which reintroduced an economic consumer benefit test for building transmission. In a practical sense, ERCOT and the PUCT had moved away from “economic” transmission, and instead relied only on transmission buildout for reliability. This has meant the market has had to wait for new transmission to be built out even as congestion costs have soared and some generation and load projects have been delayed. Unfortunately, some three years later the updated rulemaking, studies and protocols required to fully implement SB 1281 have yet to be finalized. Still, the path has been created and we appear to be in the final stages of implementing the requirements under SB 1281.

### **88th Legislature**

#### **HB 1500**

The most important bill passed during the 88th Legislature was HB 1500, the PUCT sunset bill. The Sierra Club supported the bill, which not only continued the PUCT for another six years but also included key provisions for transparency, public input and reliability. The PUCT has done an admiral job implementing the majority of the required provisions, including adopting rules on cost allocation of interconnection for power generation sources, assuring that all ERCOT protocols are approved by the PUCT, and other provisions. Two of the most important aspects of HB 1500 that are still being implemented include implementation of DRRS (Dispatchable Reliability Reserve Service), a comprehensive study of ancillary services, and a further consideration of the Performance Credit Mechanism.

## **DRRS**

The Dispatchable Reliability Reserve Service is a new ancillary service built on suggestions developed by the Independent Market Monitor, which identified the need for an “uncertainty product” to deal with relatively short-term swings in weather, generation or demand. Development of the DRRS has been complicated with more questions than answers. An initial version of the product developed by ERCOT contemplated simply splitting an existing service - Non-Spin - into a shorter term and longer term product, with the longer-term product meant to stand in for DRRS. Most stakeholders, including legislative leaders, believed this approach did not meet the requirements approved by the 88th Legislature and signed by the Governor. Subsequently, ERCOT had developed a few different NPRRs to implement a DRRS by 2026. The most current version - NPRR 1235 - is relatively simple but is limited only to generation resources that are off-line, which Sierra Club believes is not in keeping with the legislative intent to have the service available to both online and offline “resources,” which by definition should include longer duration batteries and perhaps even controllable load resources.

Some stakeholders - most notably Vistra - have been arguing that DRRS should only be open to generation resources, and should be used both as an ancillary service and for “resource adequacy” to help meet the reliability standard. Sierra Club is opposed to this approach since we view the DRRS as an operational tool to assure the grid is reliable, even though it may have a secondary benefit of providing incentives for dispatchable resources and helping with resource adequacy.

Most recently, ERCOT itself has suggested a few separate approaches that would allow for online and offline resources, including storage to participate, and even to co-optimize ancillary services with the energy market in the future. While conversations continue, Sierra Club is pleased with the open debate and input happening through the ERCOT process. Ultimately, it will be the PUCT itself which will help determine the particulars of the service.

### **Ancillary Service Study**

As part of HB 1500, the PUCT and ERCOT are also required to review the scope, size and use of ancillary services, and in 2024, ERCOT initiated a comprehensive study of ancillary services, with the PUCT also weighing in with questions and input. Most recently, the PUCT staff in early November released a draft ancillary service assessment with recommendations for further action. Sierra Club is generally pleased with this approach, though as we said in recent comments, we do want to assure that all ancillary services -DRRS - are made accessible to all resources that can meet the particular needs of that service. In other words, if a storage, load,

inverter-based or traditional generation resource can meet the qualifications, they should be allowed to bid for the service. **We expect the PUCT to take action on its final recommendations to ERCOT by the end of the year.**

## **PCM**

Sierra Club has not been supportive of the PCM (Performance Credit Mechanism) as a needed component of our electric market, but we appreciate the compromise which was reached as part of HB 1500. Currently, ERCOT, a third-party and the PUCT have all provided input as part of an analysis on a future PCM, but no action will be required until after co-optimization and implementation of DRRS have been commenced. In addition, we are still awaiting a full cost-benefit analysis by the third party analyst and the IMM. Thus, in a future analysis, it will be determined whether some version of PCM will be implemented. We believe this wait-and-see approach is warranted, given the need to see how new ancillary services, co-optimization and implementation of the Texas Energy Fund help meet resource adequacy objectives.

## **SB 2627: We must fund the TEF for the non-ERCOT resilience funds and the back-up power packages**

Recently, the PUCT approved some \$5.2 billion in funds for 17 gas plant projects for the In-ERCOT Generation Loan program, although as is well known one project was then denied, lessening the dedicated amount to the 16 projects. However, there are two other programs approved by SB 2627 and endorsed by voters through Prop 7 that are intended to help on reliability and resiliency but thus far the rules have not been finalized, and additional monies still must be appropriated by the Legislature to implement them.

First, the Outside ERCOT Grant Program will provide up to \$1 billion in funding for transmission and distribution infrastructure or electric generating facilities in Texas outside of the ERCOT power region. Under this program, the PUCT will award grants for the modernization of infrastructure, weatherization, reliability and resiliency enhancements, and vegetation management. PUCT recently proposed rules and stakeholder feedback was taken, although no final rule has been adopted. Second, TEF will provide up to \$1.8 billion in grants and loans to qualifying entities to design, procure, or install backup power packages at facilities necessary to support community health, safety, and well-being. A backup power package is a stand-alone, behind-the-meter, multiday backup power source. Again, while an advisory committee led by Senator Johnson has been named and held several meetings, rules have not been approved for these taxpayer-backed backup power packages.

Political leaders have announced that the Legislature intends to appropriate the other \$5 billion for the TEF. They have focused narrowly only on the supply side issue - more gas plants - while some suggest spending money on new nuclear plants. The Sierra Club insists that rather than dedicating these funds to new gas or nuke plants, we instead invest in programs for resiliency which ultimately will benefit customers more. Our grid does not have a major supply issue, it has an issue with getting power where it is needed and keeping the lights on when climate extremes occur. Taxpayer funds are better served helping customers, not gas or nuclear generation investors. At the very least we must honor voter's wishes and fund the Outside ERCOT program and the backup power packages.

### **SB 1699**

One bill supported by the Sierra Club - SB 1699 by Senator Nathan Johnson and sponsored by Chairman Hunter in the House - signed by Governor Abbott is important because it protects and allows the use of Distributed Energy Resources - such as battery storage and customer-sited solar by customer and third parties such as retail electric providers (REPs), while also allowing certain advances in residential demand response.

There has been some progress recently. First, to their credit, the PUCT implemented a pilot project for Aggregated Distributed Energy Resources in the competitive market even before the last legislative session and since passage of the bill has taken some steps to begin to implement these legislative directives such as opening up questions for stakeholder input. In addition, ERCOT itself has hired a professor at Texas A & M to assess the potential for other ways to incentivize the use of demand response in a market, as well as energy efficiency programs. The study has already been released and shows the tremendous opportunity to expand our demand response and energy efficiency programs. ERCOT has also proposed a new NPRR to better capture data about demand response that currently exists in the market. We would note that PUCT recently created a new Office of Energy Efficiency and has hired new staff which should help make implementation of SB 1699 and other improvements more likely.

Some portions of the bill related to distributed energy resources are essentially clarifications of statute and may not require rulemaking, such as the clarification that a retail electric provider that supports the use of Distributed Energy Resources in the market does not risk being categorized as a generator. Still, other parts of SB 1699 do require rulemaking, PUCT has opened up rulemaking on SB 1699 (*Project No . 56966 - Goal for Reducing Average Total Residential Load in the ERCOT Region.*). In their proposal, the PUCT is suggesting a 25% reduction goal for residential consumers that participate in retail electric provider programs in the competitive parts of the market, and required quarterly reporting by REPs to ERCOT. Sierra Club supports

this approach, and in our comments on the rule, suggested an annual review of the goal and public access to aggregated data. ***We expect that before the end of the year - either at the the December 12th or December 19th open meeting - the PUCT will actually adopt a new rule related to demand response.***

There are actually two provisions of SB 1699 related to demand response programs. First, the bill allows up to 10 percent of an ERCOT utility's annual energy efficiency load management budget to be spent on residential demand response programs that allow Retail Electric Providers to participate. In their 2025 energy efficiency plans and proposed fees to pay for their plans known as EECRF, both Centerpoint Energy and ONCOR the two largest ERCOT TDUs have indicated they plan to utilize this provision to begin retail electric provider residential demand response programs by incentivizing the use of smart thermostats. This is a good start.

However, both AEP Texas and TNMP have instead indicated they will not start programs until 2026. We hope that stakeholders, the utilities and the PUCT will work to assure that all utilities begin such programs, which would be incredibly useful to the market. Second, the bill requires the PUCT itself to establish a goal for residential demand response in Texas for customers who have access to devices such as smart thermostats, appliances (such as heat pumps or water heat pumps) or pool pumps that allow for demand response. This goal is not limited to the four private ERCOT utilities but to the market as a whole. Again the PUCT has suggested a 25 percent goal for residential premises that have such a program in place. As can be seen in the graphs found in this written commentary, there is plenty of opportunity to reduce consumer demand during weather extremes, particularly for the residential consumer space.

***The Sierra Club looks forward to further discussions of the the results of the ERCOT study, finalization of the SB 1699 rulemaking and hopefully some additional rulemaking happening soon on other aspects of energy efficiency programs.***

HB Permian Basin Reliability (HB 5066)

The legislature passed a new law which allows for the faster implementation of needed transmission in certain high growth regions, beginning with the Permian Basin area (which includes the Delaware play). Under provisions of that legislation, ERCOT was required to submit a Permian Basin Reliability Study, and the PUCT was required to implement a plan to build out transmission. Recently, the Study was approved and the PUCT adopted a two-phase plan to build out billions of dollars of new transmission. Under PUCT's order, local transmission upgrades are beginning in the Permian Basin, along with major export-import corridors. Still at issue - to be determined next spring - is whether several of those import transmission lines

could include high voltage transmission lines as opposed to the more traditional 345K lines which are the backbone of our transmission system. Sierra Club supports the need for additional transmission in the Permian Basin and other high growth regions, but also believes that high voltage lines - though more expensive initially - should be examined to see if they provide overall benefits to the system which could ultimately lower costs to consumers. We are also concerned, however, that some of the industrial growth in demand is speculative and worry that transmission could be built for industrial projects such as hydrogen or cryptomining that may not be there long-term. **We believe some examination of how we pay for transmission will be needed this session, including perhaps bonding requirements, some cost allocation to large loads, or a change in cost allocation from 4 CP to other methods may be needed.** It could be unfair to residential consumers to pay for the bulk of transmission buildout that is meant principally to benefit industrial development, some of it that may not be there in a few years. We look forward to the decisions and discussions at the PUCT and the legislature as the Permian Basin Reliability Plan is implemented.

### **Resiliency Plans**

Legislation approved by the legislature in both 2021 and 2023 specifically allow investor-owned utilities within both ERCOT and outside of ERCOT to file resiliency plans to bolster their investments in vegetation management, distribution and other physical and operational investments to make systems more resilient. Many IOUs have already submitted their resiliency plans and last month, the PUCT approved a giant resiliency plan by Oncor Electric. While Sierra Club supports the need for resiliency plans - most Texans are more likely to face short-term or extended outages because of local distribution issues rather than an ERCOT system-wide failure - we are concerned by the high cost on consumers, the potential for ratepayer monies to be misused - witness the recent large gas generators purchased by Centerpoint Energy - and the lack of attention in the initial plans to the most vulnerable and hard-to-reach Texans. We would be supportive of additional direction from the legislature to assure the plans are focused on consumers, and particularly vulnerable Texans such as those found in hospitals, nursing homes, and assisted living facilities. We also believe that certain consumer solutions such as energy efficiency and backup generators for some types of buildings could be considered as part of a resiliency plan.

### **SB 1929 - Crypto and Large Flexible Loads**

Recently, the PUCT finalized rulemaking to implement SB 1929, which requires that large flexible loads over 75 MWs to register with the PUCT and to provide annual information about expected demand and energy use. Under the rules, all current and future large flexible loads of

certain types must register and annually report to the PUCT. Other requirements for large flexible loads including interconnection processes are working their way through the ERCOT stakeholder process. **The bill and rules are an important first step but ultimately, Sierra Club believes further regulations will be needed including having such loads register as controllable load resources, subject to controls by ERCOT to assure reliability.**

### **What More the Legislature and PUCT Could do to Assure reliability in Texas**

The Sierra Club continues to believe that more should and could do more on the demand side, while also ensuring that costs for residential consumers remain relatively low.

### **Realizing the full benefits of distributed energy resources**

We are very appreciative of the passage of SB 1699 and efforts made by the Commission to allow a pilot project for Aggregated Distributed Energy Resources. However more should be done to realize the full potential of these resources, while also considering how to incorporate demand response into this model. We are hopeful that the legislature will ease the use of how retail electric providers, but also public entities can make it easy for the permitting and interconnection of these resources, and their inclusion in the market.

### **Continue to let the market work**

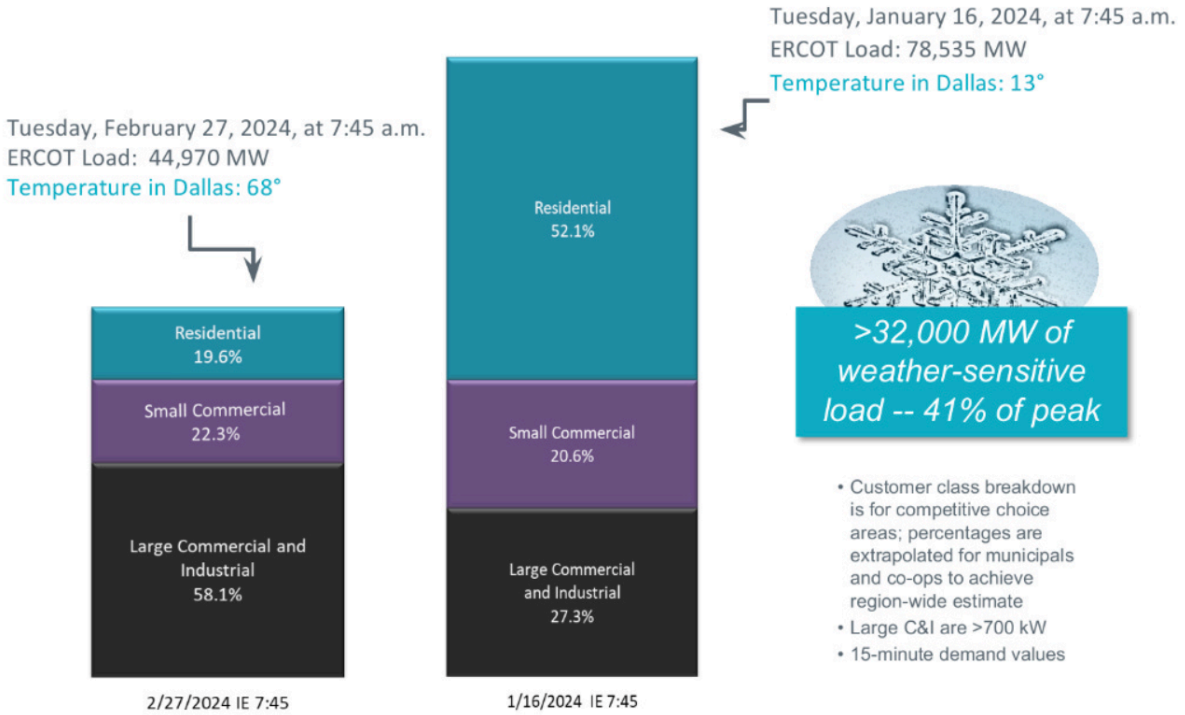
Several lawmakers have proposed laws in past sessions or prefilled legislation that will make it harder to continue to grow inverter-based resources which have been growing at a record pace. Sierra Club does not support either permitting regimes in the ERCOT competitive market or specific limits on inverter-based resources by for example requiring that a certain percentage of electricity be served by dispatchable traditional resources. This is not in keeping with our open access market.

### **Energy Efficiency is an unrealized potential still**

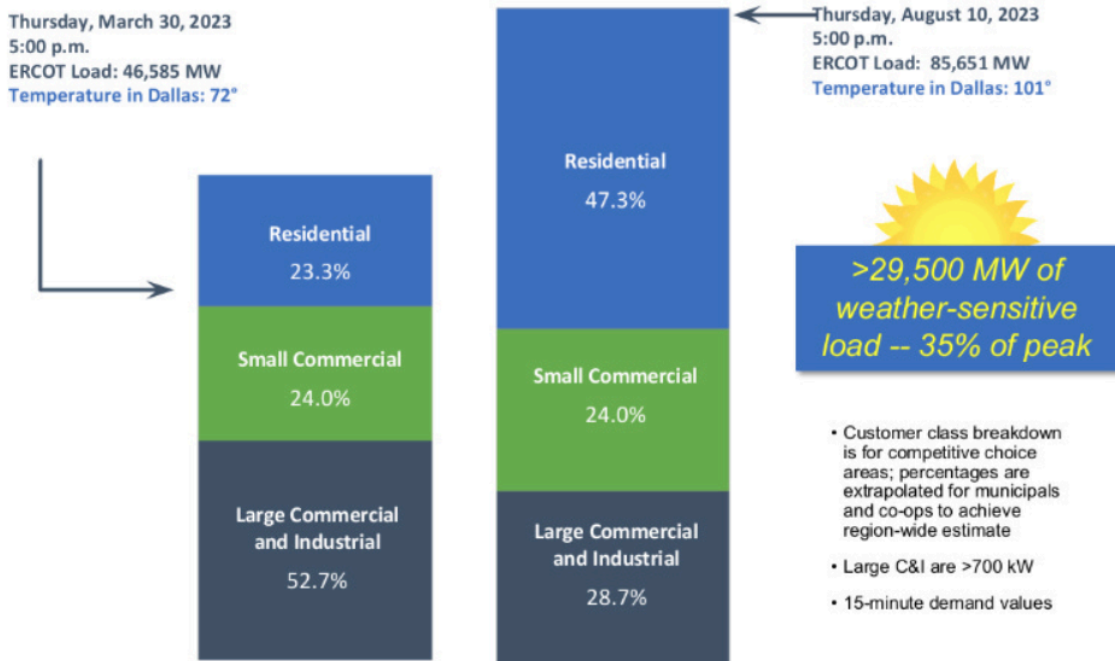
While large loads like AI, cryptomines, LNG facilities and hydrogen dominate headlines, there are large inefficiencies in our market, and much of this load is caused by inefficient residential and small business energy waste. We could do much more either through rulemaking or legislative action. In 2022, Sierra Club backed by some 25 organizations and associations, initiated a petition for rulemaking to increase investor-owned energy efficiency programs, but the petition was denied with a promise that rulemaking would begin soon. We are still waiting.



# Winter Weather Impacts on Load by Customer Type



## Summer Weather Impacts on Load by Customer Type



1

**Last legislative session, the Sierra Club supported a number of bills focused on the demand-side of the grid. With expected increases in industrial demand that could overwhelm our grid, we can not ignore these solutions.**

As mentioned, the PUCT is engaged in rulemaking related to residential demand response required by SB 1699, and did recently conduct a third-party study that showed through Texas A & M that showed the vast potential for residential and commercial energy efficiency in the Texas market.<sup>1</sup>

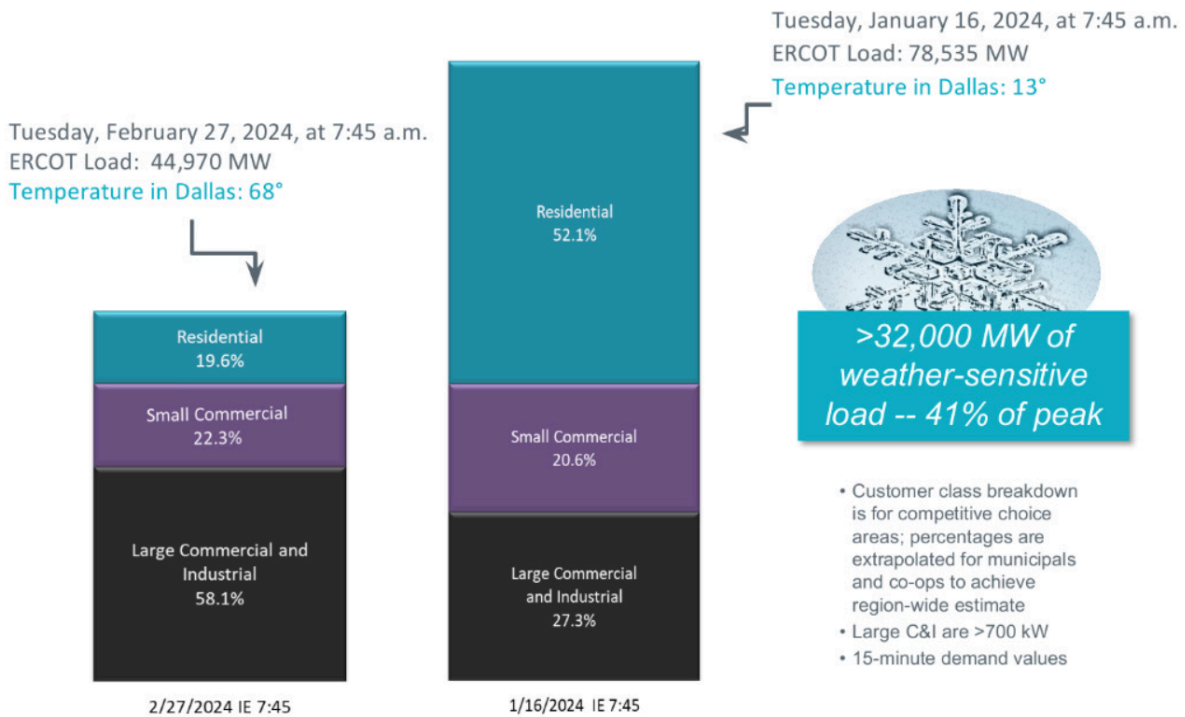
<sup>1</sup> A copy of the report is available here -

<https://www.sierraclub.org/texas/blog/2024/10/puct-revs-action-demand-response-reliability-standard-and-maybe-energy> - and the recommendations can be found on Page 35 which include:

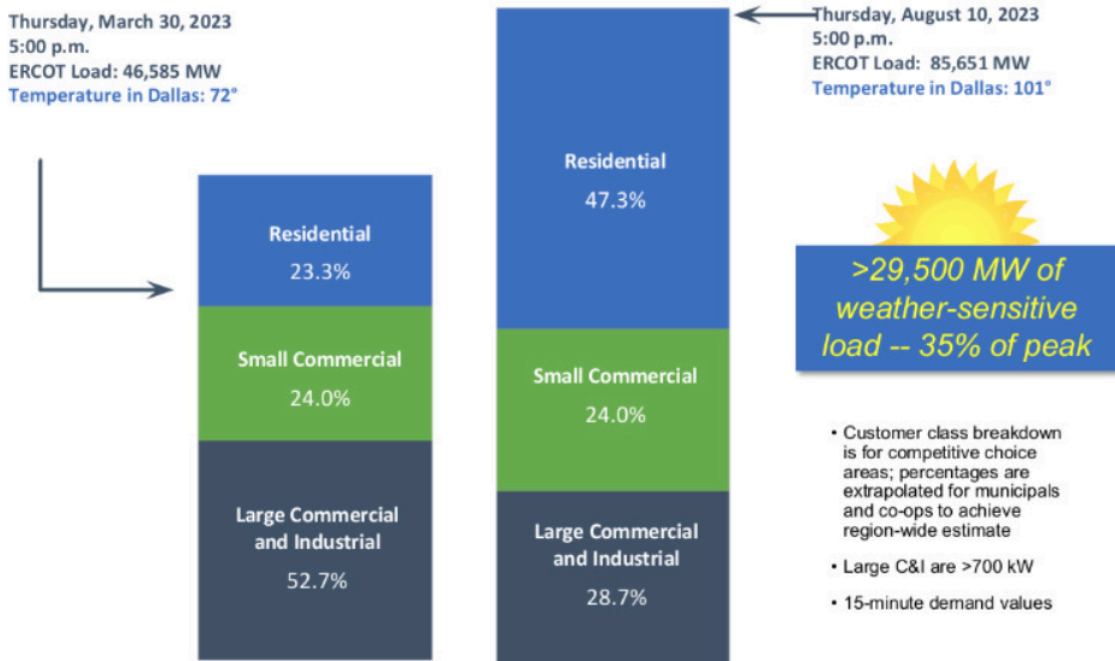
- Legislating energy efficient retrofits
- Increasing the demand response market size
- Reforming the energy market (specifically to move away from all transmission and ancillary costs being based on summer coincident peak)
- Educating and encouraging customers

The study found vast potential for demand response and energy efficiency that could save consumers money and make our grid reliable along with benefits like improved air quality and job creation. The study highlights the vital role energy efficiency and demand response could be playing in Texas with the right policy. The report supports recent efforts suggested by the Sierra Club, including passage of SB 1699, and the need to expand the energy efficiency programs.

## Winter Weather Impacts on Load by Customer Type



## Summer Weather Impacts on Load by Customer Type



1

### Weatherization and Energy Efficiency Programs Would Help: Senate passed SB 258 but House didn't move it forward

Last Legislative session for the first time in over 12 years, the Senate took action by passing SB 258 by Eckardt to raise the utility energy efficiency goals to one percent of total energy sales. Nonetheless, the House failed to take action on the Senate measure and sadly Texas remains at the end of the line in terms of states with energy efficiency savings. Increasing goals and programs at both private and public utilities would help make our system more resilient and directly help save lives by making buildings more resilient. Unfortunately, unless either the legislature or acting on its own the PUCT begins rulemaking to increase goals, utilities are unlikely to increase offerings on their own. Recent 2025 plans (supported by proposed EECRFs submitted by both ERCOT and non-ERCOT utilities) are very similar to past years. We do recognize that both Oncor Electric and Centerpoint Energy did propose to increase their program budgets in 2025 compared to 2024 and add important residential demand response programs. We support these increases, but both entities as well as AEP and TNMP could nearly double their programs and still be under the cost caps established by the PUCT. We are hopeful that in addition to the rulemaking related to SB 1699, the PUCT could make other changes to

the energy efficiency programs as they have promised for several years now through separate rules.

### **Building codes are an important resilience measure**

Buildings built to more modern building standards such as the 2021 International Residential Code and 2021 International Building Code are more energy and water efficient, and better protect against floods, high winds and other climate extremes. While cities have latitude to adopt these codes, Texas statutes and authority are a hodgepodge of differing standards. A bill that passed the Senate and House last session - SB 2453 by Senator Jose Menendez - but vetoed by the Governor - would have given specific authority to the State Energy Conservation Office to raise state minimum standards. Other bills involving raising building code standards did not make much headway but we believe that reasonable codes could help protect Texans from weather extremes and should be a focus in 2025. The most recent codes approved by the Code Council include electric vehicle and solar ready provisions to better incorporate new technology. Recently, Rep Ana Hernandez prefiled legislation (HB 1360) based on SB 2453 as passed by the Senate and House, while Rep. Ron Reynolds filed legislation to raise the base residential and commercial building code to the 2021 standard.

### **We need better reporting by our political subdivisions and NOIEs on energy use and reporting**

Political subdivisions, universities and certain state agencies that are located in non-attainment areas and “affected” counties are required to set an energy reduction goal and report on efforts to manage their energy use through an annual report to the State Energy Conservation Office. The statutory provision runs out in 2026, and the Sierra Club would support extending this reporting for another five years. There is no significant federal funding to help public entities reduce energy use, implement demand response and distributed energy resources and Texas should help coordinate these efforts.

Separately, larger electric cooperatives and municipally-owned utilities are required to report on their energy efficiency efforts annually to SECO, but the statutory requirements are vague and need an update. The reports should be extended to all NOIEs, and the reports should be publicly available on SECO’s website.

### **Sierra Club continues to support the need for a Texas Energy Efficiency Council.**

Last session, the Texas House passed HB 4911 creating a Texas Energy Efficiency Council, a bill recommended by the PUCT and supported by the Sierra Club. However, the Senate never took

up the bill. With massive amounts of federal funding potentially, including SECO applying for nearly \$690 million from the DOE for the HOMES and HEAR program, we need to be coordinated between our utilities, state agencies and retail electric providers to be efficient and grow our energy efficiency, demand response and distributed energy resources.

### **For Non-ERCOT utilities, time to bring back Integrated Resource Planning process**

It used to be that as in other states, for areas outside of ERCOT with vertically-integrated utilities, we required that the four private IOUs outside of ERCOT have so-called Integrated Resource Plans, which required them to develop long-range resource plans with public input that helped set out their course. Today, instead, ratepayers are faced with a dizzying array of ratecases and resource investment decisions that are separately decided. How many gas plants should Entergy invest in? How many solar plants? How does their resiliency plan fit in? What about transmission and distribution upgrades? What's the role of demand side resources? Sierra Club would support granting some authority to PUCT to initiate integrated resource planning procedures going forward, as many other states like Arkansas, New Mexico and Louisiana require. An IRP process does not replace individual investment decision rate cases but it can help utilities and stakeholders arrive at some common understandings.

### **Climate Change is Real and Solutions Must be Multi-Faceted**

The evidence is there for all to see. The climate is changing and no state has been more impacted by major climate events in recent years than Texas. The year 2023 was the warmest year since global records began in 1850 at 1.18°C (2.12°F) above the 20th-century average of 13.9°C (57.0°F). This value is 0.15°C (0.27°F) more than the previous record set in 2016. The 10 warmest years in the 174-year record have all occurred during the last decade (2014–2023). According to the NOAA, there have been 391 events since 1980 where damages from a storm or event have exceeded \$1 billion, which have also led to the deaths of more than 16,500 US residents, and no state has had more economic losses of \$1 billion dollars due to climate and weather extremes than Texas over that time period.<sup>2</sup> Indeed, there have been 183 such events with an estimated cost of between \$300 and \$420 billion, and 55 of those events have occurred in the last five years. Insurance claims and cost are rising and we are in danger of following in the heels of states like Florida where major companies are leaving the state

---

<sup>2</sup> NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2024). <https://www.ncei.noaa.gov/access/billions/>, DOI: [10.25921/stkw-7w73](https://doi.org/10.25921/stkw-7w73)

In essence our electric grid, and especially our distribution system where most customers receive their power, was built for a different era, before warming temperatures, sea level rise, more extreme storms and hurricanes and other impacts ravaged our basic infrastructure. While 30 years ago, or perhaps even 10, it made sense to build a cheaper system, today it is foolish to build a house of straw when a house of bricks is required. We can not snap our fingers and hope the climate returns to the way things were 30 years ago, but we can work to lower the emissions that are fueling the climate crisis and create resilient measures that will help mitigate the worst impacts of climate change, and even do so in a way that benefits our economy and quality of life.

**We can not and should not stick our heads in the sand and pretend that yesterday's solutions will work. Climate extremes are a reality and it is incumbent upon us to look for local and smart investments that consider the needs of our most vulnerable citizens.**

We must bolster the private sector investments with state and federal regulations and investments as well. First, there are billions of dollars available to Texas due to both the IIJA of 2021 and IRA of 2022. We were very pleased recently to learn that SECO - the State Energy Conservation Office - has applied for some \$690 million in so-called HEARS and HOMES grants which could assist thousands of Texas families have access to grants and incentives to make their homes or apartments more energy efficient. Texas state agencies should continue to be aggressive in applying for these funds to help customers better prepare for winter and summer extremes and weatherize buildings and our electric system. We must honor the voters' wishes to fund all four TEF programs, including outside of ERCOT resiliency plans and backup power packages. These efforts can help reduce the costs on ratepayers. Still, to be clear, making our electric system more resilient is likely to increase costs on electric consumers. This increase can be offset however by programs that help customers reduce their energy use, along with proper standards like more advanced building codes. Distributed Energy Resources, Electric Vehicles as Vehicle-to-Grid, local storage, backup power for critical facilities and neighborhoods, traditional distribution investments, demand response and energy efficiency and better built buildings will all be needed with a combination of private, public and individual investment if we are to make our grid more resilient.

In 2025, we hope the Legislature will prioritize these demand-side and customer-sited solutions to our grid, climate and affordability crisis.

