

September 13th, 2022

To: Members, Joint House Committee on State Affairs and Committee on Energy Resources From: Cyrus Reed, Conservation Director, Sierra Club, Lone Star Chapter, cyrus.reed@sierraclub.org, 512-888-9411

18 Months out From Uri and Grid Failure: Prices on Residential Customers Skyrocketing and Leadership has still (largely) ignored the demand side and customer solutions

A lot has happened since Winter Storm Uri and the passage of SB 3 and other legislation related to the electric grid and the gas supply. The events surrounding Winter Storm Uri revealed how gas, electricity and water are interrelated, and there is the need to weatherize and winterize all three systems and increase their resiliency. While imperfect — especially on the gas supply side — SB 3 and other bills did help shore up these aspects and focused on supply-side issues. We thank many members of this committee for raising the issues of the inadequate initial rule on critical infrastructure by the RRC, and it was improved. Recently, the RRC adopted both winterization requirements and reopened a rulemaking on critical infrastructure after criticisms about its initial efforts. The Sierra Club does believe that the weatherization rules adopted by the RRC did not go far enough to assure an adequate gas supply. Indeed, the RRC left specific recommendations out, instead leaving it to guidelines, and also lacked clarity on how it will enforce the rules. While they did consult with the State Climatologist as required, the rules use historical weather data in looking back, as opposed to considering how climate change will lead to more climate extremes.

In addition to efforts by the PUC and RRC on weatherization and the supply side, the PUCT has been moving swiftly on changes meant to make the grid more reliable. At times, it has been confusing to the public and stakeholders, but in December of 2021, the PUCT adopted a "blueprint" that laid out both Phase 1 changes as well as Phase 2 changes that they were considering for future adoption.

Among the important changes ordered in Phase 1 by PUCT Commissioners include:

 Operating Reserve Demand Curve (ORDC). Set the Minimum Contingency Level (MCL) at 3,000 megawatts (MW) and set the high system-wide offer cap (HCAP) and value of lost load (VOLL) to \$5,000 per megawatt-hour (MWh). These ORDC changes will enable

- market-based dispatch of reliable generation units earlier to help maintain grid reliability in the upcoming 2022 winter season and future.
- Expand Emergency Response Service (ERS). ERS is an operational reliability tool that should be deployed earlier to allow participating large commercial and industrial consumers, distributed generation (DG) facilities, and aggregated customers to curtail their electricity consumption to reduce demand on the grid to help avoid conservation appeals and emergency conditions. The PUC expanded this service seasonally and also increased the budget from \$50 million to at least \$75 million.
- Expanded ancillary services, including Fast Frequency Response Service (FFRS) (New Grid Frequency Ancillary Service Product). ERCOT is currently developing FFRS to help stabilize grid frequency in the future.
- Loads in Non-Spinning Reserve Service. Expansion of ERCOT's existing Non-Spinning Reserve Service (Non-Spin) to allow loads to participate in the service to provide additional versatility for addressing forecast error or ramping issues in the future.
- Firm Fuel Product. The Commission directed ERCOT to develop a discrete firm fuel-based reliability service pursuant to Senate Bill (SB) 3. This reliability service would provide additional grid reliability and resiliency during extreme cold weather and compensate generation resources that meet a higher resilience standard.
- ERCOT Contingency Reserve Service (ECRS) (New Ramping Ancillary Service Product). ERCOT is currently developing ECRS to serve as an additional operational reliability tool to help maintain grid reliability by managing increasing variability and ramping issues associated with higher renewable generation penetration on the grid in the future.

Despite efforts by many organizations, legislators and others, political leadership failed to recognize the other issue revealed in Winter Storm Uri: electric (and gas) customers need solutions focused on the demand-side of the equation. Energy efficiency, demand response and other distributed energy resources are solutions that could improve resiliency, lower costs and help make our system more reliable.

Electric demand records were set (or would have been set if not for the grid failure) in February of 2021, and this summer, ERCOT set no fewer than 11 peak summer records

While the PUC in their blueprint has taken some small steps forward as mentioned, they have failed to act on others, but do have the power to do so. To be clear, the PUCT has taken some steps on the demand side including:

- Opening up a pilot project on distributed energy resources including "Virtual Power Plants" that could allow customers through aggregation to participate in the energy market;
- Ordering ERCOT to pursue nodal pricing for demand response, although the protocol revisions appear to be stuck currently.

However, the Sierra Club remains concerned that the types of solutions being developed by the PUC and ERCOT – particularly those in Phase 2 - will create huge costs to consumers large and

small, and will not guarantee the reliable and resilient system required for Texas's health, and well-being. We have serious concerns with the process thus far, and want to be sure that any Phase 2 changes must undergo a robust cost-benefit analysis with opportunities for stakeholder and public input. Recently, the PUCT hired a third-party consultant to review Phase 2 potential changes. We are concerned that the consultant hired by the PUCT to review at least three proposed changes to our market is actually the same consultant that was hired by three large generation companies to arrive at a solution (known as the Load-Serving Entity Reliability Obligation). We are concerned by reports that the PUCT may be trying to make a decision by December on a major market reform, just before the legislature has had an opportunity to weigh in on these important decisions.

Prices are Hurting Customers Right now

Electric consumers are getting hit by major hikes in electricity prices due to a variety of factors. First, gas as a commodity is higher and with gas representing approximately half of our energy use, wholesale prices are up. Second, the high electricity use and more robust price-adder adopted by the Commission has increased the number of times we are hitting price caps. Third, ERCOT has adopted an overly conservative operating procedures, meaning they are buying more operating reserves than ever before and ordering power plants to be online through RUC orders. Fourth, a failure to invest in transmission solutions means that congestion costs have more than doubled this year, with in particular wind and solar companies being ordered to scale back their use due to congested lines. Eventually, implementation of SB 1281 may help this situation but PUCT is still engaged in rulemaking. Finally, some customers are already facing extra costs due to the securitization of the ERCOT Uri wholesale costs, as well as individual debts by certain public cooperatives and municipal utilities. Private TDUs are also in the process of raising rates.

Recently, the Independent Market Monitor found that through the first seven months of 2022, costs were more than \$2 billion higher in 2022 than in 2021 for the market as a whole just from changes to the ORDC. Real-time congestion costs are also rising. They stood at \$2.1 billion at the end of July, compared with \$2.1 billion for all of 2021.-https://www.ercot.com/files/docs/2022/08/12/7%20Independent%20Market%20Monitor%20(I MM)%20Report.pdf

In fact, recent data shows that average prices in the retail electric market have risen in just a year from an average of 10 to 12 cents per kilowatt hour to one that is more than 20 cents today. A search on Power to Choose in the Dallas area today shows average rates for a one-year fixed contract are in the 15 to 18 cents per kilowatt hour range, a significant increase from just a year ago.

Many Texans have huge energy burdens, particularly in light of the record-setting high temperatures, and Texas has no state discount program, meaning we rely largely on federal funds to help lower-income Texans with their energy bills.

The PUCT need to include the public more

It is difficult for the public to engage in PUCT meetings, and rulemakings, and to understand where to find basic information on their website. The Sierra Club has sent suggestions to the Sunset Commission on how to put the public back into the PUCT, and is pleased with their recent decision to open a new Office of Public Engagement. We look forward to working with the Sunset Commission and the legislature to make sure the public is better represented at Commission meetings.

A major oversight: The Failure to Address Record-Breaking Demand through Energy Efficiency and Demand Response

In its Blueprint, the four commissioners approved a plan that in Phase 1 stated they would improve the efficiency of the load-management and other programs run by the state's eight private Transmission and Distribution Utilities. However, thus far, they have failed to open up a rulemaking to do this, and in the meantime these same utilities have already submitted their plans for 2023, and their plans on how to charge ratepayers for meeting those plans.

In response, due to the lack of action by the Commission, on August 10th, the Lone Star Chapter of the Sierra Club submitted a petition for rulemaking with the Public Utility Commission of Texas (PUC) that would require the state's eight private utilities to nearly double their peak demand goals and quadruple their energy saving goals over the next three years. This would benefit thousands of Texas families and small businesses and would help make our grid more resilient and reliable. The PUC has until October 11th to either approve the petition and move forward with the recommended rulemaking process, reject the petition, or open a separate project related to the petition. Any stakeholder or member of the public can view our petition and make comments until Sep. 16. A copy of our petition and any stakeholder input can be found at the PUC's interchange through Project Number 53971.

Why is the Sierra Club taking this action?

Quite simply, we are tired of waiting. To its credit, the PUC opened a broad project on the market changes needed to fix the grid, and it did hold a series of workshops in 2021 to assess the needed changes. Among the issues discussed were how to increase the energy efficiency of homes and businesses and how to make sure customers have access to programs that help shift demand during peak summer days and cold winter mornings. Nevertheless, despite approving some changes in December 2021 and promising to assess the programs run by private utilities, meaningful progress just hasn't happened.

In the meantime, all eight of these private transmission and distribution utilities have filed their energy efficiency plans for 2023, and none offer any substantial changes. What's worse: Under current PUC rules, these same utilities are able to offer a "performance bonus" that sends roughly a third of their proposed budget back to utility shareholders – and not to programs that help customers save energy and money.

What's in the petition for rulemaking?

We are proposing eight basic changes to the requirements under PUC rules.

- 1. Raise peak goals. We call on the PUC to raise the minimum goals set by the Legislature 0.4% of peak summer demand to 0.7% by 2025. Why 0.7%? Well, back in the day, more than 10 years ago, the Legislature asked the PUC to assess whether 0.7% would be a reasonable goal, and an independent study said *yes it was*. The PUC never acted. Let's finally do what we should have done a decade ago.
- 2. Make sure the utilities can meet the summer peak goal and an equivalent winter peak goal. We all saw what happened during Winter Storm Uri. A lack of supply coupled with a huge spike in demand caused massive brownouts, deaths, and suffering. And yet utilities are almost exclusively focused on summer programs even though state statute requires that utilities focus on both. We want to change the PUC rules to also require that utilities do both.
- 3. **Substantially increase energy savings goals.** In addition to peak goals, the PUC requires utilities to meet energy savings goals. But these are so low they are meaningless. Our petition would raise the goals for our utility programs from about 0.25% of total residential and commercial consumption today to 1% by 2025.
- 4. Make a more targeted investment in programs that help Texans who struggle to pay their utility bills. Under our petition, utilities would have to double what they spend on so-called "hard-to-reach" and "low-income" programs from 10% of their program budget to 20% over the next three years.
- 5. Give utilities "credit" for reducing transmission and distribution investments because of reduced demand on the system. Each year, the PUC judges utilities on a cost-effectivity test based on the amount of generation capacity that is reduced because of the energy efficiency programs and the amount of reduced energy costs. We are proposing to add a third category delayed infrastructure needs in distribution and transmission investments due to reduced energy demand that would determine if the programs are cost-effective, giving more flexibility to the utilities.
- 6. Judge the utility on the cost-effectiveness of the portfolio of its programs, not on each individual program. This again will give an incentive to utilities to offer more programs even if some are not as cost-effective as others, as long as the total portfolio of programs is cost effective.
- 7. Double the residential and commercial cost cap over the next three years. For residential consumers, the maximum amount a utility can currently spend on energy efficiency programs is set by the PUC at \$1.43 cents per month on an average bill. Our proposal would increase this amount over the next three years to \$3, which is roughly what is spent by the leading public utilities in Texas, like Austin Energy and CPS Energy. We proposed a similar increase in the commercial cost cap.
- 8. Limit the performance bonuses that utilities can earn for exceeding the mandated goals. The current approach lets utilities claim up to 10% of the avoided costs of the programs as bonuses. We would limit it to 15% of the program costs, essentially a return on their investment. Wait, isn't 15% more than 10%? Yes, but because total avoided

costs are much larger than program costs, large private utilities like Oncor and CenterPoint Energy have been earning bonuses of roughly 30 to 40% of the total program budget, which is extreme.

The Commission is expected to take action on our petition either at their next meeting on September 29th or on October 6th. While it is unlikely they will adopt our petition as is, we are hopeful they will open up a new project to consider some of the changes we are suggesting.

In the wake of the issues that arose during Winter Storm Uri, in fact, now is the time to ramp up programs that will help us create a more resilient grid and directly help those impacted during winter and summer peaks. While the PUCT has taken some small steps to recognize the importance of looking at the demand side such as increasing Emergency Response Programs, they have yet to address the energy efficiency programs run by the utilities themselves. Now, Oncor and other utilities are proposing a fee charged to residential and commercial customers to pay for the programs. The PUCT can and should require the utilities to meet higher program goals and prioritize programs that help make the grid more resilient.

Their plans are problematic. Utilities are essentially letting the public know they are totally fine with doing about the same in 2023 as they are doing in 2022 and as they did in 2021. The name of the game here is embracing the status quo, year after year, even though natural gas prices are skyrocketing, our grid failed Texans, and we continue to face grid unpredictability as our state rapidly develops amid extreme temperatures. Energy efficiency demand reductions and savings would remain the same if the PUCT approves these plans.

Worse, using existing rules, these same utilities are proposing to spend roughly a third of their budgets on performance bonuses for meeting the 2021 goals. As an example, the largest utility, Oncor, is proposing to spend about \$83 million next year as part of its energy efficiency filing. While \$83 million may seem like a substantial amount to help consumers reduce their bills and use less energy, the Sierra Club would point out that that total includes more than \$28 million in proposed performance bonuses, which are to pay a bonus for merely meeting the lowest goals in the country. While legal, it means that over one-third of the proposed budget being paid for by residential and commercial consumers would simply go to pay for a bonus for Oncor meeting and exceeding very modest demand reduction goals. Clearly these performance bonuses are not sustainable and provide no direct benefit to ratepayers.

Table 1. Components of ONCOR's EECRF 2023 Filing

Category	Amount	Percent of Total
Energy Efficiency Incentives and Program Costs	\$51,665,337	62.20%

Performance Bonus	\$28,029,733	33.74%
Evaluation, Measurement and Verification	\$740,492	0.89%
Under-recovery of 2021 Program Costs	\$2,603,394	3.31%
2021 Rate-Case Expenses	\$18,953	0.02%
Total	\$83,058,209	100%

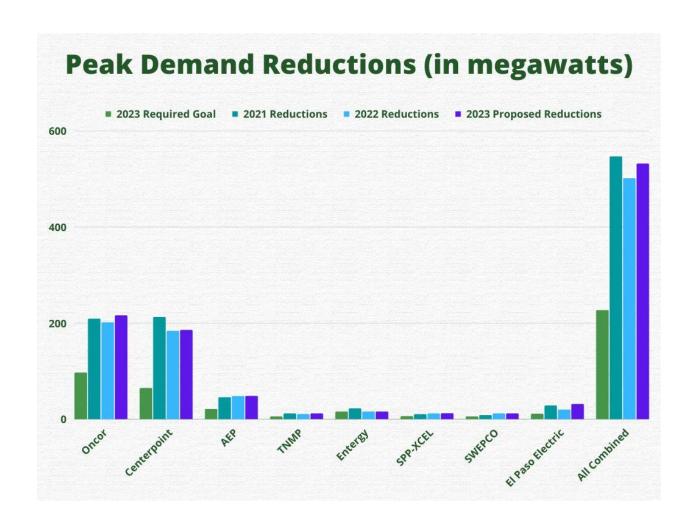
Part of the problem is how they are determined. As an example, in this case, ONCOR shows that it met its energy savings goal, and exceeded its demand reduction goal by well more than 20%, meaning it qualifies for a 10% bonus. However, that bonus is not on top of the budget but is actually a percentage of the "avoided costs" achieved through the demand and energy savings reduction, which Oncor using PUCT rules, has calculated at \$280 million. Thus, ONCOR is able to claim up to a maximum of 10% of this total, as long as they exceed the goal by 20% and are under the cost cap.

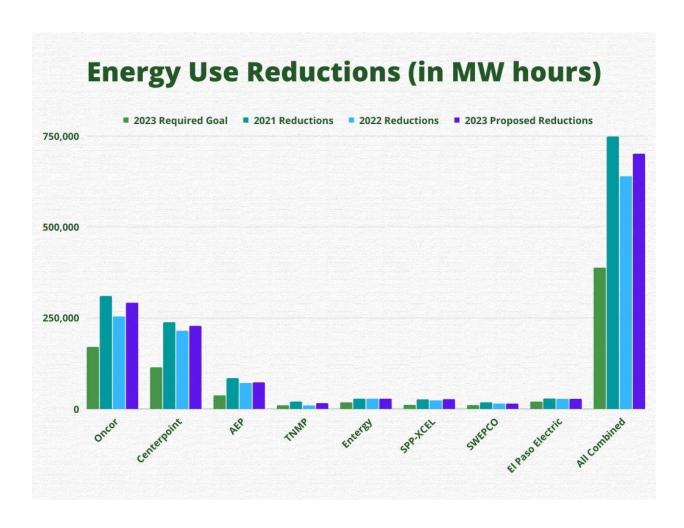
ONCOR is not alone. CenterPoint Energy is proposing to spend some \$23 million on performance bonuses - over a third of its budget - and Entergy and SPS are also proposing to spend almost a third of their budgets on performance bonuses.

How Much Would the Utilities Reduce Demand Overall through their Proposed Plans?

Overall, the eight utilities are proposing to reduce peak demand in 2023 by 531 megawatts. While this is about two-and-a-half times the required goal of 227 MWs, it is lower than what they achieved in 2021 (547 MWs) and just barely above what they expect to achieve this year (501 MWs). The utilities expect to reduce overall energy sales by 701,043 MW hours, about double the required reduction of 387,952 MWhs, but down slightly from what they achieved in 2021 (748,135 MWhs) and just slightly above the 2022 expected total (638,887 MWhs).

But wait, the utilities are essentially doubling their reductions above what's required — ain't that worthy of praise? Well, the Legislature set these goals more than 10 years ago and has not tweaked them since 2011. And, utilities can earn a performance bonus that essentially pays them ratepayer money for exceeding these outdated and underwhelming goals. Utilities are willing to do the bare minimum — design programs to exceed required goals and earn a healthy bonus — but they are unwilling to propose meaningful reductions. And paving the way is a PUCT that has yet to prioritize these programs, even after the winter storm.

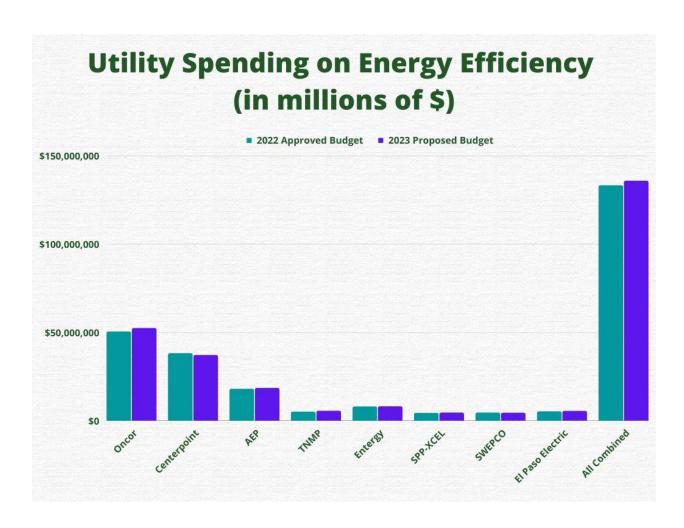




How much money are utilities spending?

Just like their lackluster reduction ambitions, the utilities are proposing spending nearly the same on energy efficiency programs: roughly \$135.8 million next year vs. \$133 million in 2022. This does not include the expensive performance bonuses, which are about a third of total costs. And the cost impact on the average residential household is very similar in 2023 as it was in 2022, between \$0.98 and \$1.74 per month depending on the utility.

While the PUCT should absolutely ensure that costs on residential and commercial consumers are kept reasonable, there is room to grow the programs especially considering that paying a little for energy efficiency saves ratepayers money. And, seven of the eight utilities are still below the "cost caps" imposed by the PUCT. Austin Energy residential customers, for example, spend approximately \$2.40 per month to support energy efficiency and local solar programs, and CPS Energy recently adopted a budget of approximately \$3.50 per month over the next five years on the average bill to support energy efficiency programs.



Note: The Chart Above Only Includes Administrative and Incentive Spending, and Does not Include the Proposed Performance Bonus, which are an additional \$60 million.

To put this in perspective, average electricity prices are already up some 20 percent this year compared to last year, with the high cost of gas and the extra "insurance" that the Electric Reliability Council of Texas (ERCOT) is purchasing to make the system more reliable. These rising costs could be tampered with a small investment increase in robust energy efficiency programs.

Just the Facts MA'Am: Electric demand setting records.

- State regulators' official forecast, in megawatts, for "extreme" peak winter electricity demand in Texas for winter 2020/2021: 67,208
- · Actual peak demand reached on Feb. 16, 2021: 76,819

Summer Peak Demand Record, ERCOT: 79,826 MW, July 20th, 2022;

Previous Summer Peak Demand Record: 74,820, August 12, 2019

- Percentage of load that is residential and small commercial during winter and summer peak events: 65%
- Percentage of Texas homes heated by electricity in 1970: 8
- In 2018: 61
- Percentage of Texas residences with inadequate insulation: 50
- · First state to establish an energy efficiency statewide goal: Texas
- · Last time Texas established updated energy efficiency goals: 2011 (SB
- Number of states that have set an energy efficiency goal: 29
- Rank of Texas in states that have set an energy efficiency goal in terms of savings achieved: 29
- Current goals are set at 0.4% of either winter or summer peak, with a modest corresponding energy savings goal
- · Current cost of the programs: 2.3 cents per kilowatt reduced, and about 1 cent per kilowatt hour saved over the life of the measures
- Last time Texas updated its base energy codes for new construction: 2015 (with implementation in 2016)

Recommendations:

- Energy Efficiency: raise the savings goals and peak demand goals through PUC rulemaking, and reduce the performance bonus, and if not, through legislation and focus the goal on energy savings, flexible demand reduction during winter and summer peaks and customer needs
- Create a state-backed revolving loan program at SECO for residential and small commercial customers to improve their homes, apartments and buildings, potentially using \$15 million available in federal IIJA money;
- Demand Response: Bring demand response (shifting energy use during peak) into energy market, pay nodal pricing and establish a load obligation goal on demand response that is tradeable
- Expand the use of demand response in our ancillary reliability services
- Customer-sited and distributed energy: Enable third-parties, municipal utilities, electric
 cooperatives and retail electric providers to both receive nodal pricing for distributed
 energy resources, and enable aggregation so that solar, storage, demand response and
 other resources on the distributed grid can fully compete in the energy and ancillary
 markets. We need more than just settlement-only distributed generation.
- Assure that energy produced from customer-sited and distributed generation is paid the fair market nodal price for produced energy.

- Building codes Raise the codes statewide and give counties more express authority to adopt, enforce and inspect buildings.
- For new buildings, adopt the latest building code, including the 2021 energy codes. While SECO has opened up a public comment period right now on potential adoption of the codes, it is unclear whether they will ultimately take action because of potential conflicts with state statute. *The legislature must fix this loophole.*
- According to the PNNL labs, adopting the new codes would lead to a five percent reduction in energy use in residential and a 10 percent reduction in energy use in commercial construction compared to the last version of the codes.

For More Info: Cyrus Reed, Sierra Club, 512-740-4086; cyrus.reed@sierraclub.org

Important approved legislation that has helped (or would have helped) on codes, demand response, distributed generation, and energy efficiency

2011 established the current energy efficiency goals

SB 1125 Senate Author: Carona (R)

House Sponsor: Anchia (D)

Caption:

Relating to energy efficiency goals and programs and the participation of loads in certain energy markets.

2015 Building code bills adopted the 2015 codes and required SECO to review future codes

2015 - HB 1736

House Author: <u>Villalba, Jason</u> (R) Senate Sponsor: <u>Fraser, Troy</u> (R)

Caption:

Relating to building energy efficiency performance standards.

2021 Code Legislation approved

Raised the base building code for the state to 2012 within cities; and provided flexibility for builders to use an alternative compliance path for future energy codes

<u>HB 738</u>	Paul, Dennis(R) Nichols, Robert(R)	Relating to the residential building codes of municipalities.
HB 3215	Geren, Charlie(R) Hughes, Bryan(R)	Relating to energy efficiency building standards.

Bills on building codes that would have helped make future grid failures less likely

Bill Number	Author	Caption
HB 1034	Goodwin	Relating to the authority of a county to adopt a fire or wildland-urban interface code.
HB 4496	Hinojosa, Gina	Relating to municipal and county building codes.
SB 1724	Eckhardt, Sarah	Relating to building codes applicable in the unincorporated areas of a county.

Allowing Distributed Energy Resources to Compete in ERCOT (Bills Filed, did Not Pass)

SB 1479 Johnson, Nathan(D) Relating to the participation of distributed energy resources in the ERCOT market.

Expanding Energy Efficiency Programs in Texas (Bills Filed, did Not Pass)

Bill Number	Author	Caption
HB 2359	Reynolds, Ron	Related to Energy Efficiency Goals for Electric Utilities
HB 4556	Anchia, Rafael	Related to Energy Efficiency Goals for Electric Utilities
SB 243	Eckhardt, Sarah	Related to Energy Efficiency Goals for Electric Utilities
HB 1533	Reynolds, Ron	Relation to the creation of an energy efficiency loan guarantee program under the Texas emissions reduction plan

Expanding Demand Response Programs in Texas (Bills Filed, did Not Pass)

Bill Number	Author	Caption
HB 3362	Reynolds, Ron	Related to the provision of electricity service in this state
SB 2052	Menendez, Jose	Related to the provision of electricity service in this state