



SIERRA CLUB

LONE STAR CHAPTER

To: The Honorable Dr. Charles Schwertner, Chair
Members, Senate Committee on Business and Commerce
From: Cyrus Reed, Sierra Club, Lone Star Chapter, cyrus.reed@sierraclub.org,
512-888-9411
Re: SB 114 (Menendez), Relating to the provision of electricity service in the ERCOT power region

April 13, 2023

The Lone Star Chapter of the Sierra Club is very supportive of SB 114 by Menendez, which would create goals for residential demand response by retail electric providers in the competitive market. While large industrial and commercial consumers are active within ERCOT in controlling and managing their electric demand through energy management systems, and providing ancillary services, for the most part, residential demand response has been only a fraction of the market. Few retail electric providers offer programs to consumers, although there has been some growth in recent years. Indeed, most growth in demand is related directly to residential peak load use.

Over the last two years, ERCOT set record summer peaks 11 times, while also setting winter peaks both during winter storm Uri, and earlier this year when ERCOT set a winter peak. Information from ERCOT indicates that these peaks were most closely related to residential demand due to heating and cooling. With continued growth in population, migration and new industrial loads, and climate extremes, assuring that residential consumers have tools to better control their energy use, particularly in peak times is a necessity. Texas's ERCOT grid would be made more resilient, cheaper, flexible and ultimately better for consumers if residential and small commercial entities could better control their electric use through the use of demand response.

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

ERCOT Facts, Summer vs Winter Peak

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

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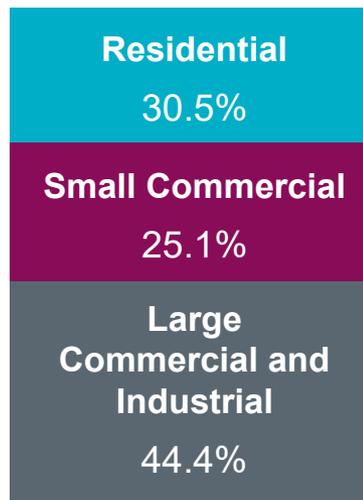
Whether through smart controllable thermostat programs, controlling pool pumps and appliances, controllable water heaters or other programs, requiring residential electric providers to offer programs and meet certain goals would be the easiest way to create a market for these resources. We are supportive of SB 114 as filed - which would set a goal of five percent of residential peak summer and winter demand by 2027. However, we agree that rather than requiring every REP to offer programs, it might make sense to set a goal for the state, and then allow those REPs that wish to offer programs to compete for customers to meet these goals.

SB 114 could help Texas reduce peak demand by some 2,000 MWs within a few years. We do believe that in addition, Texas could use its present programs offered through TDUs - Transmission and Distribution Utilities - to provide incentives to customers through the retail electric providers.

By combining the required goals on TDUs in Chapter 39.905 with the new goals for Retail Electric Providers in new Chapter 39.919, Texas could create a more reliable, cheaper and better grid for residential consumers.

Summer Weather Impacts on Load by Customer Type

Monday, March 11, 2019
5:00 p.m.
ERCOT Load: 40,158 MW
Temperature in Dallas: 63°



Monday, Aug. 12, 2019
5:00 p.m.
ERCOT Load: 74,898 MW
Temperature in Dallas: 101°



>35,000 MW of weather-sensitive load -- 46% of peak

- Customer class breakdown is for competitive choice areas; percentages are extrapolated for municipals and co-ops to achieve region-wide estimate
- Large C&I are IDR Meter Required (>700kW)
- 15-minute demand values

Customer class share of all-time summer peak demand

2011 compared to 2019

Wednesday, Aug. 3, 2011
5:00 p.m.
ERCOT Load: 68,416 MW
Temperature in Dallas: 109°



Monday, Aug. 12, 2019
5:00 p.m.
ERCOT Load: 74,898 MW
Temperature in Dallas: 101°

- 15-minute settlement interval demand values
- Customer class breakdown is for competitive choice areas; percentages are extrapolated for municipally owned utilities and electric cooperatives to achieve region-wide estimate
- Large C&I are IDR Meter Required (>700kW)

Winter Weather Impacts on Load by Customer Type

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°



>29,000 MW of weather-sensitive load -- 44% of peak

- Customer class breakdown is for competitive choice areas; percentages are extrapolated for municipals and co-ops to achieve region-wide estimate
- Large C&I are IDR Meter Required (>700kW)
- 15-minute demand values