Introduction

ERCOT seeks information from Load Serving Entities (LSEs) on their customers' Load response capabilities as required by Public Utility Commission of Texas (PUCT) rule. The rule requirement applies to LSEs in Non-Opt in Entity service territories as well as to Retail Electric Providers serving Load in competitive choice areas of the ERCOT Region.

Your response to this questionnaire will assist ERCOT in operating the electric grid reliably and efficiently. A better understanding of the amount of responsive Load and numbers of retail energy consumers actively responding to Load reduction signals will help ERCOT anticipate how the total demand on the electric system is subject to change during periods of high market prices, anticipated transmission charges (4CP events), system peaks, emergency conditions and other situations. This information will also assist ERCOT and its stakeholders in designing new programs and market features to facilitate demand response, as required by state and federal orders and policies.

Please answer all questions using the most current available data from your customer base. ERCOT anticipates requesting this information annually, but may seek additional information at any time via a re-issue or revised version of this questionnaire.

ERCOT will track responses and results of this survey by the DUNS numbers of LSEs. If you represent more than one LSE, it is not necessary to complete a survey for each; however, please make sure that the DUNS numbers for all LSEs that you represent are entered in the Contact Information section. If you wish to complete more than one survey to distinguish product offerings by different LSEs that you represent, additional surveys may be initiated by clicking the same hyperlink provided in the Market Notice.

Many questions in this survey reference specific customer types. Please use the following guide for identifying these customer types:

Customer Type	Description
Large Commercial & Industrial (C&I)	>700 kW of peak demand
Mid-size Commercial	50 kW–700 kW of peak demand
Small Commercial	<50 kW of peak demand
Residential	Residential

General Questions

1. Contact Information

Company Name	
Name of person completing survey	
Email Address	

2. List DUNS number(s) below for all LSEs. If this survey applies to more than one LSE, list information for all.

LSE 1 DUNS Number	
LSE 2 DUNS Number	
LSE 3 DUNS Number	
LSE 4 DUNS Number	
LSE 5 DUNS Number	
LSE 6 DUNS Number	
LSE 7 DUNS Number	
LSE 8 DUNS Number	
LSE 9 DUNS Number	
LSE 10 DUNS Number	
LSE 11 DUNS Number	
LSE 12 DUNS Number	
LSE 13 DUNS Number	
LSE 14 DUNS Number	
LSE 15 DUNS Number	

3. Is your company currently serving load in the ERCOT Region?

M Yes

jn ^{No}

4. Describe your overall customer base (all customers for whom you serve load) according to the customer types described above (number of customers):

Large C&I

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Midsize Commerial	
Small Commerial	
Residential	

5. What *percentage* of the following customer groups are currently being served by advanced meters, sometimes known as "smart meters". Note that Large C&I customers are already considered to have advanced metering.

Midsize Commercial	
Small Commercial	
Residential	

6. Is your company currently offering any programs that encourage load response? These programs include Time Of Use Pricing, Real Time Pricing (including MCPE products), 4CP Load shedding, Critical Peak Pricing or Direct Load Control.

jm ^{Yes} jm ^{No}

Time Of Use (TOU)

These questions relate to customers with whom your company has contracts for time-of-use (TOU) pricing. Time of use refers to time-differentiated pricing based on schedules known in advance and recorded on timeof-use meters. (As used here, TOU does not apply to seasonal fuel factor-related rate adjustments). If you have no product offerings in this area, you may scroll to the bottom of this page and click "Next."

Please enter approximate totals in each row:

1. Number of TOU Customers

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

2. Amount of customer Load enrolled in TOU Programs (approximate combined peak demand in MW)

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

3. Amount of customer demand that appears to shift from on-peak to off-peak as a result of TOU pricing(in MW).

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

4. Has your company conducted any studies or analyses of the impacts of TOU prices on customer load-shifting?

jn ^{Yes}

5. Which of the following were factors in your decision to offer a TOU product? (check all that apply)

- e Wholesale cost of electric energy
- \in Delivery (transmission or distribution) constraints
- € Grid reliability
- e Additional customer product offering
- € Other (please specify)

Real Time Pricing (RTP)

These questions relate to the customers your company has under contract for "real-time" pricing (RTP), defined as retail prices that change continuously based on the ERCOT Market Clearing Price of Energy (MCPE) or other real-time wholesale price indicator. Retail Electric Providers serving in the competitive areas of ERCOT sometimes refer to these as "MCPE Products." If you have no product offerings in this area, you may scroll to the bottom of this page and click "Next."

1. Number of RTP (MCPE) Customers

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

2. Total amount of customer load enrolled in this program (combined MW of peak load)

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

3. Potential demand reduction (MW) that can be achieved during high price periods

Large C&I	
Midsize Commercial	

ERCOT	Load Resp	onse Survey
Small C	Commercial	
Resider	ntial	
their Lo and ind what p	oad at certain pr dicate their pote ercentage of the	PE pricing plans may be subject to contractual provisions that obligate or encourage them to reduce e points. Please indicate below how many of your company's customers are subject to such contracts cial demand reduction (in MW) and their contracted RTP or MCPE strike points. Also, please indicate customers' Load reductions at the RTP or MCPE price points are voluntary or required (a "required" dicate that a penalty above and beyond exposure to the real-time price applies).
4. Es	timated de	mand reduction capability (MW) at these price points:
<\$300		
\$301-\$	400	
\$401-\$	500	

5. What *percentage* of the customers' Load reductions at the RTP or MCPE price points are voluntary or mandatory:

% Voluntary	
% Mandatory	

\$501-\$600

\$601-\$700

\$701-\$800

\$801-\$900

\$901-\$1,000

>\$1,000

6. Customers responding to price on RTP or MCPE pricing plans may reduce Load via automated systems or manual deployment. Indicate the approximate *percentage* of customers in each category:

% Automated	
% Manual	

7. Indicate whether your customers have identified any of the following as potential concerns that inhibit price response in the ERCOT Region:

E Unpredictability of high priced periods

OT Load Response Survey			
Insufficient prior notice of pricing (lack of sufficient response time)			
Lack of price certainty (possibility of prices being mitigated or changed)			
Not applicable			
Other (please be specific)			
8. Currently, the MCPE is known and available approximately eight to 10 minutes prior to the operating interval. In general, is this notice period sufficient for customers to respond efficiently to the MCPE?			
Not applicable			
Yes			
No			
If you answered "no",indicate what a more appropriate lead time would be.			
9. What other method of publishing or distributing the MCPE would help?			

10. Would guaranteed high MCPEs during scarcity or emergency conditions, such as during Emergency Electric Curtailment Plan events, provide more incentive for your customers to respond to prices?

jn ^{Yes}

jn ^{No}

Not applicable

If you answered "yes", estimate the number of additional MW of demand response that you could expect from your customers if such prices were guaranteed (through administratively set prices) during scarcity or emergency conditions.

Four Coincident Peak (4CP)

This question relates to the approximate number of your customers that you know reduce Load in response to signals predicting the Four Coincident Peak (4CP) intervals during summer months as a way of reducing transmission charges. These 4CP signals may be provided either by your company or by a third party. Enter the total number of customers, their estimated combined peak Load (during normal business conditions; i.e., during non 4CP intervals), and their estimated total amount of 4CP demand reduction (in MW). Note: The benefits of 4CP Load reductions accrue only to customers with Interval Data Recorder meters, which are almost exclusively in the largest two customer groups.

If you have no product offerings or known customers in this area, you may scroll to the bottom of this page and click "Next."

1. Number of 4CP Customers

Large C&I

2. Combined peak demand during non 4-CP periods

Large C&I

Midsize Commercial

Midsize Commercial

3. Amount of 4CP demand reduction (MW)

Large C&I	
Midsize Commercial	

Critical Peak Pricing (CPP)

This series of questions relates to any customers with whom your company has a contract for critical peak pricing (CPP) – special, typically very high prices communicated to customers a limited number of times per year as incentives for them to reduce their Load. Note: This question pertains to individual customers who curtail Load voluntarily in response to prices. You should provide information about direct Load control programs or group Load curtailment programs in response to questions in the Direct Load Control Section of this survey.

If you have no product offerings in this area, you may scroll to the bottom of this page and click "Next."

1. Number of CPP customers

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

2. Combined peak demand of these customers

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

3. Amount of demand reduction (MW) in response to CPP

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

4. Number of customers at CPP Price Point (\$per MWh)

<\$300	
\$301-\$400	
\$401-\$500	
\$501-\$600	

\$601-\$700	
\$701-\$800	
\$801-\$900	
\$901-\$1,000	
>\$1,000	

5. Combined peak demand (MW) of these customers

<\$300	
\$301-\$400	
\$401-\$500	
\$501-\$600	
\$601-\$700	
\$701-\$800	
\$801-\$900	
\$901-\$1,000	
>\$1,000	

6. Amount of demand reduction (MW) in response to CPP

<\$300	
\$301-\$400	
\$401-\$500	
\$501-\$600	
\$601-\$700	
\$701-\$800	
\$801-\$900	
\$901-\$1,000	
>\$1,000	

7. Indicate how these customers receive these critical peak price signals:

- From your company
- From a third-party provider of pricing information
- Directly from the ERCOT website
- j∩ Not applicable
- jn Other (please specify)

8. Describe any incentive(s) offered to these CPP customers to recruit them into the CPP program(s) (for example, overall price reduction, free technology, etc.). Be specific; if more than one program is in place, provide information on all.



Direct Load Control (DLC)

This set of questions relates to any customers with whom your company has a contract for Direct Load Control (DLC) – agreements to allow their Load to be remotely curtailed by another party (either your company, the Transmission & Distribution Service Provider, or other third party) under defined circumstances. Direct Load Control (also known as Group Load Curtailment) programs typically apply to groups of like customers whose Load is aggregated to achieve a particular Load reduction goal. The key difference between DLC programs and those referenced in other questions is that these customers' Load is controlled remotely by another party and not by the customers themselves.

If you have no product offerings in this area, you may scroll to the bottom of this page and click "Next."

1. Number of DLC Customers

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

2. Estimated demand reduction from DLC (MW)

Large C&I	
Midsize Commercial	
Small Commercial	
Residential	

OT Load Response Survey
Entity that controls the Load reduction
LSE
QSE
TDSP
Other (please specify)

4. Indicate an approximate number of DLC customers next to each type of technology used to control their load; the total number may exceed the total number of customers under contract, as identified in item 1 above, if multiple technologies per Load site are in use.

Switches on air conditioners	
Switches on water heaters	
Switches on pool pumps	
Smart thermostats	
Other (please describe)	
Other (please describe)	
Other (please describe)	

5. Indicate the criteria applied to initiate these customers' Load curtailments (check all that apply):

- $\hat{\mathbf{e}}$ Wholesale price signals
- € Local grid reliability
- \in Local transmission congestion
- Anticipation of a "4CP" monthly summer peak used to allocate transmission costs in ERCOT
- e Regional grid reliability (including ERCOT-declared Emergency Electric Curtailment Plan events)
- e Other (please describe)

6. This question relates to incentives offered to these DLC customers to recruit them into the DLC program(s). Indicate how many customers are under contract by type of incentive and please provide a brief description of the incentive.

Financial (lower	
electricity	pricing,	bonus

	OT Load Response Survey
-	d, etc.)
Free	e technology
Oth	er
Oth	er
	marganey Interruptible Load Carvice
	mergency Interruptible Load Service
-	
1.	Is your company participating in or planning to participate in ERCOT's
En	nergency Interruptible Load Service?
m	Yes
in.	No
J	
-	
	I dentify any impediments or barriers that you are aware of to your
cu	istomers' participation in ELLS. (check all that apply)
ê	Not enough time to market the program
ē	Not enough time to develop contracts/legal agreements
ē	Not enough time to put technology in place
ē	Prospective Load already committed to other Load response programs
ê	Long-term uncertainty of the program
ê	Insufficient financial incentive
ē	Not applicable
ē	Other (please specify)

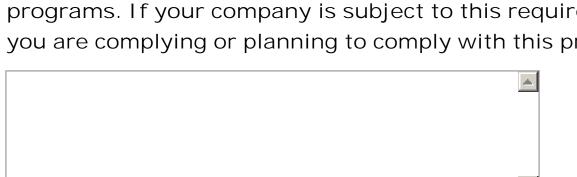
ERCOT Load Response Survey	
General Questions	
1. Does your company have plans to introduce any new Load reduction programs to your customers? Jm ^{Yes} Im ^{No}	'n

- 2. Check all programs you are planning to offer.
- E Time Of Use Pricing
- \in Real Time Pricing (MCPE)
- € 4CP Load shedding
- e Critical Peak Pricing
- € Direct Load Control
- \in Other (please specify)

3. The federal Energy Policy Act of 2005 (Section 111(d), "PURPA Standards") requires LSEs over a certain size to offer TOU, CPP, RTP, and load curtailment programs. If your company is subject to this requirement, describe here how you are complying or planning to comply with this provision.

4. Provide input on how additional Load response, including but not limited to the types of products described in this survey, may be enabled in the ERCOT Region. Input may include recommendations for market or market design changes or for how ERCOT staff or the ERCOT stakeholder process may better facilitate Load participation or demand response.

▲



5. Are ERCOT's current methods of providing information about real-time price, demand and operating conditions sufficient for your company to enable efficient communications to your customers?

 $\mathbf{\nabla}$

rn Yes

Sufficient but could use improvement

in ^{No}

If no, provide suggestions on how such provision of information could be improved.



THANK YOU!

Thank you for taking the time to answer the survey. If you have any questions please contact your ERCOT client services representative.