

# 4CP MANAGEMENT SYSTEM

## A DYNAMIC SOLUTION TO MANAGING 4CP CHARGES



## WHAT ARE 4CP CHARGES?

Every month your business is charged a fee – called a 4CP (Coincidental Peak) charge – based on how much electricity you consumed during a defined period in the previous year when electricity demand on the grid was at its highest.

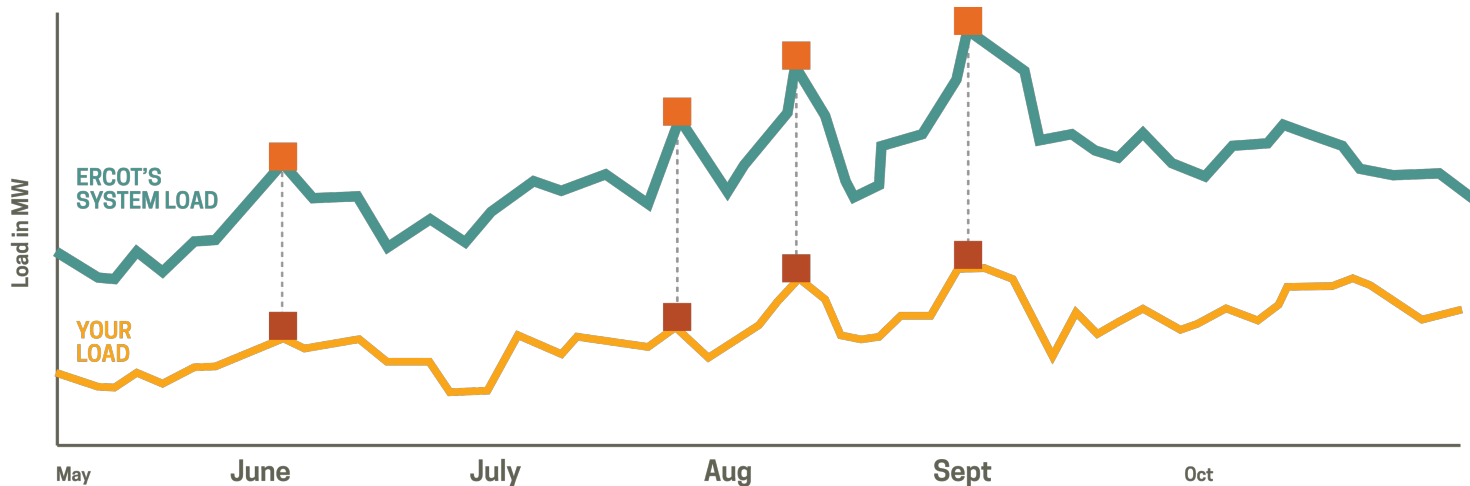
4CP stands for the average Coincident Peak demand reading set by your facility's electric load in each of the four (4) months associated with ERCOT's 4CP season (June, July, August and September).

# HOW ARE 4CP CHARGES ASSESSED?

June, July, August and September are the peak-generating months in Texas.

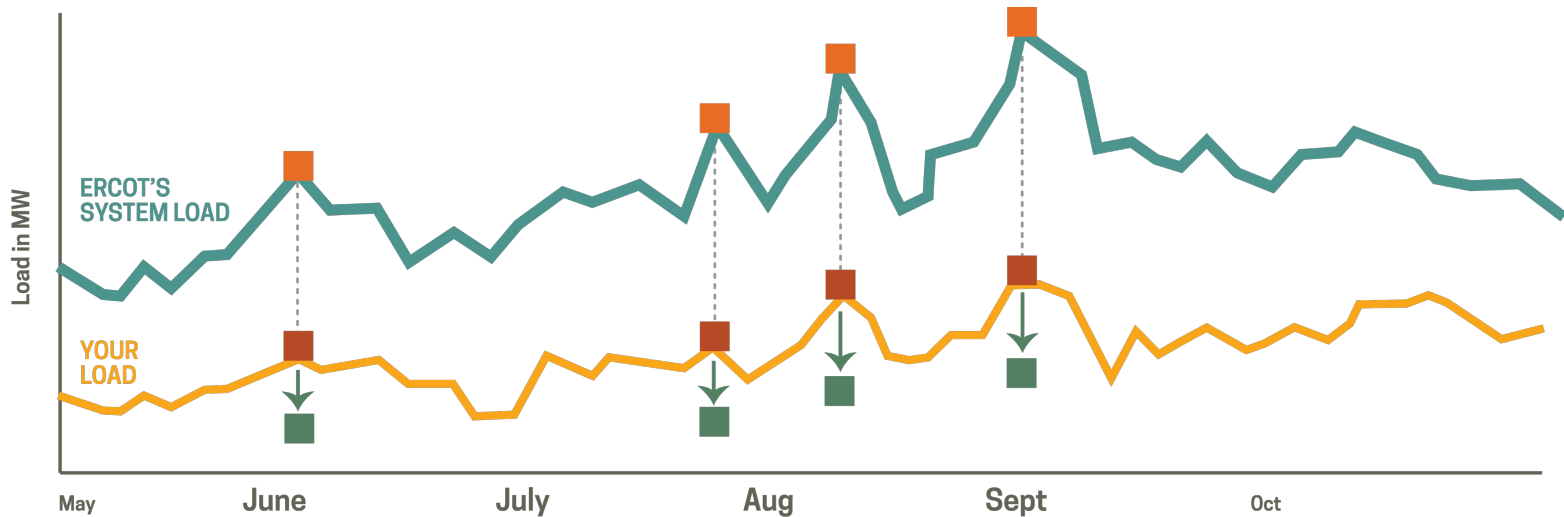
The 4CP ERCOT system peak (the single point in time when the grid hits the highest peak for the month) is set sometime during each of the four (4) months during this period.

Your 4CP charge is determined by your organization's peak load at the time ERCOT sets its monthly demand peak.



Your KW demand readings on each of the 4CP days (noted as red squares in the graphic) are averaged together. The resulting number is used to calculate the 4CP portion of your bill for the 12 months beginning with January meter readings taken during the following calendar year.

# CONSUMERS WHO USE LESS POWER ON ERCOT'S PEAK DAYS CAN SIGNIFICANTLY CUT THEIR 4CP CHARGES FOR THE COMING YEAR.



By lowering your consumption on ERCOT'S 4 peak days (noted as green squares in the chart above), your organization will incur a lower 4CP value which will lead to lower 4CP charges on your electric bill the following year.

# 4CP CHARGES ARE A SIGNIFICANT PART OF YOUR ENERGY BILL

4CP charges can account for up to 30% of your organization's monthly electric bill.

## DELIVERY CHARGES

2/27/2014 to 3/27/2014	UCM	VOLUME	UNIT PRICE	AMOUNT
Basic Customer Administrative Charages	Each	1.00	38,840000	\$38.84
Delivery Point Charge	Each	1.0	1869.150000	\$1,869.15
Distribution Charge	Act Dmd Pwr Adj	37,265.10	3.199000	\$7,415.75
Nuclear Decommissioning Charge	Act Dmd Pwr Adj	37,265.1	0.002514	\$97.41
Stdby Firm Transmission Charge	Act Dmd Pwr Adj	8,550.26	0.064009	\$718.30
Lg Ind Non Firm Transition Charge	Act Dmd Pwr Adj	23,970.19	0.734184	\$17,598.53
<b>Point to Point Transmission - Firm Schedule 7</b>	<b>4CP Pwr Adj</b>	<b>21,446.9</b>	<b>2.0085</b>	<b>\$43,078.1</b>
TC2 Stdby Firm Transmission Charge	Act Dmd Pwr Adj	8,565.27	0.172197	\$1,473.19
TC2 Lg Ind Non Firm Transition Charge	Act Dmd Pwr Adj	23,970.04	1.986337	\$47,612.58
TC3 Stdby Firm Transmission Charge	Act Dmd Pwr Adj	8,562.17	0.073856	\$632.37
TC3 Lg Ind Non Firm Transition Charge	Act Dmd Pwr Adj	23,970.28	0.545948	\$13,086.48
Energy Efficiency Cost Recovery	kWh	16,333,000.00	-0.000126	(\$2,057.96)
<b>Transmission charge</b>	<b>4CP Pwr Adj</b>	<b>21,446.9</b>	<b>1.718</b>	<b>\$36,845.77</b>
Subtotal				\$163,406.51

# HOW CAN YOUR BUSINESS LOWER ITS 4CP CHARGES?

If you can curtail your energy consumption during periods of peak system load, you will lower your 4CP value, which in turn will reduce your power costs.

CPower's 4CP Management System can help you make this happen.



# CPOWER'S 4CP MANAGEMENT SYSTEM

**A lot of companies in ERCOT can predict 4CP charges.**

**CPower helps you seamlessly execute a 4CP management plan for optimized results.**

CPower's 4CP Management System predicts the 4CP (coincidental peak) hours based on grid-wide electric demands, weather data, historical grid information, and other variables.

We give you a complete 4CP tool set that provides key peak information in an easily digestible user interface on your desktop or mobile device.

CPower can AUTOMATE your 4CP management, taking the work and worry off your plate. Your curtailment plan is executed automatically.

CPower's system can also complement your existing demand response program(s), bringing more revenue to your organization.

# AUTOMATE. OPTIMIZE.

When it comes to keeping your business running smoothly, you've got a lot on your plate.

When it comes to seamlessly executing your 4CP management program with CPower, you've got nothing to worry about.

That's because when you automate your 4CP management, you don't have to do any of the work to curtail your energy consumption.

CPower's 4CP Management System makes it easy to earn top dollar for your curtailment efforts.





# HOW MUCH COULD YOU SAVE BY LOWERING YOUR 4CP CHARGES?

We've already discussed the fact that 4CP charges can account for up to 30% of your organization's monthly electric bill.

4CP charges vary from TDSP to TDSP and are charged under the TDSP's prevailing Transmission Cost Recovery Filing (TCRF) approved by the PUCT.

4CP charges are typically valued at \$40,000-45,000/ MW per year.

How much your organization can save by reducing your 4CP charges depends on what your 4CP charges currently are, and how effective your organization can curtail its electricity consumption at the proper times when 4CP charges are assessed.

# CPOWER'S 4CP MANAGEMENT SYSTEM

CPower puts powerful demand management tools in the palm of your hands with a complete 4CP management system on your desktop or mobile device.

CPower's 4CP Management software identifies the key peak hours in advance, and alerts you to the year-long savings available. You can then make the necessary, short-term reductions in consumption to lower your 4CP charges.

## CPower's model:

- Predicts the key hours based on grid-wide electric demands, weather data, historical grid information, and other variables
- Provides a seven day forecast, identifying likely critical peak days.
- Presents key peak demand information in an easily digestible user interface.
- Provides the information necessary to make an informed decision about when to take actions to reduce electric demand during these advantageous hours.

COMPOSE

Inbox  
Starred  
Important  
Sent Mail  
Drafts  
Circles  
Deleted Messages  
Notes  
Personal  
Travel  
Less  
Chats  
All Mail  
Spam (28)  
Trash  
Categories  
Receipts (9)

← → 📧 🗑️ 📧 📧 More

TO John H. Doe  
CC  
FROM CPower Energy Management  
SUBJECT ERCOT Weekly Forecast

Below please find the 4CP Management outlook for the upcoming 7 days. CPower is providing this information to assist you in preparing for the potential peak demand management next week. Please be aware that this is only a forecast and may change due to system conditions. As the week continues CPower will provide a Day Ahead Day Of notification if we determine the likelihood of a peak day is high.

9/24/2016 Saturday	9/25/2016 Sunday	9/26/2016 Monday	9/27/2016 Tuesday	9/28/2016 Wednesday	9/29/2016 Thursday
LOW	LOW	MEDIUM	HIGH	HIGH	LOW

↑ LIKELY PEAK DAYS UPCOMING WEEK ↑

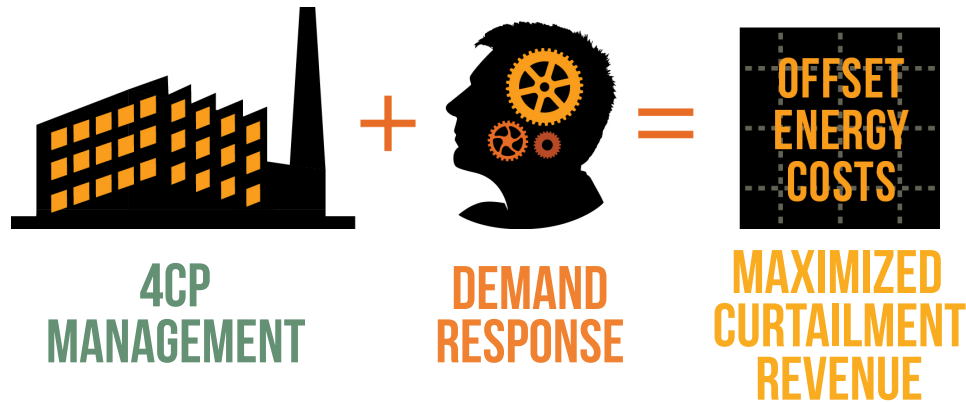
Below you will find a historical look back for the current summer. The recent CPower had predicted and sent notification indicating a peak demand ma

TO: John H. Doe  
CC  
FROM: CPower Energy Management  
SUBJECT: ERCOT Weekly Forecast  
Below please find the 4CP Management outlook for the upcoming 7 days.  
CPower is providing this information to assist you in preparing for the potential peak demand management next week. Please be aware that this is only a forecast and may change due to system conditions. As the week continues CPower will provide a Day Ahead notification then a Day Of notification if we determine the likelihood of a peak day is high.

CPower

# VALUE STACKING 4CP AND DEMAND RESPONSE

With CPower, not only can you manage down your 4CP charges, you can also earn additional revenue by participating in one of ERCOT's demand response programs.



# CPOWER'S 4CP MANAGEMENT SYSTEM

FEATURES	BENEFITS
7-day rolling forecast for likelihood of a critical peak	Keeps you informed of imminent peaks
Day-ahead warning (email) and Day-of alert (email)	Notifies you of when curtailment will be required
4-hour average recommended reduction window	Ensures that you are curtailing for the duration of time that capacity charges are incurred.
Intra-day peak shift alert	Advises on longer reduction due to high risk of peak shifting
3 supporting screens	Easily monitor and interpret information, including Peak Tracker screen that provides real-time reporting of 5 highest peaks to date and corresponding high alerts.
Combines with demand response	Provides additional revenue to help your company's bottom line.

# MODEL RESULTS

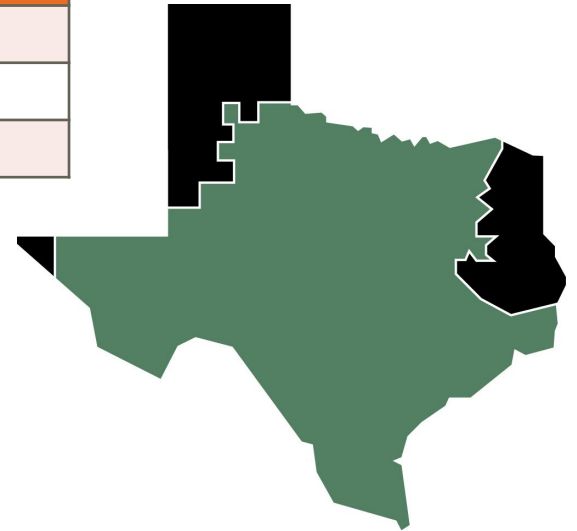
## HOW HAS CPOWER'S 4CP SOFTWARE FARED IN PREDICTING CRITICAL PEAK DAYS IN ERCOT?

### PREDICTION SUMMARY

YEAR	# HIGH PREDICTIONS	# 4CP HOURS PREDICTED
2015 4CP Season	12	4
2014 4CP Season	13	4
2013 4CP Season	13	4

### Peak Shift Analysis:

- Due to the nature of the ERCOT, daily load curve curtailments during predicted high days could result in possible shift in actual peak hour
- To mitigate the possible impact of peak hour shift, a standard curtailment duration of 2-3 hours will be recommended
- To ensure customers are aware of when there is an increased likelihood of a peak shift, we will send an Intra-Day notification extending the curtailment window.



# 4CP QUICK REVIEW

PROGRAM SUMMARY	
Number CP Days	4 (1 for each summer month)
Season Duration	Summer
Season Timing	June - September
Value/MW reduction for 2016/17	TBD (varies by TDSP)

CURTAILMENT ESTIMATE SUMMARY	
Avg. # High Calls Per Season	12
Typical Reduction Window	2 - 3 Hours
Peak-Shift Risk*	Medium

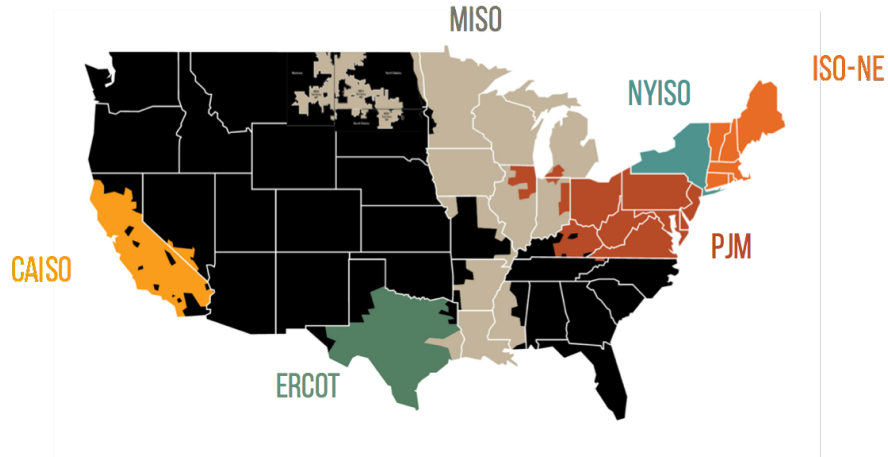
## PEAK SHIFT

\*Our analysis has shown that with so many consumers now trying to avoid critical peaks, there could be times that the mass curtailment is enough to shift the grid peak to another hour or another day.

CPower accounts for peak shift by issuing a larger curtailment window and additional peak-shift alerts where we see there is a high-risk day.

# CP REGION QUICK COMPARISON

	PJM PLC	ERCOT 4CP	NY ISO	ISO NE	IESO (Ontario) Global Adjustment
# CP Days	5	4 (1 per summer month)	2	1	5
Season Duration	Summer	Summer	Summer, Winter	Year Round	Year Round
Season Timing	June 1 – Sept 30	June 1 – Sept 30	May 1-Oct31, Nov1-April 30	June1-May31	May1-April 30



## CPOWER'S TEXAS TEAM...



Left to Right: Rory Castor, Director of Operations; Trevin Eckersley, VP & General Sales Manager; Peter Dotson-Westphalen, Compliance Officer; Courtney Ross, Senior Analyst; Vanessa Rocio, Engineer; Holly O'Neill, Account Manager; Jeff Armenta, Account Executive; Adam Prescott, Account Executive; Paul Lange, Senior Analyst, Field Operations

At CPower, we understand that energy management is not a one-size-fits-all endeavor.  
That's why we take the time to learn about the intricacies of your business.  
Then we work with you to create customized curtailment strategies that enable your organization  
to earn revenue from energy you didn't use, without disrupting your day-to-day business.

Your CPower team will be with you every step of the way.  
Always.



# WHO IS CPOWER?

## CPOWER IS AN ENERGY MANAGEMENT COMPANY.

We create optimized energy management strategies that help businesses streamline their energy usage, offset costs, and reach their sustainability goals.

We're passionate about helping businesses reach their energy management goals and know that there is no stronger resource to achieve those goals than the collaborative relationship we share with our customers.

**Get to know us at the videos below.**



Energy is forever in motion.  
At CPower, we never stop moving in our pursuit to help your organization master its energy spend.



**To get started lowering your 4CP charges with  
CPower's 4CP Management System:**  
call 844-276-9371 to speak with a CPower team member  
or visit us online at [CPowerEnergyManagement.com/demand-response-texas](https://CPowerEnergyManagement.com/demand-response-texas)

