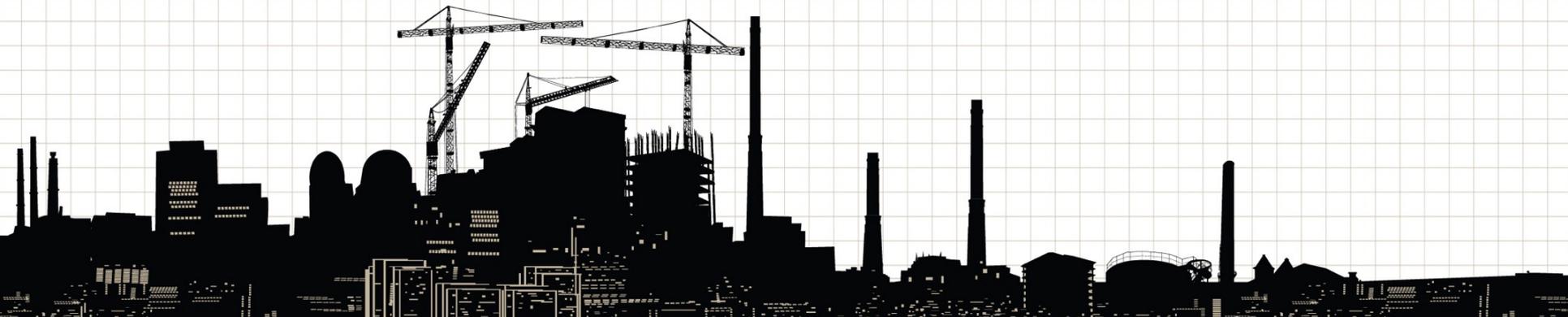


DEMAND RESPONSE IN PJM

A GUIDE TO EARNING REVENUE BY USING LESS ENERGY



Mastering your organization's energy use and spend is a challenge.

But when you succeed, you'll improve your bottom line and sustainability while contributing to a balanced, reliable energy grid.

WE'RE HERE TO HELP

CPower is a demand-side energy management company. We help organizations like yours SAVE on energy costs, EARN revenue, increase grid reliability, and achieve your sustainability goals.

Regardless of your industry, CPower has a set of solutions to help your business optimize your



energy use and monetize your existing energy assets. Watch this video to learn how we do it.

**NOW, LETS TALK ABOUT HOW CPOWER CAN HELP YOUR ORGANIZATION SAVE MONEY
WITH THE DEMAND-SIDE ENERGY MANAGEMENT IN PJM.**

CPOWER'S PJM TEAM



Left to Right: Peter Bergeron - Sr. Director, Customer Fulfillment; Danielle Bond - Sr. Engineer; Jim Rybarczyk - Account Manager, Beatrice Gockley - Act 129 and Utility Programs Manager, Bill Oosterom - Account Executive, Donna Karas - Account Manager, Cathy Smith - Senior Analyst; Jackie O'Mara - Account Manager, Corey Pettingill - Project Manager, Dave Resler - Account Executive, Leigh Ann Ratliff - Account Manager, Dailey Tipton - VP/General Manager, Dann Price - Executive Director, Market Development, Rocco Venuto - Account Executive, Raymond Berkebile - Senior Director of Engineering, Operations, Suzanne Levine - Account Executive, James Disabato - Project Manager; Stephanie Tray - Analyst; Meg Kelly - Sr. Director, Energy Efficiency.

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.**

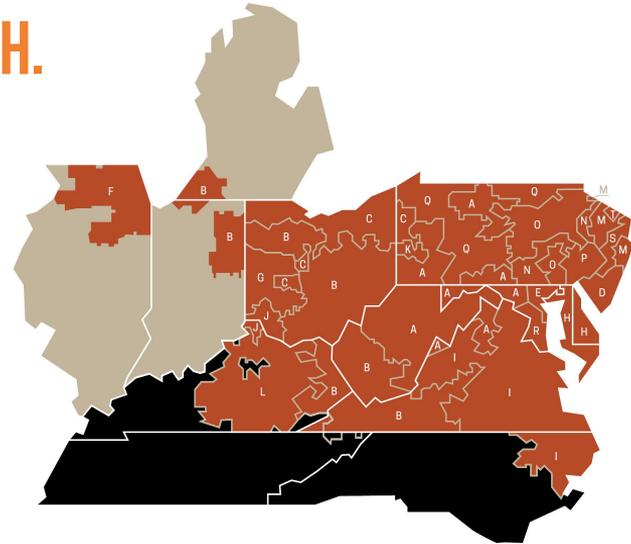
PJM'S ECONOMIC DEMAND RESPONSE PROGRAM

GET PAID FOR USING LESS ENERGY WHEN ELECTRICITY PRICES ARE HIGH.

PJM's Economic Demand Response program allows participating businesses to reduce their energy consumption in response to high prices in the wholesale energy market.

When you participate in Economic Demand Response, not only can you save money on your electricity bill, but you can also help minimize the impact of price spikes, reduce the need for expensive peaking generating capacity, and help keep prices stable in the PJM market.

CPOWER CAN HELP YOU MAKE IT HAPPEN.



WHAT IS ECONOMIC DEMAND RESPONSE?

The Economic Demand Response program pays organizations to curtail their energy consumption in response to high wholesale electricity prices.

Wholesale electricity prices in a deregulated energy market, like PJM's, fluctuate hourly. Retail consumers, however, typically pay electricity rates that are based on average electricity costs. This means businesses like yours often don't see the hourly changes in wholesale electricity prices and, as a result, do not have the opportunity to react to them.

With CPower at your side, you'll be armed with state-of-the-art tools that will provide clear price signals and make it easy to reduce energy usage when wholesale prices are high.

CPower also makes it easy to offer your curtailed energy into PJM's Real-Time Market, allowing you to potentially earn additional revenue from the energy you did not use as a result of your curtailment. We also give you visibility into the day-ahead prices, so you can participate in the real-time market when prices are advantageous for you.

Before we get into the details of the program, let's introduce ourselves...

ECONOMIC DEMAND RESPONSE

Program Parameters and Requirements

Minimum Size	100 kW
Participation Lead time	Price notifications sent day-ahead and participants can enroll up to three hours prior to their participation hour(s)
Compensation	Hourly LMP (Locational Marginal Price) for each hour awarded
Duration	Flexible and voluntary, participant selects time and hours
Enrollment Deadline	Year round
Baseline	The default PJM baseline is the 3 Days Type with Symmetric Additive Adjustments (SAA), explained below. The 3 days types used under this baseline are; Weekdays, Saturdays and Sundays/Holidays
CBL Certification	The CBL Certification is a calculation that allows PJM to verify if a customer's load is too variable or unpredictable to be used against a specific CBL methodology. A Relative Root Mean Square Error (RRMSE) calculation is applied against the customer's load. If a customer's RRMSE score is less than 20% then they are free to participate with that CBL; if it is greater than 20% the customer may not participate under that CBL and must request the use of an Alternative Baseline methodology that gets their RRMSE score under 20%



ECONOMIC DEMAND RESPONSE

Technology Requirements

Metering	1-hour interval data. If meter is Customer Owned it must meet PJM's accuracy standards.
Validation	Meter load data must be validated against sixty days of utility data.
Platform	Customer must be trained on and using the CPower App platform for hourly offers and compliance.
Site Requirements	120 V output, Internet or cell service (cell service preferable)

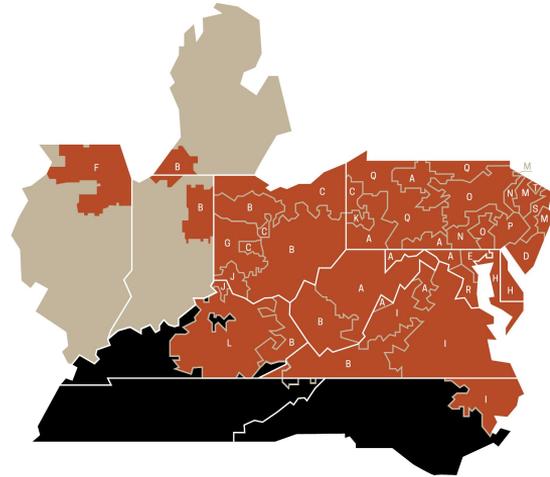
PJM'S SYNCHRONIZED RESERVE PROGRAM

PJM's ancillary services help balance the grid's transmission system as electricity moves from generation to consumption.

Unlike capacity programs, whose participants are called on to curtail by PJM when grid stress is foreseeable, the Synchronized Reserve program is an ancillary service demand response program that supplies electricity if the grid has an unexpected need for more power on short notice, such as unplanned generator outages or unexpected spikes in energy demand.

Organizations that participate in the Synchronized Reserve Program can earn money for being available to use less energy on short notice when the grid is stressed.

Participants can also help preserve the environment and keep energy prices stable for rate payers in the PJM region.



Resources obtained via the Synchronized Reserve program are often called Spinning Reserves, since they are idling on the sidelines and ready to be dispatched on short notice when the grid is stressed.

CPOWER CAN HELP YOU MAKE IT HAPPEN.

HOW THE SYNCHRONIZED RESERVE PROGRAM WORKS

The Synchronized Reserve program is available 24 hours a day, 7 days a week, 365 days a year.

Each hour, customers may offer a price at which they're willing to be available. If their offer is accepted, they receive at least their offer price and must be on-call to curtail within 8 minutes of an event notification. Curtailments occur unpredictably and last 30 minutes or less.

The revenue participating organizations receive from the Synchronized Reserve program will be based on PJM's Synchronous Reserve Market Clearing Price (SRMCP).

Once PJM accepts your offer, **your organization will be paid whether an event is called or not.**

When you're a CPower customer, your team of energy experts will always be at the ready to help you optimize the results from your demand response participation.

SYNCHRONIZED RESERVE

Program Parameters

Minimum Size	Minimum load reduction must be 100kW (may be aggregated within a load zone).
Number and Duration of Events	Based on customer's accepted offers, which can be entered and modified via the CPower App. Maximum event period is 30 minutes.
Notification	At least 8 minutes prior to the event via phone and e-mail.
Compensation	Customers receive the Synchronized Reserve Market Clearing Price for all accepted offers.
Compliance	Required for events during all hours in which offers were accepted.
Settlements	60 days after end of each month.
Consequences of Non-Performance	Customer forfeits the SRMCP for the amount of non-compliance over the hours it was accepted for the event day. Customer incurs an additional revenue adjustment in the amount of the shortfall for previous 12 days or most recent event day, whichever is less.
Enrollment Deadline	No deadline.
Metering	Each account must have an approved CPower meter providing 1-minute data validated against the utility meter.

SYNCHRONIZED RESERVE

Event History

MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
EVENTS	5	3	1	1	1	2	0	0	3	0	0	0
MINUTES	40	19	24	10	10	19	0	0	40	0	0	0

On average, Synchronized Reserve events last 14 minutes.

THE VALUE OF AGGREGATION

PJM's Synchronized Reserve program is run by **aggregators**, which are licensed companies that have been approved by PJM to facilitate your demand response.

Aggregators are expert at helping organizations like yours maximize your demand response participation.

Getting the most out of Synchronized Reserve begins with choosing the right aggregator to manage your demand response participation.

That's where CPower comes in.

WHAT IS AN AGGREGATOR?

An aggregator is a third party entity (separate from the utility) that handles the demand response participation of many organizations to ensure effective curtailment takes place when the grid is stressed.

Aggregators, like CPower, work with your organization to develop a customized curtailment strategy that suits the specific needs of your business.

Aggregators ensure safe, efficient energy curtailment that results in larger incentive payments for the participating organization.

The aggregator's mission is to optimize the participant's demand response in a way that minimizes risk and maximizes reward.



CPOWER IS A LEADING AGGREGATOR IN THE PJM MARKET

CPower is one of the largest commercial and industrial demand response providers in the PJM market. We aggregate hundred of facilities across states, in every zone, and have enrolled our customers in 5 (Emergency Capacity, SR, Econ, EE, Act 129) different demand response programs in the region.

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.

That's why we regularly over perform in every zone. Our vast, industry-diverse network of customers in PJM makes us one of the largest aggregators in the market.

As an aggregator, CPower can greatly mitigate the risk of underperformance penalties your company may face should you be unable to meet the Synchronized Reserve program's requirements for any reason.



WATCH THE VIDEO
LEARN WHY CPOWER IS DIFFERENT

HOW WILL CURTAILING ENERGY AFFECT YOUR BUSINESS?

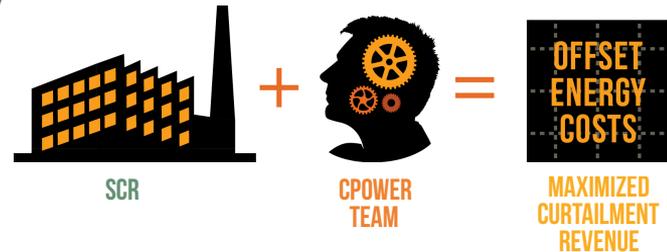
CPower has a team of energy experts who live and work in PJM and will help you develop your energy curtailment strategy and maximize your demand response participation.

Your CPower Team will perform a complete assessment of your facilities to understand your energy needs, usage and load profile.

We'll work with you to develop and fine tune an energy curtailment strategy that suits your **specific business needs**.

We'll then identify where your organization can cut back on **energy** and still meet the needs of day to day business.

Once your customized strategy is in place, your CPower Team continues to work closely with you to refine your energy management efforts and maximize your results.



WATCH THE VIDEO
WE'RE THERE FOR YOU. ALWAYS.

Energy is forever in motion.
At CPower, we never stop moving in our pursuit to help your organization optimize
its demand response participation.



**To get started offsetting your energy spend with demand response in PJM,
call 844-276-9371 to speak with a CPower team member
and schedule a no-obligation earnings assessment for your organization
or visit us online at: cpowerenergymanagement.com**

