



PJM Capacity Performance Seasonal Preparation

CPower Panelists: Bill Oosterom, Donna Karas, Steve Fulcher

5 / 21 / 24



Presenters



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Director, PJM/MISO Sales
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Donna Karas

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Manager, Dispatch
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Housekeeping Items

- 01 Webinar is in listen only mode
- 02 Use the Q&A (chat) panel to submit questions
- 03 This webinar is recorded
- 04 Find this webinar, deck and program info at: CPowerEnergy.com/Ready2024/

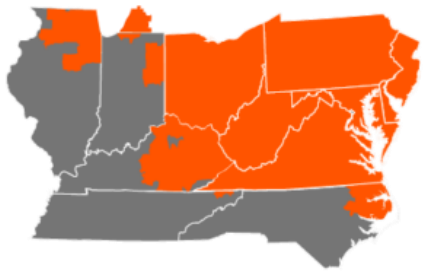
Agenda Items

- | | | | |
|----|----------------------------|----|--|
| 01 | 2024 market overview | 04 | Curtailment Plan Review |
| 02 | Program information review | 05 | Communications, alerts & notifications |
| 03 | Updating information | 06 | Recap & meet the team |

Program Snapshots

PJM Demand Response Programs

- Capacity Performance
- Economic Demand Response
- Synchronized Reserves
- Frequency Regulation



Program snapshots provide a quick review of program rules and participation parameters.
























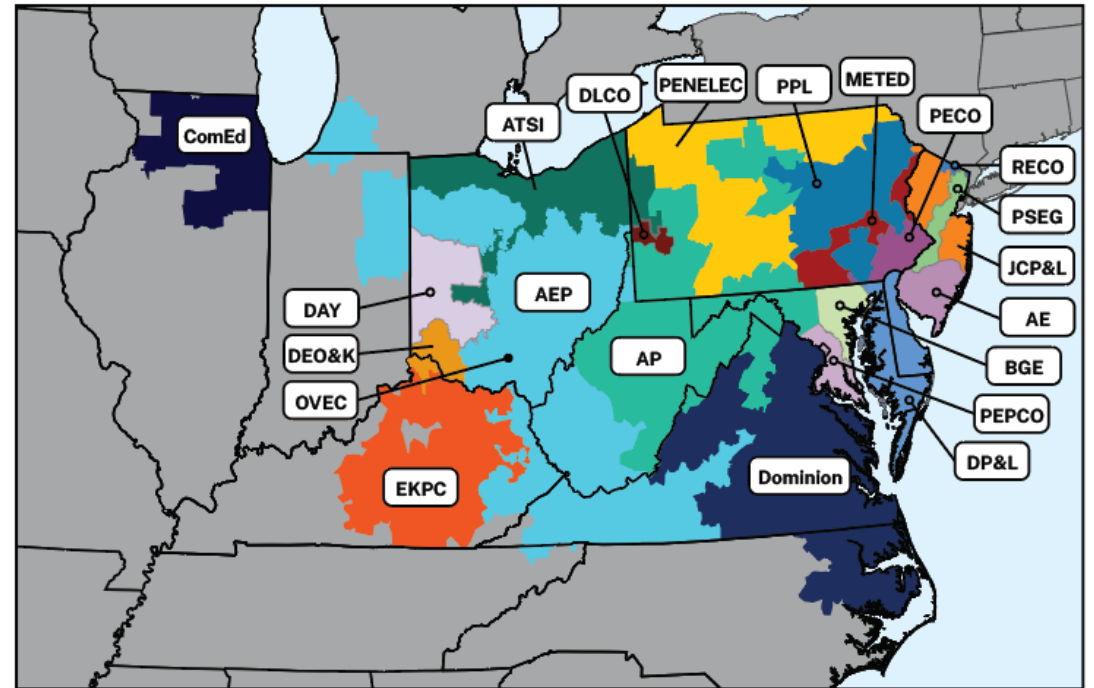
PJM Service Area

PJM Transmission Zones

Legend

ZONE

- | | |
|---|--|
|  Allegheny Power Systems (AP) |  East Kentucky Power Cooperative (EKPC) |
|  American Electric Power (AEP) |  Jersey Central Power & Light (JCP&L) |
|  American Transmission Systems, Inc. (ATSI) |  Met-Ed (METED) |
|  Atlantic City Electric Co. (AE) |  Ohio Valley Electric Corp. (OVEC) |
|  Baltimore Gas and Electric Co. (BGE) |  PPL Electric Utilities (PPL) |
|  Commonwealth Edison Company (ComEd) |  PECO Energy Co. (PECO) |
|  Dayton Power & Light Co. (DAY) |  Pennsylvania Electric Co. (PENELEC) |
|  Delmarva Power & Light Co. (DP&L) |  Potomac Electric Power Co. (PEPCO) |
|  Dominion (Dominion) |  PSEG (PSEG) |
|  Duke Energy Ohio and Kentucky Corp. (DEO&K) |  Rockland Electric Co. (RECO) |
|  Duquesne Light Co. (DLCO) | |



2024-2025 PJM Capacity Market Program

Capacity Performance (Annual)

- June through October and the following May
 - 7 days/week between the hours of 10:00 am – 10:00 pm
- November through April
 - 7 days/week between the hours of 6:00 am – 9:00 pm
- Unlimited # of Events
- 12-hour maximum duration in the summer & 15-hour maximum duration in the winter

- Thirty (30) Minute Response (unless 1- or 2-hour Exemption is granted)
- 100 kW minimum commitment
- Two (2) Hour Test Event minimum, if no actual PJM-initiated events are called
- Events outside of parameters above will be communicated, but are voluntary
- Revenue forfeiture for non-compliance capped at the annual projected revenue amount (i.e.; no “out of pocket” penalty)



Event History – Capacity Performance

Historical Events for Capacity Performance (2013 – 2022)

Year	# of Events	Total Hours
2013	5	22
2014	0	0
2015	0	0
2016	0	0
2017	0	0
2018	0	0
2019*	1	2
2020	0	0
2021	0	0
2022*	5	18.75
2023	0	0
Average	1	<i>3.89 hours per event</i>

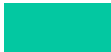



- 2019*: 4 zones called (AEP, BGE, PEPCO, DOM)
- CP Mandatory, Base voluntary
- 2022*: 2 winter events (all zones), 3 (AEP Marion)

Reminder: PJM Testing Change Reminder

Testing Change Reminder:

- Tests will no longer be scheduled by CPower
- PJM will now provide a 2-week window for the test event but not the specific day
- A day-ahead notification will be provided by PJM within this window
- The day of the test event notifications will be according to your lead time (30, 60, or 120 minutes)
- CPower will communicate test window, the day-ahead notice, and the day of notice through our dispatch system

Example Month						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

-  PJM Notification Window of the 2-week Testing Window
-  2-week Testing Window Open
-  Day-ahead PJM Notification of Test Day
-  Day-of PJM Test

Testing Zones

Dispatch email notice info:

- 2 - week window
- M – F, excluding holidays and weekends
- Day-ahead and Day-of notice
- [PJM Testing Schedule \(Live Link\)](#)

Anticipated Test Zone*:

- Summer Tested (June 2024 – October 2024)
 - Zones: AEP, ATSI, BGE, DAY, DPL, PECO, Penelec, PPL, PSEG, RECO
- Winter Tested (November 2024 – March 2025)
 - Zones: AECO, APS, ComEd, DEOK, DOM, DUQ, JCPL, MetEd, Pepco

*based on test calls seen the last two years, CPower anticipates test calls to occur in these timeframes within these zones.

Review & Update Information

Reviewing and updating your organization's contact information



- **Responsible Parties for Notifications: Make sure all relevant contacts are up to date**
 - Make sure to send the persons' names, email addresses and phone numbers
 - Any changes to former or added staff on your current notification group

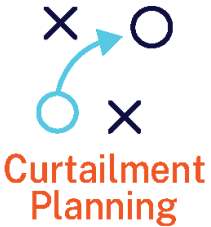


- **Make Sure Responsible Parties Save CPower Dispatch Information**
 - CPowerDispatch@mg.cpowerenergymanagement.com
 - Add the CPower Dispatch number to your cell phones – “Demand Response Notification”
 - 410-346-5907



- **Review Your Plan:**
 - Make sure your plan is accurate and align with your curtailment commitments and resources.

Curtailment Review



Demand Response Curtailment Plan

Plan Effective Date: 2/26/2024

Curtailment Plan Summary

Executive Summary Overview

The Customer has agreed to participate in the following Demand Response (DR) program(s) at the listed facilities. The intent of this document is to provide guidance on how to successfully respond to demand response events. This includes a list of curtailment measures and provides a basic understanding of program requirements. Please notify the CPower Engineering team at Engineering@CPowerEnergyManagement.com if you have any changes to your facility, curtailment actions, or any other information listed in this Curtailment Plan.

Utility Account Information

Company: _____
Facility #: _____
Address: _____
City: _____
State: _____
Zip: _____

Facility Information

EDC Utility: _____
Account Number(s): _____
Account Number(s): _____
Account Number(s): _____
Account Number(s): _____

Enrolled Program

Emergency Capacity

Curtailment Estimates

	Summer	Winter
Load Shed	1369 kW	1469 kW

Check with your Account Manager to:

- Ensure FSL/meter targets amounts are accurate
- Ensure contacts are up to dates

Curtailment Plans:

- Curtailment plans outline the various curtailment strategies that your facility may implement during a demand response event.
- Make sure the plan is still accurate and aligns with your curtailment commitments and resources.

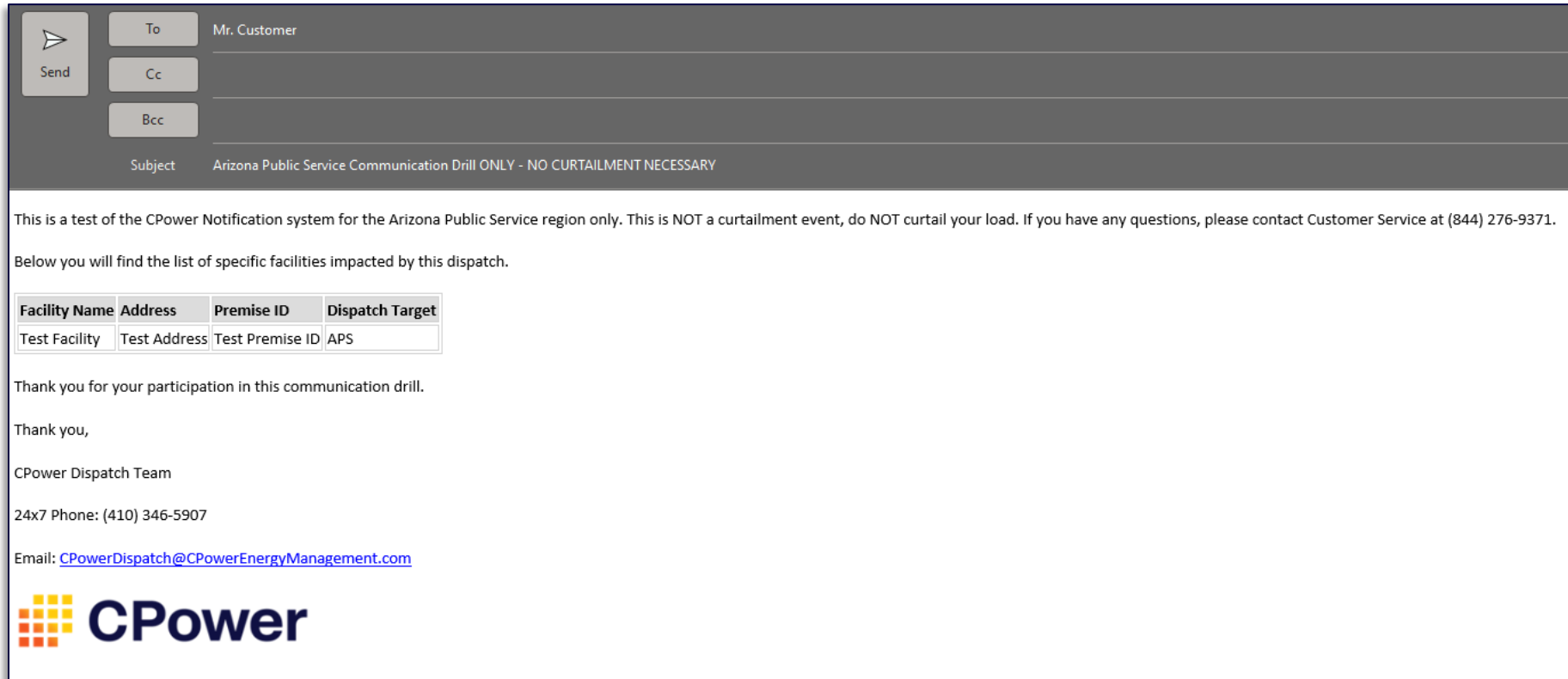
Distributed Energy Resources:

- Let us know if you've added any DER assets to your facility – i.e. Solar, battery, backup generation, etc.

Dispatch Notification

Communications Drill

- Communication Drill: June 6, 2024 [2 PM ET, 1 PM CT]
 - This is only a test. DO NOT curtail.



The screenshot shows an email interface with a 'Send' button and fields for 'To', 'Cc', 'Bcc', and 'Subject'. The subject line reads 'Arizona Public Service Communication Drill ONLY - NO CURTAILMENT NECESSARY'. The email body contains a test notification, a table of impacted facilities, and contact information for the CPower Dispatch Team.

To: Mr. Customer

Cc:

Bcc:

Subject: Arizona Public Service Communication Drill ONLY - NO CURTAILMENT NECESSARY

This is a test of the CPower Notification system for the Arizona Public Service region only. This is NOT a curtailment event, do NOT curtail your load. If you have any questions, please contact Customer Service at (844) 276-9371.

Below you will find the list of specific facilities impacted by this dispatch.

Facility Name	Address	Premise ID	Dispatch Target
Test Facility	Test Address	Test Premise ID	APS


Thank you for your participation in this communication drill.

Thank you,

CPower Dispatch Team

24x7 Phone: (410) 346-5907

Email: CPowerDispatch@CPowerEnergyManagement.com



CPower Dispatch Team



100% in house Dispatch Operations

ensures accuracy and helps identify and resolve issues in real time so you can perform to your potential.



All Call System Functionality

Understanding The CPower Dispatch System

- **The All Call System utilizes:**
 - Phone
 - Email
 - Text Message
 - Notifies all relevant contacts based on the program notification requirements
- **The All Call System will:**
 - Be activated by CPower Dispatch Operators
 - For both comms test and events
 - Send important preparation, start and completion notifications by utility, zone, or ISO.



All Call System Functionality

Understanding The CPower Dispatch System

▪ Phone Number for Events and Tests

- **410-346-5907** (Save as CPower or Dispatch)
 - Also sends text message alerts
- This is the direct line of our 24x7 dispatch service desk

▪ Emails for Events and Tests:

- cpowerdispatch@mg.cpowerenergymanagement.com
- Ensure this address is added to your safe sender list.



All Call System Functionality

Phone and Email Messages



- Phone Call Message
 - Greeting and prompt to play message
 - The entire message must be heard before confirmation
 - Upon message completion, “did you understand?” will be asked
 - Press (1) for yes, (2) for no. (1) will end the notifications to that contact, (2) will repeat the message



- Email
 - An event email will be sent by the system (if you have email set up for notification)
 - There is no need to reply to the email

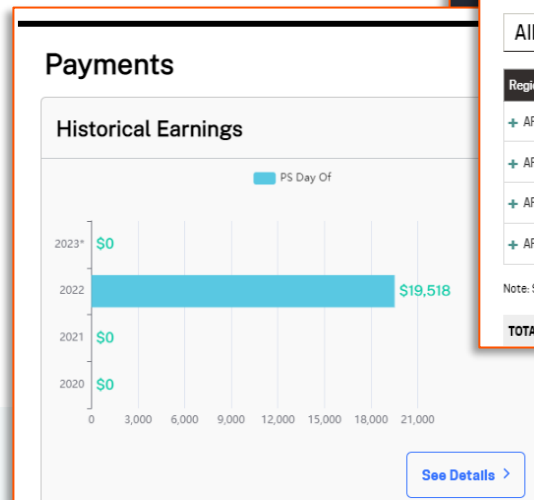
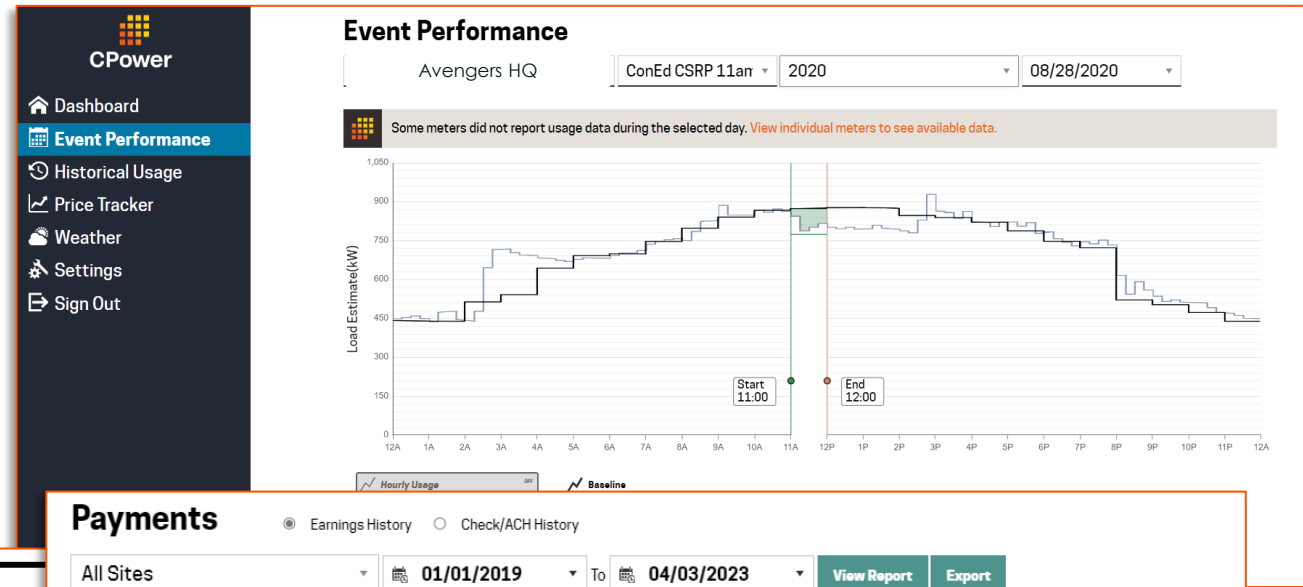


- Text/SMS (smartphones only)
 - An event notification text will be sent to your phone (if you have text notification set up)
 - You will reply, and type the word “yes” into the body of the text and send
 - We must receive TXT acknowledgments back within 2 hours of sending dispatch notices.
 - After that time, the system closes down, and we will not register an acknowledgement

CPower Portal

Real Time Data at Your Fingertips

- CPower Portal provides real time:
 - Payments and Earnings
 - Energy usage
 - Load drop (with meter)
 - Test or PJM Initiated Event Performance (with meter)
 - SR Performance is now available



Payments Earnings History Check/ACH History

All Sites To [View Report](#) [Export](#)

Region	Program	Payment Period Start Date	Payment Period End date	Amount
+ APS	PS Day Of	9/1/2022	9/30/2022	\$4,520.76
+ APS	PS Day Of	8/1/2022	8/31/2022	\$4,860.00
+ APS	PS Day Of	7/1/2022	7/31/2022	\$5,138.16
+ APS	PS Day Of	6/1/2022	6/30/2022	\$4,999.11
TOTAL				\$19,518.02

Note: Site level payment details are rounded to the nearest penny so totals may appear slightly different than adding the rounded details.

Recap

Important things to remember

- Season begins June 1, 2024 (summer), November 1, 2024 (winter)
- Be sure to update contacts
- Respond to all test and communications drills
 - June 6, 2024, at 2 PM ET, 1 PM CT
- Make sure you have backup personnel in case of emergency, including holidays and PTO
- Ensure everyone reviews this training
- Review curtailment plan and/or curtailment strategy
- Make sure metering is operational and accurate



Additional Resources

One Stop Shop for Demand Side Energy Management



Download white papers, webinars, blogs,
case studies and more at
[CPower's online publication,
The Current](#)



View [this webinar](#) and content as
well as all other markets we serve on
our Seasonal Readiness Portal

CPower's PJM Team

Your Local Team!

Team Member	Title	Email	Phone
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Thank You!

Questions & Answers

