ACT 129 DEMAND RESPONSE
Seasonal Preparation
5/23/2019
Welcome!

Jackie O’Mara
Account Manager, PJM
CPower

Daric Snyder
Senior Manager, Customer Experience
HOUSEKEEPING ITEMS

- Webinar is in listen only mode
- Use the Q&A panel to submit questions
- Webinar will be recorded and available at: CPowerEnergyManagement.com/Ready19
- Please take our short survey following the webinar
AGENDA ITEMS

- Act 129 Overview
- Program Information Review
- Updating Information
- Your Team’s Curtailment Planning
- Communications Alerts and Notifications
  - All Call System
- Scheduling and app
- Recap
Program Snapshots

- PPL Act 129 Demand Response
- FirstEnergy Act 129 Demand Response
- PECO Act 129 Demand Response
- See All PJM ISO Programs

Program Snapshots provide a very quick review and reference of all of the PJM demand response programs. Access any time and share.
# Program Parameters

## Act 129 Participation

<table>
<thead>
<tr>
<th>Program Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participation Period</strong></td>
<td>June 1 through September 30</td>
</tr>
<tr>
<td><strong>Dispatch Criteria</strong></td>
<td>Day Ahead forecast reaches 96% of PJM RTO summer peak demand</td>
</tr>
<tr>
<td><strong>Event Notification</strong></td>
<td>Electric Utilities will use PJM’s 10:10 am forecast to determine whether the following day will be an ACT129 event</td>
</tr>
<tr>
<td><strong>Event Days</strong></td>
<td>All non-holiday weekdays between June 1 and September 30 (excluding July 4 and Labor Day)</td>
</tr>
<tr>
<td><strong>Event Duration</strong></td>
<td>4 consecutive hours</td>
</tr>
<tr>
<td><strong>Max Number of Events</strong></td>
<td>6 events per summer</td>
</tr>
<tr>
<td><strong>Min Number of Events</strong></td>
<td>Zero. If no event is called by September 1, CPower will conduct a test in mid - September</td>
</tr>
<tr>
<td><strong>Performance Measurement</strong></td>
<td>Hourly Reduction KWh = Hourly CBL KWh - Hourly Average Load KWh</td>
</tr>
<tr>
<td><strong>Payment</strong></td>
<td>Hourly Reduction in KWh * Price per KWh</td>
</tr>
</tbody>
</table>

2019 PJM forecasted peak is 151,358 MW. 96% of it is 145,304 MW for event.
EVENT NOTICES
Know Your Start and End Times!

Day-ahead
- Day-ahead notice is sent out when an event is imminent for the next day
  - Between 11:00 AM – 12:00 PM and 1:45 PM EDT

Day-of Notification
- Day-of notice will be sent at 10:00 AM EDT the day of, if an event is imminent
## EVENT HISTORY
Act 129 Programs – All Utilities

<table>
<thead>
<tr>
<th>Year</th>
<th>Utility</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>FirstEnergy</td>
<td>6/13, 7/20, 7/21</td>
</tr>
<tr>
<td>2017</td>
<td>PPL</td>
<td>6/13, 7/20, 7/21</td>
</tr>
<tr>
<td>2017</td>
<td>PECO</td>
<td>6/13, 7/20, 7/21</td>
</tr>
<tr>
<td>2018</td>
<td>FirstEnergy</td>
<td>7/2, 7/3, 8/6, 8/28, 9/4, 9/5</td>
</tr>
<tr>
<td>2018</td>
<td>PPL</td>
<td>7/2, 7/3, 8/6, 8/28, 9/4, 9/5</td>
</tr>
<tr>
<td>2018</td>
<td>PECO</td>
<td>7/2, 7/3, 8/6, 8/28, 9/4, 9/5</td>
</tr>
</tbody>
</table>
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

#### Phone and Email Messages

<table>
<thead>
<tr>
<th>Time</th>
<th>Type of Communication</th>
<th>Method of Communication</th>
<th>Description</th>
<th>From</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day Ahead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 am - 12 pm</td>
<td>Day Ahead Notification</td>
<td>email, phone call, text</td>
<td>Notification will include the date and confirmed hours of the ACT129 Event</td>
<td><a href="mailto:CPowerDispatch@dccnotify.com">CPowerDispatch@dccnotify.com</a> 410-346-5907</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:45 PM</td>
<td>PRS (Price Responsive Schedule)</td>
<td>email</td>
<td>Will be sent out including Economic Pricing for next day and will identify the specific hours of the ACT 129 event</td>
<td><a href="mailto:noreply@cpowercorp.com">noreply@cpowercorp.com</a></td>
</tr>
<tr>
<td>Day Of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Day Of Notification</td>
<td>email, phone call, text</td>
<td>Notification will confirm the hours of the ACT129 Event</td>
<td><a href="mailto:CPowerDispatch@dccnotify.com">CPowerDispatch@dccnotify.com</a> 410-346-5907</td>
</tr>
</tbody>
</table>
DISPATCH NOTIFICATIONS
Communications Drill

TEST DATE: 6/5/2019, 2:00 PM ET

- This is only a drill to test communications
- DO NOT Curtail

Sample Communications Email

Hello,

This is a test of CPower’s Notification system. This is NOT a curtailment event, do NOT curtail your load. If you have any questions, please contact Customer Service at (800) 300-1059.

Please press REPLY, type “yes”, and then hit SEND to acknowledge this message.

Thank you,
CPower Dispatch Desk
410-346-5907
CONTACT INFORMATION

Make Sure To …

- Correct and up to date by facility site:
  - Contact Names
  - Phone Numbers
  - Email Address

- Please send your updated information to:
  - Jackie O’Mara
    - Jackie.OMara@CPowerEnergyManagement.com
Reviewing and Updating Your Contact Information

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

- **Whitelist CPower email domains and add dispatch number:**
  - CPowerDispatch@dccnotify.com, CPowerDispatch@dccbackup.com
  - Add the CPower Dispatch number to your cell phones – “Demand Response Notification”
    - 410-346-5907

- **Review Curtailment Plan:**
  - Make sure the plan is still accurate and aligns with your curtailment commitments and resources
CPOWER APP
Real Time Data at Your Fingertips
This is an interactive application between Customers and the program.

For participation in the program, a designated person from your company will need to submit the schedule for the ACT129 events into the CPower app.

Customer dispatch contacts will receive an enrollment letter with the user id and password for the CPower app.

Please login into the software to become familiar with the application.

Training materials can be found at:
http://help.cpowerenergymanagement.com/act129
CPOWER APP

Curtailment Plan

- Curtailment plans will have a direct effect on customers’ potential earnings calculations.
- Electric utilities are looking for details on how customers will be curtailing during ACT129 events.
- Based on CPower’s engineering assessments, the CPower App includes customers’ curtailment scenarios. Customers can update curtailment scenarios at any time.
- Link to a training video: http://help.cpowerenergymanagement.com/economic/
ACT129 customers must schedule their intent to participate in an event via the app.

A curtailment without the submitted schedule will not be valid.

Hours of participation must be consecutive (for example, HE13, HE14, HE 15, HE16, but not HE13, HE15 and HE16)

Customers can submit their schedule up to 15 min before the start of the first hour of a planned event.

If a customer scheduled their participation in the CPower app the day before the event, and can not participate on the day of the ACT129 event, the customers, must modify their scheduled participation.
CPOWER APP
Real Time Data at Your Fingertips
RECAP
Things to Remember

- Season Begins June 1, 2019
- Be sure to update contacts
- Response to all test and communications drill
- June 5, 2019 at 2 PM
- Make sure you have back up personnel in case of emergency
- Ensure everyone reviews this training
- Make sure your team understands curtailment procedures
- Make sure metering is up and running and accurate
ADDITIONAL RESOURCES
Your One Stop For Demand Side Energy Management

Learn the basics with CPower's Demand Side Energy Management 101 Video Series

Download white papers, webinars, blogs, case studies and more at CPower’s one stop information portal, “CPower Knowledge Hub”

View this webinar and content as well as all other markets we serve on our Seasonal Readiness Portal
Utility Customers
Stack and Earn

More Programs = More Revenue

EARN WITH PA ACT
129 DEMAND RESPONSE

EARN WITH ISO CAPACITY PROGRAMS

EARN WITH ECONOMIC AND ANCILLARY PROGRAMS

MORE EARNINGS FOR YOUR ORGANIZATION!

$ + $ + $ = $$$
<table>
<thead>
<tr>
<th>Team Member</th>
<th>Title</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beatrice Gockley</td>
<td>Program Manager</td>
<td><a href="mailto:Beatrice.Gockley@CPowerEnergyManagement.com">Beatrice.Gockley@CPowerEnergyManagement.com</a></td>
<td>267-240-5246</td>
</tr>
<tr>
<td>Ed Drew</td>
<td>VP/ General Manager, PJM</td>
<td><a href="mailto:Ed.Drew@CPowerEnergyManagement.com">Ed.Drew@CPowerEnergyManagement.com</a></td>
<td>610-894-6870</td>
</tr>
<tr>
<td>Bill Oosterom</td>
<td>Account Executive</td>
<td><a href="mailto:Bill.Oosterom@CPowerEnergyManagement.com">Bill.Oosterom@CPowerEnergyManagement.com</a></td>
<td>610 813-6366</td>
</tr>
<tr>
<td>Dave Resler</td>
<td>Account Executive</td>
<td><a href="mailto:Dave.Resler@CPowerEnergyManagement.com">Dave.Resler@CPowerEnergyManagement.com</a></td>
<td>610-813-6368</td>
</tr>
<tr>
<td>Suzanne Levine</td>
<td>Account Executive</td>
<td><a href="mailto:Suzanne.Levine@CPowerEnergyManagement.com">Suzanne.Levine@CPowerEnergyManagement.com</a></td>
<td>610-220-1099</td>
</tr>
<tr>
<td>Jim Rybarczyk</td>
<td>Account Manager</td>
<td><a href="mailto:Jim.Rybarczyk@CPowerEnergyManagement.com">Jim.Rybarczyk@CPowerEnergyManagement.com</a></td>
<td>847-220-4337</td>
</tr>
<tr>
<td>Donna Karas</td>
<td>Account Manager</td>
<td><a href="mailto:Donna.Karas@CPowerEnergyManagement.com">Donna.Karas@CPowerEnergyManagement.com</a></td>
<td>610 813-6362</td>
</tr>
<tr>
<td>Jackie O'Mara</td>
<td>Account Manager</td>
<td><a href="mailto:Jackie.OMara@CPowerEnergyManagement.com">Jackie.OMara@CPowerEnergyManagement.com</a></td>
<td>610-813-6391</td>
</tr>
<tr>
<td>Eric Read</td>
<td>Account Executive - National Accounts</td>
<td><a href="mailto:Eric.Read@CPowerEnergyManagement.com">Eric.Read@CPowerEnergyManagement.com</a></td>
<td>571-335-4181</td>
</tr>
<tr>
<td>Michael Mindell</td>
<td>Account Executive - National Accounts</td>
<td><a href="mailto:Michael.Mindell@CPowerEnergyManagement.com">Michael.Mindell@CPowerEnergyManagement.com</a></td>
<td>646 779-1785</td>
</tr>
<tr>
<td>Aimee Riley</td>
<td>Account Manager - National Accounts</td>
<td><a href="mailto:Aimee.Riley@CPowerEnergyManagement.com">Aimee.Riley@CPowerEnergyManagement.com</a></td>
<td>415-235-9835</td>
</tr>
<tr>
<td>Cathy Smith</td>
<td>Account Manager - PJM</td>
<td><a href="mailto:Cathy.Smith@CPowerEnergyManagement.com">Cathy.Smith@CPowerEnergyManagement.com</a></td>
<td>610 813-6369</td>
</tr>
</tbody>
</table>
THANK YOU

Visit: CPowerEnergyManagement.com/Snapshots for program participation snapshots
Or CPowerEnergyManagement.com/Ready19 for this training on demand
MARKET UPDATES – PJM
What You Need To Know

Significant Updates

- Supporting Grid Reliability
  - Capacity Performance – Year Round DR
  - Ruling on aggregation
- Energy Efficiency
- Program stacking – Act 129 + ISO programs

Download CPower’s State of the Demand Side Energy Market White Paper to see all major PJM updates.