



# **Demand Response: Resources to Reduce Energy Costs and Climate Impacts**

Sustainable Pittsburgh  
Business Climate Coalition  
October 29, 2009

# ClearChoice Energy

- Member of PJM Interconnection
  - Access to wholesale and retail markets
- 20 years experience in energy business
- Objective – not affiliated with any suppliers
- Pennsylvania company
- Certified woman-owned business
- Registered with PUC
  - Conservation Service Provider
  - Electric Generation Supplier



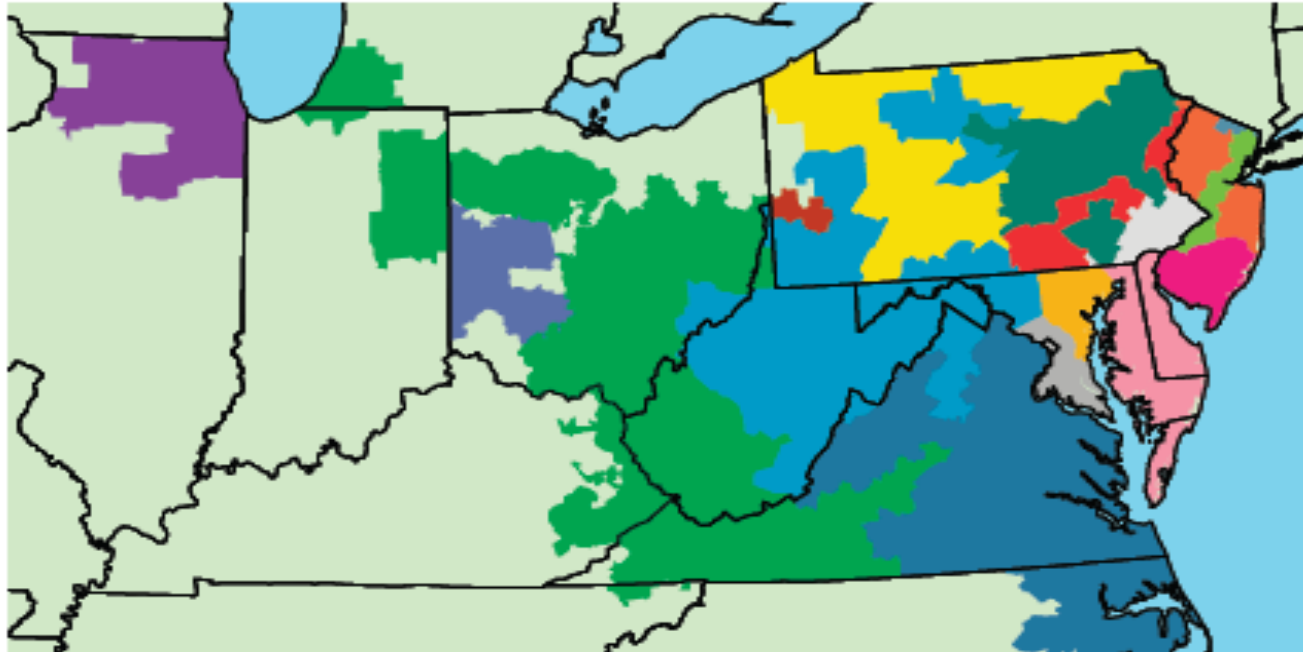
# What Is Demand Response?

- New energy conservation program that pays consumers to conserve electricity.
- Participate by agreeing to temporarily reduce their electric use during an emergency on the electric system or in response to high prices.



**NIMBY**

# PJM Interconnection, L.L.C.



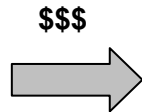
## Legend

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|--|--|
| Allegheny Power Company (AP)             | Jersey Central Power and Light Company (JCPL)  |
| American Electric Power Co., Inc. (AEP)  | Metropolitan Edison Company (Met-Ed)           |
| Atlantic Electric Company (AECO)         | PECO Energy (PECO)                             |
| Baltimore Gas and Electric Company (BGE) | PPL Electric Utilities (PPL)                   |
| The Commonwealth Edison Company (ComEd)  | Pennsylvania Electric Company (PENELEC)        |
| Dayton Power and Light Company (DAY)     | Potomac Electric Power Company (PEPCO)         |
| Delmarva Power and Light (DPL)           | Public Service Electric and Gas Company (PSEG) |
| Dominion                                 | Rockland Electric Company (RECO)               |
| Duquesne Light (DUCO)                    |  |

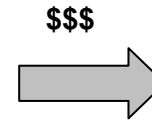
# Capacity = Insurance Premium



Electric consumer



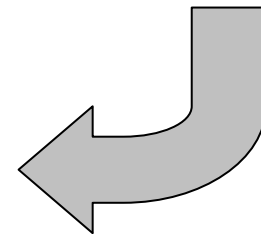
Utility



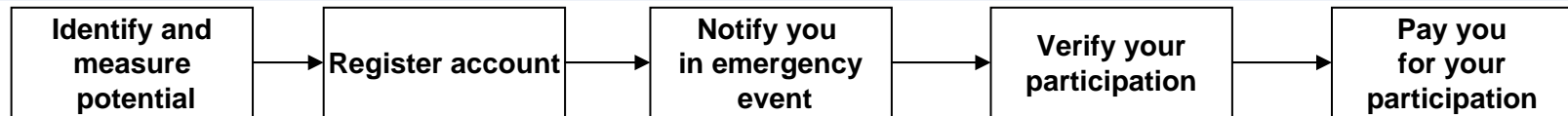
PJM

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**You get paid –  
regardless of  
whether you are  
ever called upon!**



# How you participate



ClearChoice Energy works with you to:

- Identify your ability to reduce electricity usage
- Measure potential to maximize financial benefits
- Enroll you into our demand response program
- Notify (by telephone and/or email) your Facilities Director to reduce during an emergency
- Verify the your participation based on meter data
- Pay you for your participation

# Cost to Participate?

- Each account that participates must have a meter that records its electricity consumption every hour.
- Many accounts will already have this type of meter. The local utility can install an hourly meter if you do not already have one.
- Charges for meter installations vary across utilities.
- Meters capable of recording in hourly intervals normally cost about \$500 - \$1000 per meter.



# Curtailment Requirements

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- June 1 – September 30
- Weekdays only, excluding holidays
- Available Noon – 8 pm
- Up to six consecutive hours
- Up to 10 days per year

# What are the risks if I can't reduce?



- Participants take **NO RISK** if they cannot reduce during an emergency.
- PJM has an annual testing requirement.
- You will be notified in advance of the test. If you cannot reduce during the test, you may be retested, or may be charged with a penalty that exceeds your revenues.

# Be Proactive. Prevent Damage.

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- Brownouts



- Blackouts

# Additional Benefits

- Receive advance notice
  - notify occupants in advance
  - back-up data
  - turn-off critical or sensitive equipment in a planned and safe manner
- Help your community
  - Reduces the need for new power plants and transmission lines
  - Maintains reliability on the electricity grid
  - Preserves electric supply for residences and critical needs
- Increase employee/student awareness of how energy conservation can impact their community



# Contact Information

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