

# **Demand Response: A Proven Asset to Grid Management**

*An Intelligent Utility Reality Webcast*

August 26, 2010

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# Demand Response: A Proven Asset to Grid Management

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*Senior Engineer  
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*Program Advisor of Customer Programs  
San Diego Gas & Electric*

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# Agenda

## Introduction

## The discussion


- Bill Andrew explains how Delaware Electric Cooperative is using demand response.
- Don Kujawski describes how PJM is enabling demand response in its market.
- Kathy Casas presents how San Diego Gas & Electric is applying demand response.
- **Q&A**

# “Beat The Peak”



**Delaware Electric Cooperative**

*“We Keep the Lights On”*

A Touchstone Energy® Cooperative 



Bill Andrew

August 26, 2010

# What I'm going to cover

- What is “Beat the Peak”?
- How can it help Distribution Cooperatives and G&T's?
- How do we implement it?
- What are the major benefits achieved?

# What is happening?

- Energy rates are increasing
- Disposable income is dropping
- Family budgets are stretched tight
- Cooperative Business Model engages the member
- We need to control costs and provide maximum value
- Demand is outstripping Supply
- We need to conserve energy every where possible
- Smart Grid provides actionable information

# The DEC Energy Plan

III.a As the customer is the most important part of a Smart Grid, develop a “Beat the Peak” program to encourage members to join in reducing energy during peak energy periods to mitigate demand expense, improve load factor and reduce the average cost per kwhr. Develop sustainability to defer long term capacity additions. Help mitigate the environmental impacts during peak times.



# What is “Beat the Peak”?

- 4 major demand side management initiatives
  - Residential Load Management
    - \$switch and \$ave
  - Interruptible Members/Key Accounts
  - System Voltage Control
  - Member “Beat the Peak” Participation
    - Member education and information
    - Email / Media notification
    - Beat the Peak In-Home Indicator

# What are the Benefits?

- Lower costs with minimal investment
- An engaged employee Team
- An engaged member population
- Positive image for the utility
- Reduces the need to build new generation
- Environmental Stewardship
- Energy Efficiency and Conservation

# The Program

- Existing Smart Grid in place
- ~20,000 Switch & Save load management devices
- ~400 C & I Interruptible customers
- ~36,000 residential emails sent via Constant Contact
- ~50 key account emails sent
- System Voltage Control
- Press Release sent out with request to ~125 media outlets via Constant Contact
- CEO live radio call-in
- Beat the Peak message on key radio and T.V. stations
- Website and social media updated with request
- ~40,000 “Beat the Peak” In-Home Indicators and 120,000 CFL bulbs in homes by 2012

# “Beat the Peak” In-Home Indicator & 3 free CFL light bulbs



# Internal Implementation

- Develop a communications plan to fit your needs, objectives and audience
- All Hands Meetings
- One-pagers
- Member Committee
- Website
- Disseminate all external communications to associates
- Maintain a consistent message

# External Implementation

- Press Releases
- Public appearances
- Member Messages
- Website -- [www.beatthepeak.coop](http://www.beatthepeak.coop)
- Social Media Messages, Twitter/Facebook
- 36,000 Email Messages using Constant Contact
- Radio messages
- TV Messages
- Maintain a consistent message

# Sustaining the Campaign

- Needs to be top driven
- Needs to be communicated regularly
- Needs to have quantifiable results/actionable information
- Needs to continually engage new members
- Needs to introduce new ideas and measurements
- Needs to leverage the cooperative/member relationship
- Need to publicize the results

# Making a good program better

- Increased advertising
- Continued Beat the Peak In-Home Indicator and CFL bulb deployment
- Improving upon our Social Media presence
- Increasing email participation
- Increased education
  - Television
  - BTP device
- Support from G&T organizations
- Minimum 6 month payback
- Environmentally proactive

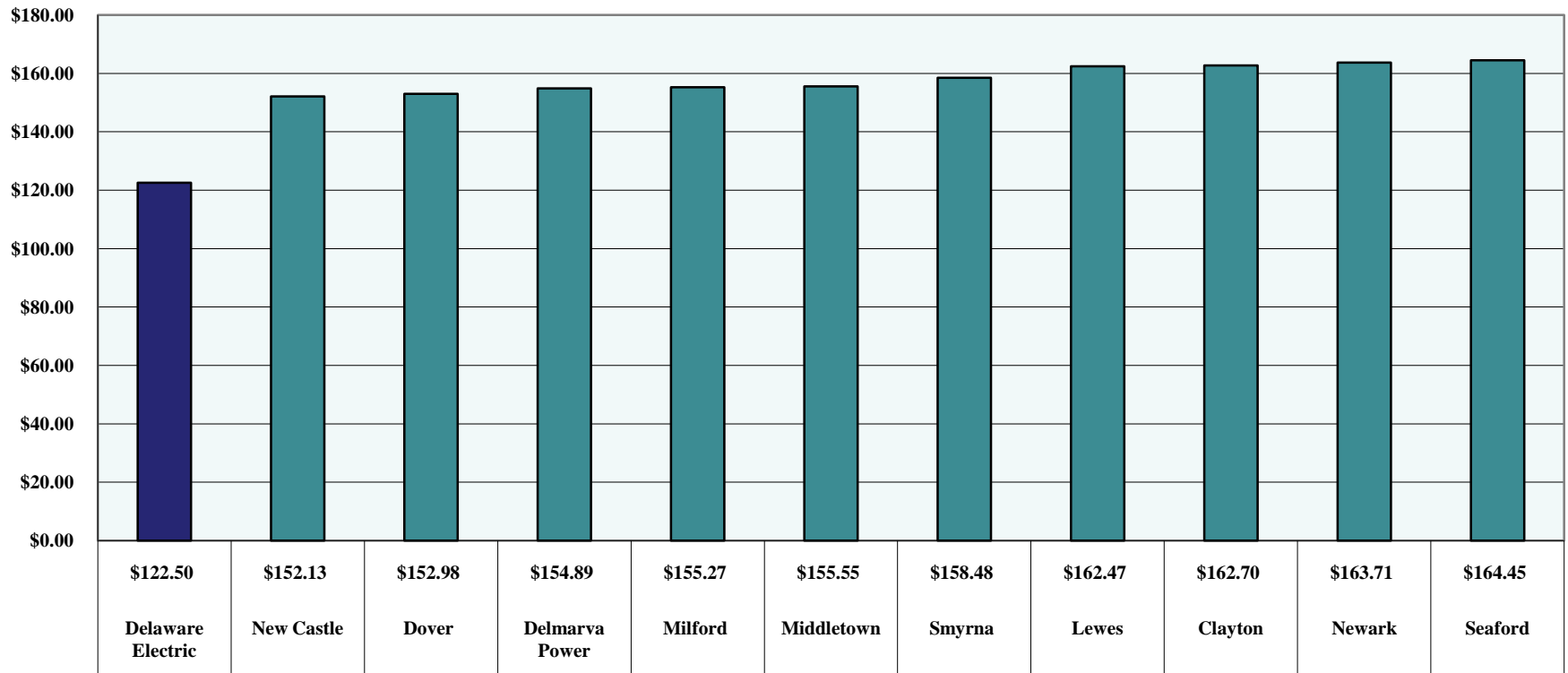


# What are the Results

- Lowered rates \$10 million on January 1, 2010
- Lower cost for capacity component of wholesale rate
- Total savings over the life of BTP: ~\$6.8 million
- Improved Load Factor: ~5% since 2007
- Distributed 20,200 In-Home Indicators as of July 1
- Distributed 60,000 CFL bulbs as of June 1
- Positive member feedback thru engaged membership
- Lower cost per kwhr performance / increase competitiveness of Cooperatives
- Improved cooperative creditability
- Environmentally Proactive

# What do our members care about?

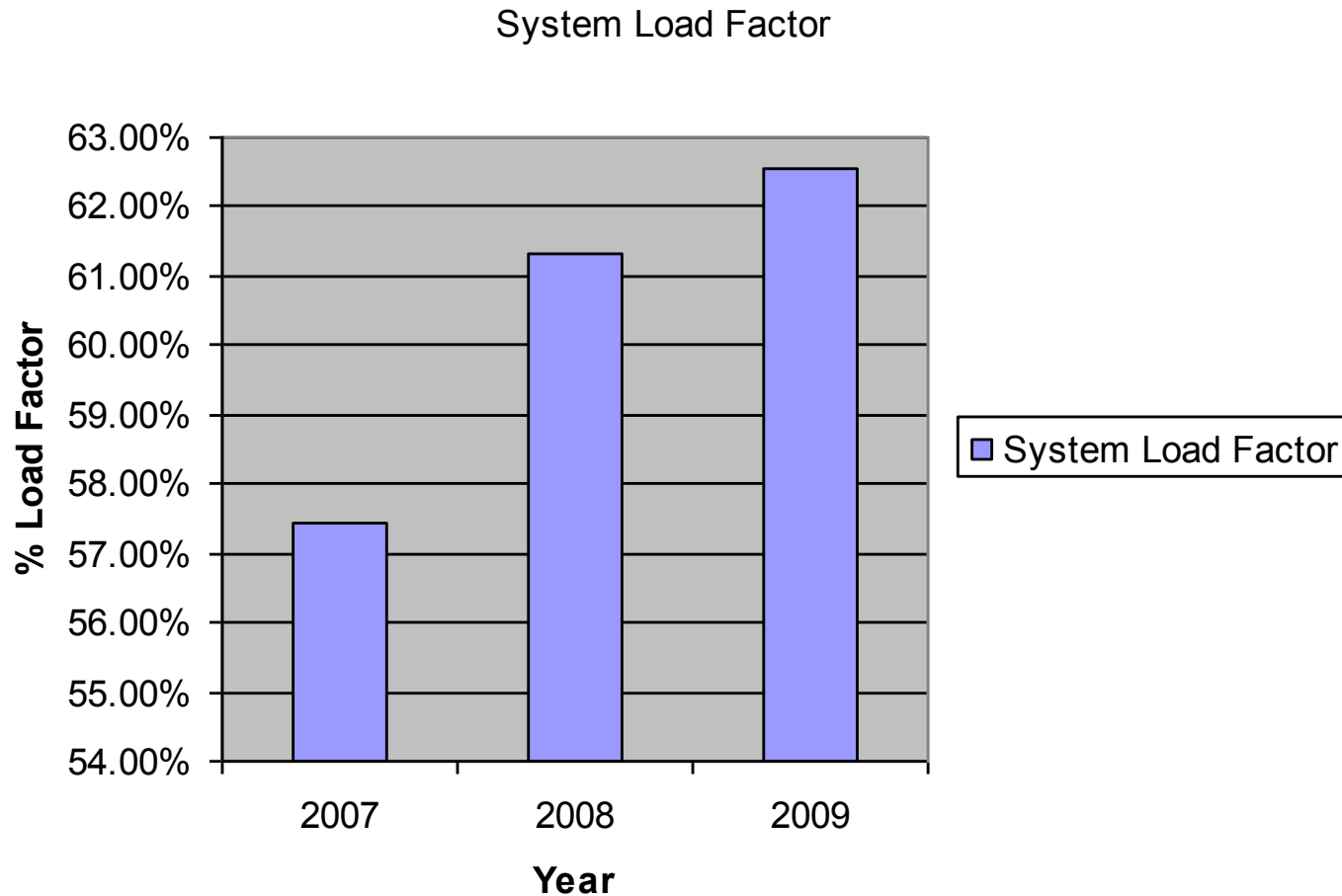
**Local Utilities - Summer @ 1,000 kWh's**  
As of July 1, 2010



# What the numbers tell us. . .

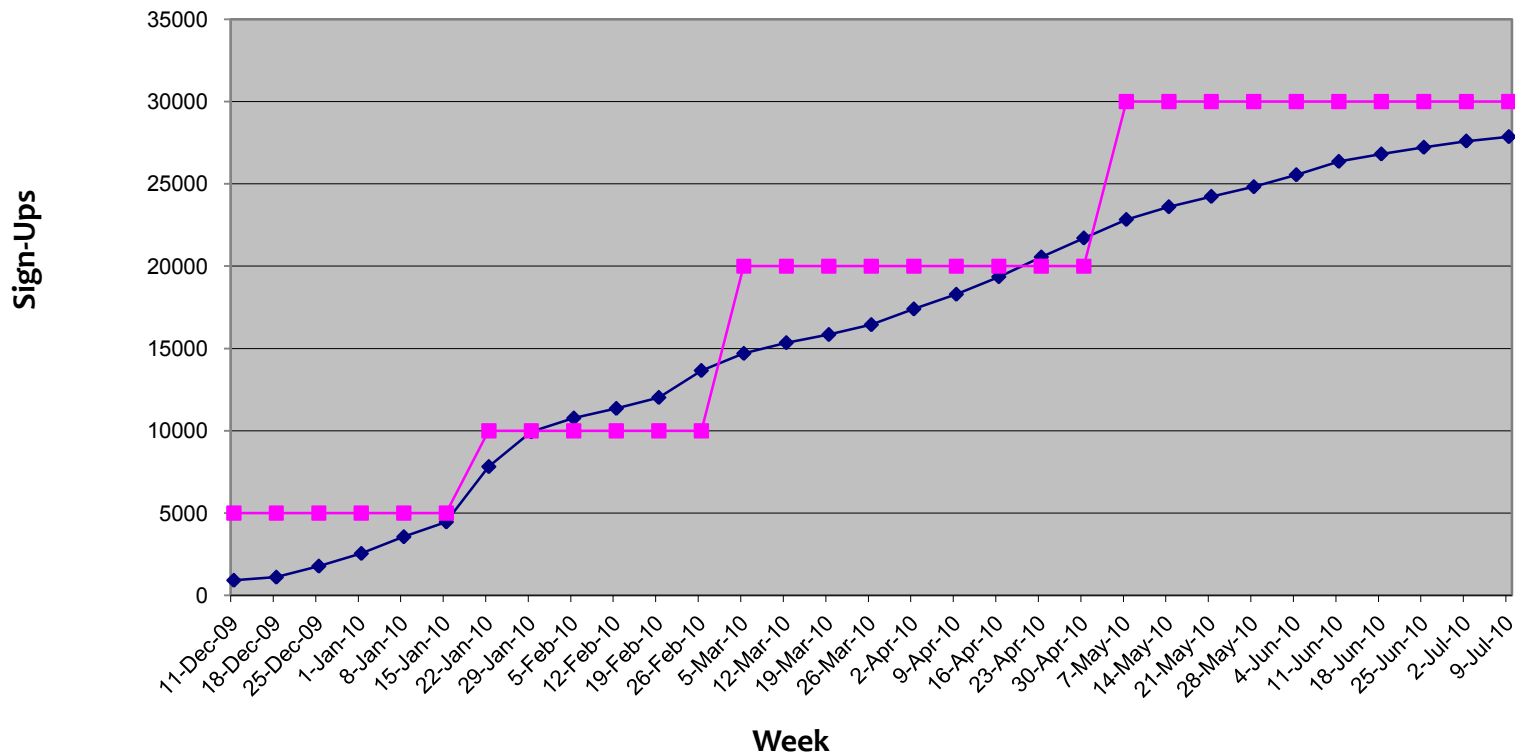
	Billable kW	Cost per kW	Meters	Load Factor %	Demand Savings vs 07
2007	2990748	\$10.44	78964	57.45%	
2008	2766242	\$11.53	80223	61.33%	\$2,588,554
2009	2686259	\$13.97	81175	62.55%	\$4,253,711

# System load factor increases



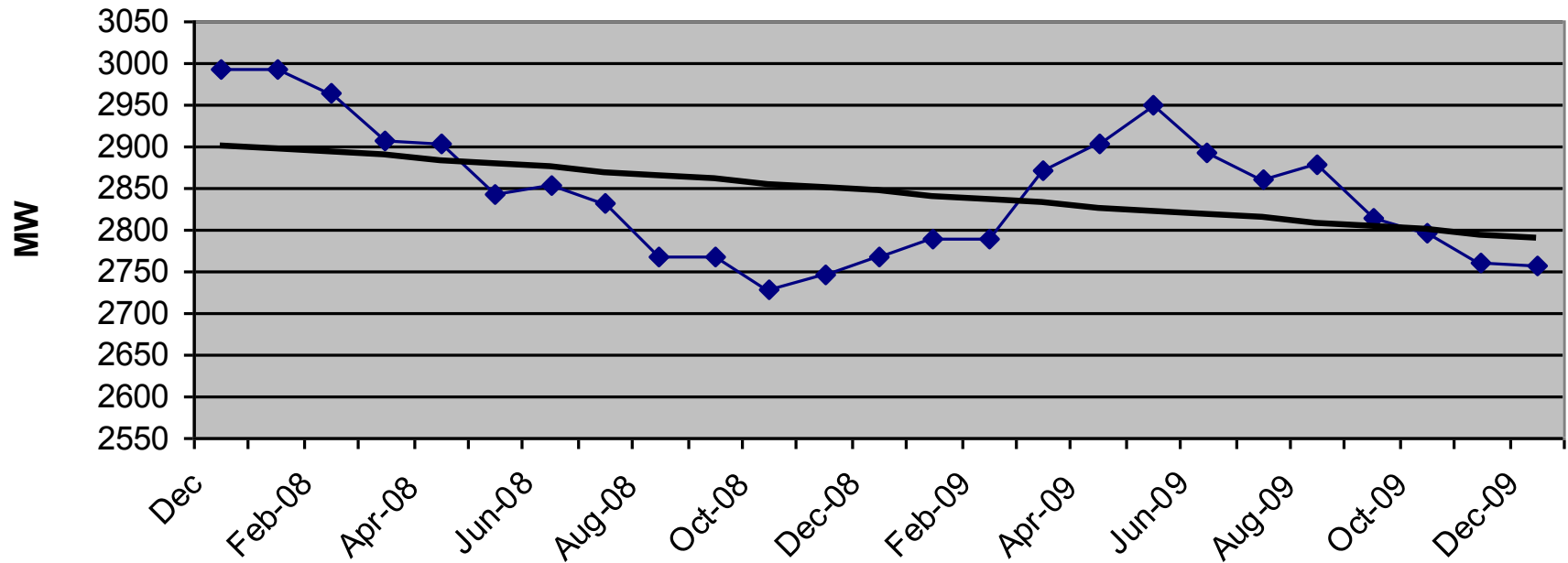
# Are our members buying in. . .ABSOLUTELY

Total Beat the Peak In-Home Indicator Sign-Ups to date



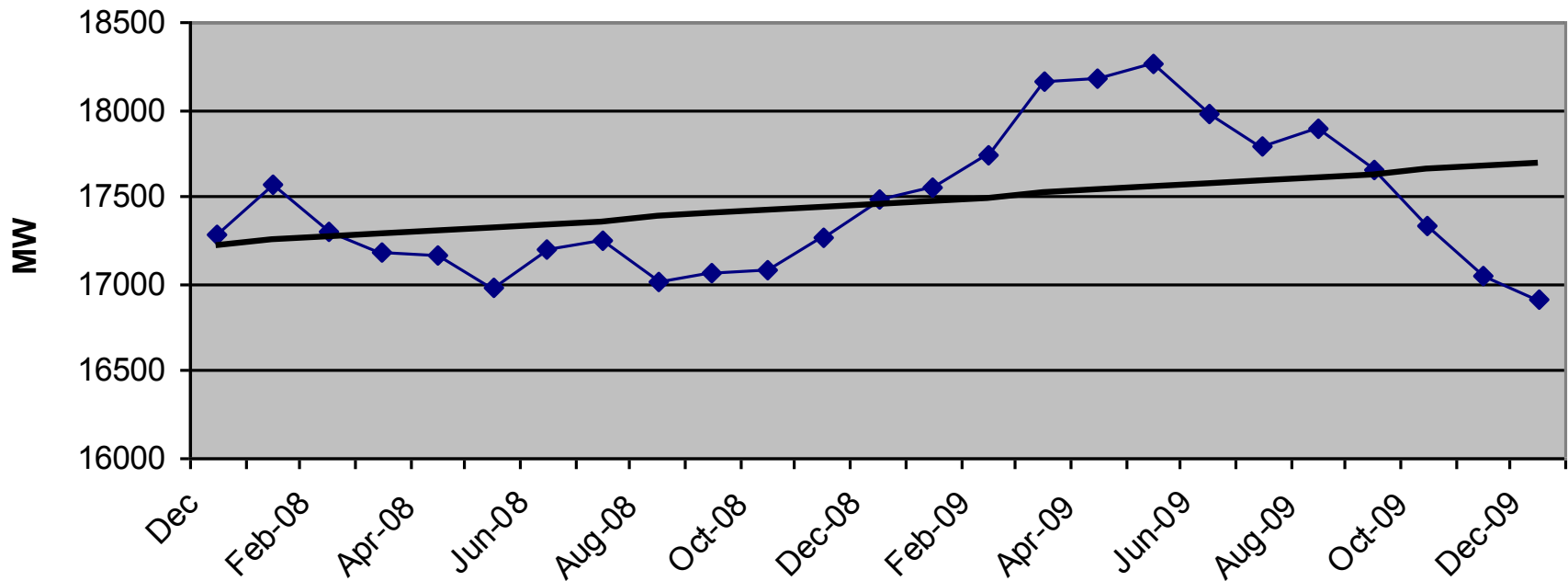
# DEC System Demand

System Demand - Rolling 12 Months



# G&T System Demand

Peer Group Demand - Rolling 12 Months



# For more information

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(302) 349-3119

[rob@decoop.com](mailto:rob@decoop.com)

[www.delaware.coop](http://www.delaware.coop)

[www.beatthepeak.coop](http://www.beatthepeak.coop)



# PJM Demand Response

- enable the power of Demand Response in the PJM wholesale markets

Don Kujawski  
Senior Engineer  
PJM

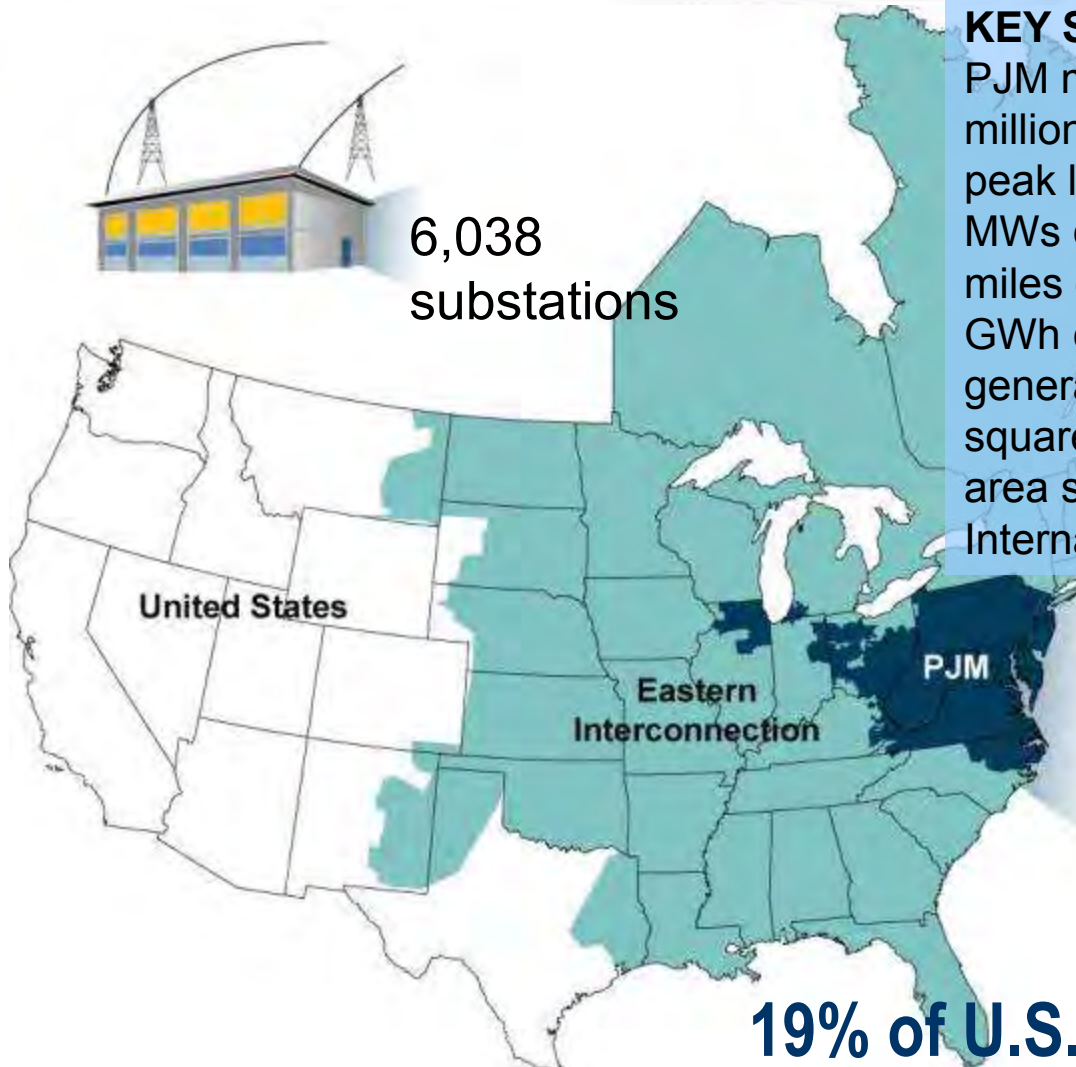
# PJM as Part of the Eastern Interconnection



6,038  
substations

## KEY STATISTICS

PJM member companies	600
millions of people served	51
peak load in megawatts	144,644
MW of generating capacity	164,905
miles of transmission lines	56,250
GWh of annual energy	729,000
generation sources	1,310
square miles of territory	164,260
area served	13 states + DC
Internal/external tie lines	250



26% of generation in  
Eastern Interconnection

23% of load in  
Eastern Interconnection

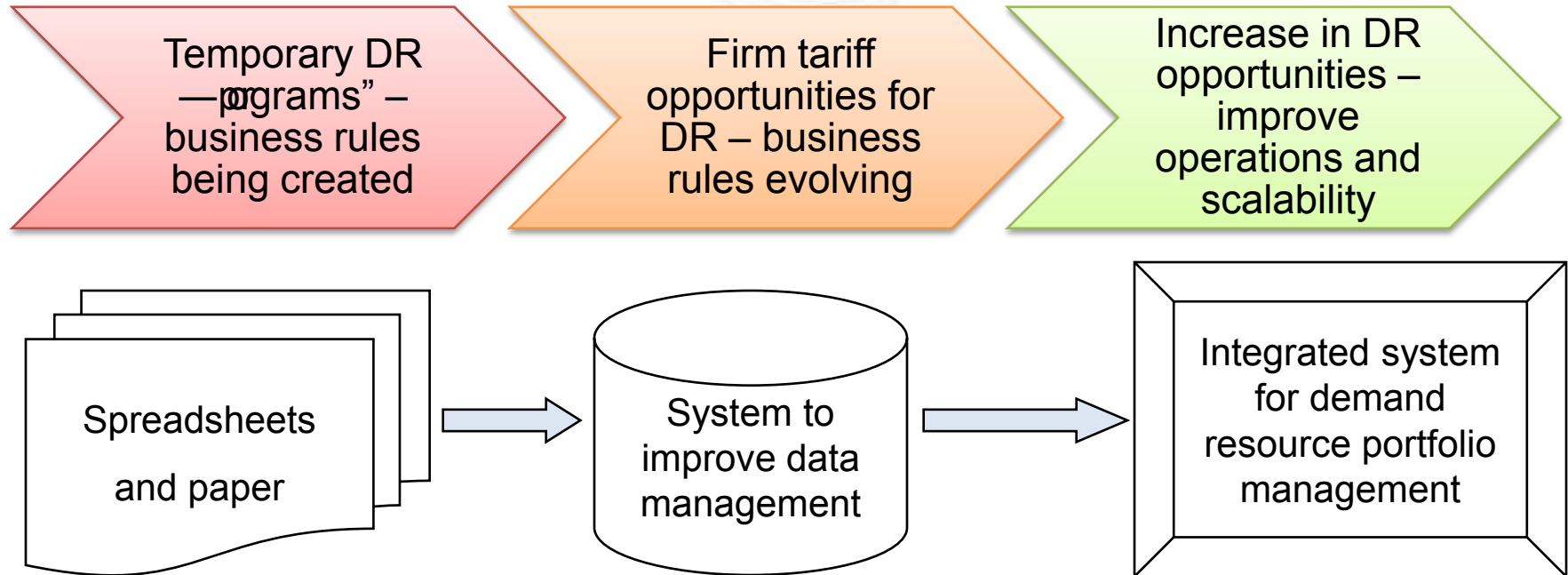
19% of transmission assets  
in Eastern Interconnection

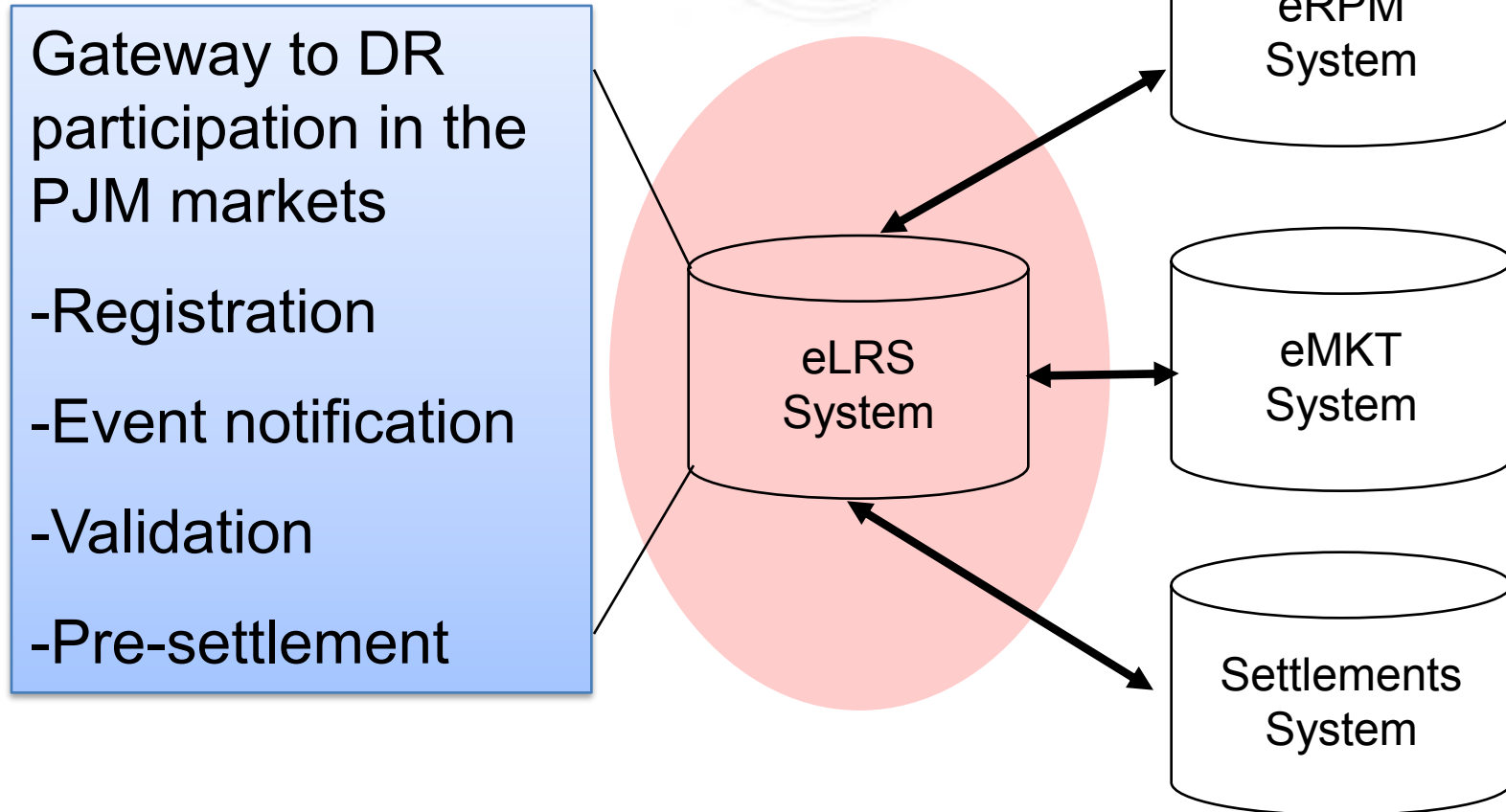
**19% of U.S. GDP produced in PJM**

*The purpose of PJM Demand Response is to enable Demand Resources under the direction and control of Curtailment Service Providers to respond to economic prices.*

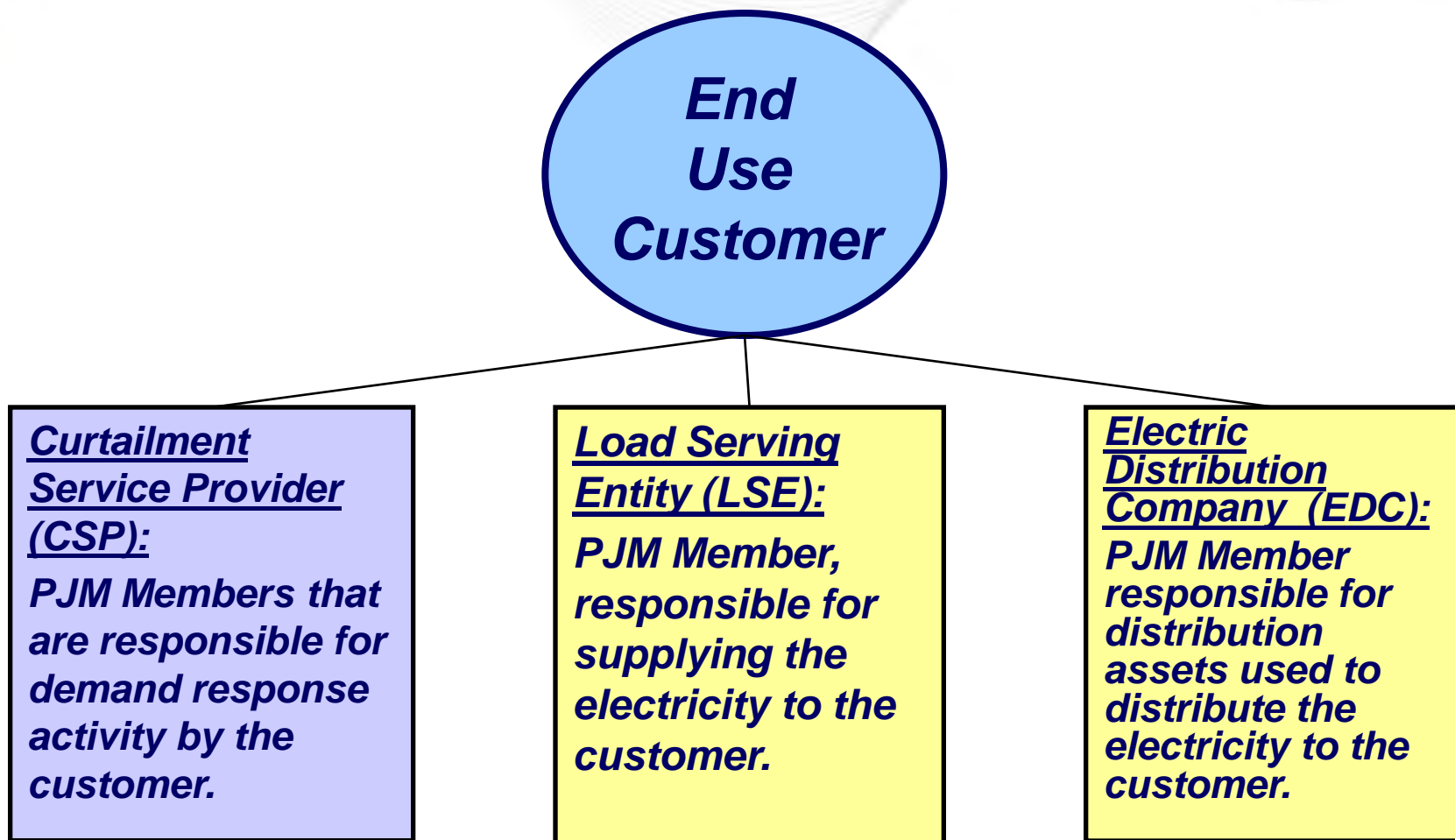
*Demand Response can participate within the various PJM markets:*

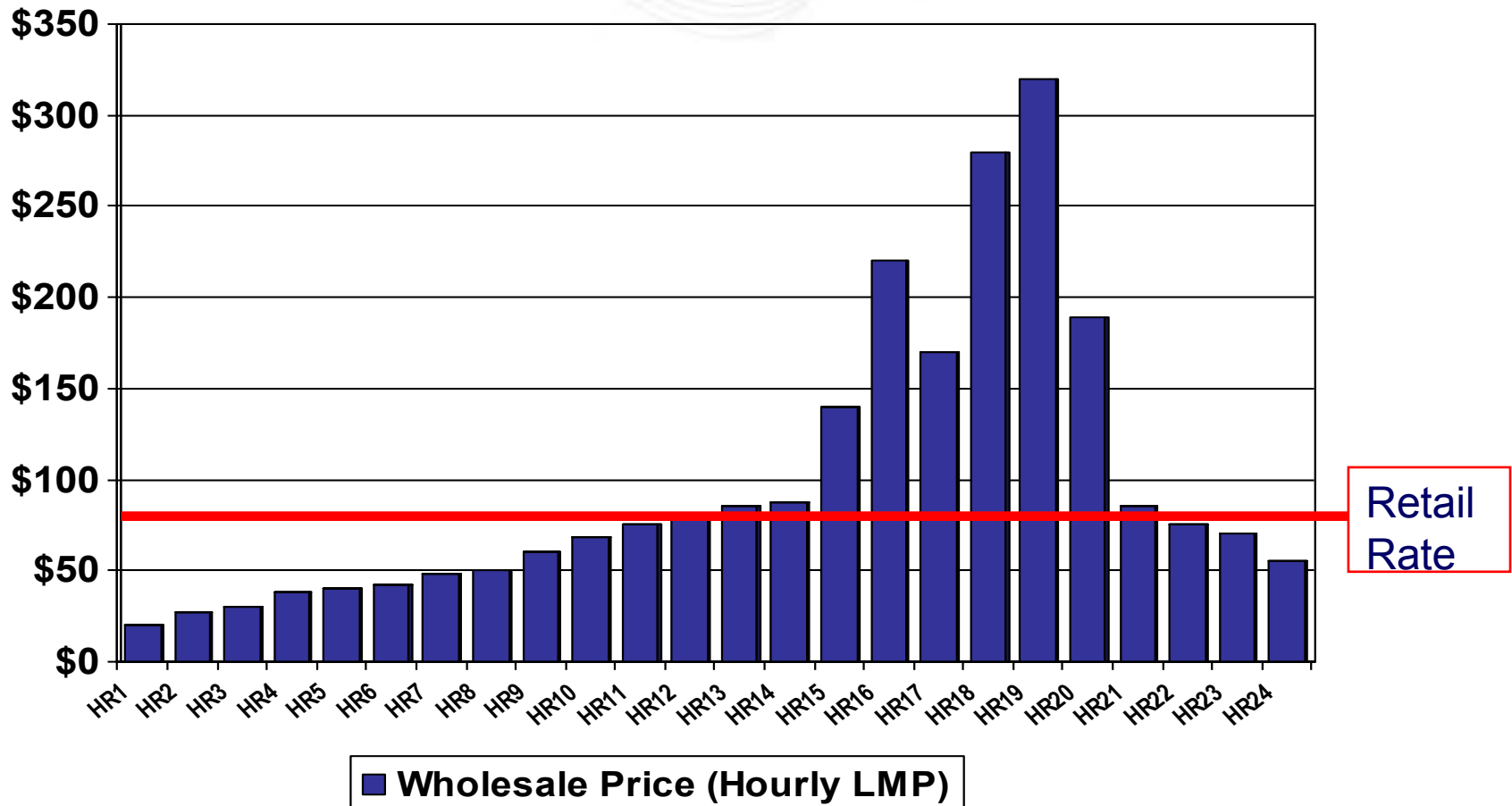
- *Energy*
  - *Day Ahead*
  - *Real Time*
    - *Dispatched*
    - *Self Scheduled*
- *Ancillary Services*
  - *Synchronized Reserve*
  - *Day Ahead Scheduling Reserve*
  - *Regulation*
- *Capacity*
  - *Offer into auction up to 3 years in advance*
  - *nominate 3 months prior to delivery year (this option expires in March 2011)*





*Replace existing application and upgrade integration to other PJM Systems*





Wholesale Service	Demand Side Response
Capacity	Yes
Energy	Yes
Day Ahead Scheduling Reserves (30 min)	Yes
Synchronized Reserves (10 min)	Yes
Regulation	Yes



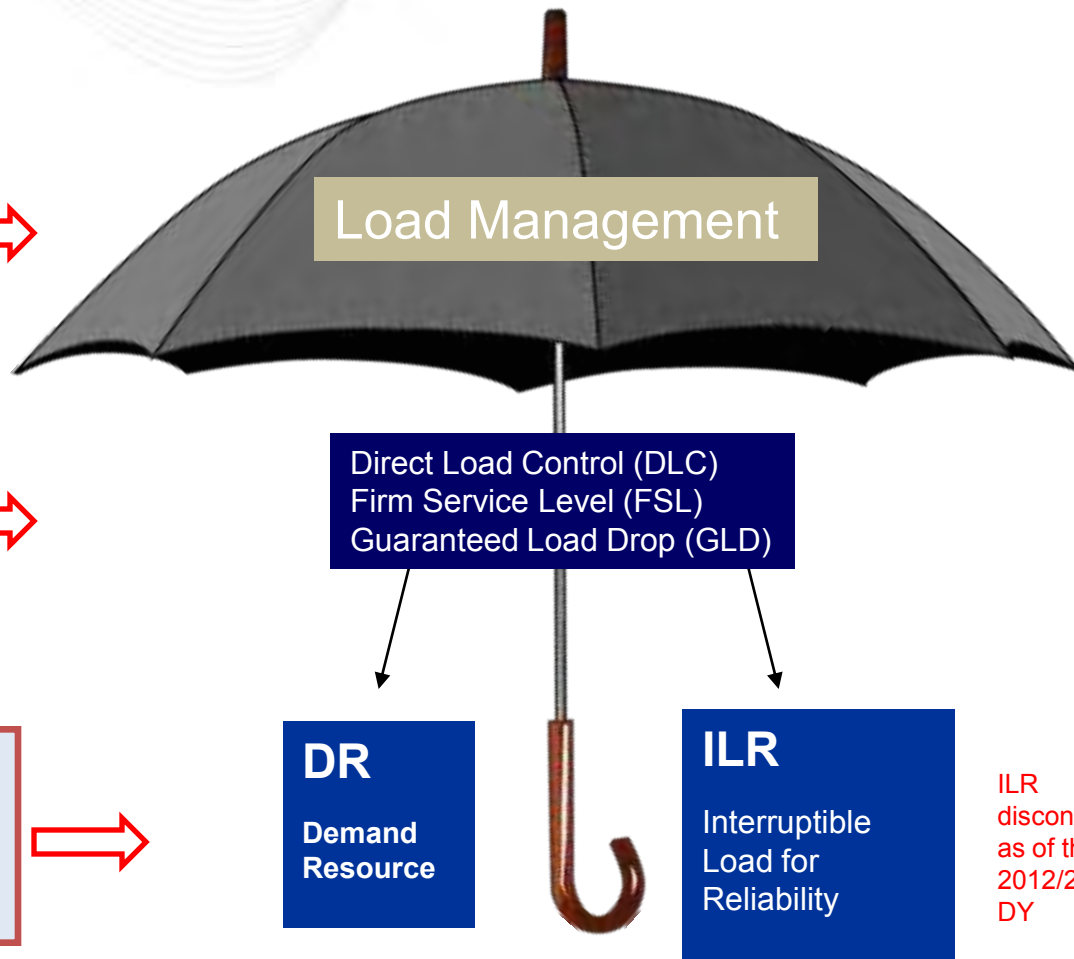
- Day ahead scheduling reserves (30 minute spin)
  - Must reduce net load within 30 minutes if dispatched by PJM
  - Hourly market price (DAMCP)
    - Average September 2009 (\$0.02 mwh)
- Synchronized Reserves (10 minutes spin)
  - Reduce load during reserve shortage, must reduce net load within 10 minutes.
  - Hourly market price (SRMCP)
    - Average September 2009 (midatlantic = \$7.50 mwh, Non-PJM midatlantic = \$0.05 mwh)
- Regulation – real time load change (increase or decrease) based on real time system conditions
  - Hourly market price (RMCP)
    - Average September 2009 (\$22.57 mwh)

Reliability service - must be there when system operator needs it.

Load Management is the broad term to describe load that responds to PJM emergencies

DLC, FSL, & GLD are the different types of Load Management

DR & ILR are the options to participate in the Reliability Pricing Model (RPM)



ILR discontinued as of the 2012/2013 DY

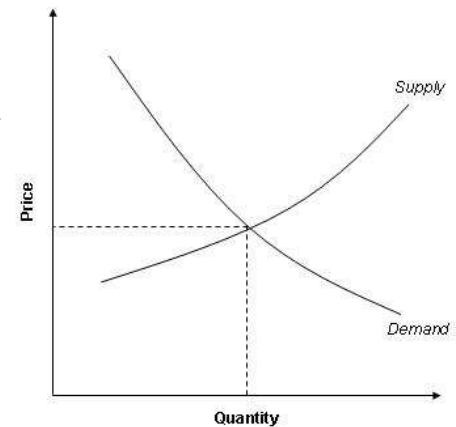
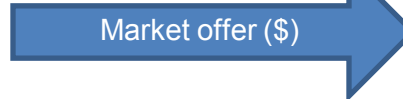
- 1) Reduce barriers to entry
- 2) Streamline workflow management
- 3) Flexible wholesale market participation for DR
- 4) Improve transparency to all participants
- 5) Improved measurement and verification

**Objective:** Reduce barriers to entry

30% of the DR locations registered are under 100kW

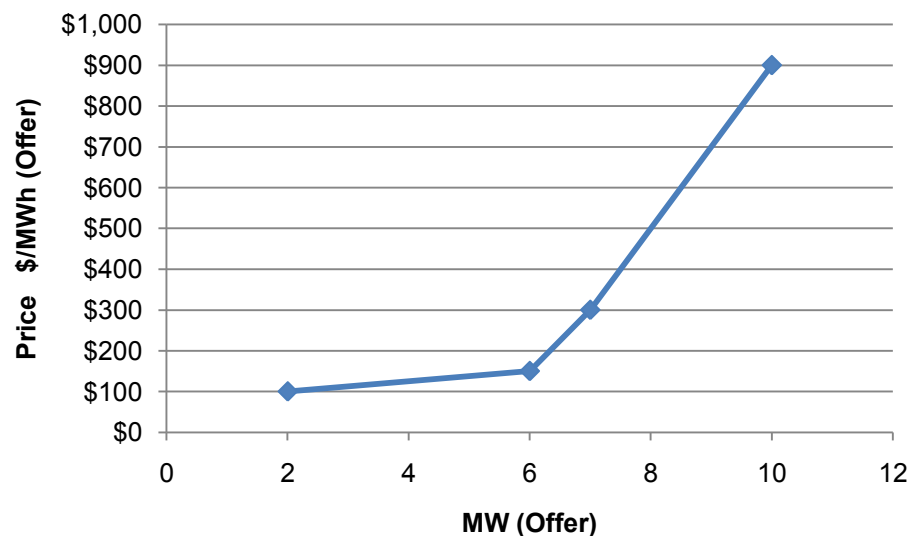


DR resource Market participation much like generation resource



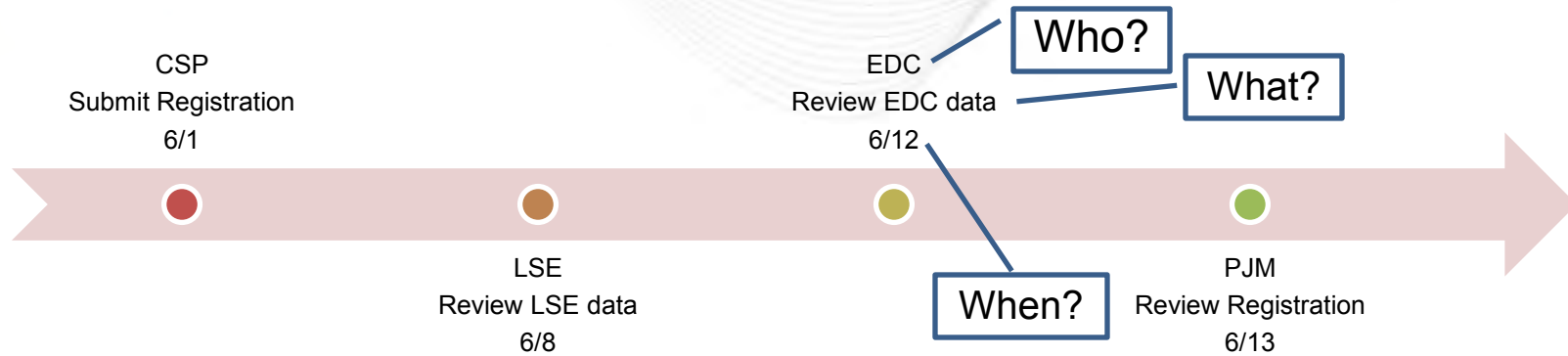
## Objective: Flexible wholesale market participation

- Incremental offer curve
- Day-Ahead vs. Real Time market availability
- Hourly availability
- Offer curve and schedule can change daily

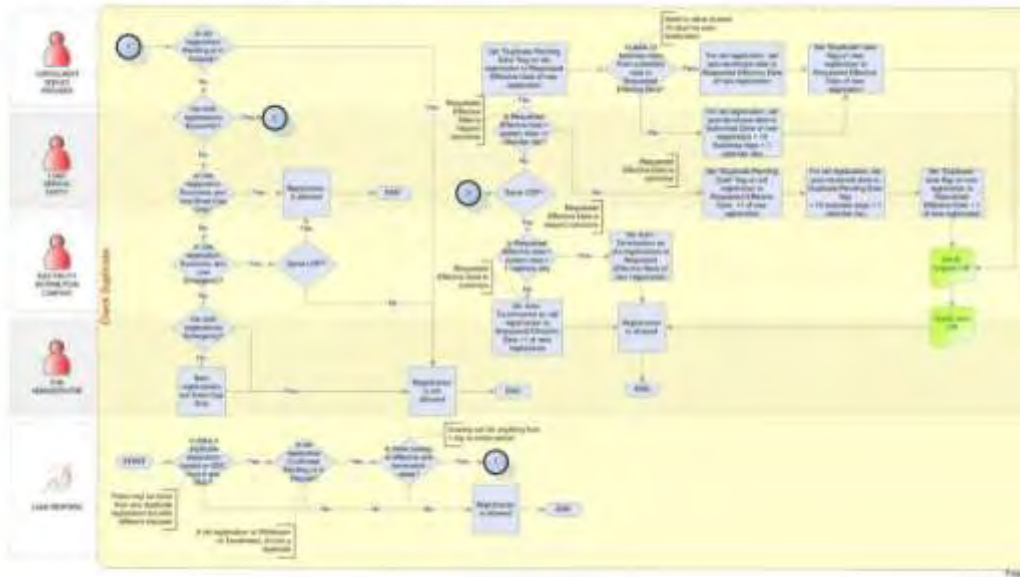


*Use generation offer flexibility in eMKT system for demand resources*

# Objective: Streamline workflow management



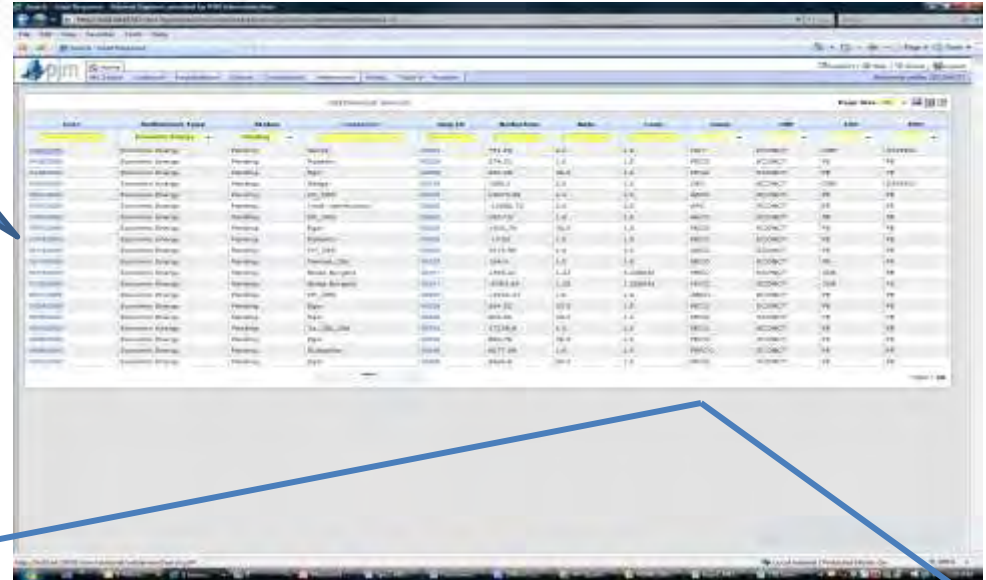
Registration - Check Duplicate Registration Process Flows



Simplify complex process

- Tasks
- Locations
- Events
- Registrations
- Settlements

Filter & Download



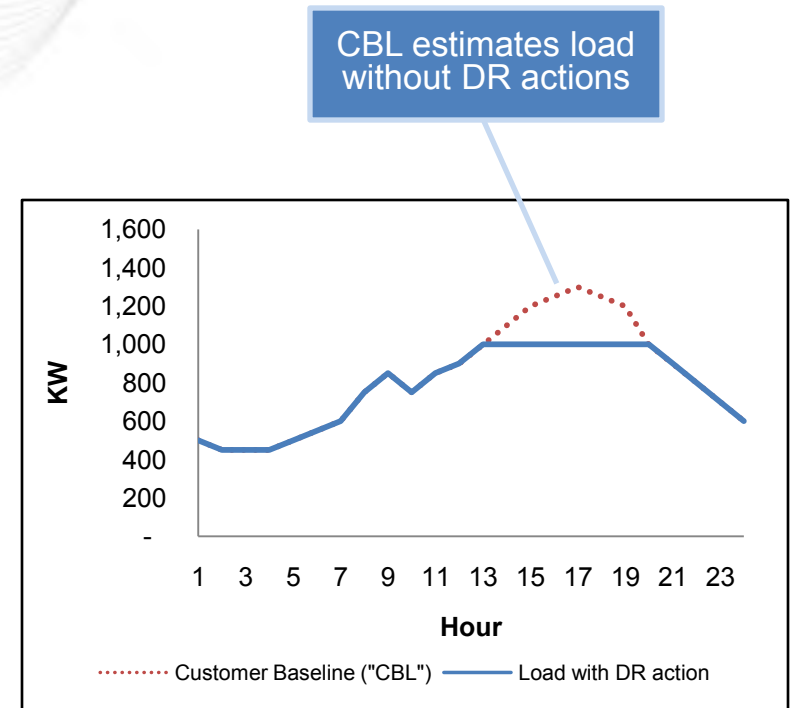
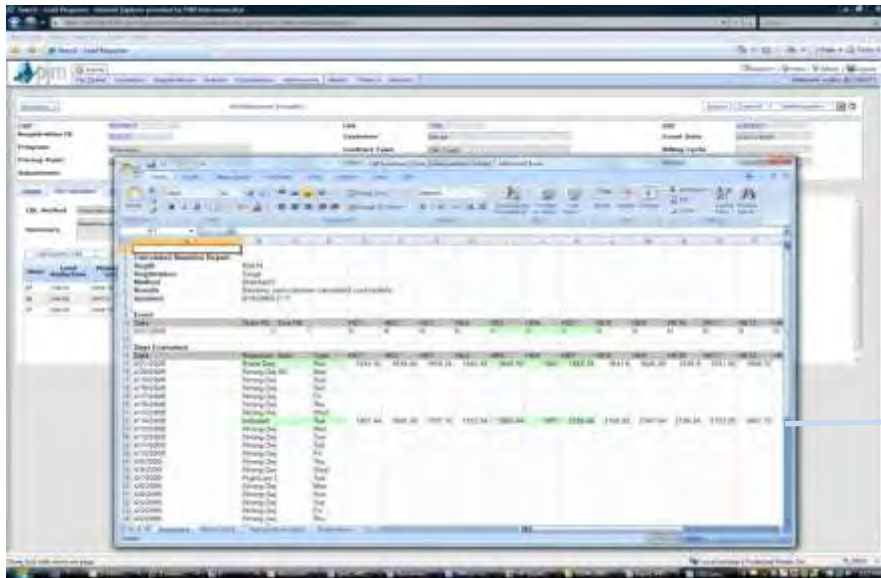
ns1:settlementType	ns1:startTime	ns1:endTime	ns1:CBLMethod	ns1:contractType	ns1:priceNode	ns1:name
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store
Economic Energy	2009-11-05T09:00:00.000-05:00	2009-11-05T20:00:00.000-05:00	Standard (3 Day Types)	Flat Fixed	PECO	Joe's Store

*User access to all information with ability to download based on flexible criteria*



# Objective: Improve measurement and verification

- Variety of CBL calculations to improve accuracy
- Transparency of calculation to all members



Ability to  
download details  
Inputs → Outputs





# Delivery Year 2010-2011 Active Participants in PJM Load Response Program: as of 07/01/2010 (page 1 of 2)

State	Zone	EDC	Economic Program Sites	Economic Program MW	Emergency Energy Only Sites	Emergency Energy Only MW	Emergency ILR Sites	Emergency ILR MW	Emergency DR Sites	Emergency DR MW	Emergency Total MW
DC	PEPCO	PEPCO	8	6.4			117	59.3	9	3.2	62.5
DE	DPL	DEMEC					3	4.8			4.8
DE	DPL	DOVDE					10	6.0			6.0
DE	DPL	DPL	33	91.1			114	95.5	9	9.3	104.8
DE	DPL	ODEC					3	1.9			1.9
IL	COMED	BATAV					1	0.5			0.5
IL	COMED	COMED	75	109.3			1,751	1,432.8	104	29.0	1,461.8
IL	COMED	NAPRVL					1	2.3			2.3
IN	AEP	AEPSCT	1	22.5			2	0.1	7	241.8	241.9
IN	AEP	HEREC					1	13.4			13.4
IN	AEP	WVSDI					1	44.0			44.0
MD	APS	AETSAP	13	26.7			115	82.1	10	6.4	88.5
MD	APS	AETSHG					5	2.7	5	0.4	3.2
MD	BGE	BC	74	476.3			599	431.7	69	405.8	837.5
MD	DOM	ODEC							4	1.1	1.1
MD	DPL	DPL	16	6.7			94	46.2	5	0.7	46.9
MD	DPL	EASTON							1	1.0	1.0
MD	DPL	ODEC	1	0.5			11	8.0	2	0.1	8.1
MD	PEPCO	PEPCO	6	12.6			214	125.5	19	8.3	133.8
MD	PEPCO	SMECO	7	3.3			16	16.8	16	3.4	20.2
MI	AEP	AEPSCT					4	6.1			6.1
NC	DOM	DOMEDC					18	87.3			87.3
NJ	AECO	AE	37	13.9			164	67.1	2	6.1	73.2
NJ	AECO	VMEU	2	1.0			9	3.4			3.4
NJ	JCPL	AECI					1	0.3			0.3
NJ	JCPL	JCBGS	77	103.0			314	158.4	30	19.7	178.2
NJ	PSEG	PSEG	159	29.9			836	380.1	20	6.6	386.7
NJ	RECO	RECO	1	0.3			8	1.7			1.7
OH	AEP	AEPSCT	22	17.6			520	464.7	44	111.0	575.7
OH	AEP	AMPO					46	221.9	1	1.7	223.6
OH	AEP	BUCK					4	39.7			39.7
OH	DAY	AMPO					11	42.0			42.0
OH	DAY	BUCK					1	3.4			3.4
OH	DAY	DAYEDC	8	10.5			204	160.6	5	1.2	161.8



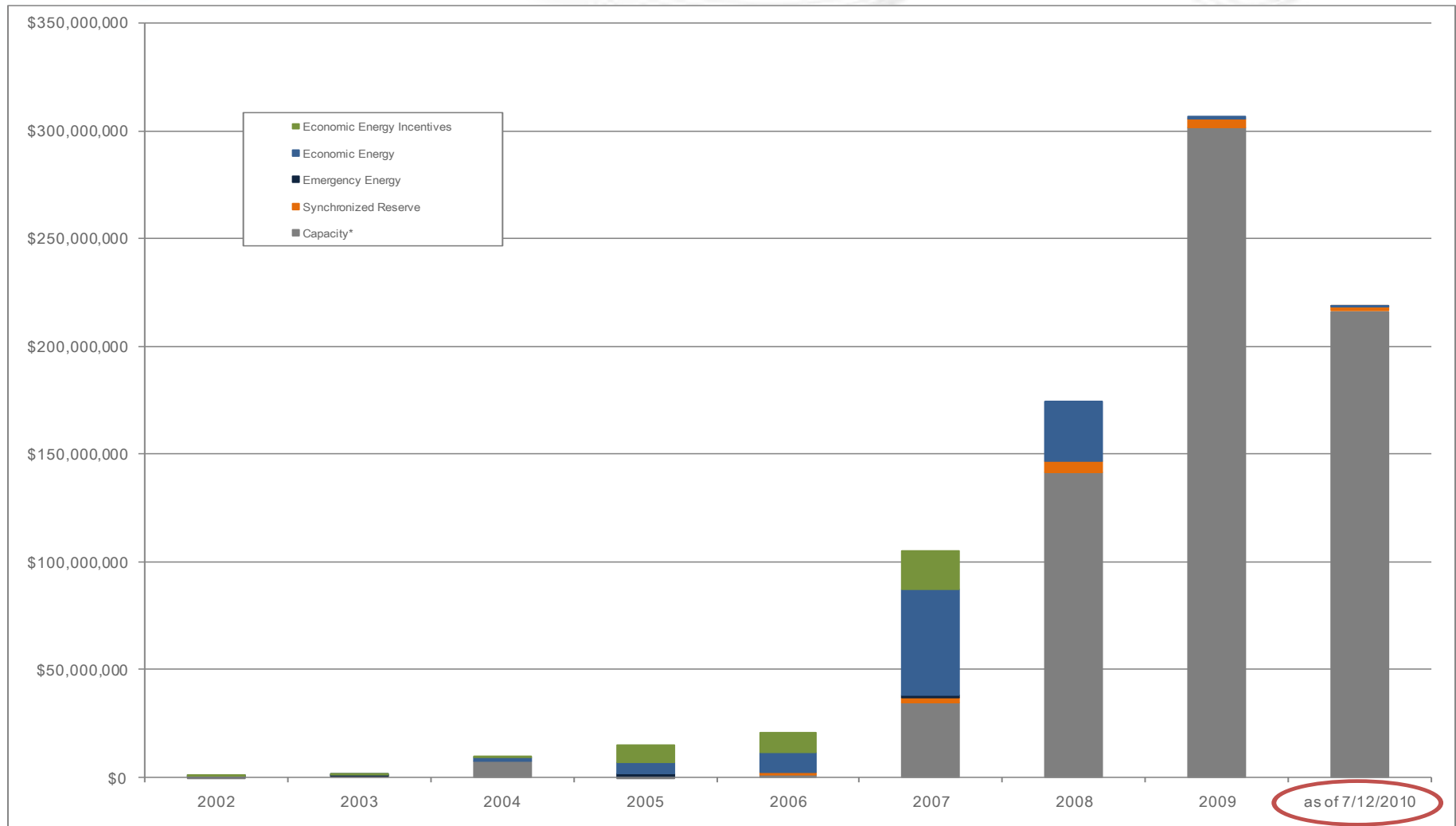
# Delivery Year 2010-2011 Active Participants in PJM Load Response Program: as of 07/01/2010 (page 2 of 2)

State	Zone	EDC	Economic Program Sites	Economic Program MW	Emergency Energy Only Sites	Emergency Energy Only MW	Emergency ILR Sites	Emergency ILR MW	Emergency DR Sites	Emergency DR MW	Emergency Total MW
PA	APS	AECI					2	1.9			1.9
PA	APS	AETSAP	32	94.2			567	377.3	14	4.7	382.0
PA	APS	CHBDTE	1	0.4			4	2.0			2.0
PA	DUQ	DLCO	31	72.9			320	200.1	14	4.6	204.7
PA	METED	AECI					1	1.7			1.7
PA	METED	MetEd	50	54.7			276	183.8	12	2.2	186.0
PA	PECO	PE	144	99.7			789	404.8	80	21.1	425.9
PA	PENELEC	AECI					3	8.9			8.9
PA	PENELEC	PaElec	34	17.5			413	286.5	18	16.8	303.3
PA	PPL	AECI					1	0.1			0.1
PA	PPL	AMPO	2	0.2			9	4.0	2	0.2	4.3
PA	PPL	CTZECL	3	0.3			7	4.2			4.2
PA	PPL	PPL	121	144.2			934	699.6	48	13.3	712.9
PA	PPL	UGI-UI					13	9.2	3	0.5	9.7
TN	AEP	AEPSCT					7	15.0			15.0
VA	AEP	AEPSCT	20	11.8			183	273.6	6	1.1	274.7
VA	AEP	AMPO					19	29.7			29.7
VA	APS	AETSAP	1	0.5			47	43.0			43.0
VA	DOM	CVEC							3	0.9	0.9
VA	DOM	DOMEDC	69	88.1			694	700.3	108	29.2	729.5
VA	DOM	DOMVME					7	94.4			94.4
VA	DOM	NVEC	4	35.9			7	23.5			23.5
VA	DOM	ODEC	9	51.9			17	69.0	5	0.5	69.5
VA	DPL	ODEC					7	0.4	1	4.5	4.9
WV	AEP	AEPSCT	2	0.4			208	249.1	13	129.4	378.5
WV	AEP	APWVP					9	2.3			2.3
WV	APS	AETSAP	8	58.3			262	245.3	9	26.6	271.8
WV	APS	AMPO					2	0.2			0.2
<b>Total</b>			<b>1,071</b>	<b>1,662</b>	<b>0</b>	<b>0</b>	<b>10,006</b>	<b>7,961</b>	<b>698</b>	<b>1,091</b>	<b>9,052</b>

## Note:

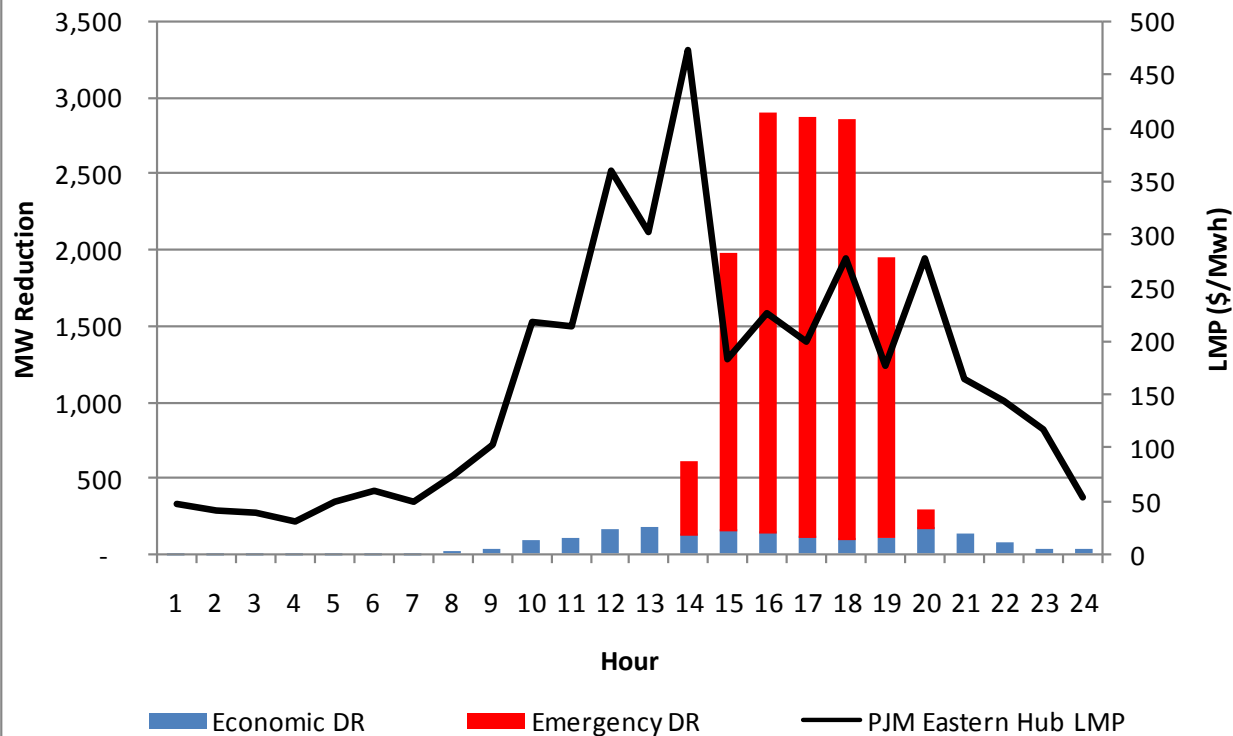
- 1) Data as of 07/01/2010.
- 2) Emergency MW are in ICAP.
- 3) Residential Direct Load Control (DLC) registrations reported as one site not a total number of end use customers in that program.

## PJM Demand Side Response Estimated Revenue



\*Capacity Net Revenue inclusive of Capacity Credits and Charges.

## Estimated Demand Response in PJM July 7, 2010



*Note: Actual load reductions are not finalized until up to 3 months after event.*



# SDG&E's 2010 Demand Response Programs

August 26, 2010

Kathy Casas

Program Advisor of Customer Programs

San Diego Gas & Electric

# Benefits

## **Incentives**

Receive incentives for saving energy during temporary critical times  
Reduced consumption equates to lower bills — even for temporary reductions

## **Minimize potential costs and inconveniences incurred by outages**

Get advance notice when energy supply could become an issue

## **Tools to help you monitor and leverage your energy consumption**

Advanced metering and online management tool

## **Community recognition**

Serve as a model for other businesses and consumers  
Public relations benefits

# Day-Ahead Programs

---

- Critical Peak Pricing Default (CPPD)
- Capacity Bidding Program (CBP)



# Critical Peak Pricing Default

## How does the program work?

Day-Ahead notification. Program available year round.

Event days are determined by forecasted temperature at MCAS and SDG&E's system load :

- Tuesday-Friday - 84 3837 MW
- Saturday - 86 3837 MW
- Sunday - 86 3472 MW
- Monday - 84 3472 MW

May also be triggered by CAISO alerts or local utility emergencies.

Event period is 11:00 am to 6:00 pm. Maximum of 18 events per season.

## What are the program benefits?

Reduced commodity rate all year long in return for higher prices during CPP events.

## Which customers are eligible for this program?

Customers that have a demand of 20 kW or greater for 12 consecutive months and appropriate electric metering.

For Multiple Program Participation please reference rule 41.

# Capacity Bidding Program

## How does the program work?

Day-Ahead or Day-Of notification. Program available May 1<sup>st</sup> – October 31<sup>st</sup> weekends and holidays are excluded.

Event days are determined by the forecasted price of energy.

May also be triggered by statewide or local utility emergencies.

Event period is 11:00 am to 7:00 pm. Limit 1 event per day. Maximum of 24 hours per month.

## What are the program benefits?

Pays capacity payments whether or not events are called.

Participation can be through an DRP – Demand Response Provider to mitigate risk of penalties.

## Which customers are eligible for this program?

Customers must have a maximum demand of at least 20 kW and be on a time-of-use (TOU) rate.

SDG&E will install IDR meters & telecom if needed for participation.

# Day-Of Programs

---

- Critical Peak Pricing Emergency (CPPE)
- Base Interruptible (BIP)
- DemandSMART (DSP)
- Peak Generation (PGP)
- Clean Generation (CGP)
- Summer Saver Program

# Critical Peak Pricing-E

## **How does the program work?**

Voluntary/Day-of 30 minute notification. May be called year round.

Alert periods are determined primarily by local utility emergencies or CAISO alerts that a stage 3 emergency (rolling blackout) is imminent.

Maximum of 40 hours per month and 80 hours per year.

## **What are the program benefits?**

Reduced commodity rate all year long in return for higher prices during CPP-E alert periods.

## **Which customers are eligible for this program?**

Customers that have a demand of > 20 kW on time-of-use rate with appropriate electric metering.

For Multiple Program Participation please reference rule 41.

# Base Interruptible Program

## How does the program work?

Voluntary/Day-of , two options - Option A: 30 minute notification

Option B: 3 Hour notification

Events may be called year round

Event Triggers: CAISO initiates an interruptible period or warning notice that a Stage 1 is imminent.

Extreme temperature conditions impacting system demand.

SDG&E discretionary events for test purposes, program evaluation or system contingencies.

Option A: Max 4 hrs/day, 10 events/month, 120 hours/year

Option B: Max 3 hrs/day, 10 events/month, 90 hours/year

## What are the program benefits?

Monthly capacity payment in exchange for demand response

\$7/kW/Monthly Average Peak Demand for Option A

\$3/kW/Monthly Average Peak Demand for Option B

Excess penalty charges do apply

## Which customers are eligible for this program?

Customers who can reduce 100kw or 15% of their Monthly Average Peak demand, whichever is greater. Customers may also sign up for this program through DRP–Demand Response Provider

# DemandSMART Program

## **How does the program work?**

Day-Of 30 minute notification. Program available May 1<sup>st</sup> – October 31<sup>st</sup>  
weekends and holidays excluded.

Event trigger is determined by the Utility.

Event period is 12:00 am to 6:00 pm. Limit 1 event per day. Maximum of 50  
hours per year.

## **What are the program benefits?**

Pays capacity payments whether or not events are called.

Participation is only through an DRP – Demand Response Provider (EnerNoc) to  
mitigate risk of penalties.

## **Which customers are eligible for this program?**

Customers must have an average annual max demand of 100 kW on a time-of-  
use rate with appropriate electric metering.

# Generator Programs

## **Peak Generation (formerly: Rolling Blackout Reduction Program)**

Use back-up generators during CAISO -Stage 3 emergencies.

Incentive = \$0.35 /kWh. Voluntary participation - No penalties.

Day-Of 15 minute notification.

Event Period is any hours during the year. Maximum 75 hours per year for APCD BUG rules with no event limits.

## **Clean Generator Program (Clean Gen)**

Program to help generator owners with cost savings and equipment upgrades.

Participation is only through an DRP – Demand Response Provider (EnerNoc).

Event Trigger: Stage 2 emergency or a Stage 1 alert if SDG&E anticipates a Stage 2 emergency call later that day; or for high peak prices.

Day-Of 10 minute notification.

Event Period is Monday-Saturday 7am to 10pm. No annual limit and no more than 8 hours daily.

# Summer Saver

## How does the program work?

Air Conditioning is cycled in 15 minute increments during program events

Incentive = Residential – 100% cycling receives up to \$184 in annual bill credit

50% cycling receives up to \$46 in annual bill credit

Commercial - 50% cycling receives \$15/ton annual bill credit

30% cycling receives \$9/ton annual bill credit

Event Trigger is Stage 1 or 2 local emergencies at SDG&E discretion.

Program available May 1<sup>st</sup> – October 31<sup>st</sup> with weekend option.

Event Period is 12:00 pm to 8:00 pm Monday-Friday weekend optional.

Maximum 40 hours in a month and 120 hours in a year.

## Which customers are eligible for this program?

Available for residential and small commercial (under 100 kW) customers.



# Tools and Services

---

- Technical Assistance
- Technology Incentives
- kWickview

# Demand Response Tools

## **Technical Assistance/Technology Incentives (TA/TI)**

TA offers a free assessment of demand response potential at businesses and incentives for installing demand reduction technologies.

TI is available to qualifying businesses for the automation of temporary demand reduction strategies .

## **kWickview**

Online energy presentment tool for DR participants that allows customers to monitor and analyze their business's energy use.

Customer training sessions are offered throughout the year.

# What's New

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## Things were working on:

- Demand Response Wholesale Market Pilot (DRWMP)
- CAISO's Reliability Demand Response Product (RDRP)
- Proxy Demand Resources (Full Market Module)
- Bilateral Contract Programs (BCP)

# 2010 Program Enrollments

Program Name	Active Customers	Active Meters	Active MW
<b>(Day Ahead)</b>			
Capacity Bidding Program**	109	554	31.17
Critical Peak Pricing Default	680	1,476	43.24
<b>Total Day Ahead:</b>	<b>789</b>	<b>2030</b>	<b>74.41</b>
<b>(Day Of)</b>			
Critical Peak Pricing - Emergency	7	10	4.45
Peak Generation Program	25	48	23.89
Base Interruptible Program - Option A	13	18	6.27
Base Interruptible Program - Option B	1	1	0.18
Scheduled Load Reduction Program	0	0	0.00
Optional Binding Mandatory Curtailment	0	0	0.00
Clean Generator Program (Celerity)	5	11	25.37
Summer Saver	31,824	44,131	25.10
Participating Load Pilot*	8	16	0.00
Billateral Contract Program	32	60	8.00
<b>Total Day Of:</b>	<b>31,915</b>	<b>44,295</b>	<b>93.26</b>
Technical Assistance Program ***	26	62	31.25
Technical Incentive Program @	2	8	1.23
<b>Totals:</b>	<b>32,732</b>	<b>46,395</b>	<b>200</b>

# 2010 Program Events

Program Name	Load Reduction Goal	Total 2010 YTD Load Reduction	Actual Load Reduction (used to report events)	Actual Load Reduction (used to report events)	Actual Load Reduction (used to report events)	Actual Load Reduction (used to report events)	Actual Load Reduction (used to report events)	Actual Load Reduction (used to report events)	Actual Load Reduction (used to report events)	Actual Load Reduction (used to report events)	Actual Load Reduction (used to report events)	Actual Load Reduction (used to report events)
<b>DAY AHEAD</b>			8/25/2010	8/24/2010	8/23/2010	8/20/2010	8/19/2010	8/18/2010	8/17/2010	7/16/2010	7/15/2010	7/14/2010
Critical Peak Pricing-Default	21	0	-	-	-	-	-	-	-	-	-	-
Capacity Bidding Program	11	30.2	-	-	-	8	10.5	-	-	11.7	-	-
<b>Total Day Ahead</b>	<b>32</b>	<b>30.2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>10.5</b>	<b>0</b>	<b>0</b>	<b>11.7</b>	<b>0</b>	<b>0</b>
<b>DAY OF</b>												
Enernoc Bilateral	14	60			9	-	9.7	9	8.2	7.1	8	9
Critical Peak Pricing - E	2	0	-	-	-	-	-	-	-	-	-	-
Capacity Bidding Program	12	63			10	-	10	10.3	-	11.7	11	10
Peak Generation Program	5	0	-	-	-	-	-	-	-	-	-	-
Base Interruptible Program	6	0	-	-	-	-	-	-	-	-	-	-
Clean Generator Program	22	0	-	-	-	-	-	-	-	-	-	-
Summer Saver	26	66.92	TBD	TBD	TBD	-	16	16	9	16.42	9.5	-
<b>Total Day Of:</b>	<b>87</b>	<b>189.9</b>	<b>0.0</b>	<b>0.0</b>	<b>19.0</b>	<b>0.0</b>	<b>35.7</b>	<b>35.3</b>	<b>17.2</b>	<b>35.2</b>	<b>28.5</b>	<b>19.0</b>
<b>Totals:</b>	<b>119</b>	<b>220.1</b>	<b>0.0</b>	<b>0.0</b>	<b>19.0</b>	<b>8.0</b>	<b>46.2</b>	<b>35.3</b>	<b>17.2</b>	<b>46.9</b>	<b>28.5</b>	<b>19.0</b>

# Q&A

**To submit a question . . .**  
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## **J. Christopher Perdue**

Vice President, Sierra Energy Group,  
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