

Constellation NewEnergy's Sustainable Strategies

NewAnswersSM
OFFERING INNOVATIVE SUSTAINABLE SOLUTIONS

 **Constellation
NewEnergy**[®]
*The way energy works.
for your business.*



Today's Agenda

- Introduction
- Constellation Energy Overview
- A Changing Industry
- NewResponse Program
- How Can Manufacturers Participate
- Benefits From Demand Response Participation
- Why Work with Constellation NewEnergy?
- Next Steps

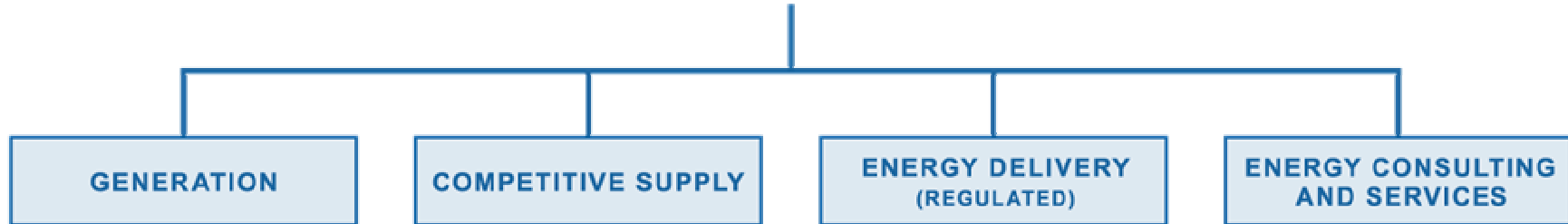


Constellation Energy Overview

- Integrated energy merchant (NYSE: CEG)
- Fortune 500 company (No. 125)
- Owns a diversified fleet of 78 generating units located throughout the United States
- Approximately 8,700 megawatts of generating capacity
- Employees: 9,645
- Named to the 2007 FORTUNE list of Most Admired Energy Companies
- No. 37 on the 2007 BusinessWeek list of 50 Best Performing Companies in the U.S.



Constellation Energy



Constellation NewEnergy Overview

- Leading North American energy cost manager and competitive supplier to commercial & industrial customers
- Supplies more than 17,000 megawatts of peak load
- Serves more than 14,000 customers including over two thirds of the Fortune 100 companies
- Active in 16 states, Washington DC and two Canadian provinces
- Manages 8 regional offices across North America
- More than 500 employees
- Wholly-owned subsidiary of Constellation Energy



Constellation NewEnergy's Sustainability Team Overview

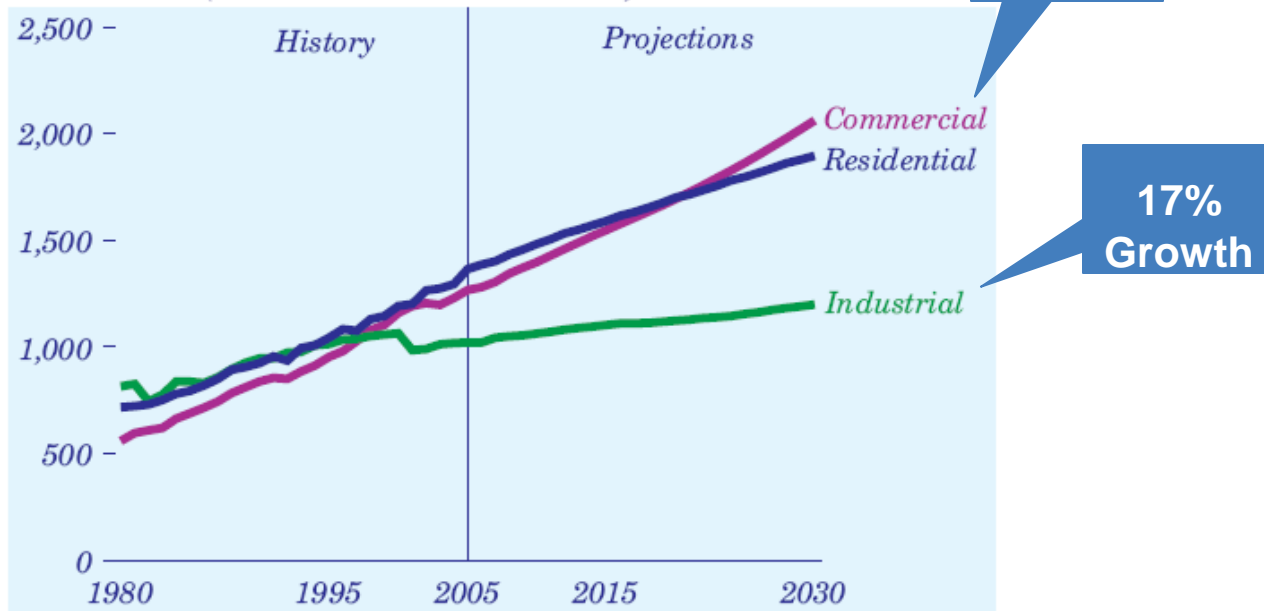
Constellation NewEnergy fully integrates demand response capabilities and sustainable electricity supply opportunities that support customer efforts to procure and use energy in a more efficient and environmentally responsible manner.



A Changing Industry

Electricity Demand Growth: Commercial Sector

Figure 53. Annual electricity sales by sector, 1980-2030 (billion kilowatthours)



Between 2003 and 2030, the US and Canada will
Need to add 758,000 MW of additional capacity

At the cost of \$1.6 trillion (IEA)

Energy Information Administration / Annual Energy Outlook 2007



A Changing Industry

- There is a new paradigm for Capacity
 - First time end-use capacity = new steel in the ground
 - Electricity customers will incur increased costs resulting from this change in the capacity market structure.
- What are Capacity costs?
 - Costs assigned to customers as a consequence of a Federal Energy Regulatory Commission (FERC) decision aimed at ensuring the adequate availability of electricity generation in the region's future.
- Capacity prices can be set by utilities or by auctions in advance
- Participating in a Load Response Program can offset increasing energy costs



PJM Capacity Prices

- Reliability Pricing Model (RPM)
 - Insures Generating Capacity is Available to Cover Expected Load
 - Capacity Auctions Held Three Years Prior to the Planning Year
 - Capacity Obligation Based on 5 Coincident Peaks (5CP)



PJM Auction Dates

Planning Year	Auction Date	Enrollment Deadline
June 2008 - May 2009	Completed	March 3, 2008
June 2009 - May 2010	Completed	March 2, 2009
June 2010 - May 2011	January 21, 2008	March 1, 2010



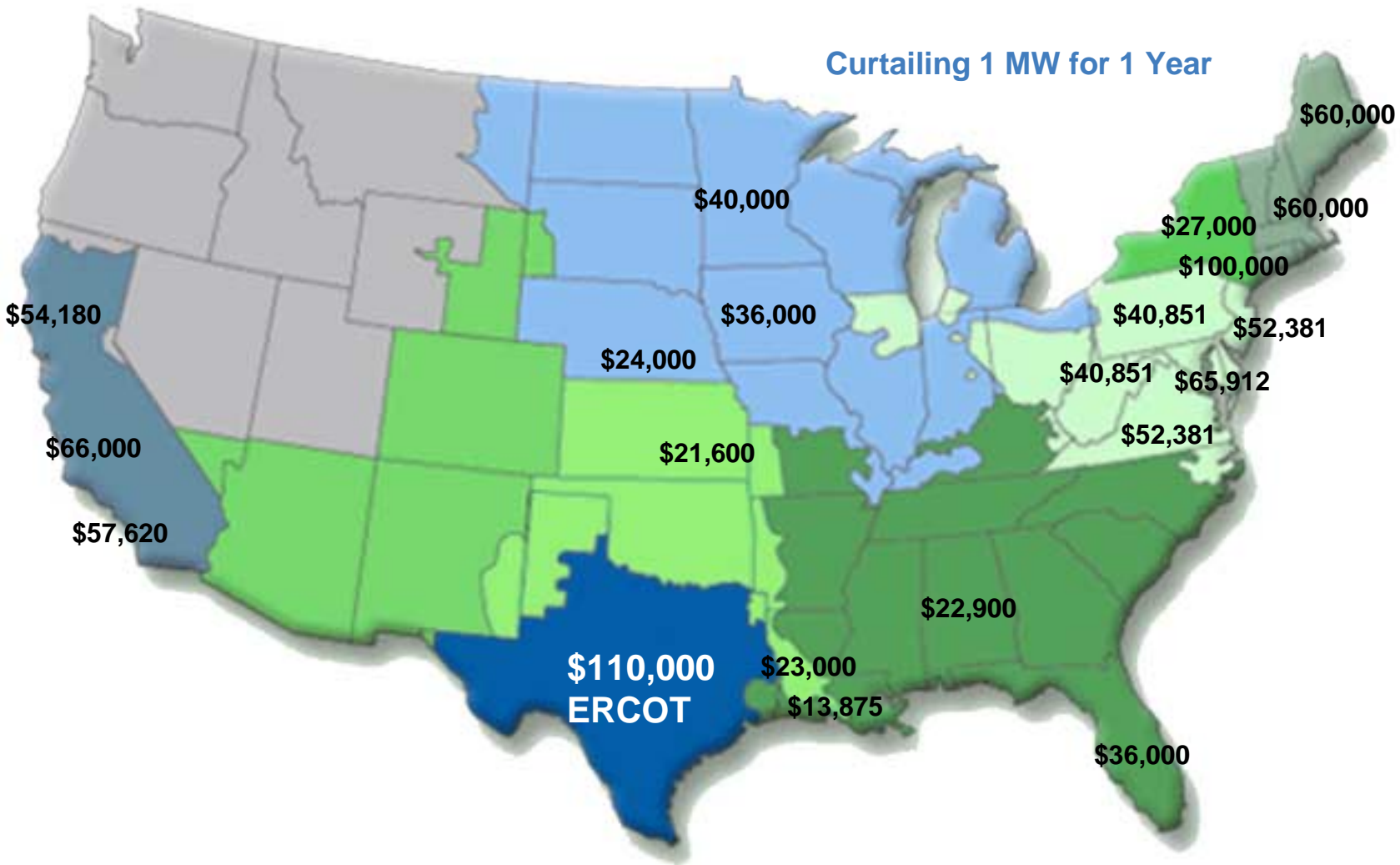
PJM Auction Results

\$\$ per year for 1,000 kW of Capacity Curtailment

Zone	Capacity Value 2008-2009	Capacity Value 2009-2010
AE, DPL, JCPL., PECO, PSEG, RECO	\$52,381	\$68,821
BGE, PEPCO, APS (09-10)	\$65,912	\$79,614
AEP, APS (08-09), COMED, DAYTON, DOM, DUQ, METED, PENLC, PL	\$40,851	\$37,245



Capacity & Energy Payments From Demand Response Programs



What is Load Response?

The reduction of electrical consumption by customers in response to:

- ✓ high wholesale electricity prices
- ✓ system resource capacity needs
- ✓ system reliability events.



How Does NewResponse Work?

- Participants can reduce electricity consumption in two ways:
 - Self Generation - emergency backup generation, distributed generation or UPS systems
 - Curtailment - turning off lights, raising temperature setpoints or changing production schedules



Loads to Consider

- Large loads on a single breaker
- Redundant production lines
- Large HP motors
 - conveyors,
 - compressors,
 - pumps,
 - elevators
- Electric reheat furnaces or ovens
- Process chilled water
- Refrigeration equipment
- Ventilation
- Variable speed drives
- Distributed Generation



Benefits of Load Response

- Energy cost reduction
 - Earn payments for participation
 - May reduce future supply prices by controlling usage patterns
 - No charges for supply or distribution of energy curtailed
- Compelling social benefits
 - Prevent regional blackouts
 - Put downward pressure on prices
 - Environmental benefits gained by avoiding use of last-resort generators



Economic Considerations

- Is value of credit worth potential downtime?
- Can product be stored ahead?
- Can production be shifted?
- Corporate Initiatives – intrinsic value



Constellation NewEnergy's NewResponse Program in PJM

- Firm Service Level

- When event is called, customer agrees to reduce Load to a “Firm Service Level” predetermined by the customer.
- This can be accomplished by the reduction of load or the increase in behind the meter generation.

- Guaranteed Load Drop

- When an event is called, customer agrees to reduce Load by the amount of the “Guaranteed Load Drop” predetermined by the customer.
- This can be accomplished by the use of separately metered generation.



NewResponse Program in PJM

Minimum Size	Minimum load reduction must be 100 kW, may be aggregated
Number & Duration of Load Response Events	Can call up to 10 events lasting up to 6 hours from 12:00 p.m. to 8:00 p.m. Monday through Friday during the months of May through September and 2:00 p.m. through 10:00 p.m. Monday through Friday during the months of October through April excluding holidays.
Notification	Customers will be notified of events at least 1 hour prior to the event via email.
Compensation	Customers receive a capacity credit based on the annual auction clearing price for their load zone.
Payments	\$3.40-\$5.49/kW-month 2008-2009
Participation Compliance	Customers are required to comply during the months of June through September
Settlements	CNE will pay customers their portion of the capacity credit minus any penalties incurred. This will be paid 60 days after the end of the quarter.
Penalties	Customers will be penalized 1/5 of the annual capacity credit for each non-compliant event. This penalty is capped at the annual credit.
Enrollment Deadline	March 3, 2008



PJM Curtailment Program History

Year	# of Events	# of Hours
1991	1	5:36
1992	1	1:21
1993	0	0:00
1994	0	0:00
1995	1	6:00
1996	0	0:00
1997	0	0:00
1998	1	1:15
1999	5	19:25
2000	0	0:00
2001	4	11:00
2002	3	13:00
2003	0	0:00
2004	0	0:00
2005	2	5:00
2006	2	6:00
2007	1	4:00
Ave/Year	1.24	4:16
No events in Comed since joining PJM		



Additional Load Response Opportunities

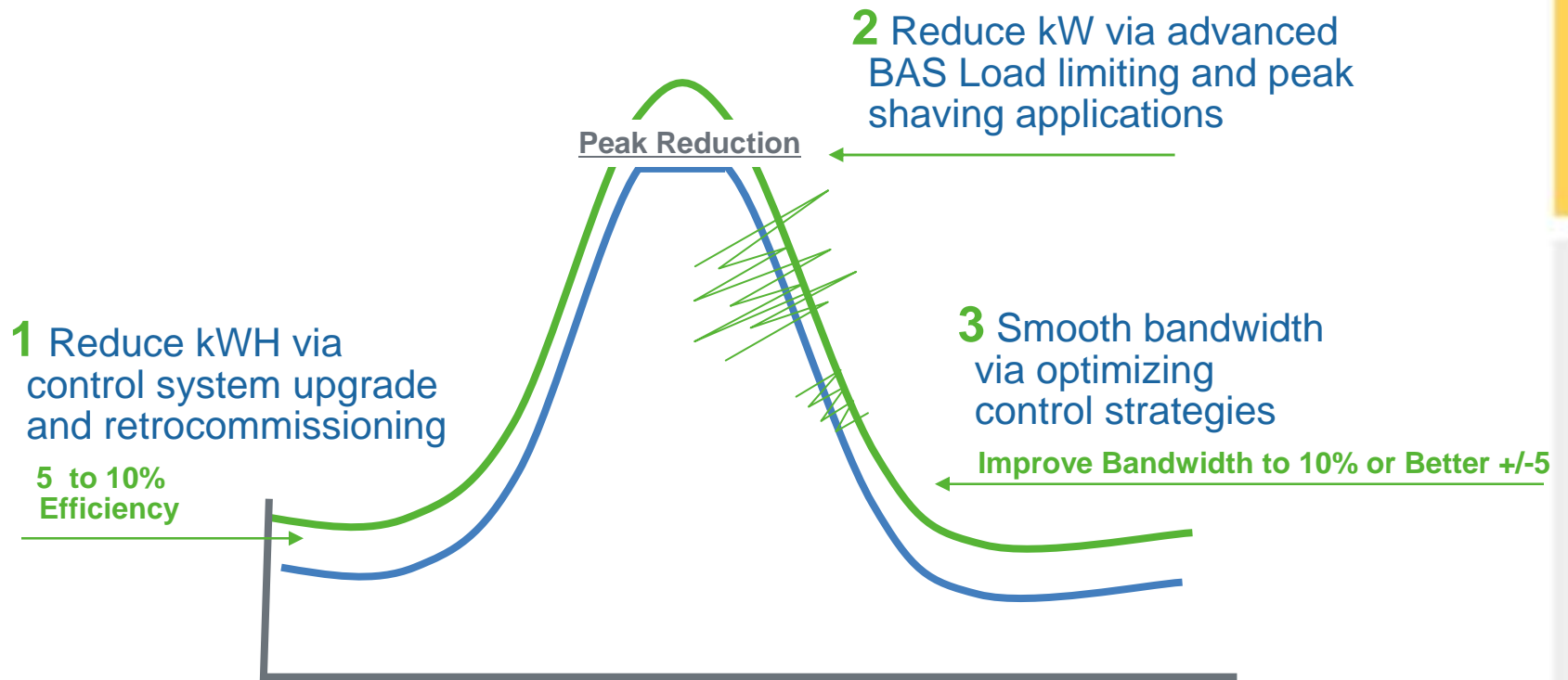
- Building Automation Systems can help improve your energy management system
- Expertise can be brought to bear in three primary ways:
 - Shaping load via control system upgrades and retrofitting.
 - Reducing load via advanced demand limiting and peak shaving applications.
 - Smoothing bandwidth via optimizing control strategies.



Capacity Savings: Typical Load Curve

NewResponse Partner Program Mission

Affect Load Shape in 3 Ways:



Why Work with Constellation NewEnergy

- National player who can combine market risk expertise with additional technical offerings such as Load Response
- Infrastructure *already* in place allowing us the ability to offer more competitive prices
- Dedicated to educating our customers as part of our commitment to providing maximum value

Supply-side

- Over 17,000 MW served nationally
- Over 8,000 MW of Real-Time load
- Serve two-thirds of Fortune 100
- Providing energy solutions for customers since 1995

Load-side

- Active in all open load response markets
- Over 400 MW of Load Response nationally
- Extensive clientele across various industries, sizes ranging from 100 kW – 30 MW

We are dedicated to comprehensive Energy Risk Management



Next Steps

Q: When should I enroll in Load Response?

A: NOW!

1. Enrollment deadline is March 2, 2009
2. PJM Requires 10 days to validate enrollment
3. Begin earning payments for participation

Q: How do I enroll in Load Response?

A: Contact your CNE representative

We will help you determine curtailment capability, answer technical questions, and enroll you with PJM



Contact Information



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