AMIT/DSWG Workshop The Ideas from Other Markets

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Discussion Points

- Who is Comverge?
- PA Act 129 Overview
 - PA Programs
- CA Overview
- ERCOT Challenges

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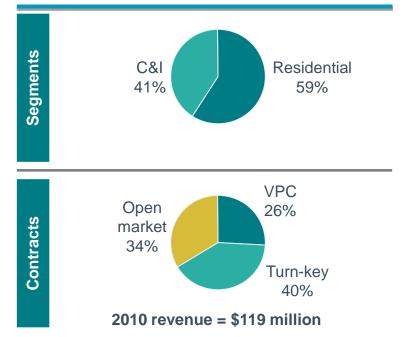
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Comverge is the leading provider of Intelligent Energy Management solutions

Key highlights

- > Headquartered in Atlanta, GA
- ➢ Over 570 employees
- > 30+ year history of innovation
- Publicly listed on the NASDAQ
- > 2010 sales of \$119 million
- >5+ million devices installed
- > 3,700+ MW under management

Revenue breakdown (2010)



Comverge is uniquely positioned to capitalize on energy growth trends in both the residential and C&I DR markets

Note: 2010E excludes impact from Energy Efficiency contracts

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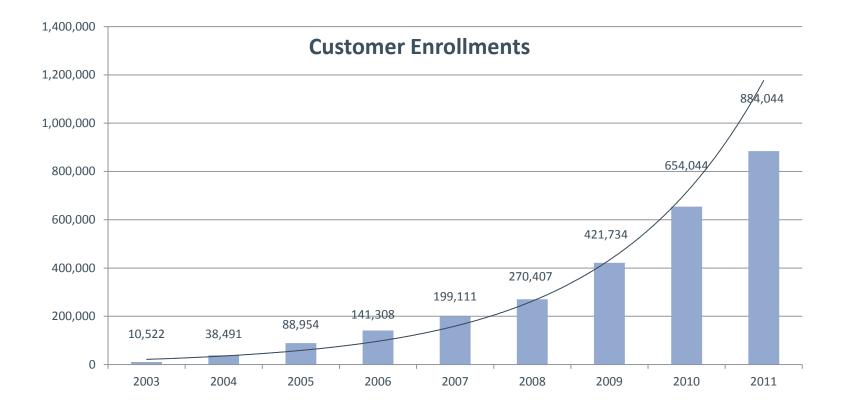
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Converge is consistently the energy management provider of choice

Established incumbency



Converge Track Record of Success



In 2011, we expect to be approaching ~1.0M enrollments

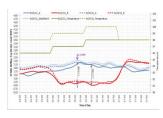
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Demand Response is our Business



Device Optimization

- Devices controlled over 3 million times in 2011
- Events from 6 hours to 9 min



Energy Sciences

• 10,000 M&V points & 20,000 HAN devices read in real time, 24x7

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Marketing Recruitment:

- 225,000 Recruitments in 2010
- 1 Millionth recruitment this fall

Optimize Parameter Adjustment & Modeling

Analysis Statistical

Statistical Strategy Analysis

> Measure Performance Measures & Verification

Control Operations

211 Control Events in 2011 16,000 MWhs in 2011

Control Operate MWs Manage Constraints

Acquire

Prospect

Analysis &

Segmentation

Call Center:

260,000 transactions in 2011 YTD



Field Force

- 150,000 Installed in 2011 YTD
- 22,000 per month peak





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Act 129 Overview

- Elements of Act 129
 - Energy efficiency and Conservation
 - 1% consumption reduction goal from 2009-2010 baseline by May 2011
 - 3% consumption reduction goal from 2009-2010 baseline by May 2013
 - 4.5% demand reduction goal in 100 highest demand hours from 2007-2008 baseline by May 2013
 - Cost/benefit analyses done by November 2013

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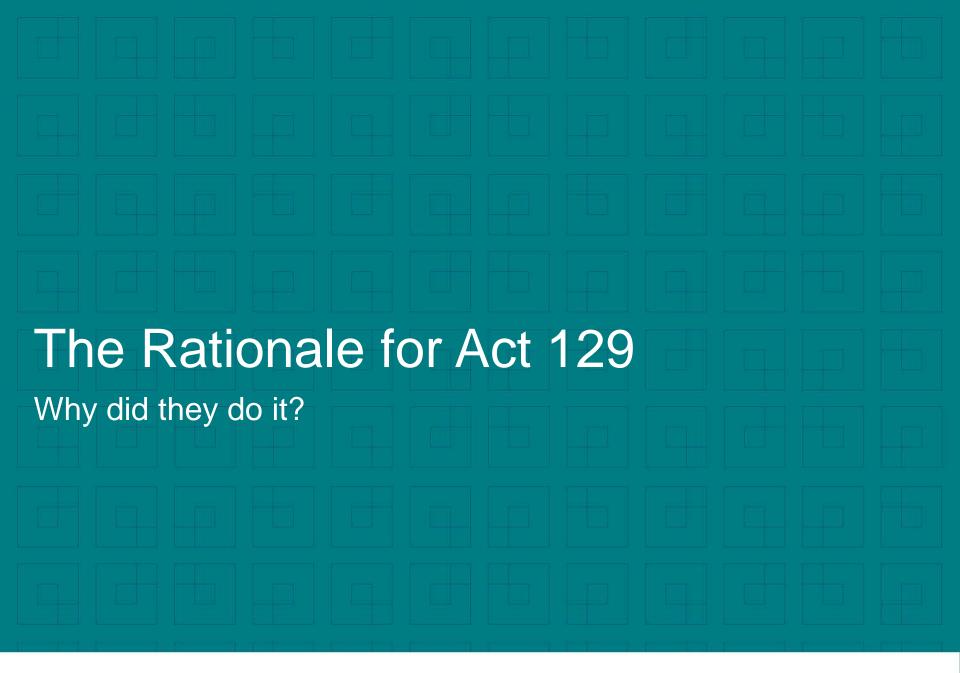
• Material fines for non-achievement of goals

Act 129 Overview

- Additional Elements of Act 129
 - Smart Meter deployment
 - Time of Use rates
 - Modifications to Alternative Energy Portfolio Standards Act ("AEPS")

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- Carbon Sequestration studies
- Default Service and Default Service
 Procurement
- Market Manipulation
- Conservation Service Providers
- Cost Recovery



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Rationale for Act 129

- Why all of the different elements?
 - PA operates a deregulated retail electricity market
 - Retail electricity rates were capped in 1998 at 1992 levels
 - Gas prices were very bullish in the post-Katrina, strong economic market from 2005 to 2008
 - PA ratepayers were looking at rate increases in excess of 100% when caps expired

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An Ominous Situation

As the Pennsylvania legislature was debating Act 129, **natural gas prices** were steadily increasing to **Historic Post**-

18 Katrina Highs, Rate caps had recently expired in neighboring MD and DE, and Rate Caps were set to expire at the end

of 2009 and 2010 in PA, on pace to **100% or greater rate increases**.



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Rationale for Act 129

- What was the goal?
 - State's goal was to put in place the tools that would allow the market to control energy costs
 - Act 129 is not "Command and Control"
 - Created Utility Obligations
 - EE & C, DR, Rates
 - Other programs
 - Modification to AEPS Act qualified additional resources as "alternative", bringing economic opportunity to nonfossil resources

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• Carbon Sequestration studies to look at long-term feasibility of coal use

PA DR Programs

• PPL

- Direct Load Control A/C Cycling
- Pays Customers \$32 per unit per year
- PECO
 - Direct Load Control A/C Cycling
 - Pays Customers \$30 per month (June-Sept)

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- Programs are available through Summer 2012
- Cost recovery is through wires surcharge
- Maryland programs are very similar

California Programs Where are they going?

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CA Programs

- Each IOU has separate programs
 - Base Interruptible Program
 - Capacity Bidding
 - Critical Peak Pricing
 - Critical Peak Pricing Emergency
 - Residential A/C Cycling Program
 - Technical Assistance and Technology Incentives

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- All programs are currently administered and cost recovered through the utilities wires charges
- Moving forward CPUC wants DR to prove cost effectiveness and dispatch through CAISO

ERCOT Challenges Where do we go from here?

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ERCOT Challenges

- Energy Only market doesn't provide any certainty of recovery
 - DR can cost \$300-500/kW
 - New Gen costs \$700-900/kW
 - Who is willing to take on the *Risk*
- EE Programs provide limited penetration
- Absent SCED integration mechanism for compensation?

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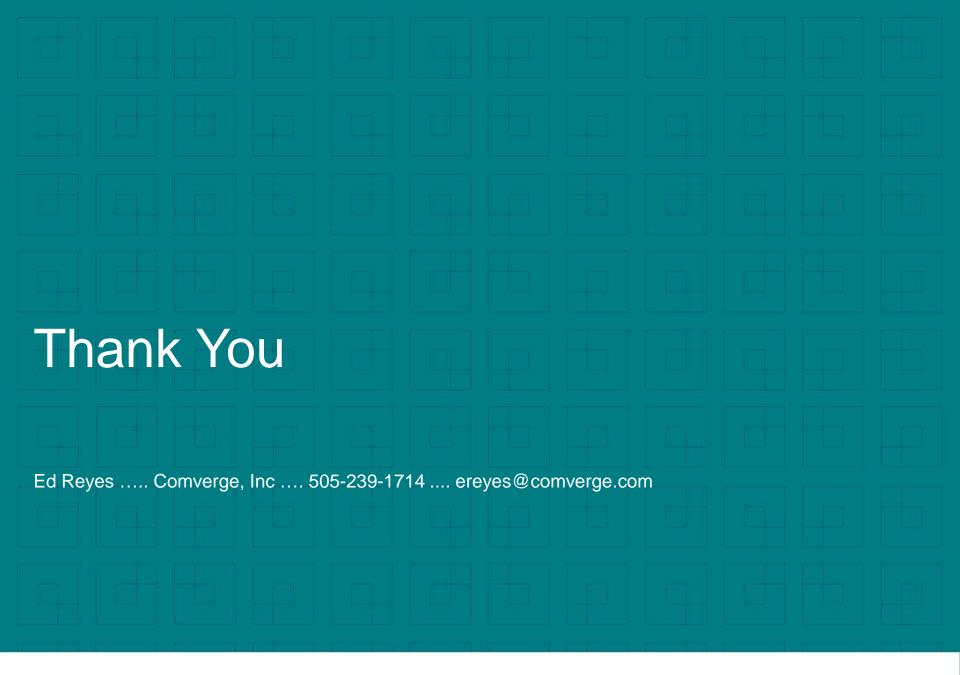
• Resource adequacy is up to the market participants

Regulatory Needs Today

- What does this mean for Regulators & Legislators Today?
 - Slow economy keeping average electricity prices in check
 - Marcellus gas is plentiful keeping gas prices in check
- Energy and Environmental Leadership
 - Non-crisis environment
 - Do we wait?
 - Or act now?
- Requires Innovative Regulatory Initiatives
 - Policies should integrate energy and environmental goals

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- Smart Grid $\sqrt{}$
- Information Availability $\sqrt{}$
- Demand Reduction Goals (add to RPS?)
- Evolving Regulatory Paradigm $\sqrt{}$



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