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Pennsylvania Public Utility Commission





# **Summary View**

- Comverge fully supports ACT 129
- Competitive bidding should apply to all residential and small commercial Demand Response (DR)
- DR is unique, should use third-party pay-for-performance contracts, and measurement & verification
- Critical Electricity Distribution Companies (EDCs) roles:
  - Lend marketing logo to substantially lower residential & small commercial customer acquisition costs
  - Provide customer information for large C/I customers
- Full EDC cost recovery for contracts and administration



### **Comverge Highlights these Sections of Act 129**

- Electric distribution companies to competitively bid all contracts with conservation service providers
- Requires Conservation Service Providers in all or part of the plan
- Quality assurance and performance of DR will be measured, verified and evaluated
- A cost recovery mechanism will fund measures and utility administrative costs
- A minimum of 4.5% of peak in the 100 hours of highest demand by 31 May 2013
- A minimum of 3% retail load reduction by 31 May 2013



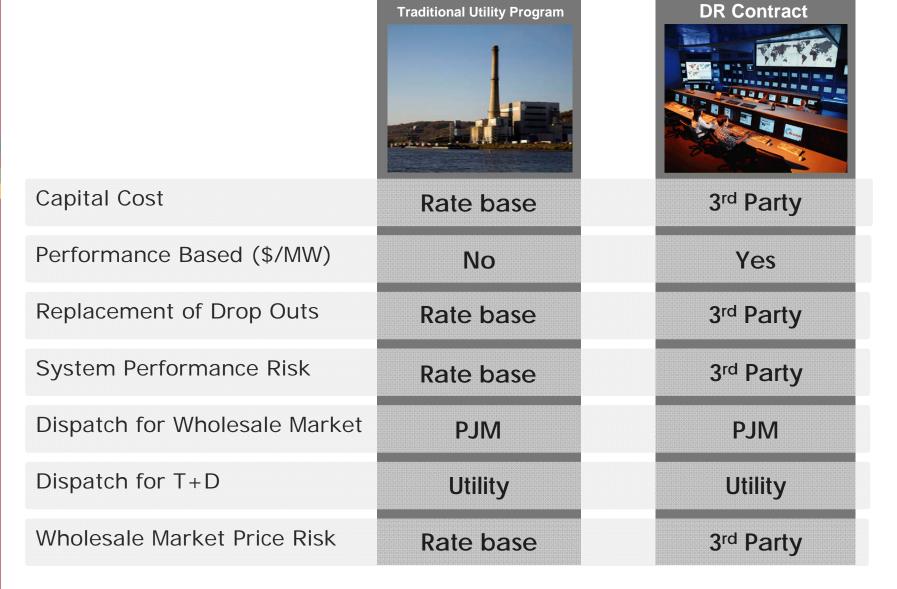
### **Demand Response Provides Insurance and Hedging**

### Specific insurance and hedging benefits

- DR reduces market prices and mitigates market power during the times when these problems are the most acute
- DR does not require added transmission or distribution
  - It reduces congestion, losses, and the need for T & D
- DR does not entail environmental impacts
  - It reduces emissions (SOx, NOx, and CO2)
  - It does not cause siting impacts or use water (for cooling)
- DR entails no fuel price of delivery risks
- DR can be expanded incrementally, rapidly, & locationally



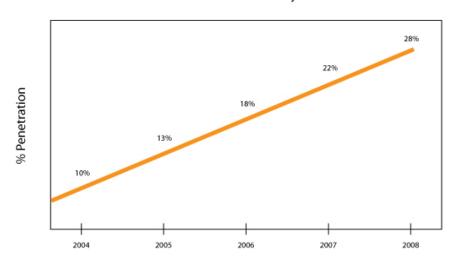
### **DR Contract Value Proposition**





# Comverge contracts deliver timely verifiable load

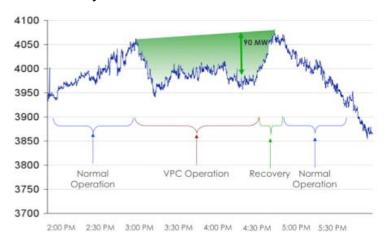
28% Penetration in 5 years



- 28% of residential and small commercial customers installed in 5 years.
- 97% customers satisfaction.
- Program used for more than 100 hours in some markets.

- 90 MW load reduction in 10 minutes.
- WECC recognized program as non-spinning reserve.

#### Utility Sheds Load: 90 MW for 2 hours





## How DR May be Implemented in Pennsylvania

- Make DR the "high price busting" resource to keep wholesale prices down in Pennsylvania
- Use a competitive RFP procurement process
- Ask for very specific DR or DR/EE services to enable apples-to-apples comparisons
- Integrate benefits/costs of G + T + D + environmental + market price/mitigation + hedging/insurance/portfolio
- Design a menu to provide more DR/EE services, for more benefits, customer acceptance, and customer choice
- Place risks for customer acquisition, hardware, installation, performance, & financing on DR/EE providers



# 3<sup>rd</sup> Party Risks Comverge Will Absorb

- DR program risks include the following:
  - Marketing, customer acquisition, and customer churn
  - Hardware and equipment (warranty)
  - Software upgrades and customer call center
  - Operations and maintenance
  - Measurement & verification
  - Performance dispatchable MWs when called upon
  - Stranded investment (if not used)
  - Financing all implementation phases of the DR contract
- Market and price risks can be absorbed by Comverge
- Customers and Utilities Can Be Free of These Risks
  - Utah, ISONE, Nevada Power, SDG&E, and PNM examples



## Responses to Other Key Questions

- Does Act 129 require the utility to competitively bid all energy efficiency and conservation services?
  - Yes, but for the exceptions that EDCs may define
  - All residential and small commercial DR should be competitively bid
  - Large commercial & industrial DR should be market (PJM) based
- Require of DR providers competitive bidding, rigorous costbenefit analysis, and pay-for-performance contracting.
- EDCs need not collaborate/coordinate on contracting with CSPs
- CSPs should be required to show in depth experience and qualifications in order to provide DR and Energy Efficiency (EE)
- To ensure recovery of prudent and reasonable costs require:
  - Competitive procurement of 3<sup>rd</sup>-party pay-for-performance DR/EE contracts
  - Rigorous Measurement & Verification



### **Final Points**

- There are significant risks to consumers of DR cost increases as a result of traditional regulatory, cost-of-service policies
- Third parties can assume all program risks under competitively procured, pay-for-performance contracts (and utility can own the DR Asset)
- Third parties can deploy residential and small commercial load control technologies that ensure a clear migration path to customer price response through AMI



### Conclusion

- Comverge fully supports ACT 129
- DR is an excellent price mitigation ("price-busting") tool that should be used much more extensively
- Third-party competitive bidding should apply to procure residential and small commercial customers DR
- Use pay-for-performance third-party contracts and M&V
- Enable EDCs to lend logos and provide customer info
- Ensure full EDC cost recovery for contracts & admin