

# Demand Response Program Update to the Resource Management Commission

Presented by  
Austin Energy  
April 17, 2012

# Program Update - Residential

- One way RF technology
- Installed ~90,000 thermostats since 2001
- Achieving sustained 7 MW to 35 MW reduction
- Short term reduction as high as 90 MW
- Recall slowed marketing in September 2010
- Curtailed 19 times in summer 2011
- Currently top-down business model
- Utilize two contracts for program delivery

# Program Update - Commercial

- Voluntary Load COOP program
- Summer 2011
  - ~55 participating accounts
  - 15 curtailment events
- E-mail notification
- Typically 1 hours notice and 2 hour curtailments
- Typical impact 3 to 4 MW
- Incentive \$1.00 /kwh curtailed
- Delivered through customer agreements
- In-house DR settlement system

# Ongoing Activities

- KEMA and GDS & Assoc. performing studies
  - KEMA – Residential/Small Commercial
- Study Scope
  - Phase I - Baseline or current state report
  - Phase II – Recommendation Development
  - Phase III – Bid or Implementation Documents
- Consultant Studies
  - Phase I and II complete
  - Finishing Phase III

# Program Updates - Residential

- Considered Top-Down and Bottom-Up models
- Considered numerous network options
  - RF, Broad-band, cellular, AMR/AMI
- Canvassed market for functionality and cost
- Continue Top-Down RF approach
  - Multifamily sector
  - Hard to reach customers

## Program Updates – Residential (Cont.)

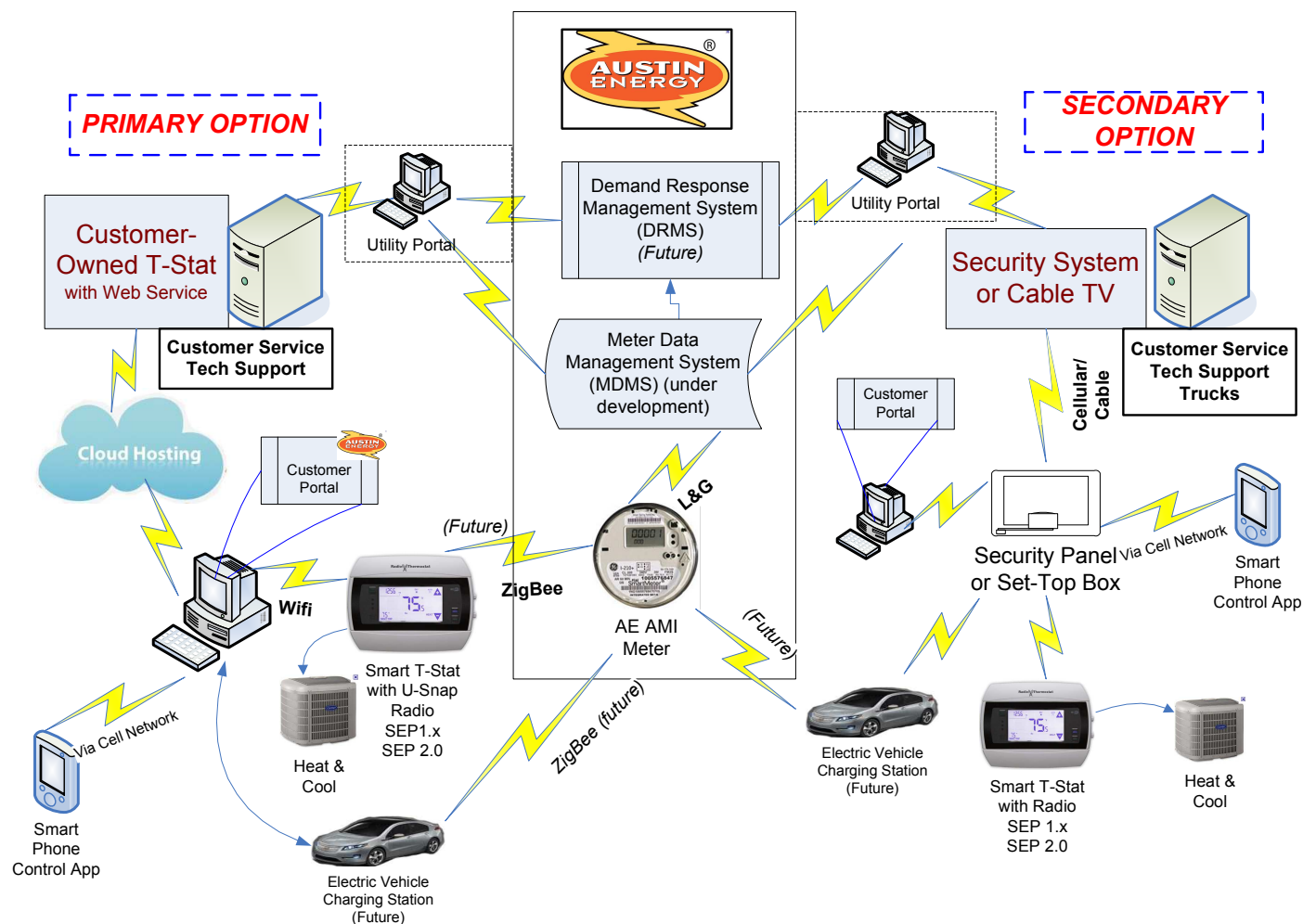
- Continue maintaining current RF 1-way system
  - Purchased 2,000 RF thermostats
- Re-solicit service provider for RF system
- Implement new Bottom-up program
  - Products sold through retailers
  - Products sold and installed through HVAC contractors
  - Products sold and installed through other service providers
  - All new approach rely on customer broad band or other providers network

# Program Updates – Residential (cont.)

- Advantages of Bottom-up program
  - Leverage existing market trends
  - DR providers motivated to market products
  - Integration with HPwES
  - Lower costs
- Customer chooses DR provider & enrolls in AE program
  - Enrollment Incentive to customer
  - Annual participation incentive (future)
- KEMA developing program documentation
  - DR provider agreements
  - Customer agreements
- Continue to explore AMI network options



# Austin Energy Demand Response Business Model Recommendations



February 24, 2012

Proprietary and  
Confidential

# Program Updates – Commercial

- Summer 2012
  - Expansion of current Energy Profiler On-line product to facilitate notification and settlement
  - Expand current Load COOP program
  - Increase Incentive to \$1.25/kwh
  - Market to customers and Energy Management System Vendors
- Expanded Program Options considered
  - Turn-key (hire vendor to deliver MW)
  - Equipment and Systems (procure equipment only)
  - Hybrid-approach (procure expertise and staff augmentation)

# Program Updates – Commercial

- Hybrid approach chosen
- Potential estimated at ~30 MW
- GDS currently developing RFP documents
- DR providers anticipated scope of services
  - Customer identification/DR audits
  - Development of Curtailment plans
  - Settlement and reporting assistance
  - Development of OpenADR strategies
  - Implementation assistance of OpenADR

# Program Update - Integration

- Develop Demand Response Management System (DRMS)
  - Connect to multiple vendor systems through standard APIs (Open Auto Demand Response)
  - Common platform for initiation, verification, and settlement after event
  - Automated creates opportunity for fast DR
  - Target date late 2013 to early 2014
- Open ADR
  - Developed in conjunction with Lawrence Berkeley Lab's Demand Response Resource Center

# Proposed Timeline

- Residential
  - Continue maintenance of RF system (5 -7 years)
  - Implement Bottom up approach (summer 2012)
  - Integrate into DRMS (summer 2013)
- Commercial
  - Implements EPO DR settlement system
  - Expand promotion of Load COOP program (2012)
  - Hire DR provider
  - Expand into OpenADR (summer 2013)
  - Integrate into DRMS (summer 2013)

Thank you  
Austin Energy  
Demand Response Program Update  
April 17, 2012

Contacts:

Fred Yebra - Director Energy Efficiency Services

[fred.yebra@austinenenergy.com](mailto:fred.yebra@austinenenergy.com), 512-482-5305

Stephen Leinweber- Manger Energy Efficiency Services

[stephen.leinweber@austinenenergy.com](mailto:stephen.leinweber@austinenenergy.com),

Scott Jarman – Consulting Engineer

[scott.jarman@austinenenergy.com](mailto:scott.jarman@austinenenergy.com), 512-482-5307