

**Presentations on Austin Energy's Rate Proposals –
Commercial and Industrial Rates Discussion
Presented at the Electric Utility Commission Meeting of October 3, 2011**

PANEL 1: EFFECT OF PROPOSED RATE STRUCTURE ON DEPLOYMENT OF DISTRIBUTED AND UTILITY SCALE SOLAR AND COMMERCIAL & INDUSTRIAL CUSTOMERS AND ALIGNMENT OF INCENTIVE TO ACHIEVE CITY AND UTILITY GOALS AND DISTRIBUTION OF COSTS ACROSS CUSTOMER CLASSES

Speakers: Trevor Lovell (Solar Austin) and Tom "Smitty" Smith (Public Citizen)

PANEL 2: EFFECT OF THE RATE DESIGN ON CHURCHES AND HOUSES OF WORSHIP

Speakers: Joshua Houston (Texas Impact), Stephen Reeves (Texas Baptist Christian Life Commission) and Jeff Patterson (Texas Catholic Conference)

PANEL 3: ENVIRONMENTAL ISSUES AND ENERGY EFFICIENCY AS IT RELATES TO SCHOOLS, COMMERCIAL AND INDUSTRIAL CUSTOMERS.

Speakers: Ward Tisdale (AMD), Michael Cation (SmarteBuilding), and David Downing (AISD)

PANEL 4: COST OF SERVICE AS IT RELATES TO SCHOOLS, COMMERCIAL AND INDUSTRIAL CUSTOMERS.

Speakers: Barry Dreyling (Spanion), John Sutton (BOMA) and Wesley Perkins (RRISD)

PANEL 5: RATE DESIGN AS IT RELATES TO SCHOOLS, COMMERCIAL AND INDUSTRIAL CUSTOMERS.

Speakers: Roger Wood (Freescall), Peter Rieck (Seton Hospital) and Bill Clayton (PISD)

PANEL 6: REVENUE REQUIREMENTS AS IT RELATES TO SCHOOLS, COMMERCIAL AND INDUSTRIAL CUSTOMERS.

Speakers: Andy McFarlane (Data Foundry), Marilyn Fox (Fox, Smolen & Associates), and Steve Bartley



Encouraging Smart Solar Development

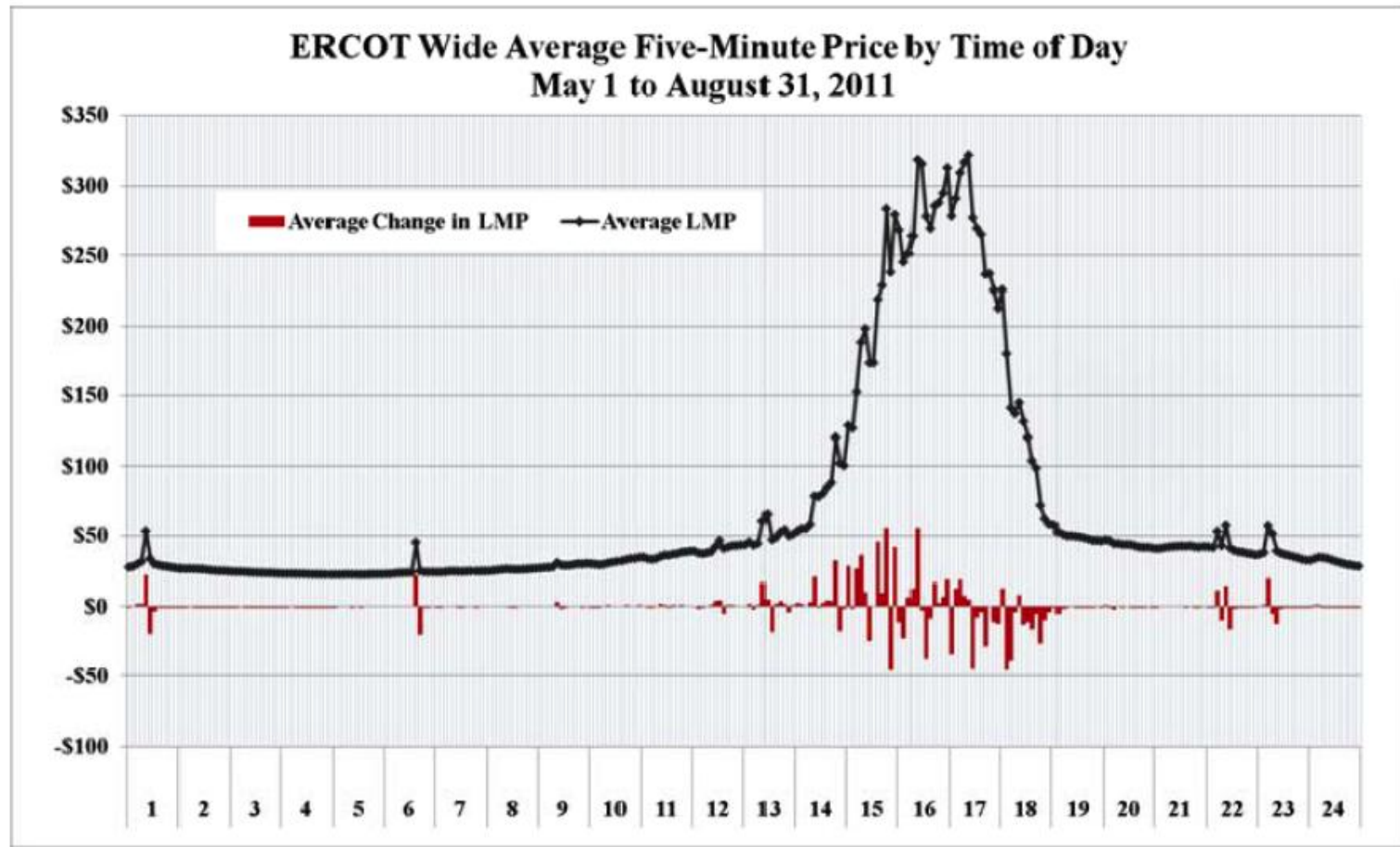
Presented by Trevor Lovell
Solar Austin Treasurer

- At the last meeting I quoted a Lawrence-Berkeley National Labs study estimating solar costs:
 - *Specifically, solar costs are dropping*
 - *2010 saw a 17% decline in installed cost of DG*
 - *2011 saw an 11% decline in the first 6 months*
 - *New installations are priced at \$5.20/watt*
 - *Utility-scale has come in as low as \$2.90/watt*
- I was approached by solar installers who said they are installing RESIDENTIAL at \$4/watt and sometimes hit \$3.50/watt

CORRECTION

ERCOT Real-time Price Volatility

May-August, 2011



- Do not make a recommendation w/o comparing generation resources
 - Metric should account for value of energy produced (i.e. margin/kWh)
- Build an ongoing commitment to solar into the AE rate case

What to Do?

- Make commercial & industrial customers pay their fair share
 - Meeting utility and city goals means emphasizing energy rate over base charges
 - Higher energy costs will motivate wider solar adoption → can't put 96% on residents
- Raise the cap on commercial capacity
 - 20kW is too small – 200kW would be better
 - Community solar for commercial entities

What to do?

- While the EUC has attempted to host an open and transparent process, too little has been accomplished to make a recommendation
 - Experts and advocates get 5 minutes each (as opposed to 3) which is inadequate to cover relevant issues in any detail
 - Placing a deadline on the process gives AE an incentive to wait-it-out
- Fundamental questions are being avoided and weeks later we're still debating essentially the same proposal

We're not done

Environmental Issues and Energy Efficiency as it relates to hospitals, schools, worship centers, commercial and industrial customers

By: Ward Tisdale (AMD), Michael Cation (SmarteBuilding) and David Downing (AISD)



Who are the Industrial / Commercial Users?

- Hospitals, schools, places of worship, non-profits and large employers
- Many are nationally and internationally recognized for leadership in environmental stewardship and are part of ISLA, the Industrial Sustainability Leaders of Austin group



- Purchase the majority of all GreenChoice energy



The cheapest and cleanest megawatt is the one you never use

- Conservation must be a vital component of Austin Energy's business model
- We recognize the long-term economic and environmental benefits of energy efficiency and conservation
- We have been retrofitting facilities for 20+ years
- Some examples:
 - AMD
 - Austin ISD
 - Food Bank
 - Freescale
 - Pflugerville ISD
 - Seton
 - SmarteBuilding
 - Spancion



AMD



- Largest LEED Gold certified corporate campus in Texas
- Highly efficient central plant minimizes energy consumption for campus
- Continual optimizing of all lighting, heating, cooling system schedules
- 1.5 million gallon rainwater collection system conserves water and power
- State of the art energy management system running on AMD servers that measures energy consumption tens of thousands of times per second across the campus and enables continual optimization of energy consumption

Seton Healthcare Family

- Dell Children's hospital is first hospital in the world to achieve LEED Platinum certification
- Seton Asthma Center honored with National Environmental Leadership award by the Environmental Protection Agency



Spancion

- Purchases 1 million kWh of GreenChoice power each month
- Water reclaim system reclaims over 1,000 gallons of water per minute
- Water treatment requires huge amounts of power – reclaiming water conserves both power and water



- Awards:
 - Bob Derrington Water Reclaim Award in 2003
 - City of Austin Water Conservation Award in 2005
 - City of Austin Water Conservation Award in 2011

Capital Area Food Bank

- Provided over 25 million pounds of food to people in 2010
- 160,000 cubic feet of freezers and coolers and 60,000 sq. ft. of distribution center space
- Continuously working to operate the distribution center, freezers, and coolers more efficiently



Freescal

- Working with the Department of Energy (DOE) Industrial Technology Program – the Oak Hill site has implemented an energy management system
- Oak Hill plant reduced its annual energy consumption from 2006 to 2009 by
 - 28 million kilowatt hours (kWh) of electricity and
 - 26,000 million British thermal units (Btu) of natural gas
- Ongoing upgrades and tuning of heating and cooling and lighting systems
- Developed Watt Saver technology
 - Eliminates no-load power consumption for AC adaptors on devices like chargers for cell phones, laptop computers, tablets, etc.



Austin Independent School District

- Utilized over \$6.7 million dollars in SECO LoanStar Loans since the late 1990s to improve energy efficiency
- Energy efficiency standards for all renovation and construction projects exceed the current energy code requirements by 15%
- All construction and renovation projects meet or exceed Austin Energy's Two Star rating, with several projects receiving Three and Four Star ratings
- Actively commissioning facilities on an ongoing basis to achieve the highest energy performance possible
- \$1,000,000 in grants to install solar panels at four campuses
- Have applied for \$1.7 million Federal Grant for additional energy efficiency upgrades



Pflugerville ISD



- Replaced 165 HVAC units and 1,100 light fixtures at campuses served by Austin Energy
- 1.6 million kWh demand reduction
- Six more schools retrofitted for over 500,000 kWh additional savings

We Support Increased Conservation Efforts



- Schools, hospitals, worship centers, commercial and industrial customers are actively conserving and practicing energy efficiency
- We believe the rates need to encourage more conservation for all classes of users
- We believe cost of service should include a contribution to Demand Side Management programs
- We support assistance programs for low-income residents

Cost of Service as it relates to hospitals, schools, worship centers, commercial and industrial customers

By: Barry Dreyling (Spansion), John Sutton (BOMA) and Wesley Perkins (RRISD)



Who are the Industrial / Commercial Customers?

We are area:

- hospitals,
- schools,
- worship centers
- large employers



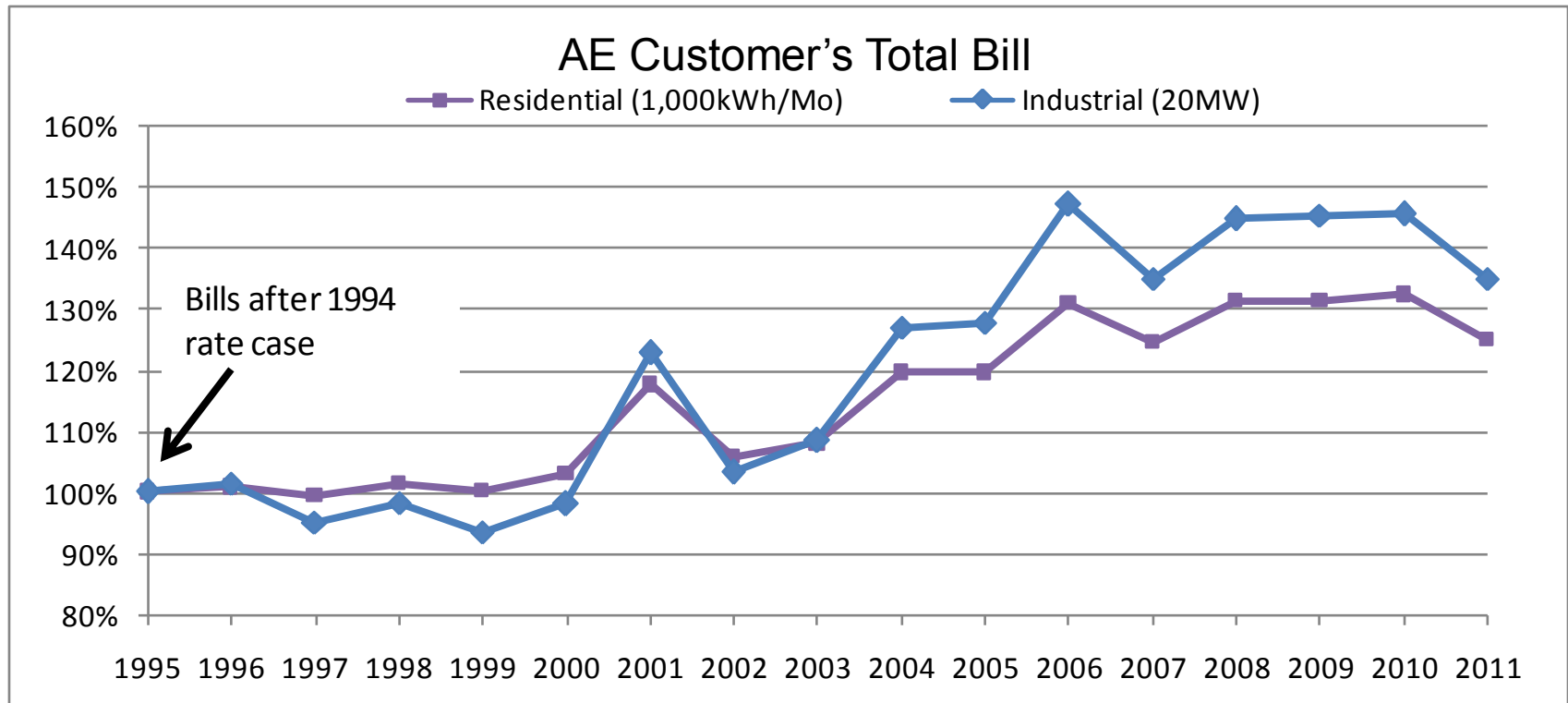
- We employ more than 50,000 Central Texans, many residential customers of Austin Energy
- We lease office space to small businesses
- We teach more than 200,000 children in over 200 schools

Electric reliability is important

- Austin Energy's current business model is not sustainable, and reliability is in jeopardy
- The 1994 fail to recover all of today's costs
- AE's revenue requirements need to be re-evaluated
- In general we support cost of service



Industrial/ Commercial Bill's Increase Is Greater Than Residential Users



Source:

Residential – AE tariff and AE fuel charge data.

Industrial – AE large (20MW) customer bill.

New Rate Effect on School Districts

Data Provided by Austin Energy on 09/30/2011

Historical and Projected Costs for Round Rock ISD

Electric Utility	Provider Ratio	Consumption (kWh)	Electric Cost \$	\$ Cost / kWh	% Change
Austin Energy 2010		15,968,864	\$ 1,389,604	\$ 0.0870	
Austin Energy 2012 Proposed		15,968,864	\$ 1,917,089	\$ 0.1201	38.0%

Austin Energy's Proposed Increases for School Districts

- Austin ISD 25%
- Pflugerville ISD 28%
- Round Rock ISD 38%

Compare AE to Electric Choice Market

Round Rock Independent School District

----- This Past Year -----

Electric Utility	Provider Ratio	Consumption (kWh)	Electric Cost \$	\$ Cost / kWh	
Austin Energy	24%	16,220,668	\$ 1,438,816	\$ 0.0887	\$ 0.0870
Pedernales	10%	6,960,421	\$ 637,950	\$ 0.0917	
<u>Texas Electric Choice</u>	<u>66%</u>	<u>44,459,180</u>	<u>\$ 5,275,955</u>	<u>\$ 0.1187</u>	
Mean Price per kWh (excluding AE)				\$ 0.1052	
Austin Energy's Mrkt Postion to Mean Price				-15.7%	Low

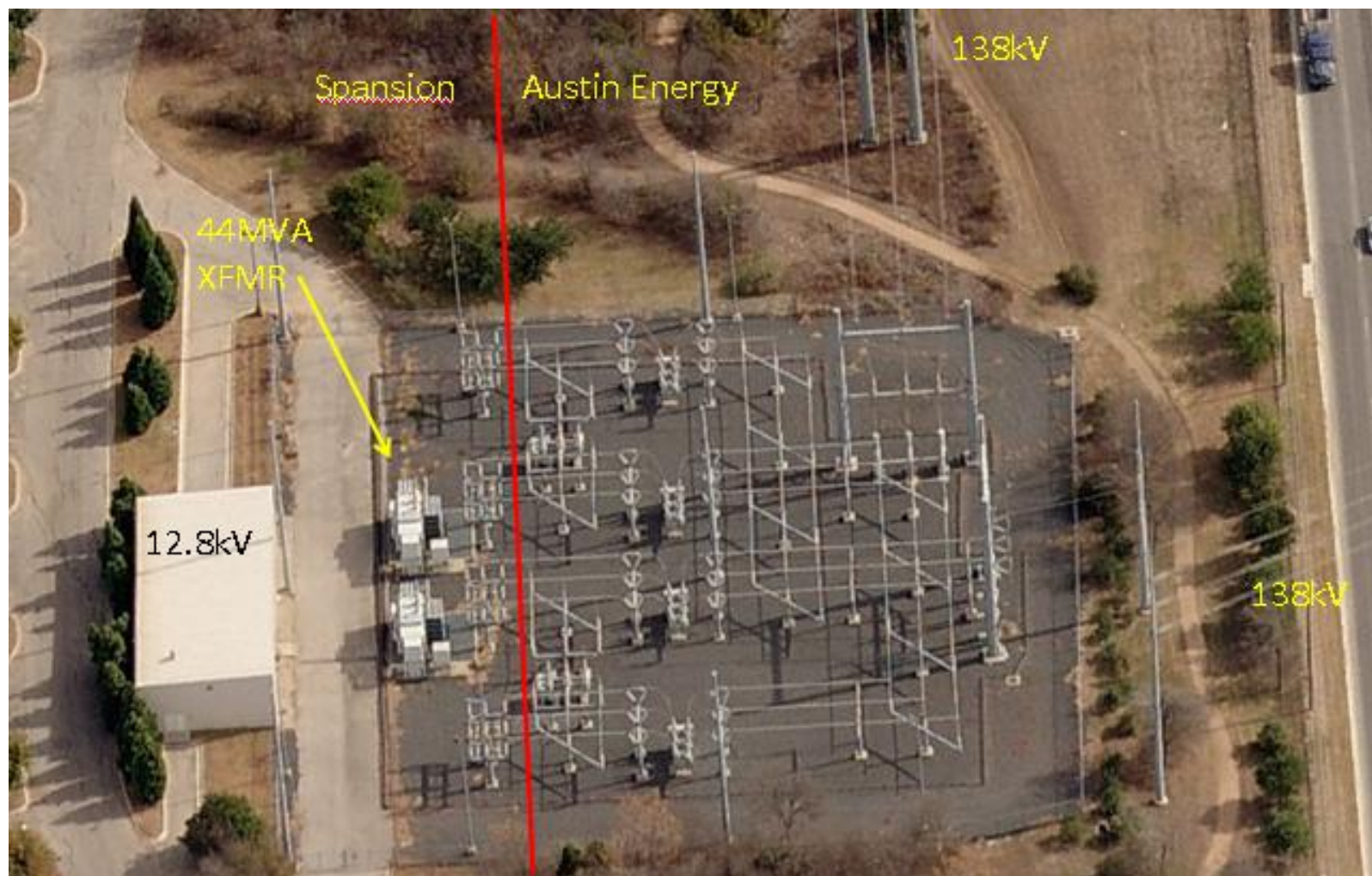
----- Next Year -----

Electric Utility	Provider Ratio	Consumption (kWh)	Electric Cost \$	\$ Cost / kWh	% Change
Austin Energy proposed	24%	16,220,668	\$ 1,947,318	\$ 0.1201	35.3%
Pedernales	10%	6,960,421	\$ 637,950	\$ 0.0917	0.0%
<u>Texas Electric Choice</u>	<u>66%</u>	<u>44,459,180</u>	<u>\$ 3,917,387</u>	<u>\$ 0.0881</u>	<u>-25.8%</u>
Mean Price per kWh (excluding AE)				\$ 0.0899	
Austin Energy's Mrkt Postion to Mean Price				33.6%	High

Cost of Service

- Every public entity should be recognized for their efficiencies and held accountable for their wastes.
- Some school Districts cannot simply pass through new costs as many are already operating at the maximum M&O tax rate allowed by the State. Those districts will be required to hold tax ratification elections to secure the additional revenue needed to meet AE's rate proposal.
- The solution to cost control for school districts should not be a question of subsidy at the retail level. The solution resides in the cost control of fuel and in the cost of operations for the utility.

Large User Capital Costs



Large User Capital Costs

- Built by Spansion (AMD) in 1994
 - 2-138kV transmission lines
 - One provided by COA
 - 138kV ring bus
 - Deeded all 138kV infrastructure to COA
 - 12.8kV switchgear and distribution
 - 94% load factor
 - 0.85 power factor

Power Distribution

- 2-44MVA 12.8kV transformers
- 2 miles of 12.8kV underground distribution feeders
- 18-2MVA low voltage substations
- All maintenance and repairs by Spansion
- Power factor change to 0.9 will cost ~\$600k and 9 months to implement



We Support the Community Benefit Charge

- We support the Community Benefit Charge which is designed to help *low-income* families but not necessarily low-end users. There is a significant difference between low-income and low-end users. CCARE supports special programs for those families or individuals with low-incomes only.

Low-Use and Low-Income are Different

Summary

- AE's Revenue Requirements need to be re-evaluated
- We support cost of service
- We support assistance programs for low-income residents

Rate Design as it relates to hospitals, schools, worship centers, commercial and industrial customers

By: Roger Wood (Freescale), Peter Rieck (Seton
Healthcare Family) and Bill Clayton (PISD)



We Support AE's Rate Design Philosophy*

- **Alignment with strategic objectives**
- **AE's mission statement**
- **Clean Energy**
- **Affordable Energy**
- **Reliable Energy**
- **Excellent Customer Service**
- **Founded on economic standards common to the electric utility industry**

Austin Energy's Strategic Direction



* Source – AE PIC Meeting 2 Presentation

We Support Rates Based on Cost of Service

“Cost of service is an analysis of what it costs to run the utility and whether each customer class is paying what it costs to serve them” *

* Source – AE PIC Meeting 2 Presentation

Austin Energy's Strategic Direction



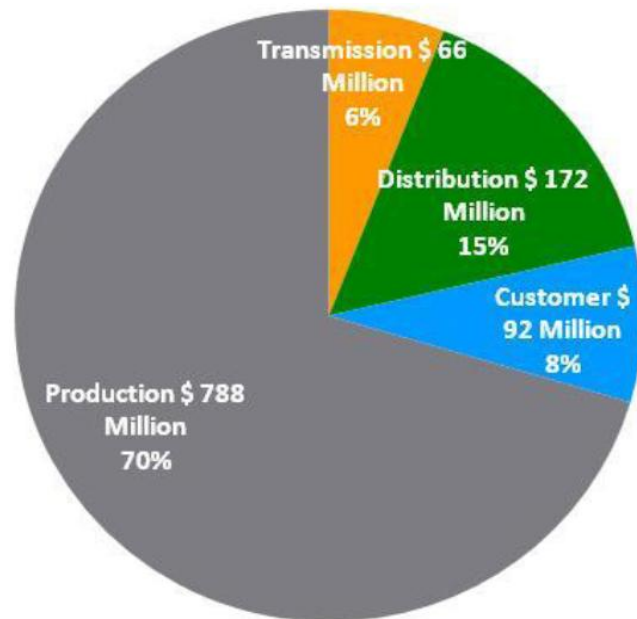
We Support Rates That Are Competitive

- **Austin City Council has set affordability goals for Austin Energy:**
 - **Future rate increases no more than 2% annually after one-time adjustment following current rate review**
 - **Remain in bottom half of rates statewide**
- **Austin Energy will continue to offer affordable, competitive rates and exceptional value**
- **Rates will be benchmarked annually to track progress**

Austin Energy's Strategic Direction



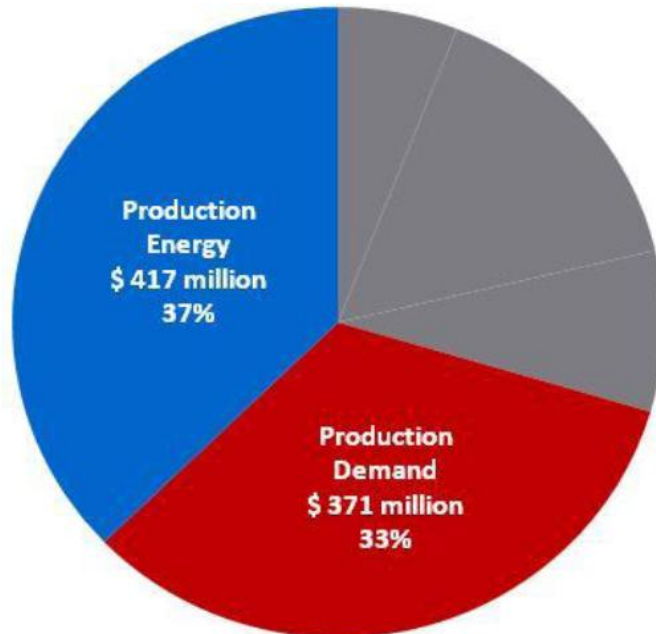
Cost Allocation Models



Source – PIC Mtg 3 Presentation

- **Transmission – 4CP (ERCOT model)**
- **Distribution – 12NCP**
- **Customer Service - # customers**
- **Production - Various Models**

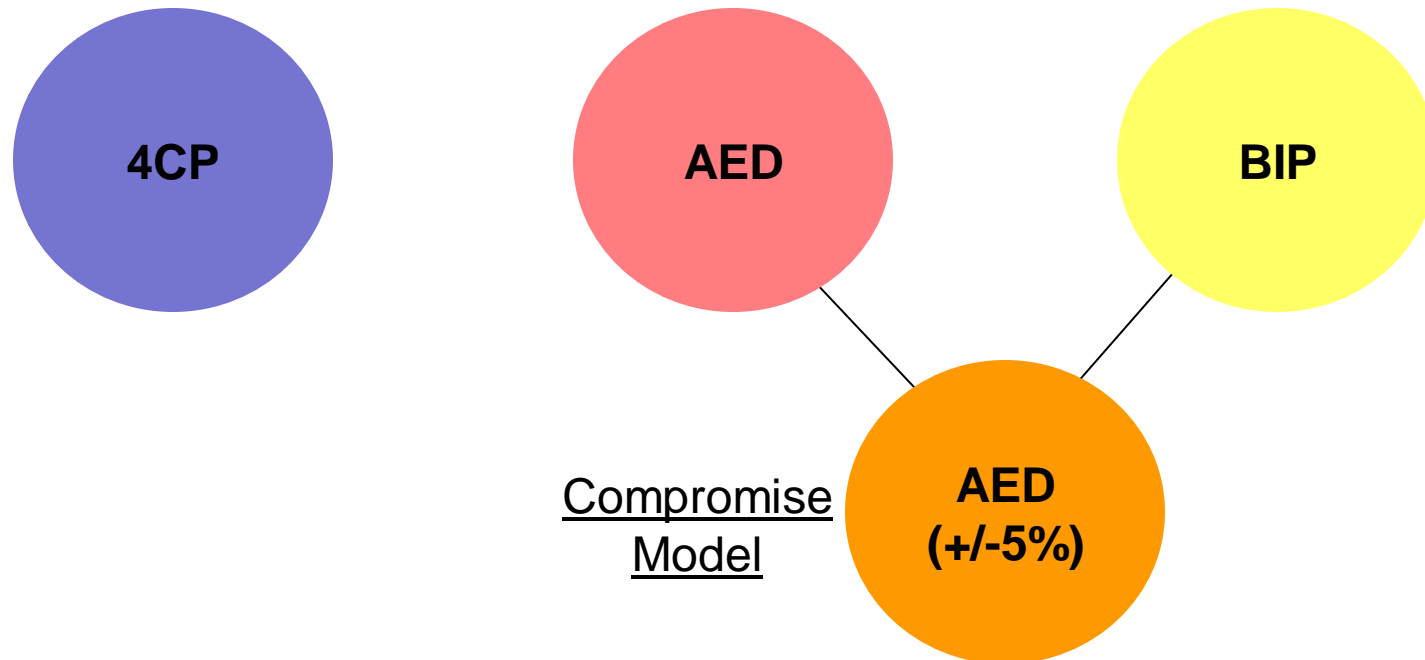
Production Cost Allocation Models



Source – PIC Mtg 3 Presentation

- **Energy**
 - Variable cost
 - Includes fuel, PPAs
 - Allocation based on consumption (kWh)
- **Demand**
 - Fixed cost
 - Includes O&M, debt service, capital
 - Three proposed allocation models

Production Demand Cost Allocation Models

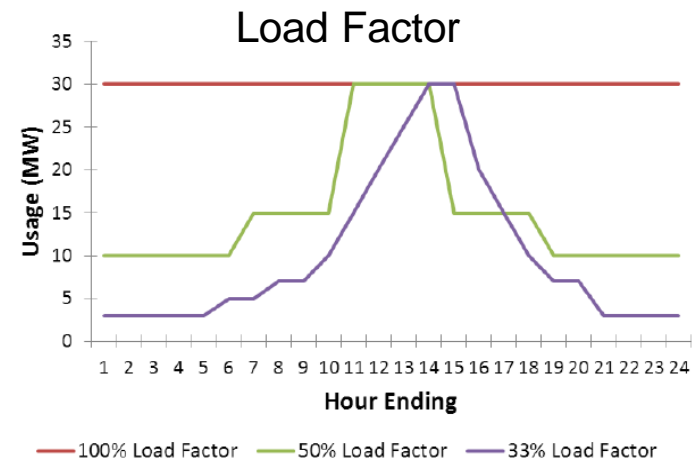


- **4CP and AED** - widely accepted throughout US, ERCOT and by PUCT
- **AED (+/- 5%)** - compromise between BIP and AED
 - Residential rates at 95% of AED – remain within 1% of BIP rate*
 - Large customer rates at 105% of AED – midway between BIP and AED*

* Based on data from PIC Meeting 2 & 3 whitepapers and presentations

Load Factor and Cost Models

- AED and 4CP models encourage High Load Factor (low peak demand)
- Historically AE and most all utilities have valued/encouraged High Load Factor
- Current AE key programs promote shift to High Load Factor
 - 800MW DSM goal
 - Time-of-Use
 - Thermal Storage
- BIP model severely penalizes High Load Factor customers, sending conflicting behavior signals



High Load Factor - Aligns With Key AE Objectives

“Austin Energy wants to encourage customer classes to reduce demand.methodology that incentives customers to lower demand usage and/or improve load factor aligns well with AE’s energy efficiency objectives.”

Source: AE Rate Analysis and Recommendation Report, page 85 - Aug 22, 2011

“Rate structures should provide incentives for energy conservation, promote the efficient use of resources, and encourage consumer investment in energy efficiency.”

Source: AE Rate Analysis and Recommendation Report, page 102 - Aug 22, 2011

“Reducing peak demand can help the utility counteract the need to build costly new power plants or buy costly market power by reducing load during periods of high demand when power market prices are highest. This helps lower the utility’s overall costs and these cost savings can potentially be transferred on to all customers.” *Source: AE Rate Analysis and Recommendation Report, page 138- Aug 22, 2011*

Summary

- We support the philosophy behind AED (+/- 5%) in order to help low-income and residential customers pay their electric bills.



Data Foundry Presentation to Electric Utility Commission

Austin Energy Rate Review

A series of horizontal lines in teal and light blue colors, with varying lengths and thicknesses, extending from the left edge of the slide towards the right.

October 3, 2011

Overview of Recommendations

- AE's financial policies and AE's interpretation of those policies virtually eliminate all short term risks to AE and shift the financial burden to rate payers
- AE should share in risks with ratepayers.
 - Allow for economy to improve to help all ratepayers and increase AE's margins to meet reserve requirements
 - AE should continue to monitor its costs and revenue to stay within the 2% cap
 - Continue to monitor the results of ERCOT's Nodal market and its impact on AE's costs

Fuel and Purchased Power Costs

AE's Proposal

- Base rate fuel and power cost based on adjusted TY 2009 and adopt an Energy Adjustment tariff that relates to the Rate Stabilization Reserve
 - Fuel and purchased power cost combined with other costs in the energy charge
 - Proposed Energy Adjustment tariff embeds @\$.03 in base rates; allows GM to “reset” to zero if costs vary in excess of \$.01; Rate Stabilization Reserve absorbs variance; reserve funded through excess coverage

Recommendation

- Continue with the Fuel Adjustment Clause:
 - Impact of Nodal market less than 1 year of experience
 - Allows more transparency to compare with generation rates in the competitive market
 - Additional generation assets will likely be acquired using a purchase power agreement
 - Keep current method that sets the fuel factor once a year for recovery of fuel and purchased power. The method provides for adjustments when actual recoveries are 10% over or under
- Review tariff and propose changes in future, if necessary

Coverage- Financial Policy - #6

AE's Proposal

- Requested Coverage is
 - 2.37 times before the removal of the \$20 million revenue shortfall for contract customers (Table 3.3, page 62, Rate Analysis and Recommendations Report)
 - 2.24 times after consideration of \$20 million revenue shortfall

Recommendation

- Set coverage at 2 times as targeted by Financial Policies, not 2.24 as requested by AE
- Revenue requirement is overstated by reserve requirements to achieve 2.24 times

Financial Policy - # 14 Pay As You Go

AE Proposal

- Requested equity financing for CIP funding at 50% based on 3 year average
- Excludes Holly decommissioning and non-utility

Recommendation

- Limit to FY 11-12 projection of \$78 million, as adjusted for spending for “non-utility” CIP and Holly decommissioning
- 37% equity funding shown in spending plan for FY 11-12;
- Falls within parameters of F/P #14 – “an equity contribution ratio between 35% and 60%”

Financial Policy #16-Rate Stabilization Reserve - Adopted in July 2011

AE Proposal

- Previously called the Competitive Reserve
- To be used to offset future rate increases to meet the Council's 2% rate cap
 - "Austin Energy's goal is to fund the Rate Stabilization Reserve balance so that it is available to cover energy market increases, purchased power cost increases, or related costs when system rate increases may exceed the 2 percent affordability goal." (AE response to AM3.4)

Recommendation

- Current ratepayers should not be asked to pay inflated rates now to avoid **possible** future rate increases

Non-Nuclear Decommissioning Reserves - Financial Policy #21

AE's Proposal

- Non Nuclear Decommissioning Reserve used a 10 year target for units

Recommendation

- Current policy requires that amounts be established by decommissioning studies for each plant site and a set-aside be completed within a minimum of 4 years prior to retirement
 - No retirement dates included in filing
 - No support for estimated cost
- Recommend exclusion until criteria met

Other Reserves

AE's Proposal

- AE included a Working Capital Reserve
- AE included Repair and Replacement Reserve

Recommendation

- Before any amounts are included in revenue requirements, AE should conduct a lead-lag study.
- Cash provided by depreciation should be used to fund the CIP spending plans for repair and replacement. Both depreciation and O & M are already included in revenue requirement.

Rate Mitigation -

AE' Proposal

- Mitigate impact of current rate increase
 - Phase-in demand charges for non demand secondary service customers
 - Cap increase to residential with less than 1500 kWh to \$20 per month on average
 - Cap cost of service for residential at 95%

Recommendation

- As rates are put in place over the next fiscal year, build reserves to “targeted” levels based on revenue increases due to customer growth, extreme weather and continued cost reductions
- Adoption of recommendation reduces Revenue Requirement by \$45.7 million but maintains coverage at 2 times resulting in a 7% increase rather than 11%

Conclusions

- Proposed recommendations are justified because
 - Much of the rate increase is driven by reserves requirements which eliminate all risks to the utility and reflect liberal interpretations of the financial policies
 - Central Texas unemployment rate over 7 % before impact of state budget cuts
 - AE can adjust rates in the future
- DF has not completed its review of O & M expenses because of time constraints, but reserves the option to submit additional comments and recommendations
- DF supports A&ED as the cost allocation method because it is widely accepted and considers both energy and demand
- DF supports a rate design for C & I that encourages high load factors and the efficient use of resources by customers