



## MEMORANDUM

TO: Mayor and City Council Members

CC: Marc A. Ott, City Manager

FROM: Larry Weis, General Manager

DATE: March 23, 2012

SUBJECT: Materials for March 27 Council Work Session on Revenue Requirement Issues – Distributed Solar Goals, Energy Efficiency Goals, and Customer Assistance Program Goals

---

Attached please find primers on the topics scheduled for the March 27 Council Work Session discussion regarding Austin Energy distributed generation and energy efficiency goals, and regarding the design and funding of low-income electric customer assistance programs.

Please feel free to send us questions on these or any other electric rate topics at any time. You can submit questions regarding electric rates to my staff by e-mailing [ratereview@austinenergy.com](mailto:ratereview@austinenergy.com). I look forward to our continued discussions on these important issues.

---



## Rate Review Topic – Distributed Solar Goals (Impact on Revenue Requirements) Council Work Session 3 – March 27, 2012

### Topic Overview

- Austin City Council established a goal in the Generation, Resource, and Climate Protection Plan to 2020 for Austin Energy to achieve 200 megawatts (MW) of solar generation capacity by 2020. This goal includes distributed solar photovoltaic (PV) systems and utility-scale solar facilities. Austin Energy provided a memo to the Council on November 2, 2011 regarding its strategy to reach this goal.
- Austin Energy began providing rebates for solar PV system installations in 2004. The rebate level has fluctuated over time depending on customer demand, budget, and market dynamics. The current rebate level for residential customers is \$2.50/watt. This, combined with federal tax credits, reduces the current cost of distributed solar to approximately \$1.40/watt for certain types of installations.
- Austin Energy supports a production-based incentive (PBI) program for commercial customers and multi-family housing units. The PBI program credits program participants \$0.14 per kilowatt-hour (kWh) for all energy produced from the solar PV system. Austin Energy recently increased the system size limitation from 20 kilowatts (kW) to 200 kW.
- The solar program has resulted in more than 1,600 rooftop solar installations totaling 6.5 MW of solar PV installed in Austin Energy's service territory.
- The number of solar installers in Austin has increased from 4 to 34 over the past 8 years, creating more than 600 jobs, according to Solar Austin, a local non-profit organization.
- Austin Energy's distributed solar *goals* do not directly impact the utility's Test Year revenue requirements as no adjustments are made to the Test Year to account for any expected future changes in spending to support distributed solar installations.
- Funding for Austin Energy's solar rebate program is included in the utility's revenue requirements in the amount of \$4,352,770.
- Historical spending and performance for the solar PV program for the years 2007 through 2010 (the most recent years with all audited data available) is provided below.

### Solar Photovoltaic Program Spending and Performance: 2007-2010

|                    | 2007      | 2008      | 2009      | 2010      |
|--------------------|-----------|-----------|-----------|-----------|
| Participants       | 147       | 210       | 325       | 234       |
| Expenditures (\$)¹ | 2,265,589 | 3,614,181 | 4,352,770 | 4,372,958 |
| Peak Demand (MW)   | 0.60      | 0.94      | 1.77      | 1.34      |
| Energy (MWh)       | 765       | 1,279     | 2,288     | 1,720     |

### Issue for Council Consideration

- Do adjustments to the revenue requirements need to be made to account for Austin Energy's distributed solar goals?

### Austin Energy Recommendation

- Austin Energy's spending for the solar rebate program is included in the Test Year revenue requirements and no adjustments need to be made.

¹ Expenditures are based on Generally Accepted Accounting Principles (GAAP) and only include expenses booked to Federal Energy Regulatory Commission (FERC) Accounts 901-916 such as solar rebates and incentives and certain O&M expenses associated with the program; the method used in the cost of service study.



## Rate Review Document References

The issue of distributed solar goals is discussed in the following documents publicly released during the rate review process and located at [www.rates.austinenergy.com/rrresources](http://www.rates.austinenergy.com/rrresources). Direct links to the documents are provided below.

### *Rate Proposal Documents*

- Council 0.3 Rate Analysis and Recommendations Report (full-length December 19 report to the Austin City Council). December 19, 2011. [weblink](#)
  - Page 3-16, 3-29. Incremental revenue from solar gross metering.
  - Page 5-14. Solar rebate component of Community Benefit Charge.
  - Page 6-24 through 6-20. Residential solar rebate proposal narrative.
  - Page 7-44, 7-45. Net metering distributed generation alternative rate proposal narrative.
  - Page 9-24. AE, RRA and EUC positions on residential solar rate.
  - Page C-1. Test year solar rebate amount.
  - Page C-4. Test year solar gross metering incremental revenue.
  - Page D-67. FERC 555 recoverable direct to solar.
- Council 0.4 Independent Residential Rate Advisor Report (December 19 report to the Austin City Council). December 19, 2011. [weblink](#)
  - Pages 7-8. Gross metering solar.
  - Page ES-2. Solar program updates, payment amounts.
  - Page 25. Residential Solar rate discussion.
  - Pages 26-28. “Value of solar” is inappropriate compensation.
  - Page 31. Net vs. gross metering effect on solar goal.
  - Pages A-3 and A-4. Community solar recommendation.
  - Pages J-9 and J-10. AE, RRA and EUC positions on residential solar rate.

### *Documents Provided During Electric Utility Commission Review Process*

- Citizen Panel Materials: Comments and Presentations on Austin Energy’s Rate Proposals –Residential Rates Discussion, Distributed at the Electric Utility Commission Meeting of September 19, 2011, p. 23, Public Citizen presentation, Solar Austin presentation, Sierra Club presentation. [weblink](#)
  - Page 35. Public Citizen presentation supports “value of solar” rate.
  - Page 39. Mike Sloan: high delivery charge will reduce economic justification for rooftop solar.
  - Page 56. Solar Austin: reduce base charges unaffected by solar, remove commercial size cap.
  - Page 73. Solar loan and community solar program should be considered.

### *Documents Provided to Public Involvement Committee*

- Final Feedback Submitted to Austin Energy on Behalf of PIC Members and PIC Member Alternates, June 2011. [weblink](#)
  - Pages 4-5. Community Solar recommendation.
  - Page 8. Effect of rate ties on solar adoption.



## Rate Review Topic – Energy Efficiency Goals (Impact on Revenue Requirements) Council Work Session 3 – March 27, 2012

### Topic Overview

- Austin City Council established a goal in the Generation, Resource, and Climate Protection Plan to 2020 for Austin Energy to achieve 800 megawatts (MW) of demand savings through energy efficiency by 2020 (from 2007). Austin Energy provided a memo to the Council on December 6, 2011 regarding its strategy to reach this goal.
- Austin Energy's Energy Efficiency Services and Green Building groups provide residential and commercial energy management and green building products and services to Austin Energy customers. These programs have achieved almost 1,000 MW of demand savings since 1982.
- Energy Efficiency Services program and product offerings include technical assistance, energy audits, recommendations on most cost-effective measures, and financial incentives for installation of qualifying equipment. Green Building provides plan-review and technical assistance services to building industry professionals seeking to have their projects evaluated for energy and resource efficiency or sustainability.
- Greater efficiency lowers costs to Austin Energy and all of its customers, while also reducing power plant emissions and promoting economic development in the region.
- These programs drive market transformation to maximize energy resources by lowering customer electric consumption and electric bills while increasing customer comfort and satisfaction.
- Austin Energy's energy efficiency *goals* do not directly impact the utility's Test Year revenue requirements as no adjustments are made to the Test Year to account for any expected future changes in spending to support energy efficiency programs.
- Funding of Austin Energy's energy efficiency programs is included in the utility's revenue requirements in the amount of \$23,367,359 (includes Green Building Program).
- Historical spending and performance for energy efficiency for the years 2007 through 2010 (the most recent years with all audited data available) is provided below.

### Energy Efficiency Program Spending and Performance: 2007-2010<sup>1</sup>

|                                | 2007       | 2008       | 2009       | 2010       |
|--------------------------------|------------|------------|------------|------------|
| Participants                   | 48,012     | 55,471     | 45,914     | 42,764     |
| Expenditures (\$) <sup>2</sup> | 20,910,129 | 20,348,302 | 23,367,358 | 21,825,950 |
| Peak Demand Reduction (MW)     | 65.4       | 64.1       | 52.4       | 41.2       |
| Energy Savings (MWh)           | 119,178    | 132,192    | 102,228    | 88,957     |

### Issue for Council Consideration

- Do adjustments to the revenue requirements need to be made to account for Austin Energy's energy efficiency goals?

### Austin Energy Recommendation

- Austin Energy's spending for energy efficiency programs is included in the Test Year revenue requirements and no adjustments need to be made.

<sup>1</sup> Includes residential efficiency, commercial energy management, and Green Building programs.

<sup>2</sup> Expenditures are based on Generally Accepted Accounting Principles (GAAP) and only include expenses booked to Federal Energy Regulatory Commission (FERC) Accounts 901-916 such as Conservation Rebate Incentive Funds and Energy Efficiency Services and Green Building O&M costs; the method used in the cost of service study.



### Rate Review Document References

The issue of energy efficiency goals is discussed in the following documents publicly released during the rate review process and located at [www.rates.austinenergy.com/rrresources](http://www.rates.austinenergy.com/rrresources). Direct links to the documents are provided below.

#### *Rate Proposal Documents*

- Council 0.3 Rate Analysis and Recommendations Report (full-length December 19 report to the Austin City Council). December 19, 2011. [weblink](#)
  - Page ES-9. Energy efficiency programs residential charges per kWh.
  - Page ES-11. Energy efficiency programs C/I charges per kWh.
  - Page 1-13. Efficiency and other strategic goals.
  - Page 4-33. Energy efficiency unit cost of service by class
  - Page 6-11. Efficiency program impact will increase with new rates.
  - Page 9-20. AE, RRA and EUC positions on Community Benefit Charge
  - Page C-1. Test year energy efficiency test year cost of service.
  - Page D-301. WP 36 Customer Related Business Activities.
- Council 0.4 Independent Residential Rate Advisor Report (December 19 report to the Austin City Council). December 19, 2011. [weblink](#)
  - Page 2. Energy efficiency 800 MW by 2020 goal.
  - Page J-6. AE, RRA and EUC positions on Community Benefit Charge.

#### *Documents Provided to Public Involvement Committee*

- Final Feedback Submitted to Austin Energy on Behalf of PIC Members and PIC Member Alternates, June 2011. [weblink](#)
  - Page 10. Strongly support energy efficiency, but little information about programs.
  - Page 11. Costs and revenues need to be distributed fairly and for maximum impact, but are not analyzed in enough detail.



## Rate Review Topic – Customer Assistance Program Goals

### Council Work Session 3 - March 27, 2012

#### Topic Overview

- Austin Energy manages a Customer Assistance Program (CAP) to help customers on low and/or fixed incomes cope with their overall utility costs. Services offered through the program include utility bill discounts, emergency bill payment assistance, and free home energy improvements.
- Austin Energy is proposing to help mitigate the rate increase for at risk customers through a combination of restructuring the CAP discount, expanding the CAP discount to a larger segment of the population in need, directing energy efficiency education and services to CAP customers with the highest electricity usage, and refining the program to provide improved services.
- Currently, customers qualify for the CAP if a member of the household participates in certain social service programs. However, the current program budget limits the number of customers who can be enrolled in the CAP to 10,000 at the annual cost to the utility of \$3 million.
- CAP customers are enrolled in several different ways. Households on qualifying Medicaid programs are automatically enrolled. Other households enroll following a referral from community partner agencies such as Meals on Wheels and More. Some households enroll directly with Austin Energy.
- The proposed CAP charge of \$1/month for residential customers and \$0.65/megawatt-hour (MWh) for commercial customers would generate \$6.2 million for electric utility bill discounts and an additional \$1 million for energy efficiency improvements.
  - CAP funding is not included in the utility's revenue requirement as the proposed CAP charge will directly fund the program.
- The analysis below compares CAP discount structure options. Five discount structure scenarios are compared to the Lite-Up Texas discount structure (current and maximum) which provides electric bill assistance to qualifying low-income customers in competitive markets in Texas.

#### Customer Assistance Program Discount Structure Options

| Customer Assistance Program Discount Option Analysis - Impact on Customers Served (about 10,000 customers currently served) |   |  |  |   |   |                                |
|---|---|--|--|---|---|--------------------------------|
| Discount Structure Scenario   | # of Customers Served (\$6.2 million annual budget) | Average Monthly Discount for CAP Participant | Average Monthly Discount at 1000 kWh Usage | Number of Add'l Customers Served per \$1 Increase in CAP Charge | Charge Needed to Serve 40,000 Customers | Cost to Serve 40,000 Customers |
| \$10 Discount - 12 months   | 51,667  | \$ 10.00                                     | \$ 10.00                                   | 36,500  | \$ 0.68                                 | \$ 2,980,000.00                |
| \$12 Discount - 12 months   | 43,056  | \$ 12.00                                     | \$ 12.00                                   | 30,417  | \$ 0.90                                 | \$ 3,940,000.00                |
| \$22 Discount - 12 months   | 23,485  | \$ 22.00                                     | \$ 22.00                                   | 16,591  | \$ 2.00                                 | \$ 8,740,000.00                |
| \$12 Discount + 5% - 12 months  | 30,051  | \$ 17.19                                     | \$ 16.50                                   | 21,229  | \$ 1.47                                 | \$ 6,432,762.82                |
| \$22 Discount + 5% - 12 months  | 23,079  | \$ 22.39                                     | \$ 26.00                                   | 16,304  | \$ 2.04                                 | \$ 8,925,525.63                |
| \$12 Discount + 10% - 12 months   | 19,356  | \$ 26.69                                     | \$ 21.00                                   | 13,674  | \$ 2.51                                 | \$ 10,992,762.82               |
| \$22 Discount + 10% - 12 months   | 16,461  | \$ 31.39                                     | \$ 30.00                                   | 11,629  | \$ 3.02                                 | \$ 13,245,525.63               |
| State Design Current (10% for 5 months)   | 81,219  | \$ 6.36                                      | \$ 4.25                                    | 57,378  | \$ 0.28                                 | \$ 1,233,457.98                |
| State Design Max (20% for 5 months)   | 40,610  | \$ 12.72                                     | \$ 8.50                                    | 28,689  | \$ 0.98                                 | \$ 4,286,915.97                |

#### Issues for Council Consideration

- Should a goal be set for CAP enrollment level? Any other CAP goals?
- What is the appropriate funding level and funding mechanism for the CAP?
- What is the appropriate discount level and discount structure for CAP customers?

#### Austin Energy Recommendations

- Austin Energy should set a goal of doubling the number of enrolled CAP customers.
- Austin Energy should fund the CAP through a line item charge of \$1/month for residential customers and \$0.65/MWh for commercial customers.





### Rate Review Document References

The issue of Customer Assistance Program goals is discussed in the following documents publicly released during the rate review process and located at [www.rates.austinenergy.com/rrresources](http://www.rates.austinenergy.com/rrresources). Direct links to the documents are provided below.

#### *Rate Proposal Documents*

- Council 0.0 Presentation to Austin City Council on Final AE Recommendations on Electric Rates - December 14, 2011. [weblink](#)
  - Pages 34-40. CAP program recommendations
- Council 0.3 Rate Analysis and Recommendations Report (full-length December 19 report to the Austin City Council). December 19, 2011. [weblink](#)
  - Page S-2. Revised CAP Proposal.
  - Page ES-8 through ES-11. Community Benefit Charges description and amount.
  - Page 1-3. Affordable energy and excellent customer service goals.
  - Pages 1-16 and 9-13. Rate review policy guidelines for CAP.
  - Pages 3-13 through 3-14.
  - Pages 4-29 through 4-30 and 4-33. CAP billing rates.
  - Pages 5-5 and 9-15. Rate design principles – provide discount to low-income customers.
  - Page 5-9. Impact of CAP on rate increase.
  - Page 6-3. Current CAP discount structure.
  - Pages 6-4 and 6-5. CAP discount challenge.
  - Page 6-9. CAP charge – existing rate versus proposed rate.
  - Pages 6-16 through 6-21. CAP funding mechanism and bill discount program design.
  - Page 6-36. CAP and residential rate benchmarking.
  - Pages 9-9, 9-11 and 9-20 through 9-22. Summary of CAP recommendations.
  - Page E-53. Tariff description of CAP charge.
  - Pages I-5 and 1-6. EUC CAP recommendations impact on revenue requirement.
  - Pages I-19 and I-22 through I-23. EUC CAP recommendations.
  - Pages I-31, I-38 and I-41 through I-42. Recommendations from public on CAP.
- Council 0.4 Independent Residential Rate Advisor Report (December 19 report to the Austin City Council). December 19, 2011. [weblink](#)
  - Pages ES-4 and ES-5. Customers don't object to CAP charge.
  - Page 20. Supports \$1/month charge.
  - Page 32. Fixed monthly charge stabilizes funding source.
  - Page B-19, B-20. Discussion of low-income discount alternatives, CAP enrollment process, CAP funding.
  - Page I-2. CAP administration should be changed (letter from CAP participant).
  - Page J-6. Community Benefit Charge Decision Point List positions of parties.
  - Page J-7. CAP Decision Point List positions of parties.
- Council 1. Memos to the Council Following December 14 Council Briefing on Electric rates. January 10, 2012. [weblink](#)
  - Pages 9-12 of 12 (PDF document). Memo on CAP recommendations.



### *Documents Provided During Austin City Council Review Process*

- Council 1.4 Memo to the Council – Follow-up to January 17 Council Work Session on Electric Rate Recommendations. January 23, 2012. [weblink](#)
  - Pages 6 and 7. Electric consumption and bill impacts for CAP customers and funding for CAP.
  - Page 12. CAP customer bill frequency chart.
- Council 2.3 Memo to Council - Follow-up to February 2 Council Briefing on Modified Rate Proposal. [weblink](#)
  - Pages 4 and 5. Electric bill impacts.
  - Pages 5 and 6. CAP customers using less than 200kWh/month.
  - Pages 7-9. CAP discount structure options.

### *Documents Provided During Electric Utility Commission Review Process*

- EUC 2.4 Written Comments to the EUC Following the September 1 EUC Meeting. [weblink](#)
  - Pages 2-5. Texas ROSE CAP comments
- EUC 2.2 Austin Energy September 19 Presentation on Residential Rates. September 19, 2011. [weblink](#)
  - Pages 22-26. CAP recommendations to the EUC.
- EUC 2.8 Residential Rate Advisor September 19 presentation. September 19, 2011. [weblink](#).
  - Page 22. Fixed charges vs. variable charges effect on low-income customers.
  - Page 27. Supporting \$1/month as correct amount to bill.
- EUC 3.5 Decision Point List with EUC Positions as of September 30. October 3, 2011. [weblink](#)
  - Pages 16 and 17. Positions of parties on CAP charge.

### *Documents Provided to Public Involvement Committee*

- PIC Meeting #2 Summary. February 8, 2011. [weblink](#)
  - Page 10. The number of low-income customers you show [5,192] seems low to me. How is low-income defined?
- PIC Meeting #4 White Paper – Residential Rate Structures. March 30, 2011. [weblink](#)
  - Page 10. CAP customer profile data.
  - Page 12. CAP customer bill frequency data.
  - Page 13. CAP customer monthly usage data.
  - Page 46. CAP overview.
  - Page 52. CAP customer potential rate shock.
  - Page 55. Impact on CAP.
- PIC Meeting #4 Summary. April 6, 2011. [weblink](#)
  - Pages 10-13. CAP discussion.
- Final Feedback Submitted to Austin Energy on Behalf of PIC Members and PIC Member Alternates, June 2011. [weblink](#)
  - Page 3. Low-Income Program recommendations.

### *Requests for Information*

- PIC Meeting #1 Information Requests. January 26, 2011. [weblink](#)





- Page 4. Describe Austin Energy's Customer Assistance Program and how they benefit low-income customers.
- Council 2.6 RFI Response to Council Member Spelman Rate Scenario. March 1, 2012. [weblink](#)
  - Pages 6 and 9.
- EUC 2.6 Responses to RFIs and Questions from EUC Meeting 1, Part 2. September 16, 2011. [weblink](#)
  - Pages 1-8 and 12. Various questions on CAP.