



Austin Energy Resource, Generation, and Climate Protection Plan to 2020

INTRODUCTION

The City Council adopted the Austin Climate Protection Plan (ACPP) in 2007 to build a more sustainable community. Every City department was subsequently tasked to create action plans intended to ensure that departmental operations were consistent with the ACPP. Austin Energy developed this Resource, Generation, and Climate Protection Plan to 2020 (the Plan) to meet these objectives.

This document is a resource planning tool that brings together demand and energy management options over the planning horizon. Developing the Plan involved extensive analysis of the expected risks, costs, and opportunities to meet the future demand for electricity services. The goals outlined in this document are based on Austin Energy's current understanding of technology and of national, state and local energy policies. The Plan also benefited from substantial input from citizens, customer groups, utility advisory commissions and a Council appointed Taskforce. Much of this input is included under the "Additional Objectives and Initiatives" section of the Plan.

This Plan is designed to be flexible and dynamic. As circumstances change, the City must maintain the flexibility to modify elements to respond to a range of factors, including economic conditions, customer load, fuel prices and availability, infrastructure build-out, technological development, law and regulations, policy direction, and customer needs. Therefore, as conditions change, the Plan will be adapted and modified to manage risk, maintain system and service reliability, achieve policy goals, and meet customer demand for excellence in all aspects of service. As each significant implementation step is undertaken through contracts, purchases or other arrangements, Austin Energy's recommendations to the City Council will be supported by assessment of impacts on all customers and by charting the progress each step will make toward achieving the goals outlined in this Plan.

Austin Energy will review the Plan annually and issue a report on performance against goals. An example of the format and kind of data that will be provided in these Annual Reports is included as Exhibit A. Austin Energy will reassess the Plan in a public forum every two years. Every major Resource decision and Plan change will, as always, be taken before the City Council for review and authorization.

AUSTIN ENERGY'S MISSION

Outlined below is a description of how the Plan meets each element of Austin Energy's mission *to deliver clean, affordable, reliable energy and excellent customer service*. This plan demonstrates that customers and our community can indeed expect equitable, economic, and environmentally responsible electric services.

Clean. The Plan establishes clean energy goals to meet by 2020. The initial implementation strategy to achieve these goals is to escalate the use of renewables, increase energy efficiency, and load shifting. This will reduce current and future reliance on fossil fuel generation to meet Austin Energy customer load and will reduce CO₂ to better position the utility regarding probable future federal requirements. The Plan would also reduce nitrogen oxide (NO_x) and volatile organic compound (VOC) emissions, to help keep Austin in compliance with national ambient clean air standards.

Affordable. Austin Energy strives to optimize rates and services in a responsible manner. A fundamental benchmark that will guide implementation of the Plan is affordability. Austin Energy must be financially sound, the cost of electric service must be affordable for all classes of customers (with particular attention to the low income and disadvantaged), and rates must be competitive to ensure the retention and attraction of businesses for a strong local economy. As the City moves forward with implementation of the Plan, customer bills will be compared to those for similar customers in other major metropolitan areas, including, Houston, San Antonio, Dallas-Fort Worth and other areas within the Austin MSA. An appropriate affordability measure will be established for each customer class in the upcoming financial analysis. Available data (rates, average monthly bills for residential, commercial, and industrial, and other affordability benchmarks) will be included in Austin Energy's Annual Report. Austin Energy will develop and adopt an affordability goal for rates and services for all classes of customers by no later than December 31, 2010 and prior to any new major resource acquisition of 10 MW or more or an aggregate of 10 MW from a single program.

Reliable. Implementation of the proposed plan will be guided by power quality and reliability requirements to meet the needs of our community. In serving as a road map, the recommended plan will respond to system needs, changing technologies and market conditions to ensure consistent power quality and reliability. Transmission and distribution reliability goals will be targeted to meet or exceed current goals. Power quality and reliability history will be detailed in the Annual Report.

Excellent Customer Service. The process for implementation and ongoing review of the Resource, Generation, and Climate Protection Plan to 2020 will be transparent. Through the Annual Report, biennial Plan reassessment, and informed decision making process, the City Council and Austin Energy customers will be provided vital information detailing progress toward goals and any necessary Plan adjustments. The goal in the implementation of this Plan is to consistently demonstrate that proposed actions, to the highest degree possible, meet the goal of providing clean, affordable, and reliable energy.

GOALS SUMMARY

Austin Energy adopts the following changes and additions to its current resource planning goals, with a target of meeting these goals by 2020:

- Increase the energy efficiency goal from 700 MW to 800 MW
- Increase the renewable energy goal from 30% to 35%
- Increase the solar component of the renewable energy goal from 100 MW to 200 MW
- Establish a CO₂ reduction goal of 20% below 2005 level

Figure 1 shows a scenario developed and presented by Austin Energy during the public participation and Task Force discussions that demonstrates the type and pace of investments that may be followed in meeting these goals. Specific resource investments will be evaluated continually by Austin Energy, reinforcing that the plan is adaptable to changing legal/regulatory, market, and economic conditions. As explained further in this plan, however, each individual investment will be considered by the Council and subject to public review.

Austin Energy Recommendation						
Generation Resources in MW						
Year	Coal/Nuclear	Gas	Biomass	Wind	Solar	Renewable Energy %
2009	1,029	1,444	12	439	1	10%
2010		100			30	10%
2011				(77)* 200		15%
2012			100			17%
2013				150		25%
2014					30	25%
2015		200		100		28%
2016			50		20	30%
2017				(126)* 200	30	33%
2018					20	32%
2019					30	32%
2020				115	40	35%
Total	1,029	1,744	162	1,001	201	

* Wind contracts expire.

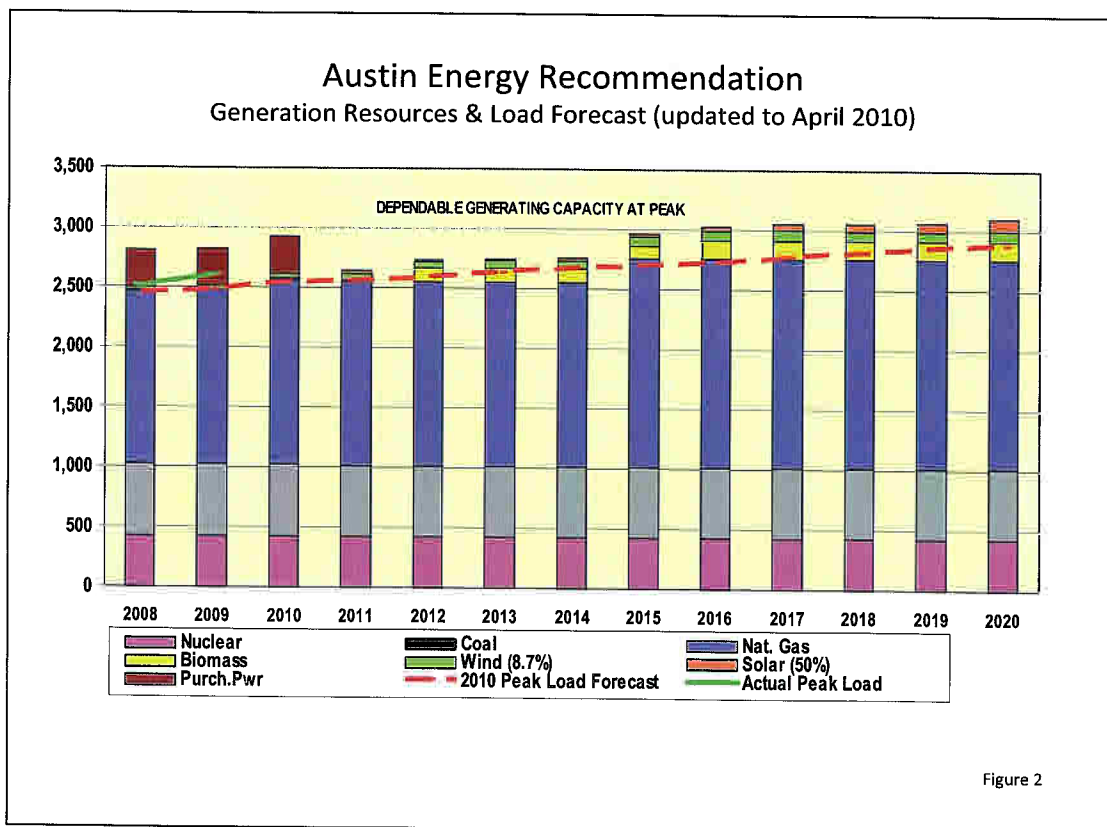
Figure 1

Coal/Nuclear. The Plan (Figure 1) recognizes current ownership levels in the South Texas Project (STP) and the Fayette Power Plant (FPP). Plan implementation would effectively reduce by about 24% the amount of energy Austin Energy receives from the FPP by 2020 to meet customer load. That reduction figures prominently in the Austin Energy goal to reduce its greenhouse gas emissions within the planning horizon by 20% from 2005 levels.

Natural gas. The proposed plan calls for the build out of the gas-fueled Sand Hill Energy Center to add 200 megawatts of combined cycle capacity. This is in addition to the installation underway of 100 MW of peaking units at the facility. That installation began last year and is expected to be completed by this summer.

Biomass. A total of 150 MW of biomass-fueled generation is projected to be developed. The Council has approved a 20-year contract through which Austin Energy will purchase the annual output of a 100 MW wood chip-fueled biomass plant currently under construction 10 miles northwest of Nacogdoches, Texas. The plant is being built by a Southern Company subsidiary and is expected to go online in 2012. An additional 50 MW of biomass is anticipated in later years.

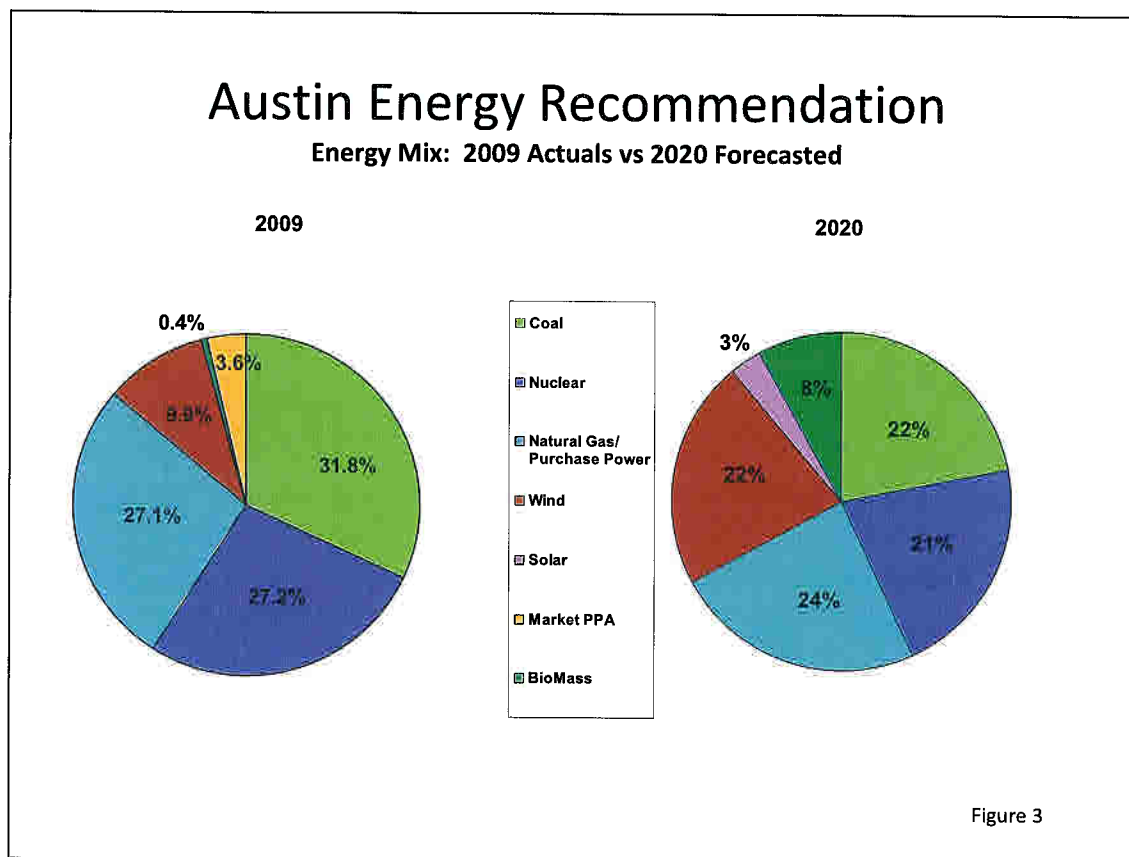
Wind. The majority of the Austin Energy renewables goal will be met through wind-generated power. As an early adopter of wind energy resources, Austin Energy now has wind contracts for about 200 MW of wind capacity that will expire by 2020. The proposed Plan calls for total wind capacity by 2020 of 1,000 MW.



56

Solar. Installed solar capacity will increase from 100 MW to 200 MW by 2020. In February 2009, the Council approved a 25-year contract under which Austin Energy will purchase the annual output of a 30 MW solar farm to be built near Webberville on Austin Energy property. That project being built by Gemini Solar Development Company, is expected to be on line by 2011 and will be one of the nation's largest solar projects.

Plan implementation (Figure 2) will provide a reserve versus projected peak demand through 2020. The projected peak demand, represented by the dotted red line, also takes into account an increase from 700 to 800 MW of energy efficiency and load shifting proposed by 2020.



The generation mix by fuel type (Figure 3) that would result from Plan implementation reflects a decrease in natural gas use from about 30% today to 24% in 2020; 8% of power generated by biomass, 3% by solar with a drop in coal-generated power from 32% to 22% and a drop in the percentage of nuclear-generated power from 25% to 21%.

Additional Objectives and Initiatives

Austin Energy's Resource and Climate Protection Plan benefited from review by customers, the City of Austin Electric Utility Commission, the City of Austin Resource Management Commission, and the Council Appointed Generation Resource Planning Task Force. Following

is a summary of this input. The status of each objective is listed as either “underway” (signifying that Austin Energy is already working toward accomplishing the initiative or is ready to launch) or “to be studied” (signifying work has not yet begun).

Affordability & Due Diligence

1. Develop and adopt an affordability goal for rates and services for all classes of customers by no later than December 31, 2010 and prior to any new major resource acquisition of 10 MW or more or an aggregate of 10 MW from a single program. (underway)
2. Work with stakeholders to develop a framework through which the utility will distribute information and receive feedback on each proposed future investment from Request For Proposal (RFP)/Bid development to delivery of a project recommendation for Council approval. This process will include provision of information sufficient to allow meaningful input from stakeholders over the planning horizon up through and in advance of the approval process for the Electric Utility Commission, Resource Management Commission, and City Council. (underway)
3. Prior to taking action to acquire a generation resource of 10 MW or more or an aggregate of 10 MW from a single program and to the extent practicable and consistent with sound management and financial responsibility, present such action for approval at least once to each applicable commission and twice to City Council. (underway)
4. Promote robust community involvement in revisions to the Austin Energy business model. (underway)
5. Assist in Electric Utility Commission (EUC) hearings regarding whether the current ordinance defining what information Austin Energy considers competitive and therefore confidential should be amended. In addition to addressing specific stakeholder questions, the hearings will include a review of each item in the Competitive Matters ordinance to validate rationale for that item’s inclusion moving forward. A key test should be whether similar information is made available by other U.S. public power utilities. (underway)
6. Ensure that any future resource planning advisory or stakeholder groups include representatives of residential and low income customer advocacy organizations. (underway)

Customer Assistance

7. Evaluate the potential to expand energy efficiency and weatherization programs for low income citizens and explore the feasibility of providing these services to those with incomes at or below up to 400 percent of the federal poverty guideline. (underway)
8. Conduct a study to determine income levels, energy burden and population sizes for residential customers with household incomes up to 400 percent of the federal poverty guideline. (to be studied)

9. Develop a neighborhood-by-neighborhood approach for low-income energy efficiency program delivery where such an approach offers an opportunity to improve program delivery effectiveness, fairness, and efficiency and identifying and assisting the most energy intensive low income neighborhoods. (underway)

10. Evaluate the potential to establish distributed resource incentive programs tailored to low and medium income customers and identify available funding mechanisms to help offset the cost of such incentives. (to be studied)

11. Continue to design and implement programs that target and reach residential energy efficiency opportunities in residential rental living spaces. (to be studied)

Energy Efficiency

12. Energy efficiency will be the first priority in meeting new load growth. (underway)

13. Conduct an energy efficiency potential study and, if viable and cost effective, increase the energy efficiency goal from 800 MW to 1,000 MW. (to be studied)

14. Regularly review the maximum investments and incentives offered for energy efficiency-related customer improvements and make adjustments as appropriate to encourage customer participation, while ensuring fiscal responsibility. (underway)

15. Study the capability of increasing the maximum investment per KW or kWh of savings that Austin Energy is willing to make in customer improvements and increase or eliminate the cap for Austin Energy investment in individual customer improvements that both reduce peak and total demand for energy, so long as such investment is financially sound and not unduly risky. (underway)

16. Continue to explore and, as appropriate, implement innovative rate design changes for energy efficiency. (underway)

17. Investigate and, as appropriate, establish innovative methods for enhancing the cost-effectiveness of energy efficiency program delivery, including but not limited to, auction systems. (underway)

18. Continue to analyze and report on impacts and opportunities resulting from the Energy Conservation and Audit Disclosure (ECAD) Ordinance and make recommendations to the Council on improvements or modifications to the ordinance as may be warranted. (underway)

19. Develop, market and implement energy efficiency and conservation programs to convert the existing housing stock as nearly as possible to zero net energy capability. (underway)

20. Continue to develop for implementation, building code changes that progress toward achieving a Zero Energy Capable Homes standard by 2015. (underway)

21. Consider initiating a pilot project to measure and communicate to owners and tenants of rental properties the benefits of energy efficiency upgrades in rental housing, and the utilization of the results of the pilot to develop a program that will realize energy efficiency savings potential in both commercial and rental property, as warranted by the results of a comprehensive energy efficiency potential study. (to be studied)

22. Assess development of an auction system for a portion of Austin Energy's commercial efficiency and conservation programs targeted to obtaining the greatest DSM savings per dollar invested by Austin Energy. (to be studied)

23. Establish a system for the examination and vetting of new energy efficiency ideas and programs submitted from within the community or by industry experts. (to be studied)

24. Enhance existing and, as appropriate, establish new channels for obtaining and evaluating customer and stakeholder proposals for new or modified energy efficiency programs. (underway)

25. Continue to take a leadership role in evaluating, developing, and implementing renewables and energy efficiency programs under Texas House Bill 1937, which allows for innovative financing. (underway)

26. Develop a plan for distribution system efficiency improvements. (to be studied)

27. Examine the potential for refocusing energy efficiency programs to target base load efficiency programs that reduce carbon emissions. (underway)

Renewables

28. Undertake a comprehensive assessment of non-solar renewable energy resource options in the utility's service territory. (to be studied)

Wind

29. Seek to develop ownership rights in wind generation resources where this approach offers benefits over purchased power arrangements. (underway)

30. Develop a comprehensive strategy for the deployment and use of energy storage technologies including assessment of compressed air energy storage in order to effectively improve the value of wind energy generation. (to be studied)

31. Continue to explore non-traditional wind energy deployment options, including small- or community-scale wind farms, hybrid wind/solar generation facilities, and hybrid wind/storage projects. (underway)

32. Continue to support development of increased transmission capacity in the Electric Reliability Council of Texas where such development offers economic and operational benefits to Austin Energy. (underway)

Solar

33. Develop a portfolio approach to solar energy generation facility siting, financing and ownership. (underway)

34. Continue to develop and improve incentives and strategies aimed at increasing local solar energy technology manufacturing capacity. (to be studied)

35. Develop a plan for the development of the full potential for solar energy generation and conversion in the utility service territory. (to be studied)

36. Study and report on the potential for establishing a distributed renewable energy goal and an associated distributed renewable energy generation development plan. (to be studied)

37. Monitor and report on the development of the distributed renewable energy generation sector in Austin, including projects developed independently of Austin Energy program support. (to be studied)

38. Continue promotion of solar thermal hot water use. (underway)

Biomass

39. Study the opportunity to develop small scale biomass energy generation systems in and near the utility service territory. (to be studied)

Other Generation Resources

Coal

40. The expected impact of the proposed Resource & Climate Protection Plan is a reduction in the average annual capacity factor needed to serve AE's load from the Fayette Power Plant (FPP) to about 64%. Periodically review the plan with the target of accelerating the phase down and toward eventual closure of FPP by 2020, if economically and technologically feasible. This review will include an assessment of the following: (to be studied)

- revenue and operational savings from potential sale of the plant
- carbon reduction impacts and value upon closure
- projected revenues from wholesale market sales in ERCOT
- impact of criteria pollutant emissions on the potential for the Austin area falling into non-attainment with federal clean air standards and attendant costs

41. Evaluate whether generating revenue for the City through carbon-based “off-system” sales is consistent with the Austin Climate Protection Plan. (to be studied)

42. Continue to investigate and where appropriate, implement technologies and programs that result in NOx emissions reductions and capture and storage of CO₂ emissions associated with the Fayette Power Plant. (underway in part, capture and storage of CO₂ to be studied)

43. Continue to investigate the potential for biomass co-firing at the Fayette Power Plant. (underway)

Natural Gas

44. Continue with plans to add 200 MW of new combined-cycle gas-fired generation at the Sand Hill facility in order to realize fuel cost savings and carbon emissions reductions. (underway)

45. Continually assess whether the long term risk of natural gas price fluctuations has been sufficiently minimized due to shale gas or other factors that, subject to compliance with environmental regulations and goals, natural gas generation capacity should be substituted for other resources in order to substantially reduce costs. (underway)

46. Expand systems for utilization of reclaimed water for cooling generation equipment at the Sand Hill facility. (to be studied)

Nuclear

47. Continue participation in the operation and ownership of STP Units 1 and 2; Austin Energy will not participate in proposed STP Units 3 and 4. (underway)

48. Evaluate any cost-effective offers of power from nuclear energy facilities through purchased power agreements. (to be studied)

Other

49. Conduct an analysis of the community economic development impact of Austin Energy generation facilities and planned expansion. (to be studied)

50. Conduct an analysis of the use of water by Austin Energy’s generation facilities and its impact on the community. (to be studied)

51. Conduct a combined heat and power potential study. (to be studied)

52. Continue to investigate geothermal generation resource acquisitions. (to be studied)

CO₂ Reduction Goals

53. As an outcome of this Plan or at such time as a federal carbon cap is approved, Austin Energy will adopt a CO₂ cap consistent with the City Council's evolving guidance on the Plan. (to be studied)
54. Facilitate public participation and reassess the Resource and Climate Protection Plan at appropriate intervals to the extent practicable. (underway)
55. Attempt to substitute low- or zero-carbon emissions generation resources for carbon-emitting resources whenever such substitution is also consistent with the achievement of economic, financial, operational, reliability, and risk objectives. In determining consistency with these objectives, Austin Energy will consider and compare the long-term costs and benefits of resource options, and report the results of such analysis to the Council and Commissions in the course of securing approval for resource development or acquisition. (underway)
56. Through the plan, offset carbon emissions from any new generation resource, by a reduction in operating capacity of an existing resource, by reduction of energy use through demand-side management or distributed renewable energy or the purchase of carbon offsets. (to be studied)
57. Conduct a review based on current state of knowledge of the impact of carbon fuel emissions on global warming and impact of criteria pollutants from the plant on Austin area compliance with federal clean air standards and the attendant utility related cost if the community should fall into non-attainment. (to be studied)

Complementary Strategies

58. Continue work to transform its basic business model to effectively address and integrate increased deployment of distributed energy resources, including distributed energy generation. Among the issues that Austin Energy will address on an on-going basis are unbundled rate structures, service offerings that rely less on volumetric pricing structures, rationalization of fuel charge-related costs, modifications to GreenChoice® product offerings, and products and services demonstrated in the Pecan Street Project Energy Internet Demonstration Project. Work to reflect business model changes and opportunities in upcoming reviews of electric rates. (underway)
59. Continue active participation in the development and deployment of smart grid technologies, and continue with an active and leadership role in the Pecan Street Project. (underway)
60. Continue and, as appropriate, expand efforts to increase electric vehicle utilization and facilitate integration of electric vehicles in the utility service area. (underway)
61. Maintain and enhance the utility's role in developing and implementing green collar job initiatives to grow and strengthen the local workforce. (underway)
62. Develop and implement plans for increasing local contractor, M/WBE contractor, and veterans opportunities in working with the utility. (underway)

Austin Energy Resource, Generation, and Climate Protection Plan to 2020

Update

Robert D. Goode, Interim General Manager

April 8, 2010

April 8, 2010



1

Update

- Present staff recommendation for the “*Austin Energy’s Resource, Generation, and Climate Protection Plan to 2020*”
- Highlight changes from the briefing presented in November
- Next steps

April 8, 2010



How have we gotten here?

- **AE's response to goals established in the 2007 Austin Climate Protection Plan (ACPP)**
 - **Generation/CO2 Reduction Planning Process**
 - Draft plan development - summer 2008
 - Cost evaluation of Plan by consultants
 - Dedicated web site-austinsmartenergy.com
 - Online generation planning game
 - Online customer survey - generation preferences
 - 10 utility-wide Town Hall meetings (Oct 2008-Sep 2009)
 - 14 customer group meetings (Oct-Dec 2009)
 - 35 customer one-on-one meetings (Oct 2009– Mar 2010)
 - 9-member Council appointed Task Force (met weekly Jul-Nov 2009)
 - AE staff review of customer and Task Force recommendations
 - **Budget process launches...new forecasts (financial, load)**

Austin Energy's Resource, Generation, and Climate Protection Plan to 2020

Guiding Values

MISSION STATEMENT:

To deliver clean, affordable, reliable energy
and excellent customer service

April 8, 2010



Key Principles of the PLAN

Dynamic and Flexible

- Austin Energy annual review, update and report on performance (clean, affordable, and reliable energy and excellent customer service)
- Biennial assessment of the Plan's progress and affordability, including a public forum
- Annual Budget process (load forecasts, financial outlook, etc.)

April 8, 2010



5

Key Principles of the PLAN

Financial Feasibility

- Financial Integrity
 - Financial stability and sustainability of Austin Energy
 - Benchmark comparable utility costs and rates
- Affordability
 - Develop affordability benchmark for customer bills
 - Evaluate impact on disadvantaged
 - Retain and attract businesses; economic development



Key Principles of the PLAN

Consistent and Timely Communications

- Competitive Matters Resolution Review
 - Hearings underway with the EUC
 - Austin Energy is committed to a detailed review of every element of the Resolution
- New Power Purchases and Development
 - Establish information to be provided
 - Bill impact, affordability impact, CO2 impact, etc.
 - Present actions to EUC, RMC and twice to City Council

April 8, 2010



Austin Energy's Resource, Generation, and Climate Protection Plan to 2020

Plan Summary

April 8, 2010



8

Goals Summary

- Increase the energy efficiency goal from 700 MW to 800 MW by 2020
- Increase the renewable energy goal from 30% to 35% by 2020
- Increase the solar component of the renewable energy goal from 100 MW to 200 MW by 2020
- Establish a CO₂ reduction goal of 20% below 2005 level by 2020

Updated Information

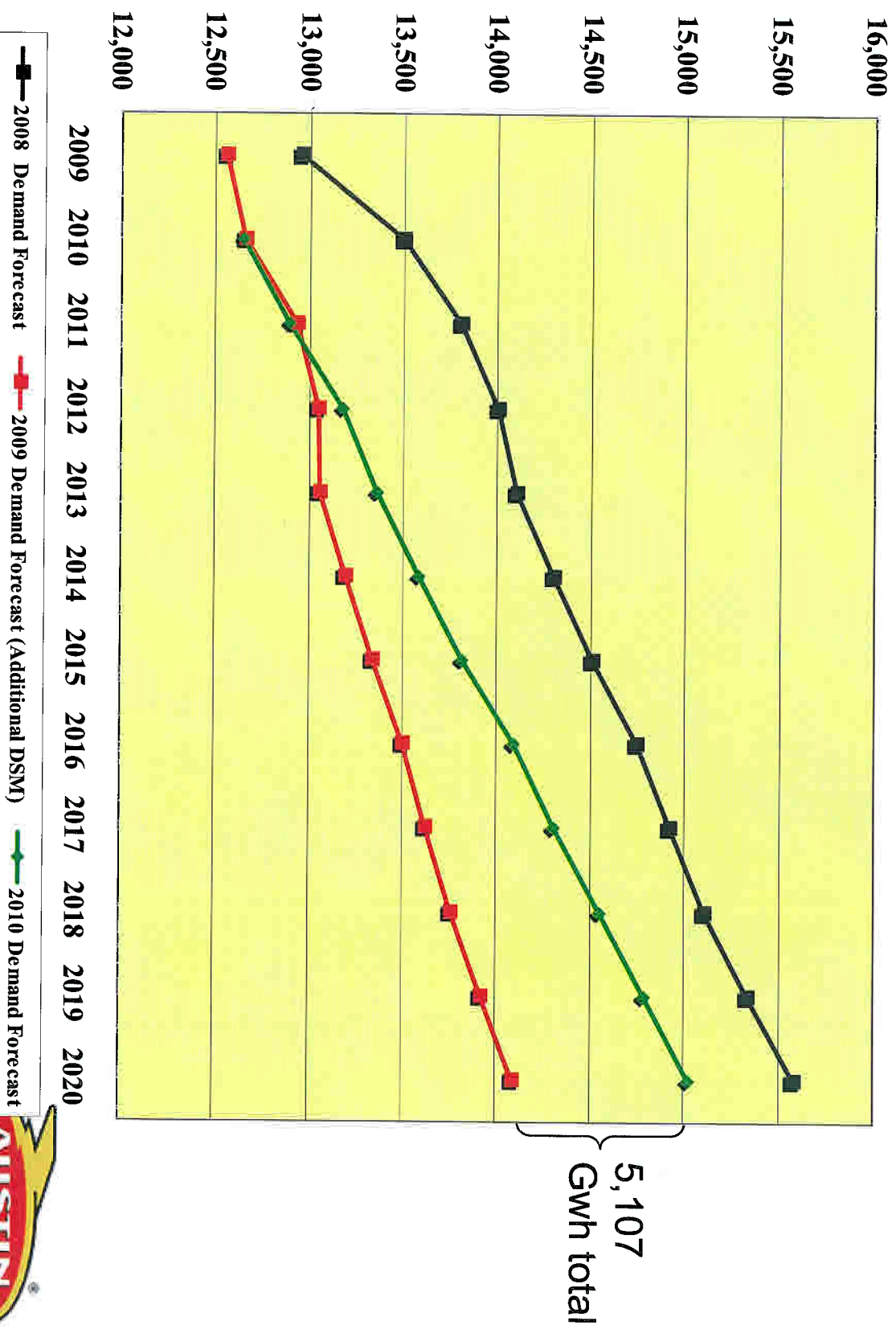
- In developing information for Budget Preparation for FY 2010-2011...
- New Load Forecast:
 - Projected Energy Demand has increased from 2009 Forecast

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10

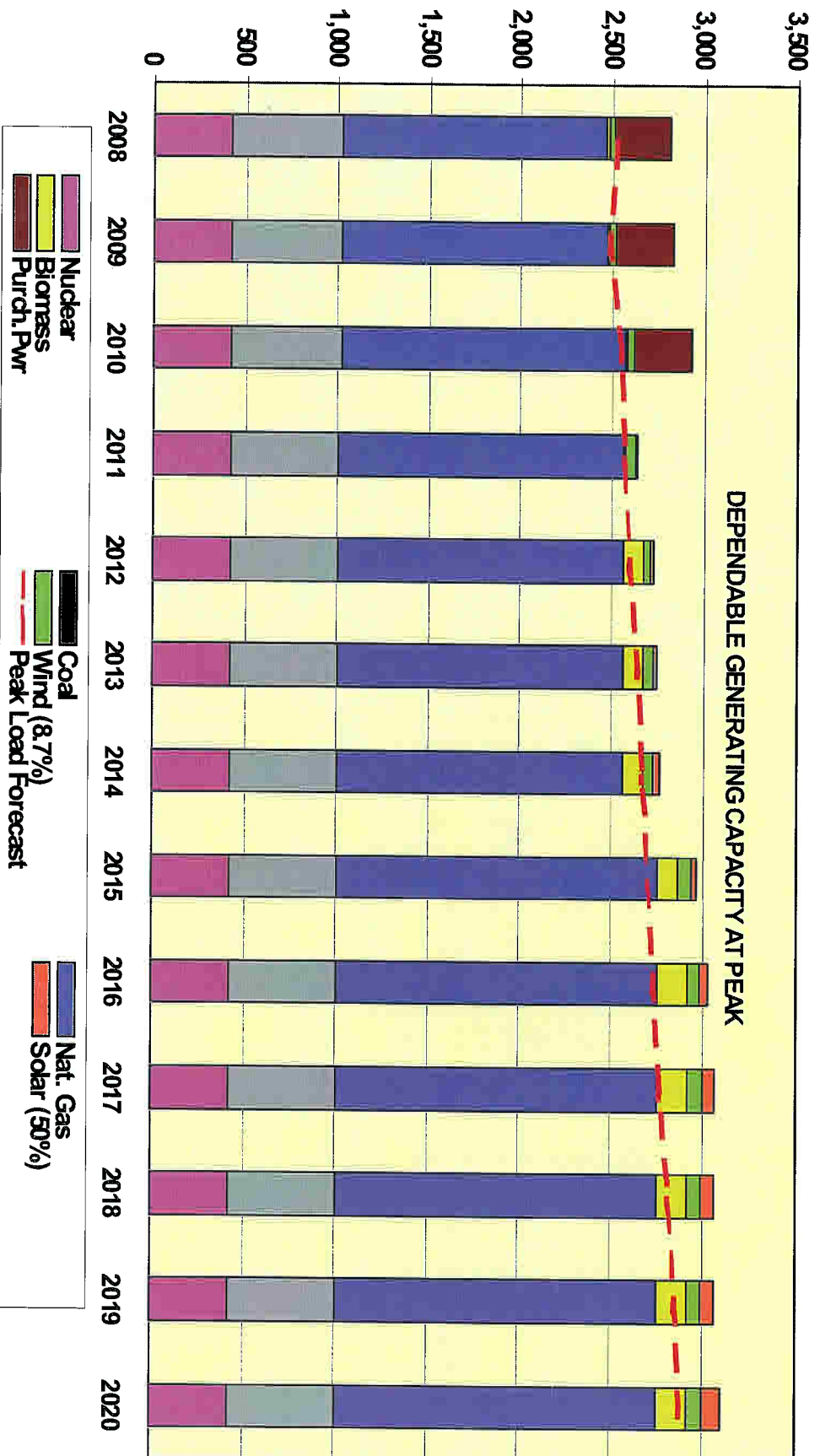
Change in Energy Demand Forecasts



April 8, 2010



Generation Resources and 2010 Load Forecast



April 8, 2010



Austin Energy Recommendation

Generation Resources in MW

Year	Coal/Nuclear	Gas	Biomass	Wind	Solar	Renewable Portfolio
2009	1,029	1,444	12	439	1	13%
2010		100			30	10%
2011				(77)* / 200		15%
2012			100			17%
2013				150		25%
2014					30	25%
2015		200		100		28%
2016			50		20	30%
2017				(126)* / 200	30	33%
2018					20	32%
2019					30	32%
2020				115	40	35%
Total	1,029	1,744	162	1001	201	

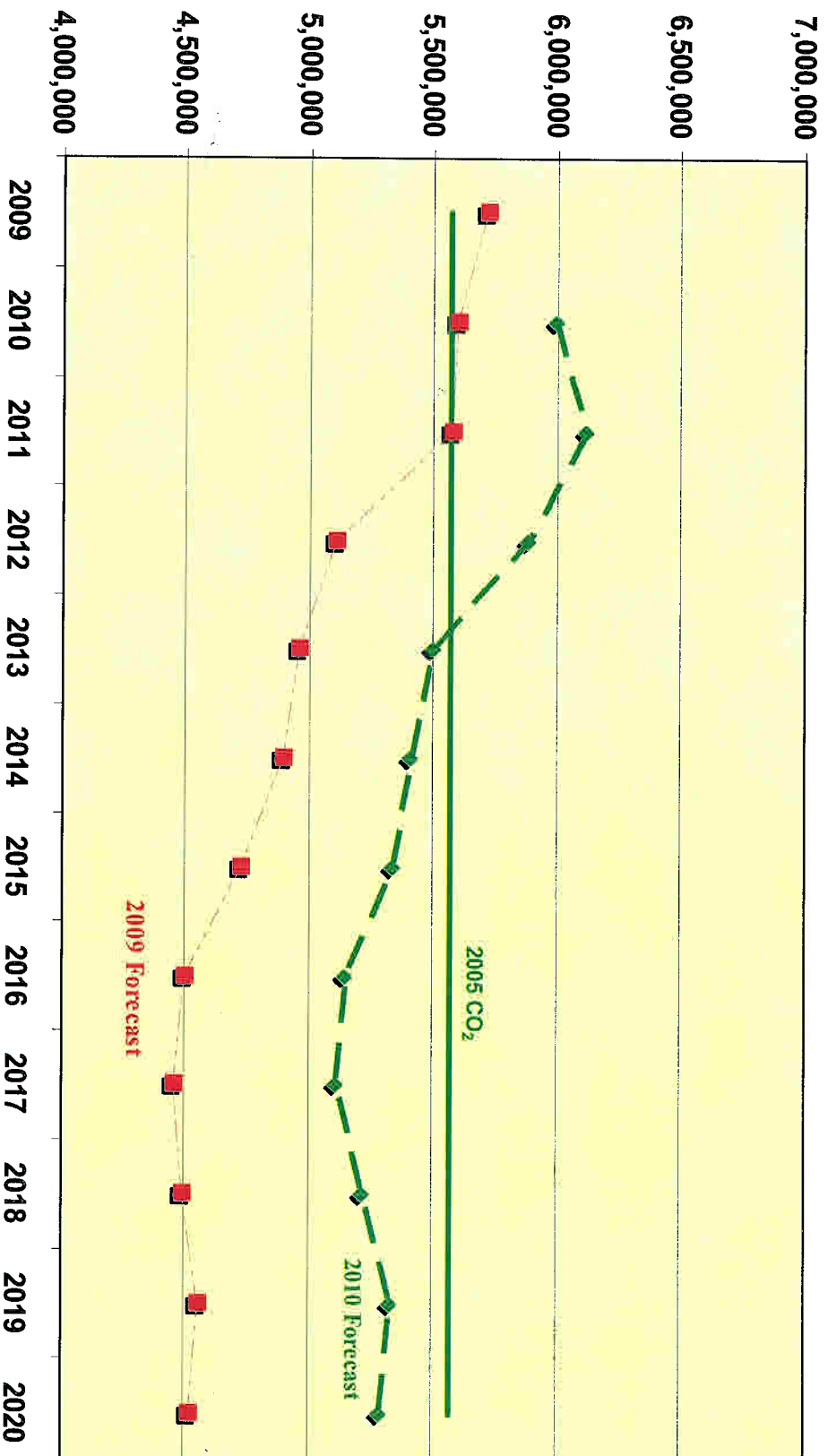
* Wind contracts expire.

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CO₂ Emissions to Serve AE's Load

Metric Tons



April 8, 2010



Austin Energy System-wide Rate Impact per MWh Estimate

- TCOS rider impact is the same under any scenario, 6.7%

- Incremental cost over existing generation plan is 9.5%

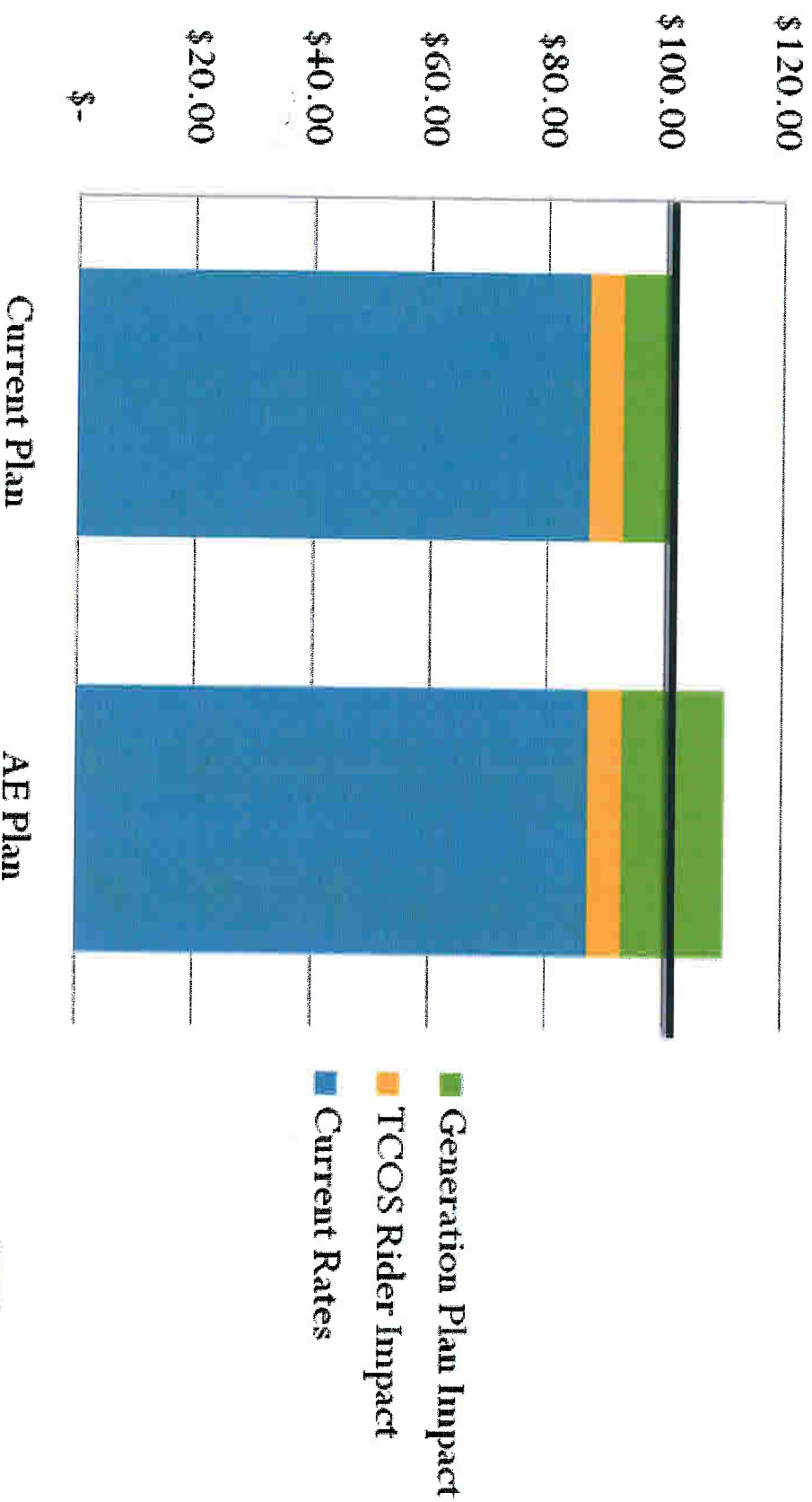
	2020	2020
	Rate Estimate *	Percent Change
2009 Current Rates	\$ 86.96	
TCOS Rider Impact	5.84	6.7%
Current Generation Plan Incremental Cost	9.08	10.4%
Subtotal	\$ 101.88	17.2%
Proposed Generation Plan Incremental Cost	\$ 8.28	9.5%

* Excludes inflation

April 8, 2010



Estimated 2020 System-wide Rate per MWh by Component



April 8, 2010



Historical Increase – Residential Class

Austin Energy
Residential Rate History
1,000 kWh

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Yearly Average Fuel	15.85	13.44	14.10	13.11	14.55	13.72	15.78	26.43	17.74	19.33	27.96	27.96	36.34	31.69	36.53	36.53
Yearly Average Base	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35
Total	74.20	71.79	72.45	71.46	72.90	72.07	74.13	84.78	76.09	77.68	86.31	86.31	94.69	90.04	94.88	94.88
Annual Change		-3.25%	0.92%	-1.37%	2.02%	-1.14%	2.85%	14.37%	-10.25%	2.08%	11.12%	0.00%	9.71%	-4.92%	5.38%	0.00%
Cumulative Change																27.87%
Annual Average Change																1.55%
<u>No Base Rate change since 1994</u>																
Prior to 1997, fuel factor was monthly																
CPI-U All Items	Dec-Dec %	2.50%	3.30%	1.70%	1.60%	2.70%	3.40%	1.60%	2.40%	1.90%	3.30%	3.40%	2.50%	4.10%	0.10%	2.70%
CPI-U All Items	Cumulative Change															44.25%
CPI-U All Items	Annual Average Change															2.47%
CPI-U Electricity	Dec-Dec %	2.70%	0.70%	-1.30%	-3.20%	0.70%	2.60%	6.10%	-1.90%	2.60%	2.10%	10.70%	7.50%	5.20%	8.60%	-0.50%
CPI-U Electricity	Cumulative Change															50.63%
CPI-U Electricity	Annual Average Change															2.77%

April 8, 2010



Next Steps

April 22, 2010

- Council consideration of the Resource, Generation, and Climate Protection Plan to 2020
- Financial Action Plan
 - Phase 1 (May, 2010 start)
 - Initial financial analysis and affordability benchmarking
 - Phase 2 (August, 2010 start)
 - Review Austin Energy's rate structure
- Budget Process
 - AE Five Year Forecast April 28th

April 8, 2010



18

510

Ongoing Steps

- Annual review, update and report on performance and affordability of the Plan
 - First update February, 2011
- Biennial assessment of the Plan's progress and affordability, including a public forum
 - January, 2012
- Annual Load forecast and Budget Process

April 8, 2010



Historical Increase – Residential Class

Austin Energy
Residential Rate History
1,000 kWh

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Yearly Average Fuel	15.85	13.44	14.10	13.11	14.55	13.72	15.78	26.43	17.74	19.33	27.96	27.96	36.34	31.69	36.53	36.53
Yearly Average Base	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35
Total	74.20	71.79	72.45	71.46	72.90	72.07	74.13	84.78	76.09	77.68	86.31	86.31	94.69	90.04	94.88	94.88
Annual Change		-3.25%	0.92%	-1.37%	2.02%	-1.14%	2.85%	14.37%	-10.25%	2.08%	11.12%	0.00%	9.71%	-4.92%	5.38%	0.00%
Cumulative Change																27.87%
Annual Average Change																1.65%
No Base Rate change since 1994																
Prior to 1997, fuel factor was monthly																
CPI-U All Items		Dec-Dec %														
CPI-U All Items		Cumulative Change														
CPI-U All Items		Annual Average Change														
CPI-U Electricity		Dec-Dec %														
CPI-U Electricity		Cumulative Change														
CPI-U Electricity		Annual Average Change														
			2.50%	3.30%	1.70%	1.60%	2.70%	3.40%	1.60%	2.40%	1.90%	3.30%	3.40%	2.50%	4.10%	0.10%
																2.70%
																44.25%
																2.47%
			2.70%	0.70%	-1.30%	-3.20%	0.70%	2.60%	6.10%	-1.90%	2.60%	2.10%	10.70%	7.50%	5.20%	8.60%
																-0.50%
																50.63%
																2.77%

April 8, 2010



17

570

Annual Austin Energy Performance Report Sample Format

This annual report to the Electric Utility Commission (EUC), Resource Management Commission (RMC), and to City Council will include summary information along with charts or other graphical display of the reportables listed below.

Affordable

- Electric bill comparison for residential, commercial, industrial customers including Austin, Dallas, Houston, Corpus Christi and San Antonio, at summer rates for the previous summer, as can be reasonably obtained.
- Electric rates, transmission rider and fuel charge for residential, commercial, and industrial customers, for each of the last five years.
- Five year history for each major customer class of revenue, sales in megawatt hour units, average monthly number of customers, average monthly kilowatt hours per customer, average monthly bill per customer and average revenues per kilowatt hour.
- Fuel cost by fuel type and percent of total, for each of the last five years.
- Fuel under/over collections at close of fiscal year, for each of the last five years.
- System annual average heat rate in British Thermal Units per kilowatt hours (Btu/kWh) (efficiency of power plants), for each of the last five years.
- System annual average fuel cost in cents per kilowatt hours (kWh) or fuel cost per kWh produced, for each of the last five years.
- System annual average production costs in cents per kilowatt hours (kWh) (fuel plus operating and maintenance cost), for each of the last five years.
- Generation and Use data including net kilowatt hours generated, total kilowatt hours delivered to the service area, average customers by customer class, breakdown of kilowatt hours delivered by customer class, and system peak demand in kilowatts for each of the last five years.
- Renewable energy purchased in kWh, kWh paid for by GreenChoice subscribers and kWh recovered through fuel charge, for each of the last five years.
- General Fund Transfer, for each of the last five years.
- Most recently released Comprehensive Annual Financial Report for the City of Austin, TX which includes Austin Energy found on the City's website at link <http://www.ci.austin.tx.us/controller/> .
- Most recently released Official Statement related to issuance of Electric Utility System Revenue Refunding Bonds found on the City's website at link <http://www.ci.austin.tx.us/finance/treasury.htm> .
- Bond ratings at close of fiscal year, for current and prior year.

- Most recently Approved Budget for the City of Austin, TX which includes Austin Energy found on the City's website at link <http://www.ci.austin.tx.us/budget/>.
- Operating Budget and Capital Improvement Spending Plan (CIP) comparison of actual expenditures to amended budget, for each of the last five years.

Reliable

- **SAIFI** (system average interruption frequency index) or average number of outages per customer, for each of last five years.
- **SAIDI** (system average interruption duration index or average length of outages per occurrence, for each of last five years.
- **SATLPI** (System Average Transmission Line Performance) or transmission performance index (voltage sags/outages) per 100 miles of lines, for each of the last five years.
- Average capacity factor for each AE generating unit, for each of the last five years.
- **Equivalent Availability Factor (EAF)** for each Austin Energy generating unit in each of the last five years. A common measure of reliability for generating units is the Equivalent Availability Factor (EAF). EAF measures the number of hours a generating unit's full capacity is available for use per the total period hours.
- Unplanned outages of more than 12 hours by any AE generating unit during the last fiscal year.

Clean

- Existing generation fleet portfolio including unit description, year installed, nameplate rating in megawatts and fuel type.
- Capacity by fuel type in megawatts and percent of total, for each of the last five years.
- Energy by fuel type in megawatt hours and percent of total, for each of the last five years.
- Energy efficiency and load shifting peak demand savings in MW by customer type and cost per MW for each customer type, for each of the last five years.
- Energy efficiency and load shifting energy savings in kilowatt hours (kWh) by customer type, for each of the last five years.
- Cumulative energy efficiency peak demand savings in megawatts (MW) compared to 2020 goal and total program costs, for each of the last five years.
- Summary rebate information for each customer class (residential, commercial, industrial), including total rebate dollars, cost per kilowatt (KW), average rebate and rebated measures as a percentage of customer class totals.
- Total CO₂ emissions by fuel type, for each of the last five years.

Customer Service

- Residential customer satisfaction index, for each of the last five years.
- Commercial customer satisfaction index, for each of the last five years.
- Key Accounts customer (largest 200) satisfaction index, for each of the last five years.
- Number of customer contacts/transactions handled by the utility Customer Contact Center and Austin 3-1-1, for each of last five years (includes calls, walk-in centers, email and fax).
- Average speed in answering calls by the Customer Contact Center and Austin 3-1-1, for each of the last five years.
- Percentage of bills payments received electronically, for each of the last five years.
- Number of customers who received utility bill discounts and total dollars, in each of the last five years. Number of customers who received Plus 1 emergency utility bill financial assistance and total dollars, in each of the last five years.
- Bad debt ratio, for each of the last five years.



TO: Mayor and Council Members

FROM: Marc A. Ott, City Manager

DATE: April 5, 2010

SUBJECT: Austin Energy Financial Planning Action Plan

As you are aware, a number of challenges facing Austin Energy were presented to Council this past November at a work session. Let me emphasize that our guiding principle in responding to all these issues will be to ensure the financial stability and sustainability of Austin Energy. We will always present recommendations that focus on preserving Austin Energy's stellar financial standing...as you know Austin Energy currently has A1 and A+ bond ratings. We will do everything we can to maintain and even improve those ratings.

In that light, I wanted to share the plan that I've given staff that will develop both short and long term recommendations to address the challenges facing Austin Energy. As a reminder, these issues include:

CHALLENGES

- **Funding** for power generation, as well as general improvements for our utility infrastructure.
- The **General Fund transfer policy** needs to be evaluated in conjunction with the review of our electric rates.
- We need to recover **increasing transmission costs** related to ongoing costs of the Texas Transmission Construction Program.
- Over a longer planning horizon, changes in the electric industry will require us to evaluate and begin planning for adjustments to our **business model** to competitively position us for the future state of the industry.

ACTION PLAN

We will address several of these issues in the short term, while others are longer term issues dependent on future market conditions and technology improvements. We are developing strategies and work plans to address each of these issues in a holistic and systematic manner. I've listed each "challenge" with a specific action plan below.

Funding

There are both short term and long term issues to deal with on the "funding" issue. In the short term, we need to evaluate our current financial position and benchmark costs compared to other comparable utilities. Austin Energy is clearly at a cross roads in terms of funding. In order to make prudent recommendations regarding the challenges facing Austin Energy, I need to spend some time determining "existing conditions" or more simply put determine "where are we now?" We plan to procure the services of several outside firms to provide expertise, knowledge of best practices, and an objective/independent perspective. I've divided this financial assessment work into two separate phases, although both efforts will feed into our recommendations. The preliminary scope of work for each phase is detailed at the end of this memo.

General Fund Transfer

As you know, the rating agencies have a favorable view of the City's existing transfer policy largely due to the historical stability of the annual transfer policy (methodology and percentage transfer). The rating agencies have been particularly pleased to see that as General Fund revenue has increased over time, the relative amount of the transfer has remained fairly constant. This is a vitally important factor in the financial stability for both the General Fund and Austin Energy that we must keep in mind as we move forward with an in-depth look at the transfer policy.

The General Fund transfer policy is an integral part of the planned electric rate review and may ultimately help to address some of the challenges presented by changes in the business model. Our strategy will balance the utility's long term financial sustainability while preserving the appropriate transfer level to the General Fund.

The first look at the General Fund Transfer policy will take place during Phase 1 (see below), where we will direct our consultant to assess the General Fund transfer methodology and review best practices across the country. The development of potential modifications will occur during Phase 2 as we work through the rate case implications.

Addressing the Rising Costs of Transmission

As we mentioned during the 2010 budget development process, Austin Energy's transmission expense is growing faster than its transmission revenue. Transmission expense is the cost of moving high-voltage electric energy over the regional electric grid operated by the Electric Reliability Council of Texas (ERCOT) from the power supply to the local lower-voltage distribution system. Transmission expense is paid to other utilities for the use of their transmission wires by Austin Energy. Our transmission expense is projected to increase by over \$125 million in the 2010-2014 forecast due to the ongoing Texas electric transmission grid build-out.

As a short term solution, Austin Energy will include a proposed transmission rider to begin cost recovery of increasing transmission expense in its 2011-2015 financial forecast and in the proposed 2011 budget. A long term solution will be evaluated and proposed during Phase 2.

New Business Model

The rate review is a key step in the development and implementation of what has become known as the "new business model." One component of the rate review will likely involve unbundling Austin Energy's costs into functional components (generation, distribution, and transmission) and consideration of alternative rate designs. These new

rate design alternatives are fundamental to the long-run evolution of the new business model and the utility's continued ability to recover its costs and remain financially sustainable.

Austin Energy's business model challenges are related to electric industry changes that may develop over an extended period of time, such as increased reliance on distributed generation and solar and energy efficiency. The timing of the impacts of these changes depends on external factors, such as market penetration and/or saturation affected by technology changes which may significantly reduce solar costs stimulating earlier adoption. In other words, the "business model" work needs to begin (as it will in Phase 2) but this will be an ongoing, long term effort.

Financial Assessment Plan

Phase 1 – Initial financial analysis and affordability benchmarking

The scope of work for this initial financial analysis will include such elements as:

- An independent evaluation of Austin Energy's financial position given the current economic and industry conditions and outlook. This evaluation will include a review of the adequacy of fund balance levels, as well as an analysis of the ability to ensure ongoing compliance with current bond ordinances that define debt service coverage and utility rate requirements,
- Benchmarking of electric utility costs compared to other comparable utilities, which will also complement the work being completed as part of the Resource and Climate Protection Plans,
- A comprehensive review of all Austin Energy programs to determine whether they support the achievement of long-range goals outlined in Austin Energy's strategic plan and to help maximize program efficiencies,
- Assistance with an assessment of the General Fund transfer methodology that incorporates a review of best practices across the country, and
- Development of a financial model that will provide the tools Austin Energy financial staff need to prepare projections in preparation for changes in the business environment and to help provide the analysis needed by management to chart the optimal course.

I believe that the resulting product will provide the future General Manager with much of the analysis he or she will need to hit the ground running. We are in the process of developing a specific scope of work for this effort and expect to bring forward a consultant contract for this initial review for your consideration in April.

Phase 2 – Review Austin Energy's rate structure

At the November 2009 presentation, we apprised Council of the need for a rate review during fiscal year 2012 with a rate increase becoming effective at the beginning of fiscal year 2013. There is a long planning and preparation process for an electric rate review. Planning began in fiscal year 2010 and work is underway to hire the third party expertise needed to assist in the planning and analysis that must be accomplished over the next two years. These consultants will assist with cost of service studies, cost analysis, rate comparisons, the design and implementation of a public involvement process, and rate design.

While the first priority of the rate review is to assure revenue sufficiency of the utility, several other business and strategic objectives will be addressed in that process. The rate review will address the appropriate balancing of rates across customer classes. The financing needs of the generation plan will be considered, as well as the implications of the increased goal for energy efficiency. Setting the stage for the new business model will also be a critical element of the review.

One of the key challenges of the rate review will be striking the proper balance among those objectives. Achieving that balance may necessitate that the recommended rate changes be implemented in stages over several years—fulfilling some objectives in the near term, while others are initially deferred. In planning for the rate review, Austin Energy will develop and recommend a long-run strategy for adjusting electric rates to satisfy these multiple objectives.

We expect to launch the RFP process in April for the “rate case” consultant with the ultimate selection of the consultant for your consideration in August.

In conclusion, I hope this memo conveys that we do indeed have financial challenges facing Austin Energy. I also hope the Action Plan detailed above confirms that we have launched our work to address each and every one of these issues head on. I look forward to working with you as we develop and implement plans and strategies to position our electric utility for the future.

xc: Robert Goode, Interim Austin Energy General Manager
Leslie Browder, Chief Financial Officer