# Late Backup

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

Update

Robert D. Goode, Interim General Manager April 8, 2010



### 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





## 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 <u>clean</u>, <u>affordable</u>, <u>reliable energy</u> and <u>excellent customer service</u>



## 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.)



## 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

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

# Plan Summary



## **Goals Summary**

- Increase the <u>energy efficiency goal</u> from 700 MW to 800 MW by 2020
- Increase the <u>renewable energy goal</u> from 30% to 35% by 2020
- Increase the <u>solar component of the renewable</u> <u>energy goal</u> from 100 MW to 200 MW by 2020
- Establish a <u>CO<sub>2</sub> reduction goal</u> of 20% below 2005 level by 2020



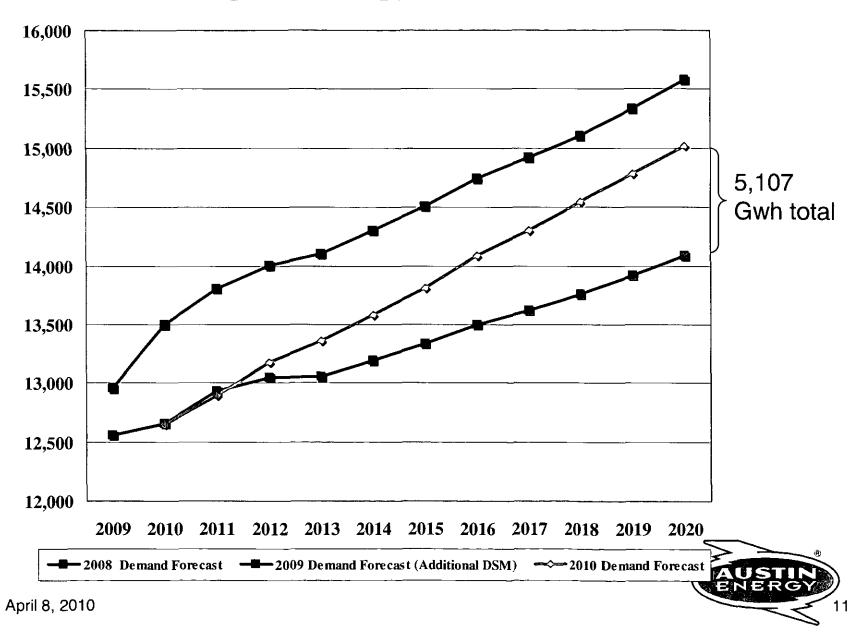
# **Updated Information**

• In developing information for Budget Preparation for FY 2010-2011...

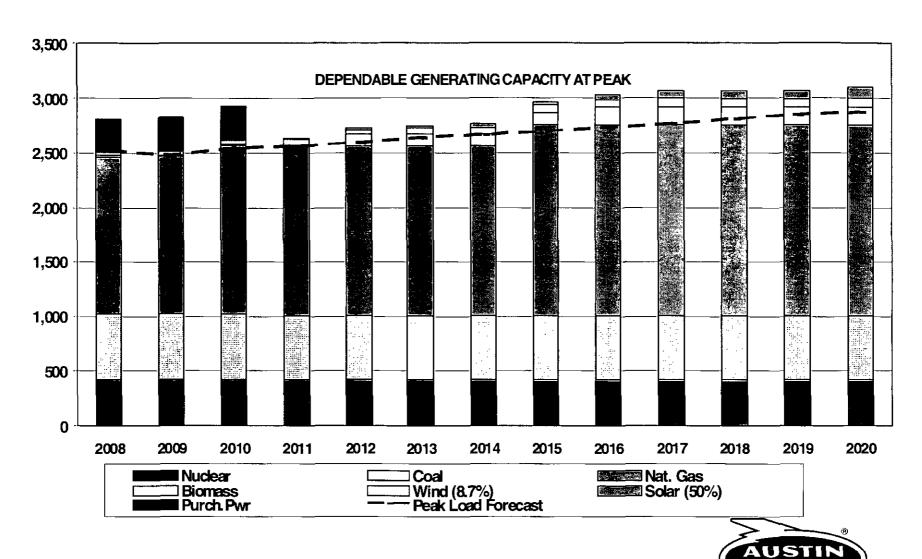
- New Load Forecast:
  - Projected Energy Demand has increased from 2009 Forecast



#### **Change in Energy Demand Forecasts**



### Generation Resources and 2010 Load Forecast



### **Austin Energy Recommendation**

#### Generation Resources in MW

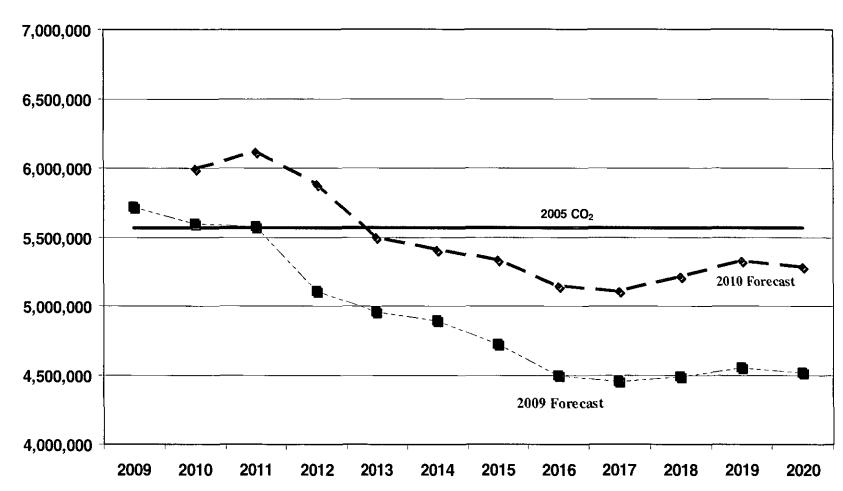
|       |              |                  |               |            | -     |                        |  |
|-------|--------------|------------------|---------------|------------|-------|------------------------|--|
| Year  | Coal/Nuclear | Gas              | Biomass       | Wind       | Solar | Renewable<br>Portfolio |  |
| 2009  | 1,029        | 1,444            | 12            | 439        | 1     | 13%                    |  |
| 2010  |              | 100              |               |            | 30    | 10%                    |  |
| 2011  |              |                  |               | (77)*/ 200 |       | 15%                    |  |
| 2012  |              | · 1111// u / 201 | 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  | . ,          |                  | , <u>1818</u> | 115        | 40    | 35%                    |  |
| Total | 1,029        | 1,744            | 162           | 1001       | 201   |                        |  |

<sup>\*</sup> Wind contracts expire.



#### CO<sub>2</sub> Emissions to Serve AE's Load

#### **Metric Tons**





## Austin Energy System-wide Rate Impact per MWh Estimate

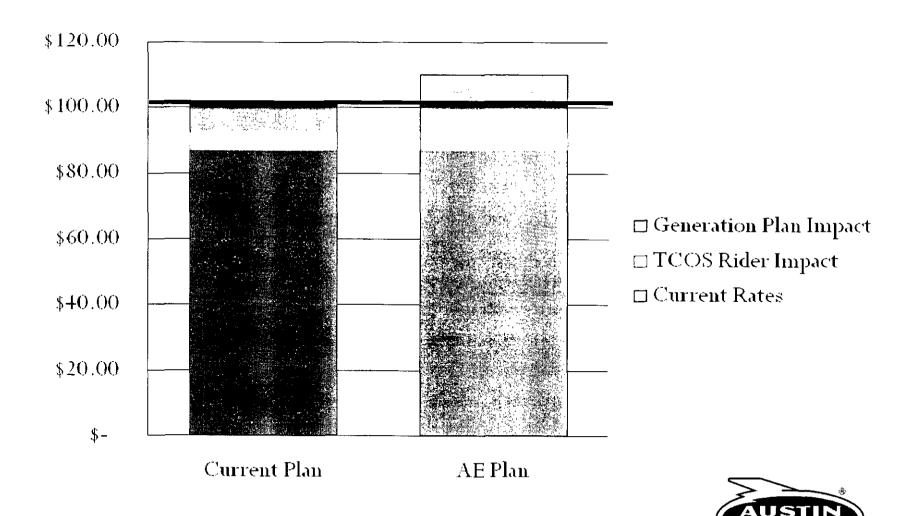
- TCOS rider impact is the same under any scenario, 6.7%
- Incremental cost over existing generation plan is 9.5%

|   |     | 2020             | 2020<br>Percent<br>Change |  |
|---|-----|------------------|---------------------------|--|
|   | Est | Rate<br>timate * |                           |  |
| 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%                      |  |



<sup>\*</sup> Excludes inflation

# 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> | 2000  | <u>2001</u> | 2002              | 2003  | 2004   | <u>2005</u> | 2006  | <u>2007</u> | 2008  | 2009                      |
|---|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------|-------------|-------------------|-------|--------|-------------|-------|-------------|-------|---------------------------|
| 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       | 76.0 <del>9</del> | 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<br>Prior to 1997, fuel factor w                         |                                      |             |             |             |             |             |       |             |                   |       |        |             |       |             |       |                           |
|   | : %<br>tive Change<br>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%<br>44.25%<br>2.47%  |
| CPI-U Electricity Dec-Dec<br>CPI-U Electricity Cumula<br>CPI-U Electricity Annual | tive Change                          | 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%<br>50.63%<br>2.77% |



### **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 28<sup>th</sup>



### **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

