

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

Update

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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 clean, affordable, reliable energy  
and excellent customer service



# 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*



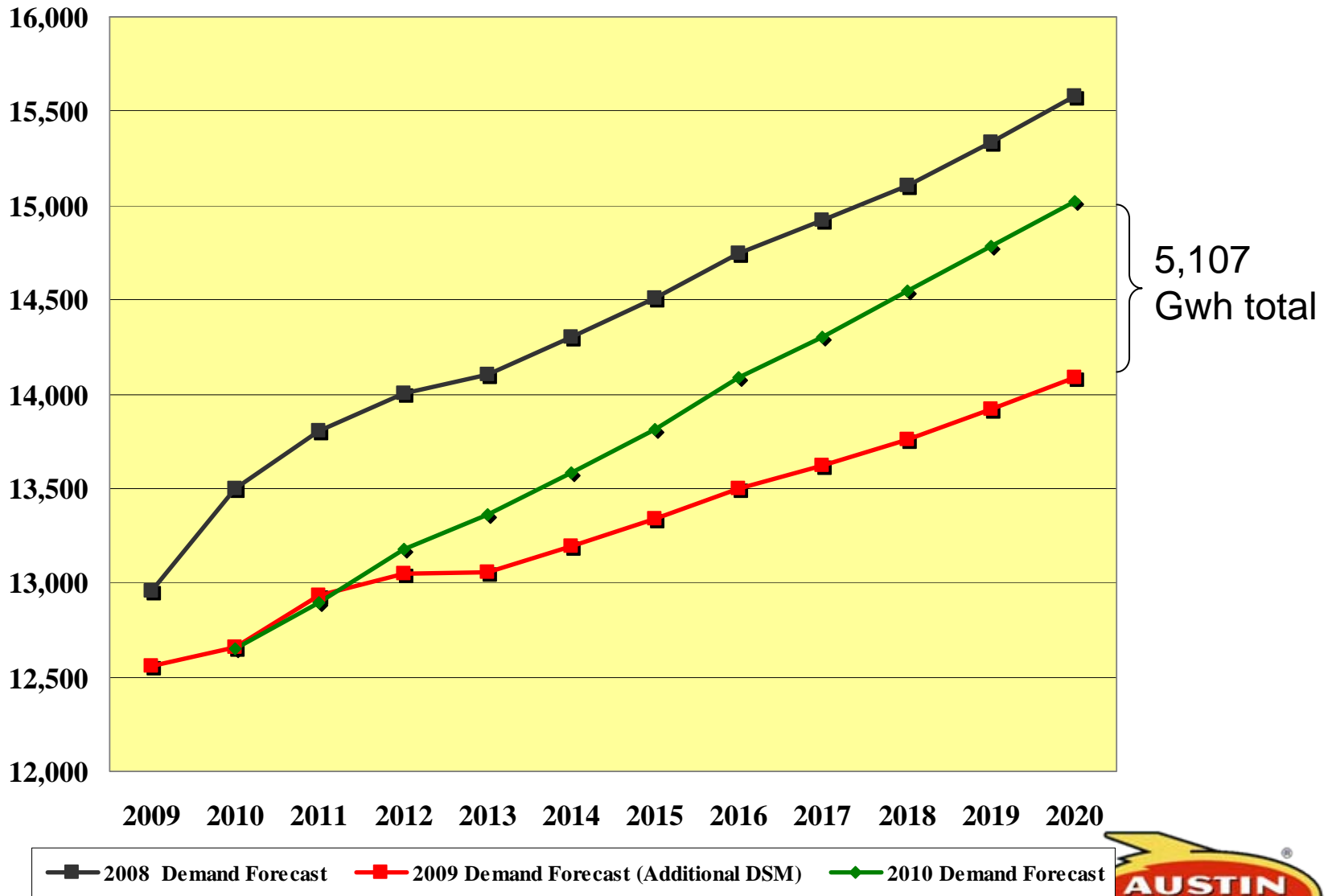
# Goals Summary

- Increase the 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 CO<sub>2</sub> reduction goal of 20% below 2005 level by 2020

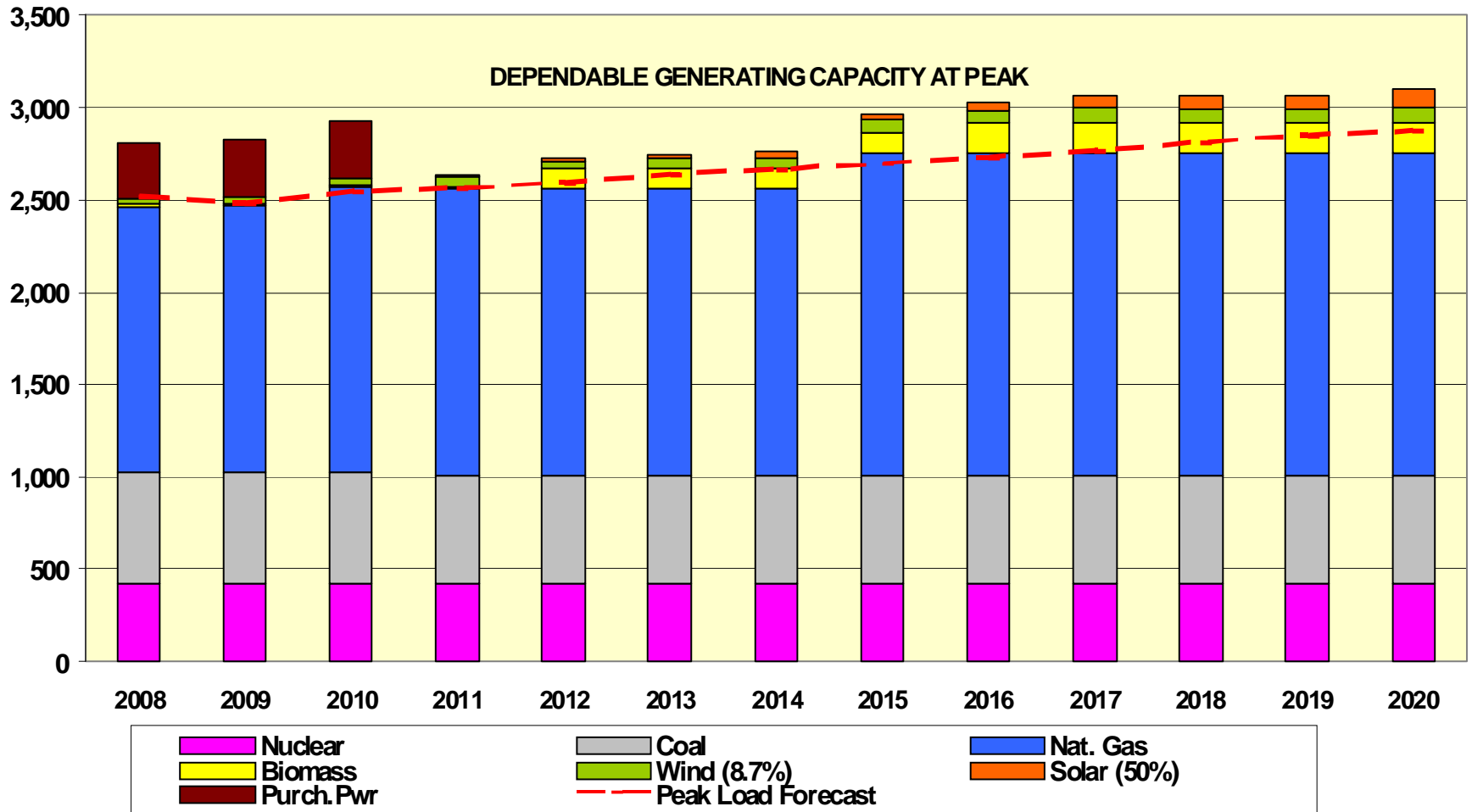
# *Updated Information*

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

# 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 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%                 |
| <b>Total</b> | <b>1,029</b> | <b>1,744</b> | <b>162</b> | <b>1001</b>  | <b>201</b> |                     |

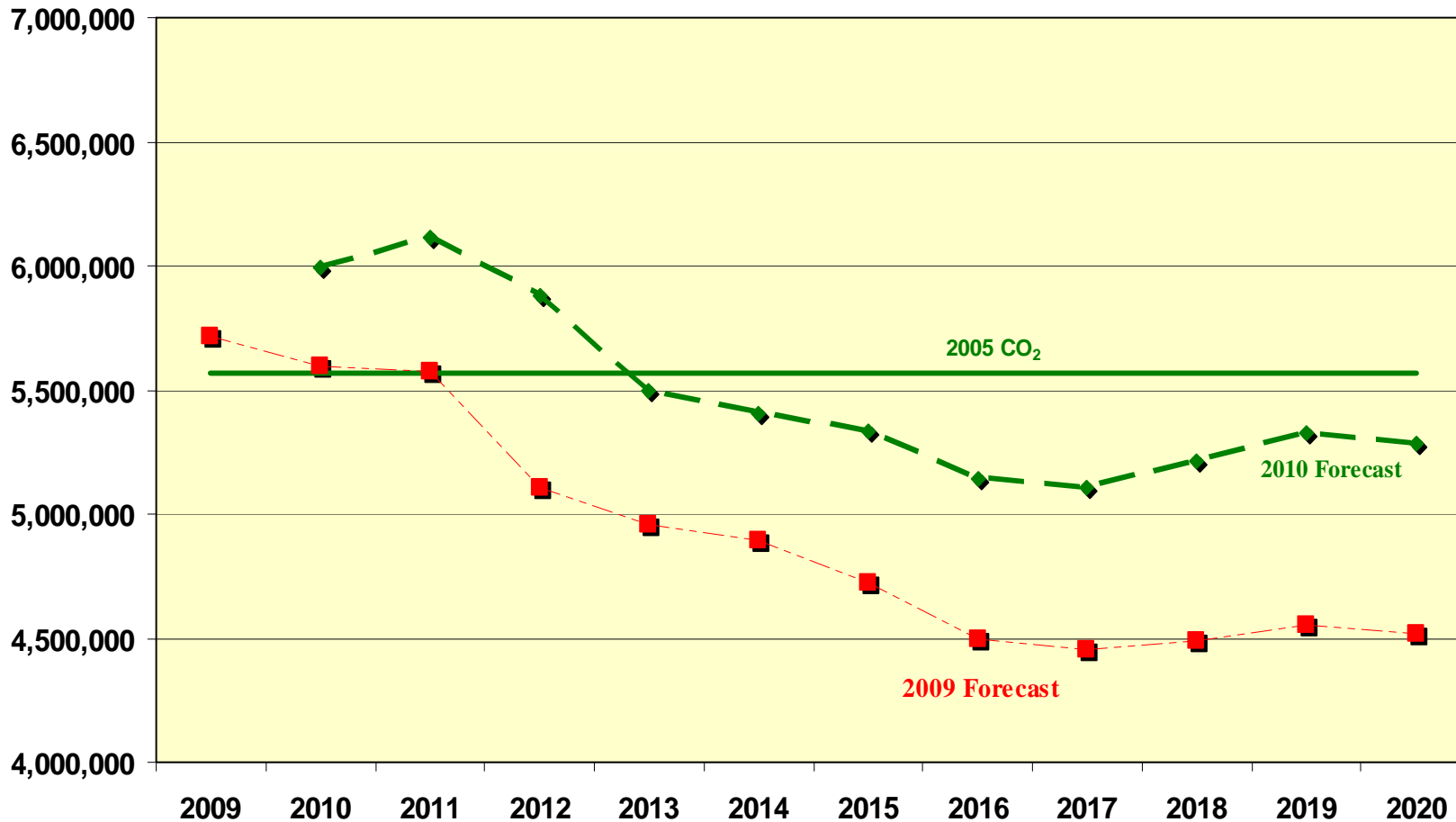
\* Wind contracts expire.

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

Metric Tons



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# Austin Energy System-wide Rate Impact per MWh Estimate

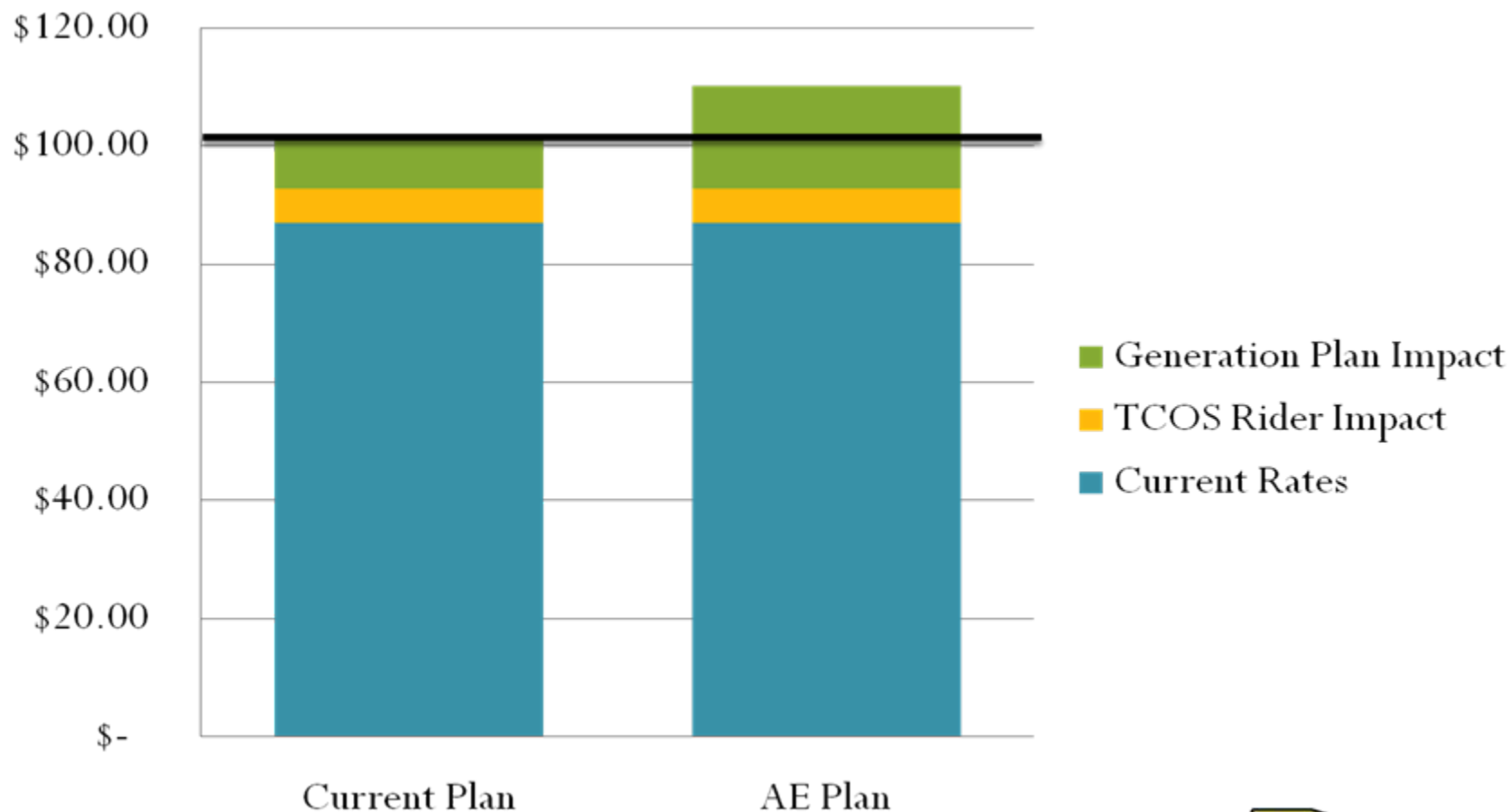
- TCOS rider impact is the same under any scenario, 6.7%
- Incremental cost over existing generation plan is 9.5%

|  | 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%          |
| <b>Proposed Generation Plan Incremental Cost</b> | <b>\$ 8.28</b>  | <b>9.5%</b>    |

\* Excludes inflation



# Estimated 2020 System-wide Rate per MWh by Component



# 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 %             | 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%       |



# 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