

**Report from the
Electric Utility Commission
Regarding the
Austin Generation Resource Planning Task Force**

To: Austin City Council

Fr: Electric Utility Commission

Date: November 16, 2009

The Electric Utility Commission believes that three generation scenarios best represent the broad (and sometimes opposing) spectrum of options that could be adopted by the Commissions and City Council. We feel that by reviewing these scenarios, the Council Members will have satisfied their duty to listen to the concerns of all of Austin Energy's customer classes and stakeholders.

The "Strawman" Scenario described on Exhibit "A"

The Replace Fayette Power Plant Scenario described on Exhibit "B"

The Austin Energy Staff Recommendation Scenario described on Exhibit "C"

A chart describing some key characteristics of each of these scenarios is attached as Exhibit "D".

Each of the three scenarios are realistic and feasible, albeit at different costs and with different risks. The three scenarios advance different policy goals and are subject to different risks, which are summarized below.

It is important to remember that none of these scenarios call for a binding commitment to any future source of generation other than what has already been approved and voted on by City Council. All of the planned commitments are just that: plans. No new commitment or purchase of additional generation capacity will be final until voted on and approved by City Council at the appropriate time in the future. Accordingly, like any good business plan, all of the scenarios anticipate adjustments and revisions as more data is available and when final decisions are to be made.

The "Strawman" Scenario

General Description. This Scenario calls for adding 1,135 megawatts of new capacity to Austin Energy's existing roughly 2,900 megawatts generation portfolio (including the addition of the solar and biomass plants recently approved by City Council) between 2010 and year-end 2020. This scenario does not retire or replace any existing generation facilities (other than wind contracts terminating at the expiration of their term). Of the 1,135 additional megawatts of capacity, 300 would be natural gas, 585 would be wind, 100 would be solar and 150 would be biomass. This

scenario anticipates reduction in demand through demand-side management of 700 megawatts by 2020.

Projected Generation Costs. Under this scenario, the PACE consultants have estimated that the total generation costs of Austin Energy would increase by 29% in 2007 real dollars by 2020.

Risk – Benefit Analysis. This Scenario was the first scenario developed by Austin Energy in early 2009 for use in town hall meetings to provide a benchmark for discussing Austin Energy's future generation plan. This scenario meets all City Council goals with the lowest projected capital costs of the three scenarios (\$1.8 billion, versus \$2.4 billion for Staff Recommendation and \$3.9 billion for Replace FPP)¹.

Since this scenario calls for the highest reliance on coal and natural gas among the three scenarios, it would produce the highest level of carbon emissions.

While this scenario reduces actual CO₂ emissions of Austin Energy by 6% of 2005 levels by 2020, that reduction does not in itself meet the current reduction proposed by the Senate version of the Waxman-Markey climate change bill of 20%. Furthermore, the Strawman Scenario's reductions in carbon emissions occur predominantly towards the end of the planning period. Under this scenario, Austin Energy's greenhouse gas emissions would not be lower than 2005 emissions until 2015. Correspondingly, in this scenario investments in solar and wind occur predominantly towards the end of the planning period. The benefit to this approach is that it allows more time for the costs of solar and wind to decrease. Therefore, if the costs of those resources decline more than expected then the actual cost of this scenario may be lower. If costs do not decline as much as expected, Austin's leaders may then elect to find less expensive ways to meet the city's carbon emissions goals. The disadvantage to this approach is that Austin Energy's emissions of

¹ Some members of the Generation Resource Planning Task Force considered the "Task Force Scenario #2" as a way to reduce capital expenditures. The Task Force Scenario #2 is very similar to the Staff Recommendation with the following differences: 200 MW of additional demand-side management (DSM) savings, 50 MW less biomass, 180 MW less wind, and an additional 96 MW of solar. This scenario assumes that the private sector (not Austin Energy) will pay the bulk of the costs associated with 266 MW of new distributed solar PV beyond Austin Energy's planned and Council-approved 30 MW centralized solar PV solar facility. The capital costs of this scenario are relatively lower than other scenarios, because the scenario assumes that AE customers will directly pay for the bulk of the capital costs of additional solar PV. The capital costs of this scenario also do not reflect the additional costs associated with the increased DSM expenditures. Based on those assumptions, the Task Force #2 scenario has an estimated total capital cost of \$1.72 billion, compared with \$2.42 billion for AE's Staff Recommendation scenario. However, if the cost of solar generation were calculated the same way it was estimated for the Strawman scenario in preparing the estimates of the total capital costs of the Staff Recommendation scenario and if the increased costs associated with additional DSM measures were added to Task Force Scenario #2's capital costs, then the estimated capital costs associated with Task Force #2 would be equal to \$2.77 billion, which is about \$300 million higher than the capital costs of the Staff Recommendation and almost one billion dollars more expensive than the Strawman.

greenhouse gases are not significantly reduced until 2020 and this leaves much of the hard decisions on how to reduce actual emissions to tomorrow's leaders.

The Replace Fayette Power Plant Scenario

General Description. This Scenario calls for adding 1,945 megawatts of new capacity to Austin Energy's existing roughly 2,900 megawatt generation portfolio (including the addition of the solar and biomass plants recently approved by City Council) between 2010 and year-end 2020. This scenario retires Austin Energy's use of 607 megawatts of coal generation by 2020. Out of the 1,945 additional megawatts of capacity, 100 would be natural gas, 1,350 would be wind, 180 would be solar, 15 would be landfill gas, 50 would be geothermal and 250 would be biomass. This scenario anticipates reduction in demand through demand-side management projects of 800 megawatts by 2020.

Projected Generation Costs. Under this scenario, the PACE consultants estimated that the total generation costs of Austin Energy would increase by 31% in 2007 real dollars by 2020. This increase in generation costs is surprisingly similar to the projected increased in the other scenarios despite this scenario's significantly higher capital costs. That result is due to the estimated savings in fuel costs and avoided carbon emissions costs.

Risk – Benefit Analysis. This scenario would eliminate Austin Energy's reliance on its ownership of the Fayette Power Project coal plant by 2020 The Fayette coal plant is currently responsible for about 71% of Austin Energy's total annual emissions of carbon dioxide while generating 32% of the total energy consumed by Austin Energy's customers. Under this scenario, there would be no more emissions of greenhouse gases from the coal plant attributable to Austin Energy.

This scenario expressly does not address what should be done with the coal plant after 2020 or whether Austin Energy has the right to shutter or sell the coal plant, in light of its obligations to the co-owner, LCRA, or the rules of ERCOT and the Texas PUC.

While this scenario has the highest capital costs, it eliminates the obligation to pay for coal fuel costs and eliminates any cost risks associated with future regulatory compliance obligations, such as limits on mercury or new requirements imposed if Austin becomes non-compliant with federal clean air standards. For example, the committed costs to install SO₂ scrubbers on the coal plant are projected to cost about \$230 million. Future costs associated with the coal plant will likely include cap and trade (or similar) costs associated with greenhouse gases, limits on emissions of mercury and costs associated with Austin being in non-attainment of federal clean air guidelines. If this scenario were implemented, annual savings from reduced fuel costs could equal about \$75 million (as compared to the Strawman) by 2020 and many future costs relating to compliance with carbon emissions regulations would be avoided. If City Council believes that the costs of coal or future costs of complying with global warming legislation or other regulations governing the burning

of coal justify the additional capital expenses associated with this plan, then this scenario should be selected.

This plan would bring the highest reductions in emissions of greenhouse gases. By 2020, Austin Energy's emissions of greenhouse gases would be reduced to 62% of 2005 levels, far exceeding a potential federal mandate of a 20% reduction.

This scenario calls for the highest reliance on wind and solar energy, which are "variable" sources of energy. This scenario provides the least amount of "baseload" power, which comes from power generation technologies employing sources of energy that can be dispatched at any time. By relying more on variable sources of energy, this scenario may require increased reliance on natural gas, which can be quickly dispatched to counterbalance shortfalls caused by the variability of wind or solar. However, natural gas prices have experienced very high volatility in recent years, ranging from a low of \$3/mcf to a high of \$14/mcf in a span of a few years. Therefore, this plan may leave Austin Energy more exposed to risks associated with the volatility of natural gas prices. This additional exposure to natural gas fuel costs could eliminate some or all of the fuel savings described above.

This scenario results in the highest percentage of Austin Energy's generation portfolio being supplied by renewable energy, with 54% of the total portfolio being renewable energy by 2020.

This scenario calls for Austin Energy to stop using a current asset that produces 607 megawatts of reliable and predictable power, the Fayette Power Project coal plant. The coal plant currently provides approximately one-third of Austin Energy's total annual energy needs. The coal plant provides baseload power that is currently relatively cheap. There is a risk associated with this scenario that the substantial additions of wind capacity anticipated may not be available within 10 years in order to replace the coal plant's baseload capacity and, even if they are, significant congestion costs, transmission costs and other costs may be associated with such investments. The ability of Austin Energy to secure the anticipated amount of biomass is also in question. This scenario also calls for 50 megawatts of geothermal, although it is not clear that such energy would be available by 2020 at reasonable costs. If the coal plant is eliminated or sold, Austin Energy may not be able to recoup the millions of dollars it has recently invested in upgrades to the plant to meet regulatory requirements.

The Staff Recommendation

General Description. This scenario calls for adding 1,415 megawatts of new capacity to Austin Energy's existing roughly 2,900 megawatt generation portfolio (including the addition of the solar and biomass plants recently approved by City Council) between 2010 and year-end 2020. This scenario does not retire or replace any existing generation facilities (other than wind contracts terminating at the expiration of their term). Out of the 1,415 additional megawatts of capacity, 200 would be natural gas, 765 would be wind, 200 would be solar and 150 would be biomass. This

scenario anticipates reduction in demand through demand-side management projects of 800 megawatts by 2020.

Projected Generation Costs. Under this scenario, the PACE consultants have estimated that the total generation costs of Austin Energy would increase by 28% in 2007 real dollars by 2020. However, PACE estimates that if the unneeded coal generation capacity and natural gas capacity were sold into the open market, the increase in generation costs would be equal to 15% by 2020 – barely over a one percent increase per year.

This scenario calls for \$600 million more in capital costs than the Strawman scenario. However, by 2020, this scenario would result in annual fuel savings of \$50 million compared to the Strawman scenario. Therefore, increased reliance on wind and solar, which have no fuel costs, would result in cumulative fuel cost savings of approximately \$200 million by 2020. When the savings from fuel are credited against the higher capital costs, the difference between the two plans is \$400 million over ten years. For that additional \$400 million investment, Austin Energy would receive 100 MW more of demand-side management; 150 MW more of wind power; and 100 MW more of solar power.

Under this scenario, Austin Energy would also retain the ability to sell about 25% of the Fayette coal plant's potential energy output into the open market and thereby recoup some of the higher costs associated with this scenario, in the event such sales are economically and politically feasible.

Risk – Benefit Analysis. This scenario calls for increasing the renewable energy portfolio from 30% to 35% by 2020. Additional renewable energy would not eliminate Austin Energy's reliance on its coal plant by 2020, but would allow Austin Energy to reduce energy generation from the coal plant to a capacity factor of 60%². That reduction in coal generated electricity would help contribute to an overall reduction in Austin Energy's emissions of carbon dioxide in this scenario to 18-20% below 2005 levels by 2020 – nearly meeting potential federal requirements without the need to purchase carbon offsets. Moreover, those real reductions in emissions would be achieved earlier than under the Strawman scenario.

This scenario provides the most diverse portfolio and therefore greater hedging against risks of volatility in any one type of fuel costs, whether natural gas prices, carbon costs or the costs of renewable energy.

² Capacity factor is the kWh of energy a facility generates in a year divided by the total amount it could generate if it ran at maximum output.

Final Recommendation

If City Council believes that, once the current goals established by the Austin Climate Protection Plan are met, the next most important policy objective is to minimize the cost associated with constructing new generation facilities, then the Strawman scenario best suits that policy objective.

If City Council believes that the risks associated with continuing to rely on coal, whether due to the costs of coal, the costs associated with regulation of carbon emissions or the health and safety risks, are too high, then the Replace FPP scenario should be adopted.

However, for the reasons explained above, the authors of this report support the Austin Energy Staff's Recommended generation scenario. That recommendation strikes a middle ground between the other two generation scenarios. The staff recommendation most effectively protects Austin Energy customers from the double risk of price increases associated with carbon emissions and price increases associated with natural gas volatility. The Staff Recommendation provides a steady path to eliminating Austin's reliance on coal and avoiding future costs associated with coal, while also protecting against too rapid a pace of capital expenditures. The Staff Recommendation also avoids assumptions about the private sector's willingness to bear the capital costs of new distributed generation. We believe that Austin can adopt this generation plan and continue to be a leader in carbon reduction.

The future cost of energy will significantly impact the quality of life for Austin's families and the local economy. We believe that the City Council should assess the plans based on all costs, including estimated future capital costs, the costs associated with fuel costs, costs associated with carbon emissions, other regulatory costs and transmission costs as well as anticipated increases in inflation and staff and administrative costs. The staff recommendation best protects against the risk of price increases from all of these factors and spreads the risk of future price increases across the broadest array of generation resources.

Therefore, the Electric Utility Commission supports the staff recommended scenario, as amended by the task force recommendations attached as Exhibit "E", with the proviso that Austin Energy review the plan in two years with the target of accelerating the phase down of Fayette plant and toward its eventual closure by 2020 if economically and technologically feasible.



Exhibit "A"

Annual Capacity Additions (MW) STRAWMAN SCENARIO

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gas CT	95											
Gas CC							200					
Nuclear												
Wind	165		135			50	100		200			100
Solar		80				20			20		30	
Geothermal												
LFG												
Biomass				100				50				

Cumulative Capacity Additions (MW)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gas CT	165	290	425	525	525	595	895	945	1,165	1,185	1,195	1,295
Gas CC							200	200	200	200	200	200
Nuclear												
Wind	165	330	465	600	735	865	1,000	1,100	1,200	1,300	1,400	1,500
Solar		80	160	240	320	400	480	560	640	720	800	900
Geothermal												
LFG												
Biomass				100	200	300	400	500	600	700	800	900

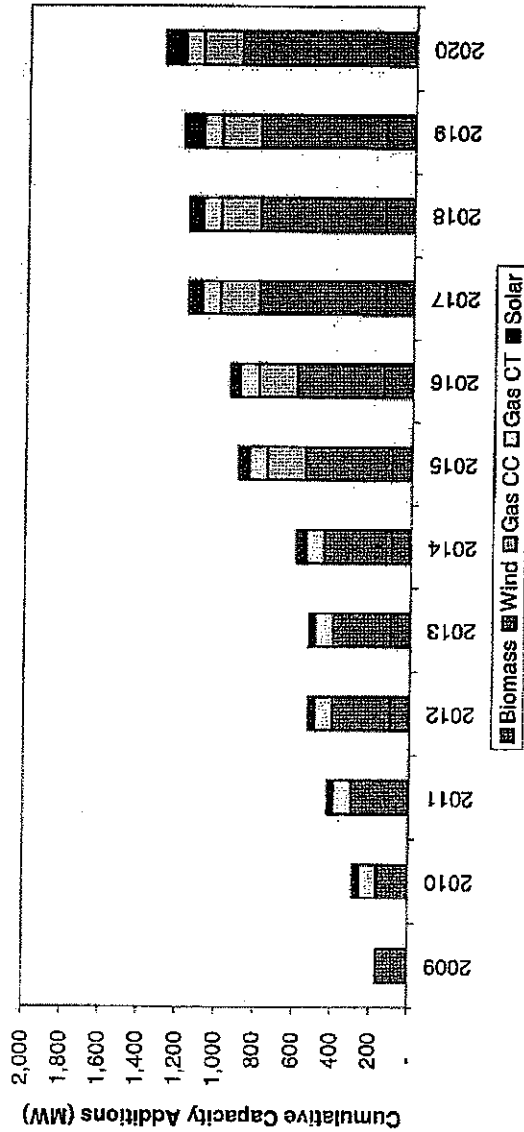




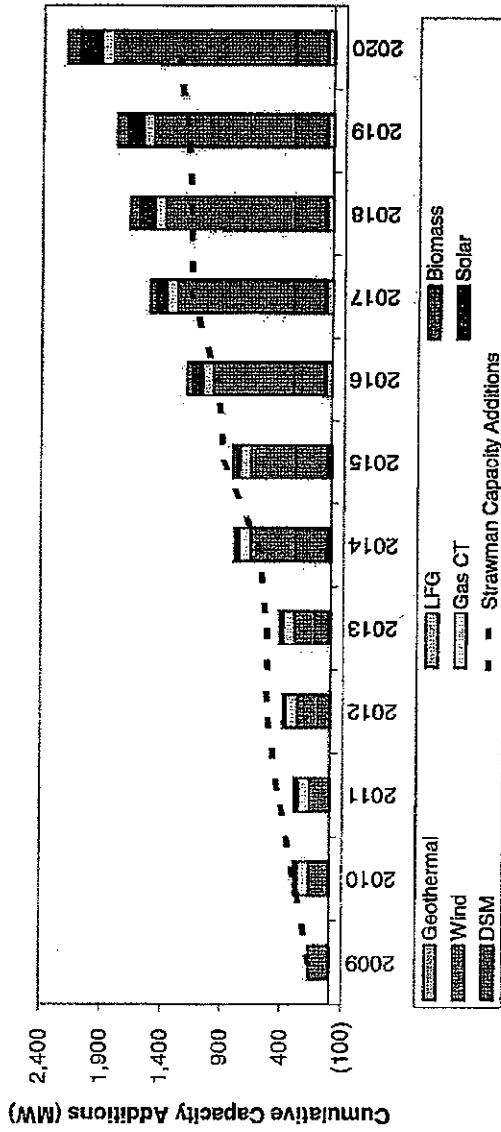
Exhibit "B"

Annual Capacity Additions (MW) REPLACE FPP SCENARIO

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gas CT		95										
Gas CC												
Nuclear												
Wind	165					200		300	300	100	100	350
Solar		30						50		50		50
Geothermal					25			25				
LFG						15						
Biomass				100		150						
DSM						14	14	14	14	14	14	14

Cumulative Capacity Additions (MW)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gas CT		95	95	95	95	95	95	95	95	95	95	95
Gas CC												
Nuclear												
Wind	165	165	165	165	165	365	365	665	965	1,065	1,165	1,515
Solar		30	30	30	30	30	30	80	80	130	130	180
Geothermal					25	25	25	25	50	50	50	50
LFG						15	15	15	15	15	15	15
Biomass				100	100	250	250	250	250	250	250	250
DSM						14	28	42	56	70	84	98
	165	290	425	525	525	595	895	945	1,165	1,165	1,195	1,295



AE Recommendation Generation Resources in MW

Year	Coal/Nuclear	Gas	Biomass	Wind	Solar	Renewable Portfolio
2009	1,029	1,444	12	439	1	12.6%
2010		100			30	12.5%
2011				(77)* / 200		17.7%
2012			100			22.2%
2013				150		26.2%
2014					30	26.4%
2015		200		100		28.7%
2016			50		20	31.6%
2017				(126)* / 200	30	35.0%
2018					20	33.6%
2019					30	33.7%
2020				115	40	36.7%
Total	1,029	1,744	162	1001	201	

* Wind contracts expire.

Exhibit "C"

August 17, 2009

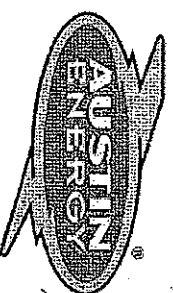


Exhibit “D”

Comparison of Four Scenarios: Strawman, New Staff Recommendation, Replace FPP and No Additional Generation

Description		Units	Strawman	New Staff Recommendation	Replace FPP	No Additional Generation
Capacity Additions (MW)	Early (09-12)	MW	525	590	390	390
	Middle (13-16)	MW	420	550	807	0
	Late (17-20)	MW	350	435	1,006	0
Replacements		MW	0	0	600 (Coal)	0
Levelized NPV of Portfolio Costs		2007 \$/MWh	57.97	58.15	57.96	56.51
Real Increase from 2009 to 2020		%	29%	28%	31%	25%
Nominal Increase from 2009 to 2020		%	69%	69%	72%	64%
CO2 Emissions 2020		Tonnes (000s)	5,238	4,580	2,086	7,034
2020 CO2 Percent Reduction from 2005		%	-6%	-18%	-62%	27%
Renewable Percentage in 2020		%	30%	36%	54%	11%
Total Capital Expenditures		\$MM	1,796	2,417	3,949	76

Exhibit "E"

Recommendations of the Austin Generation Resource Plan Task Force – November 4, 2009

The Generation Plan Scenario

The Austin Generation Resource Plan Task Force voted as follows with respect to the generation plan to be adopted by City Council:

A majority (five members) of the Task Force (Ferchill, Herbert, Johnson, Reed and Schmandt), voted in favor of the following resolution:

RESOLVED, that the task force recommends to the City Council the adoption of the Austin Energy Staff Recommended Generation Plan as the generation plan for the utility, with the provision that Austin Energy review the plan in two years with the target of accelerating the phase down of Fayette plant and toward its eventual closure by 2020 if economically and technologically feasible.

Three members of the Task Force (Rogerson, Sutton and Wood) voted to recommend the scenario known as "Task Force Scenario #2";

One member of the Task Force (Sloan) voted to recommend the scenario known as "Task Force Scenario #1".

Other Recommendations

In addition to the generation plan scenario, the Austin Generation Resource Plan Task Force voted unanimously to recommend that any generation plan adopted by the City Council be subject to the following guidelines:

1. **Increase Conservation and Efficiency.** Conservation and efficiency investments (DSM) are the most cost-effective investments that can be made to achieve reduced demand for energy, reduced customer costs and reduced greenhouse gas emissions.

The Task force recommends that Austin Energy should attempt to substitute conservation and energy investments for electric generation whenever such substitution is economically viable, and:

- a. While acknowledging that Austin Energy's proposed 800 MW goal for DSM is ambitious, the task force recommends increasing that goal to 1000 MW.
- b. The private sector and the community at large must shoulder increased responsibility for achieving the savings that can be accomplished with additional DSM. It cannot be done by Austin Energy alone. In that regard, the Task Force recommends that if the community fails to achieve the goals set forth in the existing Energy Conservation and Audit Ordinance (ECAD), the City Council should take action to revise the ordinance in a manner that achieves the energy demand reduction goals of that ordinance.
- c. Austin Energy should pursue aggressive efforts to diversify its energy efficiency programs and extend the benefits of DSM throughout the community by:

- (i) marketing energy efficiency and conservation improvements to convert the existing housing stock as nearly as possible to zero energy capability;
 - (ii) design and conduct a pilot project to measure and communicate to owners and tenants of rental properties the benefits of energy efficiency upgrades in rental housing and utilize the results of the pilot to develop a program that will realize energy efficiency savings potential in both commercial and rental property;
 - (iii) developing a neighborhood-by-neighborhood approach for weatherization services and other DSM program offerings, similar to Houston's Pleasantville project, by identifying, targeting and conducting specific outreach efforts to the most energy intensive low income neighborhoods;
 - (iv) increasing the maximum investment per KW or KWh savings that Austin Energy is willing to make in customer improvements, and increasing or eliminating the cap for Austin Energy investment in individual customer improvements that both reduce peak demand and reduce total demand for energy, so long as such investment is financially sound and not unduly risky;
 - (v) establishing 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; and
 - (vi) establishing a system for vetting new energy efficiency ideas for potential use within Austin, including procedures for new program proposals to be submitted from within the community or by industry experts.
- d. Austin Energy and the City of Austin should explore the potential of creating a financial district that would make loans to private homeowners and businesses to be paid back through voluntary additions to homeowner property taxes, as authorized by HB 1937 recently signed by the Governor.

2. **Favor Carbon-Free Generation Over Carbon-Based Resources, Subject to Economic Feasibility.** Long term developments in energy markets, regulatory policy and technology are tending to favor carbon-free electric generation over carbon-intensive generation. Given the volatility in fuel prices, the pending application of carbon regulation and the declining cost of renewable energy technologies, the long-term risk of investing in and owning carbon-intensive generating assets is increasing. Furthermore as energy technology is rapidly developing, new options may well become available that are not currently considered in the generation plan.

The Task force recommends:

- a. Austin Energy should attempt to substitute carbon-free generation for carbon-emitting generation whenever economically feasible. In addition, prior to acquisition of any new energy generation resources with greater than 10 MW capacity, Austin Energy should compare the long-term cost and benefit of such resources with other available carbon-free generation resources, and include such cost comparison

information in its reports to the Commissions and Council so as to allow Council to determine whether or not to substitute the generation resource with another non-carbon emitting option based on the information available at the time.

- b. Austin Energy should adopt a new and aggressive goal of creating a self-sustaining market for distributed renewable generation to add at least 300 MW of generating capacity by 2020. This program should:
 - i. be designed to provide a clear, consistent and predictable long-term incentive that will encourage the owner of on-site facilities to invest its own capital in generation resources and should include the potential for low-interest loans, performance bonuses such as a feed-in tariff or purchase of solar renewable energy credits for mid-size renewable energy projects and rebates for homeowners;
 - ii. favor projects with the potential for economic multipliers and other social benefits from creating businesses that manufacture operate or manage distributed energy assets;
 - iii. partner with large employers to develop medium to large distributed solar facilities owned by the employers; and
 - iv. credit any resources resulting from this program towards the City's renewable energy generation goals as though owned by Austin Energy, regardless of who owns any renewable energy credits.

- 3. **Reassess the Plan as New Cost and Environmental Data Become Available.** The environment for generation planning is changing rapidly and there is good reason to believe that the pace of change in the energy sector will accelerate. Furthermore, the total cost of energy includes factors beyond the cost of generation, which has been the focus of the Task Force. Such costs include transmission and distribution, financing, and overhead. In addition, the health effects and global warming implications of carbon-based fuels are difficult to quantify and have not been included in the Task Force planning analysis.

The Task Force recommends that the City Council adopt an affordability goal that Austin Energy's rates for all classes of customers should be competitive with rates available in the marketplace from other utilities serving the Texas market and:

- a. The generation plan should be reassessed in a public forum every two years and prior to any rate case to assess: (i) performance against goals, (ii) an evaluation of operating expenses, capital expenses, and environmental compliance expenses, (iii) changes in legislation, technology, markets and economic conditions, and (iv) whether any goals contained in the generation plan should be changed.
- b. Each public reassessment should include:
 - i. benchmarking comparing Austin Energy against similarly situated utility companies and comparing Austin Energy's generation costs against historical trends in the ERCOT wholesale market;
 - ii. a report by Austin Energy to City Council on its plans to meet the goal of reducing output from the Fayette Power Plant in the near-term and

eliminating reliance on the plant in the future, the costs and benefits obtained from reduced operation of the plant, and the potential to divest, sell, shut down or mothball the plant; and the estimated revenues that could be obtained if the plant were sold or operated at full capacity and the excess energy sold into the ERCOT market, so that the city council may decide whether the reduced carbon emissions are worth the price;

- iii. an analysis based on the current state of knowledge of the impact of use of carbon fuels and attendant pollution on community health and global warming; in particular the reassessment should consider the impact of criteria pollutants and greenhouse gasses associated with continued operation of the Fayette coal plant and other carbon-based generation assets, that may cause the Austin area to fall into non-attainment with federal clean air standards, and the attendant costs to the community as a whole;
- iv. an analysis of the use of water by Austin Energy's generation facilities and its impact on the community;
- v. an analysis of the community economic development impact of Austin Energy's generation facilities and planned expansion; and
- vi. reporting on reliability including at least the metrics currently published by Austin Energy.

- c. Austin Energy has proposed a rate case in 2012. The anticipated impact of the generation plan on customer rates of all classes should be published in connection with any rate proposal and at the conclusion of the rate case.
- d. Austin Energy should promote robust community involvement in revisions to the Austin Energy Business model.

- 4. **Consider Expanded Natural Gas Facilities.** Natural gas, while a carbon emitting resource, emits less carbon than coal. Austin Energy should continually assess whether the long term risk of natural gas 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.
- 5. **Consider Nuclear Power.** The Task Force does not recommend additional nuclear power at this time, based in part on the uncertainty associated with the costs of participating in the expansion of the South Texas Nuclear Project and other unknown factors such as radioactive waste disposal. In the event power from nuclear or other generation sources is offered to Austin Energy in the future, Austin Energy should consider such offers as a substitute for resources included in the generation plan and evaluate both the economics and the environmental impact at that time.

6. **Reduce Bill Impact on Those Least Able to Pay.** Projected future increases in energy prices will burden the poorest in our community the most. Utility bills often represent the second highest bill facing a family, after the cost of housing. It is an ethical obligation that The City of Austin ease the burden on those least able to bear it.

The Task Force recommends:

- a. expanded programs for low income citizens to reduce the energy intensity of their homes; in light of the recent Recovery Act funds available to the City of Austin for weatherization, and other potential sources of money for energy efficiency, Austin Energy should raise its own income criteria to a minimum of 200 percent of poverty and continue the program beyond the date the Recovery Act requirements terminate in 2011;
- b. Austin Energy should explore mechanisms to make energy efficiency programs available to those with incomes between 200 and 400 percent of the federal poverty guideline, such as rebates, loans or some combination; as part of this effort, Austin Energy should conduct a study specific to Austin Energy to determine income levels, energy burden and population sizes for residential consumers with household incomes up to 400 percent of the federal poverty guideline;
- c. Austin Energy should find ways and seek grants from other sources to make distributed energy generation resources available and affordable for low and medium income households (after they have been weatherized) as a hedge against future increases in energy prices;
- d. the City Council should act aggressively to assure that rented living spaces, which are disproportionately populated by lower income citizens, are given special attention through energy efficiency program outreach; and
- e. any future generation planning advisory group should include representatives of residential and low income consumers knowledgeable about energy affordability issues and solutions.

7. **Ensure Maximum Transparency and Public Participation in Energy Resource Decisions.** Austin Energy should strive to make decisions in the most public and transparent process possible while meeting Austin Energy's business objectives.

The Task force recommends:

- a. Each future decision to acquire 10 or more megawatts of capacity in the generation plan (whether by purchase agreement or by direct investment) should be presented to the applicable commissions prior to approval and presented twice to City Council before a decision is made, absent a bona fide emergency.
- b. The Electric Utility Commission should hold hearings regarding whether the current ordinance defining what information Austin Energy may hold as confidential should be amended and make a recommendation to City Council at the conclusion of those hearings, which should be completed within the next six months following this report.

- c. Each year Austin Energy should publicly provide a comparison of its residential, commercial and industrial rates to rates offered by similarly situated utility companies.
 - d. Each quarter Austin Energy should publicly provide an itemization of the fuel charge in the format shown on Appendix A.
8. **Assume Leadership Role in the Climate Protection Plan.** In 2007, City Council unanimously approved the CPP, which in part required Austin to take a leadership position on fighting global warming and establish carbon dioxide neutrality for any new carbon-based generation resources. Therefore, the Task Force recommends:
- a. Austin Energy should adopt its own CO2 cap through the adopted generation scenario, independent of but more stringent than expected federal carbon caps, to position Austin Energy as a leader on climate change. The adopted CO2 cap and generation scenario should always be aligned.
 - b. Austin Energy should offset carbon emissions from any new generation resource, either by a reduction in operating capacity of an existing resource like the Fayette Power Plant, or by reduction of energy use through demand-side management or distributed renewable energy.
 - c. The City Council should determine whether generating revenue for the City through carbon-based “off-system” sales is consistent with the CPP.
9. **Maintain the Reliability and Quality of the Austin Energy Transmission and Distribution System.** As Austin Energy pursues adding additional energy sources it is important that the quality and reliability of Austin Energy’s system not be degraded. To insure that the current reliability and quality are maintained, the Task Force recommends that Austin Energy track and publicly report the following published AE metrics for system reliability and quality as a rolling, twelve month cumulative index. Report out data should include the following historical data and trends moving forward:
- a. SAIDI (System Average Interruptions Durations Index) @ 60 minutes
 - b. SAIFI (System Average Interruptions Frequency Index) of 0.8 interruptions/year
 - c. SATLPI (System Average Transmission Line Performance Index) of 3.0 average per year
- The Task Force also recommends that a workshop on ERCOT market reliability issues be held by Austin Energy so that concerned businesses, citizens and policy makers can hear from ERCOT and industry experts to better understand these complex issues in the context of the generation plan.

Appendix A – Fuel Pass Through Charge Template

Appendix A -- Fuel Pass Through Charge Template								
AE Customer Fuel Charge	From:	1/1/09	To:	9/1/09				
	Fuel	Generator	% AE Customer kWh (Note 1)	% AE Customer Fuel Cost (Note 2)	% Sold As Green Choice	Green Choice Batch	Green Choice Price \$/Mwh	Comments
Decker (GB)	Nat Gas	AE						
Decker (GT)	Nat Gas	AE						
Sandhill (GT)	Nat Gas	AE						
Sandhill (CCGT)	Nat Gas	AE						
Sandhill Exp. (GT)	Nat Gas	AE						
Sandhill Exp. (CCGT)	Nat Gas	AE						
Fayette	Coal	AE						
STP	Nuclear	AE						
LCRA	Wind	PPA						
King Mountain	Wind	PPA						
Sweet Water 2/3	Wind	PPA						
Whirlwind	Wind	PPA						
Hackberry	Wind	PPA						
Hackberry	Wind	PPA						
Purchased Power (\$132M)	Various	PPA						
Purchased Power (Spot)	Various	PPA						
Ercot Trans. Congestion								
Other Charges (Identify)								
Other Charges (Identify)								
Other Charges (Identify)								
Other Charges (Identify)								
Total			100.0%	100.0%				