

AGENDA ITEM SUMMARY

FORT COLLINS CITY COUNCIL

ITEM NUMBER: 20

DATE: January 6, 2009

STAFF: Brian Janonis

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CASE NUMBER: 2016CV114

Patty Bigner
Steve Catanach
John Phelan

SUBJECT

Resolution 2009-002 Adopting an Updated Energy Policy.

RECOMMENDATION

Staff recommends adoption of the Resolution.

EXECUTIVE SUMMARY

This Resolution adopts the 2008 Energy Policy, replacing the 2003 Electric Energy Supply Policy. A draft of the Energy Policy was presented to City Council at the September 23, 2008 work session for discussion and comment. Council's comments have been incorporated and public outreach has been completed.

BACKGROUND

In 2003, City Council adopted the Electric Energy Supply Policy by Resolution 2003-038, providing direction and guidance in the areas of competitive rates, high system reliability, and the environment, specifically related to Demand-Side Management (DSM) or energy efficiency and renewable energy.

The Electric Board, together with Utilities staff, has drafted the 2008 Energy Policy for Council's consideration. This policy is intended to replace the 2003 Policy.

The Draft Policy updates the concepts and language of the original policy, while remaining true to the fundamentals of electric distribution system reliability and energy affordability for the community. Some of the changes include:

- Updated metrics and calibration of the policy to align with industry best practices;
- Support for a shift in the language and framework to align with the City's carbon reduction goals (Climate Action Plan);
- Emphasis on the need to protect the reliability of the distribution system;

- Focus on the importance of the relationship with Platte River Power Authority; and
- Addition of an economic component with the “affordability” concept rather than a “lowest rates” target.

The 2008 draft policy was presented to City Council for discussion at a work session on September 23, 2008. Council provided feedback for staff, including changes to wording and the addition of a goal related to Platte River Power Authority, the City’s electricity provider.

Since September, staff has incorporated wording changes into the policy document and conducted public outreach. In addition to a public open house on November 17, the Policy has been presented to several community boards. A presentation was provided for commercial customers on November 10th. Comments have been compiled and attached.

The Air Quality Advisory Board met on November 17, 2008 and adopted the following motion:

“The Air Quality Advisory Board recommends that the City Council adopt the proposed energy policy revision. We note that steps taken in the energy policy are in alignment with the Climate Action Plan, which we also support.”

In summary, the proposed 2008 Energy Policy updates and replaces the policy adopted by City Council in 2003. It provides strategic planning guidance in significant areas related to the provision of electric service to the City of Fort Collins and aligns development of energy efficiency and conservation programs with the City’s Climate Goals. The 2008 Policy sets the targets for implementation planning and directs annual reporting mechanisms.

ATTACHMENTS

1. Summary of September 23, 2008 City Council Work Session.
2. Summary of Public Comment.
3. Electric Board recommendation.
4. Natural Resources Advisory Board recommendation.
5. Air Quality Advisory Board minutes, November 17, 2008.
6. PowerPoint presentation.



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MEMORANDUM

TO: Mayor Hutchinson and City Councilmembers
THRU: Darin Atteberry, City Manager 
 Brian Janonis, Utilities Executive Director 
FROM: Patty Bigner, Utilities Customer and Employee Relations Manager 
CC: Steve Catanach, Light and Power Operations Manager
 John Phelan, Energy Services Engineer
DATE: September 24, 2008
SUBJECT: September 23, 2008 Work Session Summary – Draft 2008 Energy Policy

On September 23, 2008, City Council held a work session for discussion and to provide direction to staff on the Draft 2008 Energy Policy. Specific questions asked of Council:

1. The proposed 2008 Energy Policy reflects substantial changes to the current policy. Are there additional revisions to the proposed policy?
2. Staff plans to conduct public outreach prior to adoption of the Draft policy. What specific information about community support for the concepts in the policy is needed for Council consideration?
3. What additional information does Council need in order to consider adoption of the Draft 2008 Energy Policy?

Key Discussion Points

Brian Janonis provided context for the discussion, summarizing the importance of the draft policy in providing direction to staff and a vision for provision of electric services to the community. The Draft 2008 Energy Policy is intended to replace the 2003 Electric Energy Supply Policy. He explained the adoption of the Policy would be followed by the development of implementation plans, including rate impacts and funding strategies. The adoption of the Draft 2008 Energy Policy also supports the development of the City's Climate Action Plan, since energy efficiency, conservation and renewable energy contribute to reaching carbon reduction goals for the year 2020. policy goals.



Council supported the major shifts outlined in the Policy, including emphasis on affordability rather than lowest cost, and the change to a carbon accounting framework for reporting progress in reducing environmental impacts with energy efficiency programs and renewable energy purchases. Council also emphasized the importance of the reliability and efficiency of our electric system and acknowledged the “world-class” reliability metrics.

Council supported the inclusion of an additional goal related to the relationship with Platte River Power Authority, in order to highlight the importance of Platte River to the City. Other areas of agreement:

Annual reporting of progress toward meeting identified goals is important in maintaining transparency and accountability in the future, and pointed out it is important for citizens to understand Utilities programs are supported by utility rates rather than sales taxes.

Several suggestions were made for wording changes and additions.

In general, Council expressed support for public outreach prior to considering adoption of the Policy and directed staff to begin preparing implementation for their review early next year.

Next Steps

October- November: Conduct public outreach and compile comments

November – December: City Council consideration of a Resolution adopting the Draft 2008 Energy Policy

November – January: Development of implementation strategies and programs

Early 2009: Presentation of strategies; Rate ordinance to fund programs

2008 Draft Energy Policy Plan

Public Comments - November 17, 2008:

- I want a policy that rewards conservation and efficiency and discourages waste and wasteful behavior. A tiered rate structure might be the way to do this.
- Use additional funds generated to subsidize conservation programs for those who claim economic hardships
- Interest in local GHG reductions - 1st before buying renewable energy credits (REC's) outside the community. For example; invest in energy efficiency improvements in homes and businesses in Fort Collins, leveraging Fort Collins dollars in Fort Collins Businesses. Purchase wind turbines at PRPA sites before buying GHE offsets elsewhere. Invest in Natural area restoration and reap carbon sequestration credits using Fort Collins businesses and contractors before investing in carbon sequestration.
- Building codes structure markets without warping them like tax credits and rebates (tax & spend) (too bureaucratic for most; too chargeable for investment).
- Building code should require at least: day lighting to reduce electric consumption for lighting; passive solar building orientation, so that it could be retrofitted; solar water heating; more billboard advertising for home energy improvements - energy efficient mortgages to insulate (example); How about a home energy library where I could check out: 1) an infrared scan gum (GPS-chipped of course) 2) a blower door 3) an EZ kilowatt meter (excel customers) 4) a solar tracker to see my solar potential and maybe buy cheap weather stripping.
- Suggestion for existing hot water solar panels: (build about 1978) We need help for some leaking problems moving to Fort Collins 1992, after looking for a long time to find solar, since we have 300 sunny days in Fort Collins we thought it's the sensible thing around here, so we found it in an older home, not all ideal otherwise, but solar panels and a big window "solar room" down below. Since we are seniors (and we are having financial problems right now) we can't afford to pay for the leaking problems, so what about helping and not only for new homes. Like to mention we recycle all, compost, conserve water, etc. Since living here! Thank you for considering green acting citizens.
- Thanks for the good informative open house. It'd be great if you could do mini-open houses educational booths @Wal-Mart or Super Target or where folk's average go. Policy Comments: 1) Invest in local renewable energy production rather than out of town/state RE certifications - local investments help local economy. 2) Make a deal with investors for some sort of demonstration project to help reduce costs. 3) Please do better marketing of rebate & Green Power Programs to get more takers. 4) Focus more attention on residential energy conservation retrofits. New construct will cover fewer houses than are already here.
- Add emphasis regarding tax deductible aspect of the Colorado Carbon Fund contributions. My expectation is that CO2 needs to be cut much more aggressively before 2020. Hence, what contingency plans to cut fossil fuel use?
- Please lobby energy supplies & state legislature to increase renewable energy sources, totally eliminate coal - fired generation & encourage dispersed energy generation.
- Thank you for the public open house for the presentation of the 2008 Energy Policy. My comments include: * Catastrophic failure backup planning - Goal 1 or 4 should include verbiage and measure for developing a backup plan and system for a catastrophic failure to the supply grid to the city supply.

Public Comments Continued - November 17, 2008:

What happens if PRPA experiences some sort of supply problem?

Need to think about how we city folk deal the greater city wide outages. *Remove carbon foot print emphasis and refer to supporting the clean air imitative dept. For carbon footprint reduction - It is very confusing which department has the carbon footprint objective and responsibility and when we get there, who gets the credit? Make goal 2 read something like: Lead the way in efficient use of electric resources while supporting the CAI in carbon foot print objectives. Add measures and metrics in building efficiency improvements, kw/sq ft. Add objective to have city buildings be the model for new and existing building efficiency. Make special mention of the Fort ZED effort and supporting those objectives. *Affordability emphasis is perfect method to create a "savings" base utility rate as opposed to "consumptive" based. This will create the proper mindset for a better future. You sort of do this now in demand rates and Hot shot programs. But there needs to be an emphasis on being "savers" of electricity as opposed to "consumers". Conservation will have a far greater impact on our future than any renewable development. And conservation will magnify the impact of the few percent of renewable in the portfolio. So Goal 3 should include getting x customers on savings programs, developing a rate system bases on usage/sq ft. or efficiency....the higher the efficiency the lower the rate. Use x % of the rate to get other customers to higher efficiency. Make it a rule that new construction be on savings programs or meet efficiency stds. Create "savers rates" - If you the customer is on this program and that program and use less than y kw/sq ft., then your rate is.....Congrats! You are a Silver Saver Customers!! Hope this helps. Give me a call if you would like my help here. As you can read, efficient energy consumption is my passion.

- I was unable to attend Monday's energy policy open house, so I am providing comments now. I am providing comments now. I am in full agreement with the energy policy and have some suggestions for implementation: Offer a free consultation for homeowners to help them understand how to reduce electricity consumption. I did this myself after attending a environmental program series meeting and borrowing a kill-a-watt meter. We cut consumption by 50% with only minor lifestyle changes. Eliminate street lighting after 10 pm except at major intersections. Most people I know don't like it and Fort Collins is not a high crime area, so it's not needed. Or can we use technology to intelligently turn off lights when the traffic patterns and police statistics show it's not needed? Raise prices! I pay less for electricity for a single family home (\$25/month) than for internet or phone. Prices haven't gone up significantly for at least 20 years; I consider electricity "almost free". Use additional revenues to invest in renewable energy and conservation. These are the major points, but a couple of minor points need to be addressed: Aggressively enforce the noise ordinance, including barking dogs (these are currently enforced only after a complaint is filed, unlike weed, trash, etc.) We are currently considering installing air conditioning because we can't stand the noise in the summer. I know others that have AC just because they need to close windows to eliminated noise. Quiet neighborhoods encourage open windows! Shut off electric service when bills go unpaid. Renters learn that they can consume all they want and the service will not be shut off as long as they pay something. We had one tenant consuming \$400/month - this is not conservation! Thanks for all the great work - keep it up!

Rebates Comments:

- Thanks for putting on the expo! I hope the city of Fort Collins does implement a rebate program regarding replacing regular toilets with low water use toilets. It would also be nice to have some sort of rewards regarding energy-efficient water heaters.

Program Request:

- Move rebates for green home improvements. Free energy audits to help people recognize energy most in their homes. Larger loan programs for green improvements.

Program Request Continued:

- Good Information: I like the focus on conservation, renew ability & efficiency. I would like to see Fort Collins continue to be a leader in the new energy economy. I was surprised not to see anything about Fort Zed.
- Would have been nice to have more information on worms and composting.

Questions:

- I would like to know if my surge protections are older than 10 years. Will we replace it to renew the warranty? How about lawn mower rebates too.
- Carbon footprint reduction: 20% below 2005 levels by 2020 - Is this on a per Capita basis? What is the projected growth (population) of Fort Collins by 2020? By 2050? If the 44% growth from 1992 to 2007 is sustained Fort Collins will approach 200,000, by 2025. There is a lack of connection with CSU's "Green" initiatives. Fort Collins should take advantage.
- Are there grants available for solar panels to be installed on apartment compressors?

Other Comments:

- Shouldn't this read: "Electric Energy Policy?" (Many people heat by gas, so the big % of home energy use is not addressed).
- Would have been nice to see plans or schedule of replacing old style electric service posts in alleys/back yards to new service distribution systems located on street.

Comments on the Draft Energy Policy
By the Fort Collins Sustainability Group
November 17, 2008

The Fort Collins Sustainability Group (FCSG) has reviewed the Draft Energy Policy discussed at the City Council Work Session on September 23rd, 2008. We believe that the Policy should be strengthened by making one addition and one change, as described below:

- 1. Goal #2 should include a reference to the City's 2012 greenhouse gas reduction intent.**
 - a. The City's 2020 and 2050 greenhouse gas emissions goals referred to in Energy Policy goal #2 were established in Council Resolution 2008-051. That resolution also establishes a 2012 greenhouse gas reduction intent to limit emissions in that year to no more than 2.466 million tons. In order to be in alignment with Resolution 2008-051 and the Fort Collins Climate Plan, the Energy Policy should also refer to the 2012 reduction intent.

- 2. Under Goal #2 objectives and metrics, Fort Collins Utilities should commit to achieving energy efficiency and conservation program savings of at least 1.75% of annual energy use for the period 2010 through 2020. Electric energy used to charge electric vehicles should be exempted from this requirement.**
 - a. The Draft Energy Policy only calls for 1.0% annual electric energy savings through 2020. This goal should be contrasted with the goal set by the Sacramento Municipal Utility District of a 1.5% annual decrease in electric energy use for ten years, and with the goal set by Efficiency Vermont of a 1.75% decrease in electric energy use for two years. The goal we propose would establish Fort Collins Utilities as a (if not THE) national leader in reducing customer energy consumption. It would also help realize City Council's goal of stimulating the local economy, expressed in Resolution 2007-015, by promoting business activity focused on delivering energy efficient products and services.
 - b. The FCSG recognizes the desirability of shifting from gasoline powered vehicles to hybrid or electric vehicles, and therefore believes that electricity used to charge electric vehicles should be exempted from the annual reduction goal. The benefit in lower overall greenhouse gas emissions associated with the use of electric vehicles should be quantified in the annual Climate Plan progress reports to be prepared for Council.
 - c. The FCSG acknowledges that it will take some time to put public and private programs in place to realize this aggressive savings goal. We therefore believe that the 2009 electric energy savings goal should be 1.0% to allow public and private programs to ramp up to meet the goal for 2010 through 2020.

We urge Fort Collins Utilities to make the change and addition outlined above in the final version of the Energy Policy.

Respectfully submitted by:
The Fort Collins Sustainability Group

John Anderson
Kevin Cross
Phil Friedman
Deanna Kowal
Eric Levine
Reiner Lomb





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ATTACHMENT 3

MEMORANDUM

Date: November 19, 2008

To: Wade Troxell, City Council Member and Electric Board Liaison

From: Fort Collins Electric Board

Re: FCU 2008 Energy Policy

In 2003, City Council adopted the *Electric Energy Supply Policy* that recognized the interrelated planning goals of high reliability, low rates and minimizing environmental impacts. The 2003 plan set the framework for effective actions to meet these goals; however, the Electric Board felt that it was time to update the plan and associated goals.

The revised *Energy Policy* reflects five years of experience implementing the 2003 policy, the evolving electric utility industry and the interests of Fort Collins citizens. The purpose of the revised policy is to provide guidance for Fort Collins Utilities' Light and Power Service Unit and the Energy Services group.

The vision of the new policy is: "To serve the community with highly reliable, affordable, carbon neutral electric service, guided by an ethic of sustainable, innovative and responsible management." The policy describes four goals with associated objectives and metrics. These four goals are:

1. Provide highly reliable electric service.
2. Support the community's carbon emissions goal of reducing the City's carbon footprint 20% below 2005 levels by 2020 and 80% by 2050.
3. Enhance local economic vitality.
4. Maintain Fort Collins Utilities' collaborative relationship with Platte River Power Authority.

The 2008 *Energy Policy* will be reviewed and revised as needed the fifth year after adoption.

At the November 19, 2008, Electric Board meeting the Electric Board unanimously endorsed the revised policy and respectfully, yet strongly, recommends that City Council adopt the new *Energy Policy*.

Cc: Mayor and City Council Members
Darin Atteberry, City Manager
Brian Janonis, Utilities Executive Director

**MEMORANDUM
FROM THE CITY OF FORT COLLINS
NATURAL RESOURCES ADVISORY BOARD**

Date: November 19, 2008
To: Mayor and Council Members
From: Alan Apt on behalf of the Natural Resources Advisory Board
Subject: Draft 2008 Energy Policy recommendations

The Natural Resources Advisory Board recommends that City Council adopt the Draft 2008 Energy Policy.

The board acknowledges the coordination and interrelationship between this policy and the Draft Climate Action Plan.

NRAB voted 4-1 (including 1 abstention) in favor of this resolution.

Please feel free to contact me regarding the NRAB's recommendation on this issue.

Respectfully Submitted,

Alan Apt, Chair
Natural Resources Advisory Board

cc: Darin Atteberry, City Manager
John Armstrong, Staff Liason

the City should fund a conservation program that would involve energy audits, revolving loads for weatherization, heating and cooling and possibly homes below a certain standard would qualify for financial help for efficiency.

- Spending over \$1 million a year to purchase offsets to meet the goal does not go into our city.
- The VMT reduction of 28,000 by 2020 is extremely low. Without addressing efficiency and the order of travel we will never meet the goals. They have to be addressed ASAP.
- Dennis agreed that it would be better to spend the \$1 million in the community, but having the \$1 million to spend is not a guaranteed thing.
 - Greg suggested long term investment in things to keep spending local
- Nancy suggested any new development should have very high standards in order to get public money. Lucinda stated it is already in the Plan and the Roadmap to Green Building. Nancy added she didn't think it was a high priority with Council for these things since they approved the North College Market Place that will have a large impact on air quality and VMTs.
- Lucinda stated she will talk to Transportation staff to get their support to include a long-term strategy to Lower VMT b 2020".

Greg McMaster moved and Dennis Georg seconded the following motion:
The Air Quality Advisory Board reaffirms its support for the Draft Climate Action Plan, including the proposed additional strategies, and we urge City Council to adopt them. Secondly, we recommend that, in 2009/2010, the Council plan to study and develop further incremental and alternative strategies to attain both near and longer-term goals, including alternatives to purchasing carbon offsets and enhancements to transportation and energy efficiency. Thirdly, we recommend that the Council direct the City Manager to provide resources and direction to continue the process. And finally, we point out that, although successful implementation of the Climate Action Plan would meet its stated goal, the goal itself falls short of the need for carbon emission reduction.

Motion passed unanimously.

Energy Policy

John Phelan addressed the board regarding the Energy policy and handed out latest version of it. He stated there are some relatively minor changes since the last time he presented to the AQAB. The Energy Policy will go to Council the same night as the Climate Action Plan; December 2, 2008.

- John reported there was an open house for the public this afternoon to discuss the Energy Policy and general information about light and power. Over 100 people attended.
- Changes made to the policy were mostly editorial with some more-readable graphics:
 - Under 2050 Vision – “affordable” was added.
 - A fourth goal was added
 - Maintain Fort Collins Utilities collaborative relationship with Platte River Power Authority.

Discussion

- Dennis asked what are the biggest things the Energy Policy could do to help the city meet the 2012 goal.

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- John Phelan answered highlighting efficiency and conservation are key. The Energy Policy proposes a verifiable efficiency energy reduction of 1% per year per person. We know the current technological opportunities but the question is how do we drive customers to make the right decisions. There are lots of opportunities here. Need to explore more on behavioral techniques.
- Another possibility is to change the strategy of the program to have more aggressive goals.
- Regarding efficiency, there are math challenges around substituting carbon offsets with efficiency in residential homes. The calculations are not elastic enough to predict concrete answers.
- Dennis asked if there are there some lower hanging fruit than the smart grid technology that could be beneficial in the next five years.
 - John stated there are two benefits from smartness down to the home level
 - It enables rate structures with price incentives we don't have now.
 - It provides a feedback mechanism. John mentioned the preliminary results of a study by a utility in Las Vegas regarding smart meters showed energy reductions only averaged 5%. He felt this small of a reduction could be achieved in other efficiency efforts without investing in smart metering equipment.
- Dennis asked if there are more opportunities for Smart Meters in commercial.
 - John Phelan stated about half of commercial customers already have that feedback available. Some use it more than others.
 - Smaller commercial customers are a harder market to track efficiencies. There are too many variables.
- John Phelan stated there has been discussion at Council on the City's mix for renewable energy and RECs. One thought is to divert money from the purchase of RECs to purchasing other things. Platte River Power Authority is planning to replace RECs with delivered wind energy with plant capacity, which will actually cost more than RECs.
 - One of the more advanced pieces of our policy is to have an overall carbon framework with additional renewable energy to reach the carbon goal.
- John also stated another thing Utilities is doing is shifting to an inventory-based measure of success. This is a much more definable goal because they know exactly what the 2005 emissions were, how many megawatt hours were sold and the exact resource mix that provided those. It is a fixed number. We'll try to estimate savings from the various programs. However, the proof will be in fluctuation of inventory levels and whether overall emissions went down, or not.
 - John mentioned another element that has changed is focus on "affordable bills" rather than "rates"

Discussion

- In answer to a question by Eric Levine who asked if there was something in the Energy Plan that forbade direct cooperative efforts to supply a city block or less with renewables, John stated it is in the City code. You cannot be a supplier net meter yourself. Eric stated he could see small-scale direct energy with renewables could be feasible in the future and, therefore, did not want to see the door closed to those future efforts.
 - John Phelan said Utilities' pricing and rates are built around paying for infrastructure based on energy. If rates really reflected the fixed costs of providing energy, customers' fixed costs would be higher and energy costs would be lower per month.

Having various small distributed systems around town would make it difficult for Utilities to allocate the fixed cost of providing energy.

- Dennis stated he read somewhere there is potential for more cost effective renewables and the potential of reaching scale in the US power grid. John replied renewables are a trivial amount of energy today and the metering and pricing structure across the country aren't ready now. However, in the next few years, if they focused on the efficiency side and getting grid improvements to dynamically manage supply and demand, things could change.

Dennis Georg moved and Dave Dietrich seconded the following motion:
 The Air Quality Advisory Board recommends adoption of the revised Energy Policy. We note that steps taken in the Energy Policy are in alignment with the Climate Action Plan which we also support.
 Motion passed unanimously

New business

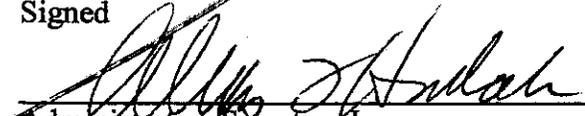
- Greg McMaster stated that Mary Smith recognized the Air Quality Advisory Committee's support of the trash issue and asked that the members of the AQAB comment on the trash issue at the public comment period of the December 2, 2008, Council meeting .
- Nancy York stated the group should also support the Climate Action Plan.
- Katrina Winborn announced public comment period on I-25EIS is out. They are accepting written and on-line comments and encouraged the group to comment. The proposal is to add lanes to I-25 and bus rapid transit. Light rail is not an option because not enough people take the light rail.

The meeting was adjourned at 8:45 p.m.

Submitted by Alexis Hmielak
Administrative Secretary I

Approved by the Board on December 15, 2008

Signed



 Administrative Secretary I

12 15 08
 Date / /

DRAFT 2008 ENERGY POLICY

CITY COUNCIL MEETING
JANUARY 6, 2009



1

Electric Energy Business Environment – the Big Picture

- Technology Advances – metering, load management, distributed generation resources
- Regulatory Environment – political changes and growing interest in regulation to reduce greenhouse gas emissions
- Carbon market development
- Funding – increased funding for development of new ways to manage electric generation, transmission and distribution, demand reduction and energy conservation



2

At the local level

- 21st Century Utilities focus on reducing environmental impacts
- City Council support for programs and services that help the community reduce greenhouse gas emissions
- Increasing opportunities to support the local economy and business development through the “new energy economy”
- New opportunities for renewable energy development
- State funding for expansion of renewable energy and energy efficiency programs



3

Highlights of Major Changes

- Updated metrics to align with utility best practices
- Adopting a framework to align with carbon emissions reduction goals
- An economic focus on affordability, local economy and Utilities' financial health
- Priorities:
 - Energy efficiency
 - Local investments
 - Maintaining the reliability of the distribution system



4

Energy Policy Public Process

- Council discussions in April, August and September relating to renewable energy, energy efficiency and climate plan
- Energy Policy work session September 23
- Open house November 17
- Web and email comments
- Review of policy by Electric, Air Quality and Natural Resources advisory boards
- Preparation for December 2 work session



5

Energy Policy Goals

1. Provide highly reliable electric service
2. Support the community's carbon emissions goal of reducing the City's carbon footprint 20% below 2005 levels by 2020 and 80% by 2050
3. Enhance local economic vitality
4. Maintain Fort Collins Utilities collaborative relationship with Platte River Power Authority



6

What we expect for energy and demand savings

- Energy efficiency program results from 2009 through 2020
 - Annual energy reduction in 2020 of 200,000 megawatt-hours
 - Peak summer demand reductions of nearly 50 megawatts
- Active load management results (shifting summer peak demand)
 - 15 megawatts by 2015
 - 30 megawatts by 2020



7

Alignment with the City's Climate Goals

- 2020 Energy Policy emissions reductions
 - 1/3 from energy efficiency
 - 1/3 from automated metering infrastructure (AMI), smart grid and conservation
 - 1/3 from renewable energy
- Energy Policy is referenced by the Climate Plan
 - Provides 25% of 2012 estimated reduction
 - Provides 57% of 2020 estimated reduction



8

Energy Efficiency Goals Compared

	Draft Energy Policy	Energy Policy Scenario 1	Energy Policy Scenario 2	Energy Policy Scenario 3
Efficiency Annual Goals	1.0% per year	1.25% per year	1.5% per year	1.75% per year
2009-2020 MWh avoided	199,510	245,562	291,615	337,668
2009-2020 CO2e tons avoided	175,568	216,095	256,621	297,148
Annual FC Utilities Cost	\$1,539,000	\$2,124,000	\$3,410,000	\$4,931,000
Cost of Conserved Energy, \$/kWh	\$0.019	\$0.019	\$0.023	\$0.026
Additional Annual Rate Impact	1.0%	1.5%	3.0%	5.0%
Benefit / Cost ratio	2.9	2.9	2.4	2.1



Implementation Strategies

- Energy Efficiency Implementation Plan
 - Provides an overview of the potential for efficiency savings
 - Offers levels of implementation, costs and associated energy reduction
 - Aggressive level planned to maximize outcomes
- AMI/Smart Grid, implementation plans and roadmap
 - Mid-line strategy planned to start implementation with careful attention to new opportunities
- Renewable energy, includes Platte River plans for new utility scale development
- Integrated into budgeting-for-outcomes process for 2010/2011



Expected Energy Policy Outcomes

- Continued high electric system reliability
- Modernization of the electric metering system
- Long-term asset management of the electric distribution system
- Greenhouse gas emissions reductions from efficiency, conservation and renewable energy
- Affordable electric bills, through competitive rates, efficiency and conservation
- Local economic benefits of a healthy municipal utility, high reliability, affordability and investments in efficiency and renewable energy
- On-going collaborative relationship with Platte River Power Authority



EXHIBIT GG

RESOLUTION 2009-002
OF THE COUNCIL OF THE CITY OF FORT COLLINS
ADOPTING AN UPDATED ENERGY POLICY

WHEREAS, on March 25, 2003, the City Council approved and adopted the current Electric Energy Supply Policy (the "2003 Policy"); and

WHEREAS, City staff has prepared a revised energy supply policy entitled "Energy Policy 2008," a copy of which is attached hereto as Exhibit "A" and incorporated herein by this reference (the "2008 Policy"); and

WHEREAS, the provisions of the 2008 Policy are consistent with the fundamental goals previously established in the 2003 Policy to maintain electric distribution system reliability and energy affordability for the community; and

WHEREAS, in addition, the 2008 Policy contains language intended to:

- incorporate related carbon reduction goals adopted by the City Council in May 2008 in Resolution 2008-051, as well as renewable portfolio standards set by the State of Colorado for municipal utilities to achieve ten percent renewable energy of total energy resources by the year 2020;
- update metrics and calibrate goals to align with electric industry best practices;
- support local economic vitality by focusing on providing highly reliable electric service while maintaining competitive electric costs and effective energy efficiency and conservation programs; and
- emphasize the importance of maintaining the City's relationship with its electric generator, Platte River Power Authority; and

WHEREAS, on November 19, 2008, the Electric Board considered the 2008 Policy and unanimously recommended that the City Council approve and adopt the 2008 Policy; and

WHEREAS, on November 19, 2008, the Air Quality Advisory Board considered the 2008 Policy and unanimously recommended that the City Council approve and adopt the 2008 Policy; and

WHEREAS, on November 19, 2008, the Natural Resources Advisory Board considered the 2008 Policy and recommended that the City Council approve and adopt the 2008 Policy.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FORT COLLINS that the Fort Collins Utilities Energy Policy 2008 is hereby adopted by the Council.

EXHIBIT GG

Passed and adopted at a regular meeting of the Council of the City of Fort Collins this 6th day of January A.D. 2009.

Mayor

ATTEST:

City Clerk



2008 Energy Policy

Background

The citizens of Fort Collins created the municipal electric utility in 1935. In 1973, Fort Collins joined with Estes Park, Longmont and Loveland to create Platte River Power Authority, a joint-action agency charged with meeting the electric generation and transmission needs of the four cities. These organizations have demonstrated progressive long-term planning throughout their history. In 2003, City Council adopted the *Electric Energy Supply Policy* that recognized the interrelated planning goals of high reliability, low rates and minimizing environmental impacts.

This revised Energy Policy reflects five years of experience implementing the 2003 policy, the evolving electric utility industry and the interests of Fort Collins citizens. In May 2008, Fort Collins' City Council adopted greenhouse gas emissions goals of 20% below 2005 levels by 2020 and 80% below 2005 levels by 2050.

The purpose of this policy is to provide strategic planning guidance for Fort Collins Utilities' Light and Power Service Unit and the Energy Services group. The policy describes a mid-century vision and four goals with associated objectives and metrics.

2050 Vision

To serve the community with highly reliable, affordable, carbon neutral electric service, guided by an ethic of sustainable, innovative and responsible management.

Goals

Goal #1: Provide highly reliable electric service

Highly reliable electric service is a core responsibility of the electric utility, defined by reliability statistics, power quality and customers' perception of "up-time." Reliable service is critical for the physical and economic welfare of the community. Long-term planning, high standards and qualified staff responsible for the planning and maintenance of the electric infrastructure are the primary drivers of high reliability.

Exemplary service from knowledgeable, responsive and courteous staff is a part of customers' perception of Light and Power's reliability. Light and Power demonstrates the value of skilled and qualified employees through long-term planning for hiring, retention and succession. Continued financial health and adequate investment in Light and Power supports the reliable electric service goal.

Smart grid innovations are expected to have an increasing role in the electric system. Smart grid is the integration of an electric transmission or distribution system, a



communications network, software and hardware to monitor, control and manage the reliability and overall system efficiency of the generation, distribution, storage and consumption of energy.

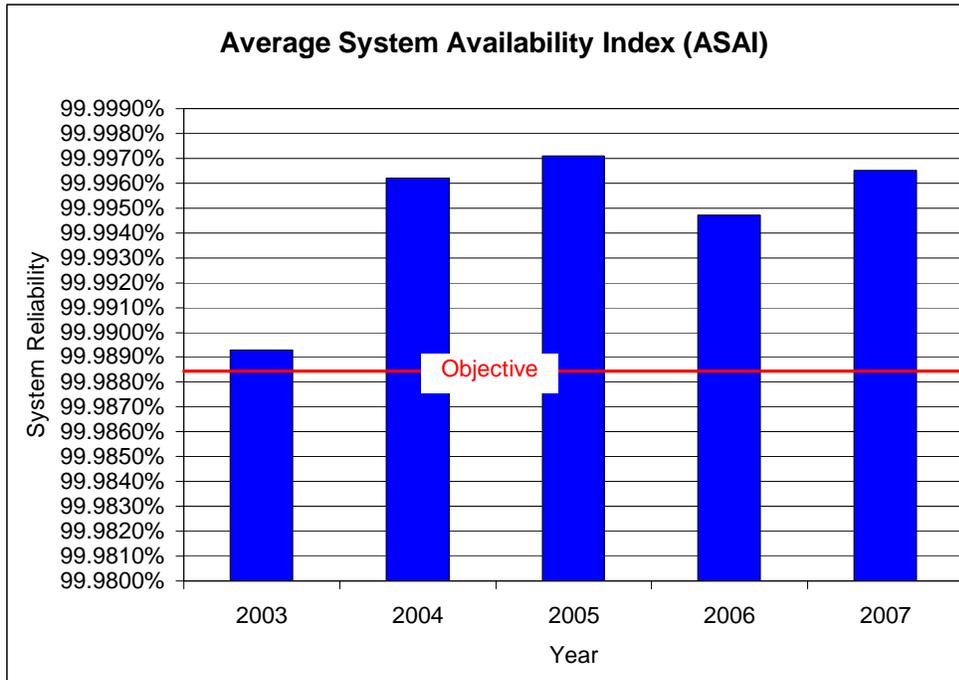


Figure 1: Fort Collins Utilities Reliability (2003-2007)

Goal #1: Objectives and Metrics

- Demonstrate and communicate the high reliability of the Fort Collins electric system by maintaining annual reliability metrics of:
 - Average System Availability Index (ASAI) greater than 99.9886%;
 - Customer Average Interruption Index (CAIDI) less than 60 minutes; and
 - System Average Interruption Frequency Index (SAIFI) less than 1.0.
- Apply appropriate construction standards and material specifications for long-term reliability.
- Create an asset management plan by 2010 for the long-term integrity of the electric utility infrastructure.
- Create a smart grid roadmap by the end of 2009, defining specific objectives and implementation plans.
- Manage peak loads to reduce demands on the distribution system, optimize infrastructure investment and reduce purchased power costs.
 - Maintain energy efficiency and demand side management programs targeting peak loads.
 - Increase the power managed by load management, smart grid and distributed generation to at least 5% of 2005 system peak demand by



2015 and at least 10% by 2020. Develop a methodology for tracking load management as a percentage of peak demand, considering utility programs, customer response and weather normalization.

- Support customer efforts to reduce electric costs through managing peak loads.
- Annually report on human resources benchmarks designed to sustain a skilled and qualified Light and Power workforce.
- See Goal #4 for reliability related coordination with Platte River Power Authority.

Goal #2: Support the community's carbon emissions goal of reducing the City's carbon footprint 20% below 2005 levels by 2020 and 80% by 2050.

Fort Collins citizens place a high value on a healthy and sustainable environment. Fort Collins Utilities goal is to continuously move in the direction of sustainability, reducing impact on ecological systems while improving the well-being of the community.

Energy use, water use and transportation are major components of the community environmental footprint, and solutions that integrate the relationship between these sectors will result in optimal long-term outcomes. All energy sources have environmental impacts related to resource exploration, extraction, transportation, emissions and land use. Carbon emissions related to the provision of electric energy, including energy supply resources and operations, is a meaningful and pragmatic metric for measuring the community environmental footprint.

Fort Collins Utilities is committed to first maximizing the benefits of efficiency and conservation, moving toward clean and renewable energy sources, and adapting to the opportunities brought by innovation and emerging technologies in the electric utility industry.

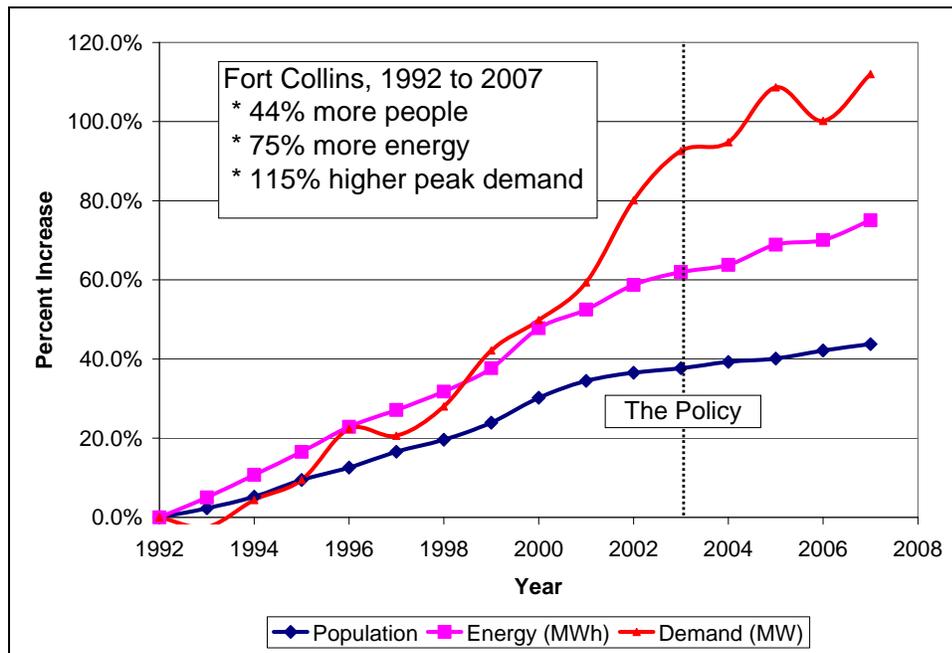


Figure 2: Fort Collins Population, Energy and Peak Demand Growth (1992-2007)

Goal #2: Objectives and Metrics

- Develop a methodology for reporting carbon emissions and savings related to:
 - Overall electricity consumption;
 - Reductions in energy use from efficiency programs;
 - Substitution of fossil fuel based electricity with renewable or clean resources; and
 - Increases in use of electricity for transportation.
- Continuously reduce energy use through verifiable energy efficiency programs, independent of population growth and economic trends.
 - Achieve annual energy efficiency and conservation program savings of at least 1% of annual energy use (based on a three year average history).
- For renewable energy resource investments, balance the interrelated factors of carbon reduction cost-effectiveness, impact on power plant operations and local economic benefits.
 - Maintain a minimum fraction of renewable energy in compliance with State of Colorado requirements. In coordination with Platte River Power Authority, develop generation resources and the delivery of renewable energy to meet minimum requirements.
 - Offer voluntary renewable energy programs, whereby customers can support renewable energy and local renewable energy projects through opt-in premium pricing.
 - Increase the contribution of renewable energy to reach the 20% by 2020 carbon reduction goal, after accounting for the contributions of resource



- Include renewable energy sources that can be scheduled to maintain system stability and reliability.
- Promote sustainable practices in homes and businesses by supporting highly energy efficient new and existing buildings.
- Participate in research, development and demonstration efforts to remain at the forefront of emerging technologies and innovative solutions.
- Develop a plan for reporting and continuous improvement on the sustainability of electric utility operations.

Goal #3: Enhance local economic vitality

Fort Collins Utilities’ Light and Power Service Unit supports local economic vitality with highly reliable service, and a history of low and stable electric rates. Competitive electricity costs and effective energy efficiency and conservation programs result in a lower community energy bill, supporting economic activity in other areas.

Fort Collins Utilities’ Light and Power Service Unit business activities also support the local economy as a direct and indirect employer, as a contributor to the City’s general fund, by leveraging customer investment in energy efficiency, supporting research and demonstration projects and as a participant in clean energy collaborations.

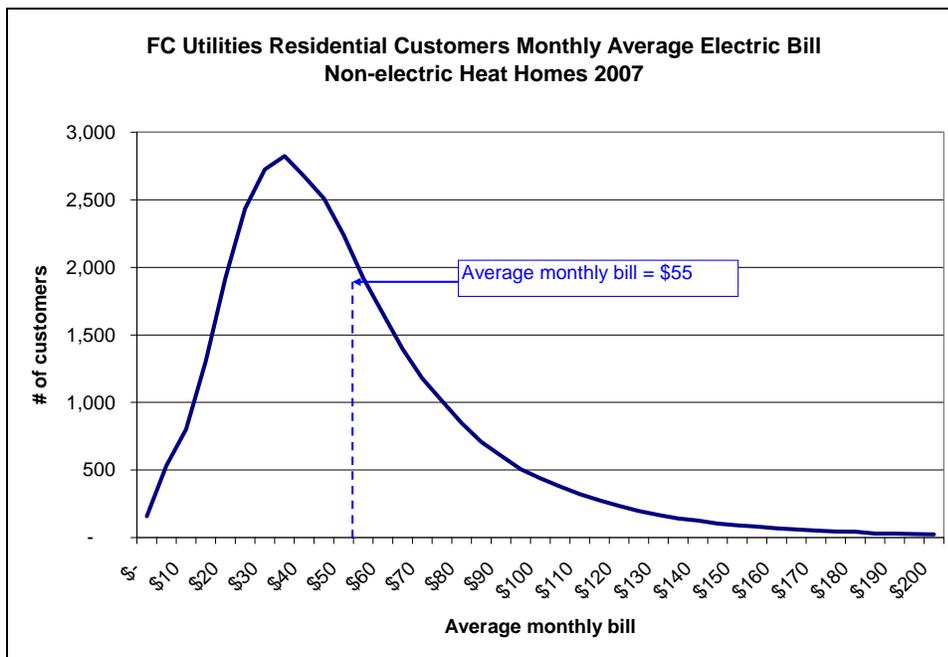


Figure 3: Fort Collins Average Residential Electric Bills (2007)



Goal #3: Objectives and Metrics

- Maintain the financial health of Fort Collins Utilities' Light and Power Service Unit to support the vision of the Energy Policy.
 - Continue to meet the Utilities Light and Power fund financial policies.
 - Maintain sufficient revenues through biennial budget planning for on-going operation and maintenance of the electric system and meet the projected requirements of the asset management plan.
- Maintain regionally competitive rates that promote energy efficiency and conservation.
- Maintain programs and services that help customers maintain affordable energy bills. Develop a metric reflecting the affordability of electric bills for Fort Collins customers.
- Promote the benefits of clean energy solutions to existing and potential customers.

Goal #4: Maintain Fort Collins Utilities collaborative relationship with Platte River Power Authority

Platte River Power Authority and Fort Collins Utilities have a long history of working closely together to meet the needs of electric customers. Platte River provides generation and transmission level electric services, while Utilities provides distribution service, metering and direct customer services. Fort Collins contracts with Platte River for all of the electricity delivered to customers, including renewable energy. The Platte River board of directors is comprised of two representatives from each of the four cities, typically the utilities director and mayor.

Goal #4: Objectives and Metrics

- Encourage Platte River Power Authority to design, operate and maintain the electric generation and transmission system to minimize the risk of system outages.
- Work with Platte River Power Authority to design, operate and maintain the electric generation, transmission and distribution system to maximize system efficiency.
- Work with Platte River Power Authority to delay the construction of new base load generation facilities.
- Encourage Platte River Power Authority to continue reducing emissions from fossil fuels in current and future generation facilities.
- Work with Platte River Power Authority to continue to diversify the portfolio of energy sources that serve the City.



Reporting and Policy Update

In order to provide transparency and document progress, the Utilities Executive Director will provide the City Manager, Electric Board and City Council with an annual status report on the Energy Policy. The report will document progress on the goals and objectives included in the policy, report policy related costs and benefits of policy initiatives and update plans for the next year.

The Energy Policy will be reviewed and revised in the fifth year after adoption.