

## COUNCIL ACTION FORM

## SUBJECT: ELECTRIC UTILITY RATE CHANGES

#### BACKGROUND:

As discussed during the FY 2008/09 budget process, the Ames Municipal Electrical Utility budget includes an 8.0% metered electric revenue increase. The revenue increase was recommended to fund plant maintenance and improvements and operating costs while maintaining an adequate fund balance for the utility. The proposed change is an across-the-board increase with no change to our current rate structure. As decision paths are selected in the project to replace base load power generation, the utility will conduct an extensive cost-of-service study and prepare alternative rate structures and analysis of impact on customers.

This rate increase is the second in a series of planned rate increases; the first was a 3.5% increase for FY 2006/07. It is important that a rate increase be implemented at the beginning of the fiscal year to allow the electric utility to fund planned capital improvements and maintain adequate fund balances.

Attached is the edited ordinance section reflecting the increased rates.

## ALTERNATIVES:

- 1. Approve the proposed changes to the electric utility rate ordinance to increase overall revenue to the electric utility by 8.0% and maintain the current rate structure. This proposed rate increase is consistent with the information provided to the public during the budget process.
- 2. Refer electric utility rate ordinance back to staff with direction to develop an alternative rate structure (flat or inclining block) that is expected to generate an 8.0% revenue increase. This alternative would likely delay implementation of a rate increase, and could result in not achieving the electric utility fund balance target unless other changes are made to the budget to reduce expenditures.
- 3. Do not make a rate increase at this time. This alternative will require extensive changes to the electric utility budget since an 8.0% revenue increase was included in the adopted budget.

## MANAGER'S RECOMMENDED ACTION:

While City Staff supports a redesign of the rate structure that will encourage conservation and reduce the need to increase power generation capacity in the future, we do not believe that this is the best time to implement a new rate structure. The electric utility will be making significant capital improvements in the near future to replace aging generation infrastructure. These capital improvements will create a new structure of costs and related revenue requirements that could vary greatly depending on the capital improvement decisions.

The electric utility will also be issuing a significant amount of debt to fund future capital improvements, bond buyers will require that a rate structure is a place that will generate the revenue needed to effectively operate the utility and repay the bonds. Due to the complexity of these issues, we would not recommend any significant changes to the rate structure without a cost of service study, and that the cost of service study not be done we until decisions are made on capital improvements to replace generation capacity.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the proposed changes to the electric utility rate ordinance to increase overall revenue to the electric utility by 8.0% and maintain the current rate structure. Given the fact that there are multiple electric rate increases in the near future, there will be other opportunities to study and implement changes to the rate structure.

The Council might want a rate structure modification at this time. If Council decides to pursue Alternative 2, City staff believes that additional time will be needed to design a rate structure to meet Council goals and determine the impact of the combination of a rate increase and new structure on our customers, and notify the public of planned rate increases. Therefore, if Alternative 2 is selected, we would suggest the Council consider delaying the rate increase until October 2008 in order accomplish the above tasks. Under this scenario, the new rate structure would be implemented without the benefit of a cost of service study.

#### Ames Electric- Running Uphill

It's tough running at the rear of the pack trying to keep up, let alone closing the gap. But, that is what the Ames municipal electric utility has been doing the last few years as energy markets changed dramatically; the needed transmission line upgrade from Ankeny remains well behind schedule and worse, with no end of the delay in sight; the downtown plants continue to age without a final decision on how to meet Ames' future energy needs; and the window is closing on an opportunity to purchase capacity from Alliant's proposed Marshalltown plant, which is likely to be one of the last major coal plants to be built in Iowa for years; Alliant just filed its advanced rate making principles with the Iowa Utilities Board.

On top of all of this, the cost of providing all electricity, peak and non-peak, is going up (even before an anticipated carbon tax is imposed). That is why the base rate increase of 8% has been proposed and why the energy adjustment is proposed to increase by 5%. Yet, the price customers pay continues to decline the more they consume. This is just the opposite of the cost of supplying electricity. Ames electric prices are out of synch with the costs to produce or acquire electricity; and, in the process, demand is stimulated causing us to incur even higher costs, especially in the summer.

The Iowa Utilities Board, which regulates for-profit electric utilities in the state, recently addressed Interstate Power's (IPL) electric declining block structure. Though the Iowa Utilities Board has limited jurisdiction over municipal, their comments are germane.

The energy landscape has changed with recent trends in electricity and natural gas prices. The Board believes it is more important than ever to promote energy efficiency as a way to mitigate the effect of general price increases and better utilize valuable resources. In promoting energy efficiency, utilities need to take new looks at their rate designs to make sure that their rate designs are consistent and promote energy efficiency.

In this case, IPL's target rate design for the summer months is not consistent with the energy efficiency message that has been sent to residential customers. It is counterintuitive and confusing to customers to have a summer rate design with declining block rates while messages regarding the importance of energy efficiency and reducing peak demand are being constantly sent by the utility, Board, and others. The message a declining block rate sends to residential customers on a summer peak day is that the more you use, the cheaper each subsequent kWh will be. This is the wrong message to send to residential customers.

The Board will reject IPL's summer declining block approach and adopt Consumer Advocate's proposal for a flat summer target rate design. A flat rate is consistent with the message the Board is sending regarding energy efficiency to residential customers. On a going-forward basis, the Board believes rate design for all customer classes should be reevaluated and specifically consider the impact of the rate design on energy efficiency and the energy efficiency messages being sent to the particular customer class. However, this change represents a significant change in IPL's current summer residential rate design. Therefore, IPL will be required to phase-in the summer residential rate design change relatively evenly over all steps of the residential equalization process and should recalibrate its first step residential rate proposals in this case accordingly.

The Board will accept the three-step declining block rate structure as proposed by IPL for the winter months. The analysis presented by IPL shows significant load factor improvements with increased levels of kWh usage, which means demand costs decline on an average per-kWh basis as usage increases. The rate structure does not send a confusing message on energy efficiency in the winter months, when cost pressures for reducing peak demand are not as great (Iowa Utilities Board In Re: Interstate Power and Light Company Final Decision and Order (Issued April 28, 2006) Docket No. RPU-05-3 (TF-05-211, EEP-02-38) pp. 14 - 15)

The upshot: Ames is out of synch with (1) price signals that reflect the cost of supplying electricity and in the process increase demand for electricity; (2) Ames' efforts and expenditures to encourage energy efficiency; and (3) Ames' Cool Cities Initiative.

There is no reason to delay adjusting rates to better reflect costs. Both short-run and long-run costs of providing electricity are increasing. That, after all, is why the proposed 8% base rate and the 5% additional energy adjustment increase are needed. It is not necessary to undertake a class cost of service study to set rates that better reflect the increasing costs of providing electricity before the declining blocks are phased out, at least for the summer months and for the residential and small commercial customers.

The proposal for phasing out the declining blocks, at least for the summer and the residential and small commercial customers, is modest. The municipal utility, Seattle City Light, for example, has gone much further than this and has an inclining block structure. With these clear price signals, it is no wonder that Seattle has been very successful in implementing its Cool Cities initiatives.

In Iowa, MidAmerican Energy has had a flat summer rate for its low volume customers for years. At the least, this is what Ames should have begun to phase in at its last rate increase. Ames needs to be revisiting its declining price structure and the cost of supplying electricity disparity- a disparity that is growing even wider as indicated by the proposed price increases.

Closer to home, Ames' water rates are currently being proposed to reflect the high cost of obtaining water in peak months with increasing blocks for the low volume customers and flat rates for higher volume customers. By restraining demand through appropriate prices, the water utility will be able to keep its costs lower longer as customers begin to respond to the prices that better reflect the cost of supplying water.

What is sound and works for water also works in other markets like food, gasoline and electricity too. Prices track costs. To do otherwise, would be to go bankrupt in more competitive markets. Prices that track costs send the right price signals to customers, restrains unnecessary demand and better limit future costs by delaying or minimizing any needed supply expansions.

Ames is very fortunate to have bright, able and hard working citizens as reflected in Steven Chapman's recent Ames' Tribune's Letter to the Editor on this subject, volunteer boards, municipal staff, city council and mayor. Put the power of markets to work, send price signals now that better reflects the cost of supplying electricity and that will lower the costs of acquiring a reliable future supply, enhances the city's energy efficiency programs and messages and better conforms to Ames' Cool City Initiative.

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### Sec. 28.103. RESIDENTIAL ELECTRIC RATES.

(2) Rate per billing period. For each monthly billing period a residential rate customer:
 (a) shall be charged three four dollars and sixty-five cents (\$3.65) (\$4.00) as a customer service charge, and

(b) in addition, shall be charged for energy consumption during the billing period as follows:(i) for bills mailed on or between August 1 and October 31, 2006, and on or between

July 1 and October 31 of subsequent years (summer period):

\$0.0797 \$0.0861 per kWh for the first 400 kWhs

\$0.0756 \$0.0816 per kWh for the next 600 kWhs

\$0.0693 \$0.0749 per kWh for all kWh s over 1000 kWhs, or

(ii) for bills mailed on or between November 1 and June 30 (winter

period):

\$0.0704 \$0.0760 per kWh for the first 400 kWhs \$0.0590 \$0.0637 per kWh for the next 600 kWhs \$0.0559 \$0.0604 per kWh for all kWhs over 1000 kWhs, and

(3) Minimum bill: The minimum charge per billing period shall be three four dollars and sixty-five cents (\$3.65) (\$4.00).

#### Sec. 28.104. GENERAL POWER RATE.

(2) Rate per billing period: For each monthly billing period a general power rate customer:
 (a) shall be charged five six dollars and twenty cents (\$5.20) (\$6.00) as the customer

service charge; and,

(b) in addition, shall be charged for energy consumption during the billing as follows:

(ii) for bills mailed on or between November 1 and June 30 (winter

(i) for bills mailed on or between August 1 and October 31, 2006, and on or between

July 1 and October 31 of subsequent years (summer period): \$0.0849 \$0.0917 per kWh for the first 2000 kWhs

period):

\$0.0662 \$0.0715 per kWh for the first 2000 kWhs \$0.0549 \$0.0593 per kWh for the next 5000 kWhs \$0.0528 \$0.0570 per kWh for all kWh a ever 7000 kW

\$0.0725 \$0.0783\_per kWh for the next 5000 kWhs \$0.0704 \$0.0760 per kWh for all kWh over 7000 kWhs.

\$0.0528 \$0.0570 per kWh for all kWh s over 7000 kWhs. Minimum bill: The minimum charge per billing period shall be five six dollars and twenty cents

(3) **Minimum** (\$5.20) (\$6.00).

#### Sec. 28.105. LARGE POWER RATE.

(2) Rate per Billing Period. For each monthly billing period, a large power rate customer:

 (a) shall be charged <u>forty-five dollars (\$45.00)</u> \$41.40 as a customer service charge, and
 (b) in addition, shall be charged for demand and energy consumption during the billing period

as follows:

(i) for bills mailed on or between August 1 and October 31, 2006, and on or between July 1 and October 31 of subsequent years (summer period) a customer shall be charged a demand of:

\$4.399 \$4.751 per kW for the first 50 kW of billing demand

\$3.985 \$4.304 per kW for the next 100 kW of billing demand

3.571 3.857 per kW for all kilowatts over 150 kW of billing demand and an energy charge of:

\$0.0569 \$0.0615 per kWh for the first 200 hours use of billing demand \$0.0393 \$0.0425 per kWh for the next 200 hours use of billing demand \$0.0362 \$0.0391 per kWh for all kWh s over 400 hours use of billing demand (ii) for bills mailed on or between November 1 and June 30 (winter period) a customer shall be charged a demand charge of:

\$3.157 \$3.410\_per kW for the first 50 kW of billing demand

\$2.743 \$2.962 per kW for the next 100 kW of billing demand

2.329 \$2.515 per kW for all kilowatts over 150 kW of billing demand and an energy charge of:

\$0.0486
\$0.0525 per kWh for the first 200 hours use of billing demand
\$0.0383
\$0.0414 per kWh for the next 200 hours use of billing demand
\$0.0342
\$0.0369 per kWh for all kWhs over 400 hours use of billing demand

## Sec. 28.106. INDUSTRIAL RATE.

(2) Rate Per Billing Period. For each monthly billing period, an industrial rate customer
 (a) shall be charged <u>one hundred twelve dollars (\$112.00)</u> \$103.50 as a customer service charge, and

(b) in addition, shall be charged for demand and energy consumption during the billing period as follows:

(i) for bills mailed on or between August 1 and October 31, 2006, and on or between July 1 and October 31 in subsequent years (summer period) a customer shall be charged a demand charge of \$3.571 \$3.857 per kW for all kilowatts of billing demand, and an energy charge of:

\$0.0507 \$0.0548 per kWh for the first 200 hours of billing demand \$0.0342 \$0.0369 per kWh for the next 200 hours use of billing demand

\$0.0321 \$0.0347 per kWh for all kWhs over 400 hours use of billing demand

(ii) for bills mailed on or between November 1 and June 30 (winter period) a customer

shall be charged a demand charge of \$2.329 \$2.515 per kW for all kilowatts of billing demand, and an energy charge of:

\$0.0435 \$0.0470 per kWh for the first 200 hours use of billing demand \$0.0331 \$0.0357 per kWh for the next 200 hours use of billing demand \$0.0300 \$0.0324 per kWh for all kWhs over 400 hours use of billing demand

# Sec. 28.107. STREET AND SECURITY LIGHTING RATE.

(2) Rate per Billing Period. For each monthly billing period the lighting customer:(a) shall be charged for service per lamp:

(i) for bills mailed on or after August 1, 2006 July 1, 2008:

		Monthly Consumption
	Monthly	Lamp
	Charge	(kWh per Lamp)
1000 Watt - Mercury Vapor	<del>21.55</del> 23.25	383
700 Watt - Mercury Vapor	<del>15.70</del> 16.95	268
400 Watt - Mercury Vapor	<del>9.85</del> 10.60	153
400 Watt - Mercury Vapor-Ornamental	<del>11.90</del> 12.85	153
250 Watt - Mercury Vapor	<del>7.05</del> 7.60	96
250 Watt - Mercury Vapor-Ornamental	<del>10.45</del> 11.30	96
175 Watt - Mercury Vapor	<del>5.75</del> 6.25	67
175 Watt - Mercury Vapor-Ornamental	<del>7.85</del> 8.45	67
400 Watt - High Pressure Sodium	<del>10.65</del> 11.45	153
400 Watt - High Pressure Sodium-Ornamental	<del>11.90</del> 12.85	153
360 Watt - High Pressure Sodium	<del>10.05</del> 10.85	138
360 Watt - High Pressure Sodium-Ornamental	<del>11.35</del> 12.25	138
250 Watt - High Pressure Sodium	<del>7.70</del> 8.30	96

<del>10.90</del> 11.75	96
<del>7.45</del> 8.05	77
<del>10.90</del> 11.75	77
<del>6.45</del> 6.95	60
<del>8.50</del> 9.15	60
<del>5.20</del> 5.60	38
<del>7.05</del> 7.60	38
<b>4.50</b> 4.90	27
<del>6.50</del> 7.00	27
	$\begin{array}{c} 10.90 \\ \hline 11.75 \\ \hline 7.45 \\ 8.05 \\ \hline 10.90 \\ 11.75 \\ \hline 6.45 \\ 6.95 \\ \hline 8.50 \\ 9.15 \\ \hline 5.20 \\ 5.60 \\ \hline 7.05 \\ 7.60 \\ \hline 4.50 \\ 4.90 \\ \hline 6.50 \\ 7.00 \end{array}$

(d) Flood lights, where available from utility stock, shall have an additional monthly charge of  $\frac{5.55}{5.55}$  \$0.60 per lamp.

(f) Contract for energy only charges will be billed at a rate of \$0.075 per kilowatt hour plus the applicable energy cost adjustment.