

COUNCIL ACTION FORM

SUBJECT: **ELECTRIC UTILITY RATE ORDINANCE CHANGES**

BACKGROUND:

In February 2011, City Council approved a contract for an Electric Services cost-of-service study and electric rate design study to SAIC Energy, Environmental & Infrastructure LLC. Using utility cost principles and financial and customer data provided by City staff, SAIC conducted a study to identify the costs of services provided by the City of Ames Electric Utility. After completion of the cost-of-service study, the consultant worked with staff to design cost-based electric rates based on allocated costs. A draft report was presented to the EUORAB on November 1, 2011, and the final report and proposed rate structure were presented at a special joint meeting of the City Council and EUORAB in December 2011.

Summary of Results of the Rate Study

- Cost by customer class was relatively close to revenue by customer class so the new rate structure does not include significant re-allocation between classes of customers.
- Costs of certain cost components of the rate did not match associated revenue and the proposed rate structure reflects better matching of these costs. Most notable are the base billing charges and demand charges, which are both increased in the proposed rate structure.
- Declining block rates did not match cost of service and have been eliminated in the proposed rate structure and replaced with flat rates for all customer classes. However, for residential and small commercial classes, summer and winter rate differentials still apply.
- The base electric rates did not reflect the current cost of energy and have been increased in the proposed rate structure. The additional cost of energy in the current rate structure was reflected in the Energy Cost Adjustment (ECA) rate component. As energy costs are better reflected in base rates, the ECA is lowered, resulting in no net change in revenue.

City Council voted unanimously to receive and file the study. At that time, staff indicated that the rate ordinance implementing these changes would be to Council in spring 2012 for approval. Following Council's adoption of the rate ordinance on first reading, staff will be work on a process of customer notification and feedback on the new rate structure with planned implementation no earlier than November 1, 2012.

The adopted FY 2012/13 Budget did not include an electric rate increase, so the proposed rate structure is revenue neutral. As discussed during review of the study, the impact of the new structure on customer groups will vary based on the cost of services utilized.

In general, the proposed cost based rates reflect increased customer charges for all classes, and increased demand charges with decreased energy charges for those rate classes with a separate demand charge. Below is a summary of changes in the proposed rate ordinance by class of customer:

Residential:

- The monthly customer charge was increased from \$5.25 to \$8.00.
- The proposed summer energy rate will be the same as the current summer energy rate (\$.0866/kWh), plus the estimated ECA rate of \$.03/kWh.
- The proposed winter three-block energy rate will be simplified to a single energy rate of \$.0966/kWh (including ECA) for the eight winter months. The proposed winter rate will be slightly lower than the average of the current winter rates.
- Overall, revenues generated by the residential class from this new rate will be virtually the same. However, individual customers may see changes in their monthly bills.

Small Commercial (General Power):

- The monthly customer charge was increased from \$6.30 to \$15.00.
- The three-block energy rates for each season were simplified to a single energy rate for each season (winter rate will be \$.0948/kWh and summer rate will be \$.1148/kWh, both including the current ECA).
- Overall, revenues generated by the small commercial class from this new rate will be virtually the same. However, individual customers may see changes in their monthly bills.

Commercial (Large Power):

- The monthly customer charge was increased from \$48.00 to \$150.00.
- The three-block energy rates for each season were simplified to a single energy rate for the year. The proposed energy rate for this class of \$.0619/kWh (including the current ECA) is lower than the average of the current energy rates.
- The demand charge in the proposed rates will change from three blocks to one block in both the summer and the winter; and the billing determinant will change

from kilowatt (kW) to kilovolt amp (kVA), which is a more appropriate measure for demand on the system.

- The proposed summer demand rates will increase to \$10.30/kVA from an average of \$4.52/kW, while proposed winter demand rates will increase to \$7.70/kVA from an average of \$3.11/kW. Total demand revenues will be higher than at current rates.
- The overall revenues generated by the large power class from this new rate will be virtually the same. Again, however, individual customers may see changes in their monthly bills.

Industrial:

- The monthly customer charge was increased from \$118.00 to \$150.00.
- As with the Large Power class, the three-block energy rates for each season were simplified to a single energy rate for the year, and the billing determinant will change from kilowatt (kW) to kilovolt amp (kVA).
- The three-block energy rates for each season will be simplified to a single energy rate for the year of \$.0619/kWh, including the current ECA. This rate is lower than the average of the current energy rates.
- The proposed summer demand rate will increase to \$10.00/kVA from \$4.05/kW, while the proposed winter demand rate will increase to \$7.50/kVA from an average of \$2.641/kW. Total demand revenues will be higher than at current rates.
- The overall revenue generated by the industrial class from this new rate will be virtually the same. Again, individual customers may see changes in their monthly bills.

ALTERNATIVES:

1. Approve the proposed revenue neutral Electric Rate Ordinance on first reading and delay the second and third readings of the ordinance to allow time to implement a customer notification process and to solicit feedback from customers.
2. Approve the proposed Electric Rate Ordinance on first reading, and direct staff to move ahead with second and third readings at the next two Council meetings.
3. Refer the electric utility rate ordinance back to staff with direction to develop an alternative rate structure. This alternative would likely require some additional work with the consultant to ensure any newly proposed structure will generate adequate revenue.

MANAGER'S RECOMMENDED ACTION:

Since this is the first significant change in the electric rate structure in several years, customer notification and education on the impact of the changes will be an important part of the implementation process. Because of this, it is recommended that the Council support Alternative #1, thereby approving the first reading of the proposed rate structure and delaying the second and third readings to allow staff time to provide information to customers on the new rates and to solicit customer feedback for the Council.

After initial Council approval of the revised rate structure, staff will take several steps to notify customers of the changes and to gather their input. The notification and feedback process will include articles in the City Side Newsletter, City Cable Channel programs, a Rotary Club presentation, discussions with the Ames Chamber and Main Street Cultural District, and one-on-one meetings with our largest customers. With an implementation date planned no earlier than November 1, there will be time to pursue several methods of providing rate change information to customers, and then to report back to Council and review customer feedback and discuss options for possible adjustments to the proposed rates, if needed, prior to final approval of the rate ordinance.

Sample Bills for Customers on the Commercial Rate

Account: 170443-44216 ISU Research Park Corp (Commercial Rate)

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$2,854.06	\$7,310.04	kW Demand	52.80	160.80	244.00	244.00
			kWh Use	26,880		68,960	
Proposed Rate	\$3,174.46	\$7,274.51	Power Factor	91%		88%	
			kVa	58.02	176.70	277.27	277.27
Difference	\$320.40	-\$35.53	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	11.23%	-0.49%	ECA \$	\$806.40		\$2,068.80	

Account 311-362 Restaurant (Commercial Rate)

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$7,229.81	\$12,364.72	kW Demand	209.60	234.00	296.00	296.00
			kWh Use	80,640		132,560	
Proposed Rate	\$6,999.16	\$11,598.83	Power Factor	97%		94%	
			kVa	216.08	241.24	314.89	314.89
Difference	-\$230.65	-\$765.89	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	-3.19%	-6.19%	ECA \$	\$2,419.20		\$3,976.80	

Account 166991-62764 Large Store (Commercial Rate)

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$36,506.21	\$49,721.70	kW Demand	752.00	752.00	988.00	988.00
			kWh Use	454,000		566,000	
Proposed Rate	\$34,161.20	\$46,127.81	Power Factor	98%		93%	
			kVa	767.35	767.35	1062.37	1062.37
Difference	-\$2,345.01	-\$3,593.89	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	-6.42%	-7.23%	ECA \$	\$13,620.00		\$16,980.00	

Account 477-580 Processing (Commercial Rate)

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$40,227.80	\$59,116.07	kW Demand	850.50	882.00	1,186.50	1,186.50
			kWh Use	487,200		664,650	
Proposed Rate	\$38,392.68	\$55,338.87	Power Factor	84%		87%	
			kVa	1012.50	1050.00	1363.79	1363.79
Difference	-\$1,835.12	-\$3,777.20	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	-4.56%	-6.39%	ECA \$	\$14,616.00		\$19,939.50	

Sample Bills for Customers on the Industrial Rate**Account: 491-594 Industrial Rate**

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$99,698.30	\$167,440.57	kW Demand	2,653.35	2,653.35	3,710.70	3,710.70
			kWh Use	1,261,785		1,958,870	
Proposed Rate	\$102,230.57	\$167,787.82	Power Factor	83%		80%	
			kVa	3196.81	3196.81	4638.38	4638.38
Difference	\$2,532.27	\$347.25	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	2.54%	0.21%	ECA \$	\$37,853.55		\$58,766.09	
Load Factor	60.04%	70.95%	Days	33		31	

Account 501-610 Industrial Rate							
	Winter	Summer		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$130,432.55	\$206,401.15	kW Demand	3,032.40	3,471.30	4,309.20	4,309.20
			kWh Use	1,687,896		2,540,118	
Proposed Rate	\$132,327.29	\$203,225.90	Power Factor	94%		94%	
			kVa	3225.96	3692.87	4584.26	4584.26
Difference	\$1,894.74	-\$3,175.25	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	1.45%	-1.54%	ECA \$	\$50,636.88		\$76,203.54	
Load Factor	70.28%	79.23%	Days	33		31	

Account 192731-43076 Industrial Rate							
	Winter	Summer		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$481,664.30	\$560,973.57	kW Demand	9,432.36	9,432.36	11,004.42	11,004.42
			kWh Use	6,577,830		6,999,804	
Proposed Rate	\$479,504.13	\$551,764.97	Power Factor	98%		93%	
			kVa	9624.86	9624.86	11832.71	11832.71
Difference	-\$2,160.17	-\$9,208.60	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	-0.45%	-1.64%	ECA \$	\$197,334.90		\$209,994.12	
Load Factor	88.05%	85.50%	Days	33		31	

Sample Bills for area Churches

Account 103153-32020 - Heartland Baptist Church (Commercial Rate)

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$524.77	\$827.72	kW Demand	36.52	39.15	50.87	50.87
			kWh Use	3,955		5,558	
Proposed Rate	\$729.76	\$1,076.20	Power Factor	90%		90%	
			kVa	40.58	43.50	56.52	56.52
Difference	\$204.99	\$248.48	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	39.06%	30.02%	ECA \$	\$118.65		\$166.74	
Load Factor	14.60%	13.80%	Days in Cycle	31		33	
LF (Using Ratchet Dmd)	13.60%	13.80%					

Account 535-648 - Des Moines FM Group (Commercial Rate)

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$689.42	\$1,283.06	kW Demand	31.60	53.10	71.20	71.20
			kWh Use	5,320		9,400	
Proposed Rate	\$933.61	\$1,546.69	Power Factor	90%		90%	
			kVa	35.11	59.00	79.11	79.11
Difference	\$244.19	\$263.63	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	35.42%	20.55%	ECA \$	\$159.60		\$282.00	
Load Factor	23.40%	16.70%	Days in Cycle	30		33	
LF (Using Ratchet Dmd)	13.90%	16.70%					

Account 31581-33698 - Episcopal Parish Ames (Commerical Rate)

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$911.63	\$1,567.13	kW Demand	40.40	44.40	50.80	50.80
			kWh Use	8,280		14,240	
Proposed Rate	\$1,042.37	\$1,612.79	Power Factor	90%		90%	
			kVa	44.89	49.33	56.44	56.44
Difference	\$130.74	\$45.66	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	14.34%	2.91%	ECA \$	\$248.40		\$427.20	
Load Factor	25.90%	34.40%	Days in Cycle	33		34	
LF (Using Ratchet Dmd)	23.50%	34.40%					

Account 173-190 - Collegiate Methodist Church (Commercial Rate)

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$1,914.63	\$2,607.80	kW Demand	64.00	88.20	106.40	106.40
			kWh Use	18,560		21,840	
Proposed Rate	\$2,053.46	\$2,719.56	Power Factor	90%		90%	
			kVa	71.11	98.00	118.22	118.22
Difference	\$138.83	\$111.76	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	7.25%	4.29%	ECA \$	\$556.80		\$655.20	
Load Factor	39.00%	26.70%	Days in Cycle	31		32	
LF (Using Ratchet Dmd)	28.30%	26.70%					

Account 229-258 - St Thomas Aquinas Church (Commercial Rae)

	<u>Winter</u>	<u>Summer</u>		Jan-11	bill dmd/kVa	Aug-11	bill dmd/kVa
Current Rate	\$2,432.40	\$3,085.10	kW Demand	72.80	111.00	139.20	139.20
			kWh Use	23,920		25,200	
Proposed Rate	\$2,580.29	\$3,302.98	Power Factor	90%		90%	
			kVa	80.89	123.33	154.67	154.67
Difference	\$147.89	\$217.88	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	6.08%	7.06%	ECA \$	\$717.60		\$756.00	
Load Factor	40.30%	24.30%	Days in Cycle	34		31	
LF (Using Ratchet Dmd)	26.40%	24.30%					

Small Commercial Examples:**Account 31583-32114 - Ames Jewish Congregation (Small Commercial)**

	<u>Winter</u>	<u>Summer</u>		Jan-11	Aug-11
Current Rate	\$89.75	\$207.50	Usage	794	1593
Proposed Rate	\$90.27	\$197.88	ECA \$/kWh	\$0.03	\$0.03
Difference	\$0.52	(\$9.62)	ECA \$	\$23.82	\$47.79
% Impact on Bill	0.58%	-4.64%			

Account 12573-12860 -University Lutheran Center (Small Commercial)

	<u>Winter</u>	<u>Summer</u>		Jan-11	Aug-11
Current Rate	\$364.18	\$559.60	Usage	3600	4680
Proposed Rate	\$356.28	\$552.26	ECA \$/kWh	\$0.03	\$0.03
Difference	(\$7.90)	(\$7.34)	ECA \$	\$108.00	\$140.40
% Impact on Bill	-2.17%	-1.31%			

Account 171235-18822 - St Andrews Lutheran Church (Small Commercial)

	<u>Winter</u>	<u>Summer</u>		Jan-11	Aug-11
Current Rate	\$349.41	\$725.65	Usage	3440	6160
Proposed Rate	\$341.11	\$722.17	ECA \$/kWh	\$0.03	\$0.03
Difference	(\$8.30)	(\$3.48)	ECA \$	\$103.20	\$184.80
% Impact on Bill	-2.38%	-0.48%			

Sample Bills for area Schools

**Account 431-886 - 300 20th St. –
Meeker Elementary School**

	<u>Winter</u>	<u>Summer</u>		February	bill dmd/kVa	September	bill dmd/kVa
Current Rate	\$2,028.98	\$3,069.81	kW Demand	86.40	87.60	120.00	120.00
			kWh Use	20,160		26,480	
Proposed Rate	\$2,107.92	\$3,090.21	Power Factor	95%		95%	
			kVa	90.95	92.21	126.32	126.32
Difference	\$78.94	\$20.40	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	3.89%	0.66%	ECA \$	\$604.80		\$794.40	
Load Factor	33.50%	29.70%	Days in Cycle	29			31
LF (Using Ratchet Dmd)	33.10%	29.70%					

**Account 431-882 - 3521 Jewel Dr. –
Kate Mitchell Elementary School**

	<u>Winter</u>	<u>Summer</u>		February	bill dmd/kVa	September	bill dmd/kVa
Current Rate	\$2,613.81	\$3,873.84	kW Demand	97.60	126.00	177.60	177.60
			kWh Use	25,280		31,840	
Proposed Rate	\$2,736.08	\$4,046.48	Power Factor	95%		95%	
			kVa	102.74	132.63	186.95	186.95
Difference	\$122.27	\$172.64	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	4.68%	4.46%	ECA \$	\$758.40		\$955.20	
Load Factor	37.20%	24.10%	Days in Cycle	29			31
LF (Using Ratchet Dmd)	28.80%	24.10%					

**Account 431-892 - 1400 McKinley Dr. –
Fellows Elementary School**

	<u>Winter</u>	<u>Summer</u>		February	bill dmd/kVa	September	bill dmd/kVa
Current Rate	\$2,997.44	\$4,358.12	kW Demand	117.60	117.60	165.60	165.60
			kWh Use	31,120		38,640	
Proposed Rate	\$3,029.51	\$4,337.31	Power Factor	95%		95%	
			kVa	123.79	123.79	174.32	174.32
Difference	\$32.07	-\$20.81	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	1.07%	-0.48%	ECA \$	\$933.60		\$1,159.20	
Load Factor	36.80%	31.40%	Days in Cycle	30			31
LF (Using Ratchet Dmd)	36.80%	31.40%					

**Account 431-56302 - 3915 Mortensen Rd.
Ames Middle School**

	<u>Winter</u>	<u>Summer</u>		February	bill dmd/kVa	September	bill dmd/kVa
Current Rate	\$12,154.50	\$15,979.92	kW Demand	417.00	465.75	594.00	594.00
			kWh Use	132,000		148,200	
Proposed Rate	\$11,980.30	\$15,696.71	Power Factor	98%		96%	
			kVa	425.51	475.26	618.75	618.75
Difference	-\$174.20	-\$283.21	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	-1.43%	-1.77%	ECA \$	\$3,960.00		\$4,446.00	
Load Factor	45.50%	33.50%	Days in Cycle	29			31
LF (Using Ratchet Dmd)	40.70%	33.50%					

**Account 431-902 - 1921 Ames High Dr.
Ames High School**

	<u>Winter</u>	<u>Summer</u>		February	bill dmd/kVa	September	bill dmd/kVa
Current Rate	\$9,376.99	\$15,974.59	kW Demand	313.60	547.80	676.00	676.00
			kWh Use	91,520		139,280	
Proposed Rate	\$10,119.23	\$15,949.61	Power Factor	98%		97%	
			kVa	320.00	558.98	696.91	696.91
Difference	\$742.24	-\$24.98	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	7.92%	-0.16%	ECA \$	\$2,745.60		\$4,178.40	
Load Factor	40.50%	27.70%	Days in Cycle	30			31
LF (Using Ratchet Dmd)	23.20%	27.70%					

**Account 431-900 - 1921 Ames High Dr. ADD
Ames High School**

	<u>Winter</u>	<u>Summer</u>		February	bill dmd/kVa	September	bill dmd/kVa
Current Rate	\$6,761.06	\$11,480.40	kW Demand	200.00	296.40	402.40	402.40
			kWh Use	70,008		108,560	
Proposed Rate	\$6,788.80	\$11,099.15	Power Factor	99%		98%	
			kVa	202.02	299.39	410.61	410.61
Difference	\$27.74	-\$381.25	ECA \$/kWh	\$0.03		\$0.03	
% Impact on Bill	0.41%	-3.32%	ECA \$	\$2,100.24		\$3,256.80	
Load Factor	48.60%	36.30%	Days in Cycle	30			31
LF (Using Ratchet Dmd)	32.80%	36.30%					

ORDINANCE NO.

AN ORDINANCE TO AMEND THE MUNICIPAL CODE OF THE CITY OF AMES, IOWA, BY REPEALING CHAPTER 28 SECTION 28.101(3), 28.102, 28.103(2)(a)(b)(i)(ii), 28.103(3), 28.104(1),(2)(a)(b)(i)(ii), (3),(4)(iii), 28.105(1),(2)(a)(b)(i)(ii)(c),(3)(d),(5),(8)(c),(9)(b)(i)(ii), 28.106(1),(2)(a)(b)(i)(ii), (3)(d), (5), (8)(c), (9)(b)(ii), 28.107(2)(b) AND ENACTING A NEW CHAPTER 28 SECTION 28.101(3), 28.102, 28.103(2)(a)(b)(i)(ii)(c), 28.103(3), 28.104(1),(2)(a)(b)(i)(ii)(c), (3),(4)(iii), 28.105(1),(2)(a)(b)(i)(ii)(c),(3)(d),(8)(c),(9)(b)(i)(ii), 28.106(1),(2)(a)(b)(i)(ii), (3)(d),(8)(c), (9)(b)(ii), 28.107(2)(b) THEREOF, FOR THE PURPOSE OF IMPLEMENTING COST OF SERVICE AND RATE STUDY; REPEALING ANY AND ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT TO THE EXTENT OF SUCH CONFLICT; AND ESTABLISHING AN EFFECTIVE DATE.

BE IT ENACTED, by the City Council for the City of Ames, Iowa, that:

Section One. The Municipal Code of the City of Ames, Iowa shall be and the same is hereby amended by enacting a new Section as follows:

“Sec. 28.101. GENERAL CONDITIONS FOR ELECTRIC RATES.

The following general conditions are applicable to the following as indicated in each rate schedule:

- (1) Service shall be provided subject to Ames Municipal Electric System rules and regulations.
(*Ord. No. 2975, Sec. 1, 5-19-87; Ord. No. 2977, Sec. 1, 6-9-87*)
- (2) The schedule will be applied to each meter and point of delivery and in no event will meter readings be combined except when it has been determined necessary by the Ames Municipal Electric System.
(*Ord. No. 3885, 07-5-06*)
- (3) **Where a residence and a business are combined on one premise, service for the combined use will be considered residential only if the predominant use is for residential purposes. If the use is predominantly for business purposes, the customer is required to take all service under the applicable Small Commercial or Commercial rate.**
- (4) The standard approved type of electric water heater shall have a single 120 volt heating element no larger than 1500 watts or shall have multiple thermostatically controlled noninductive 240-volt heating elements of not more than 5000 watts per element with such multiple elements connected interlocking so that only one element may operate at a time.
- (5) The utility may assess an excess facilities charge when necessary to meet costs of an unusual installation.
(*Ord. No. 2921, Sec. 1, 4-9-85; Ord. No. 3199, Sec. 1, 9-24-92*)

Sec. 28.102. ENERGY COST ADJUSTMENT.

The net monthly billing based on rates will be increased or decreased by an amount corresponding to the increase or decrease in the average cost to the Ames Municipal Electric System for power plant fuel in the preceding month. The incremental charge will be computed by multiplying the number of kilowatt-hours used by the customer times the difference between the base fuel cost and the average fuel cost of the preceding month. The base fuel cost is \$0.0495 per kilowatt-hour. The average fuel cost shall be determined by multiplying the unit fuel cost in the previous month times the quantity of fuel used in the twelve (12)-month period prior to the previous month divided by the actual kilowatt-hour sales during the same period.

(Ord. No. 2921, Sec. 2, 4-9-85; Ord. No. 2975, Sec. 1, 5-19-87; Ord. No. 2977, Sec. 1, 6-9-87; Ord. No. 3199, Sec. 1, 9-24-92)

Sec. 28.103. RESIDENTIAL ELECTRIC RATES.

(1) **Availability:** Electrical energy and service shall be available at the "Residential Rate" for all single-phase domestic uses in separately metered, dwelling units that are intended for occupancy by a single family as defined by the Ames Zoning Ordinance, as distinguished from group domiciles such as rooming houses, fraternity or sorority houses, supervised group homes, and residential care facilities of various kinds.

(2) **Rate per billing period.** For each monthly billing period a residential rate customer:

(a) shall be charged eight dollars (\$8.00) 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 July 1 and October 31 (summer period):
\$0.1166 per kWh, or

(ii) for bills mailed on or between November 1 and June 30 (winter period):
\$0.0966 per kWh

(c) All charges above shall also be subject to the current applicable energy cost adjustment per Sec. 28.102.

and

(3) **Minimum bill:** The minimum charge per billing period shall be eight dollars (\$8.00).

(Ord. No. 3885, 07-25-06; Ord. No. 3955, 05-27-08; Ord. No. 3987, 05-12-09)

(4) **Conditions:** The residential rate shall be subject to the general conditions set forth in Section 28.101(1), (2), (3), (4) and (5).

(5) **Load Management Credit:** Any dwelling unit that qualifies under the Residential Electric Rate and is equipped with a properly installed central air conditioner shall be eligible to participate in the Residential Load Management Program. Customers who agree to allow the utility to install and maintain a Load Management Switch on their central air conditioner will receive the following credits to their electric bills:

(a) \$5 credit for each installed Load Management Switch for bills mailed on or between July 1 and October 31.

(b) The total annual credit for each customer shall not exceed \$20 for each central air conditioner on which a Load Management Switch has been installed.

(Ord. No. 3277, Sec. 1, 5-24-94)(Ord. No. 822, Sections 2, 3; Code 1956, Sections 26-2, 26-3; Ord. No. 1038, Sec. 1, 9-4-62; Ord. No. 2172, Sec. 2, 2-7-67; Ord. No. 2271, Sec. 1, 2, 10-22-68; Ord. No. 2505, Sec. 1, 2, 4-22-75; Ord. No. 2586, Sec. 2, 2-22-77; Ord. No. 2657, Sec. 2, 6-6-78; Ord. No. 2723, Sec. 2, 7-24-79; Ord. No. 2895, Sec. 1, 5-22-84; Ord. No. 2921, Sec. 3, 4-9-85; Ord. No. 3199, Sec. 1, 9-24-92)

Sec. 28.104. SMALL COMMERCIAL RATE.

(1) **Availability:** Electrical energy and service shall be available at the "Small Commercial Rate" to all customers except those that qualify for another rate schedule, for all single-phase or three-phase, single-metered usage, where the metered demand does not exceed 55 kVA.

(2) **Rate per billing period:** For each monthly billing period a small commercial rate customer:

(a) shall be charged fifteen dollars (\$15.00) as the 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 July 1 and October 31 (summer period):
\$0.1148 per kWh

(ii) for bills mailed on or between November 1 and June 30 (winter period):
\$0.0948 per kWh

(c) All charges above shall also be subject to the current applicable energy cost adjustment

per Sec. 28.102.

(3) **Minimum bill:** The minimum charge per billing period shall be fifteen dollars (\$15.00).

(4) Conditions: The small commercial rate shall be subject to:

(a) the general conditions of section 28.101 (1), (2), (3) and (5); and,

(b) the following specific conditions:

(i) Unless three-phase service is determined by the Ames Municipal Electric System to be economically available, motors up to and including 5 hp shall be single-phase. Motors above 5 hp shall be three-phase. Three-phase service will normally be 120/208 volt, 4 wire. Where conditions warrant (outside the business district area), 4-wire 120/240 volt or 277/480 volt service may be furnished if mutually agreeable to the Ames Municipal Electric System and the customer.

(ii) Fluctuating loads. Loads requiring excess transformer capacity because of large momentary current requirements, or to provide close voltage regulation, shall be subject to an additional charge of \$0.327 per rated kVA of capacity above normal capacity requirement for the diversified demand. The kVA subject to an additional charge will be adjusted no more than once a year. No charge shall apply if the customer furnishes the transformers.

(Ord. No. 3885, 07-25-06; Ord. 3987, 05-12-09)

(iii) Should the electrical energy furnished under this schedule for any reason be metered on the primary side of the service transformers, the energy metered shall be reduced by 1-1/2 per cent before calculating the energy charge.

(5) Load Management Credit: Any facility that qualified and is equipped with a properly installed central air conditioner shall be eligible to participate in the Load Management Program. Customers who agree to allow the Ames Municipal Electric System to install and maintain a Load Management Switch on their central air conditioner will receive the following credits to their electric bills:

(a) Five dollars (\$5.00) credit for each installed Load Management Switch for bills mailed on or between July 1 and October 31.

(b) The total annual credit for each customer shall not exceed twenty dollars (\$20.00) for each central air conditioner on which a Load Management Switch has been installed.

(Ord. No. 822, Sections 4, 5; Code 1956, Sections 26-4, 26-5; Ord. No. 1038, Sec. 1, 9-4-62; Ord. No. 2172, Sec. 2, 2-7-67; Ord. No. 2271, Sec. 1, 2, 10-22-68; Ord. No. 2505, Sec. 1, 2, 4-22-75; Ord. No. 2586, Sec. 2, 2-22-77; Ord. No. 2657, Sec. 2, 6-6-78; Ord. No. 2723, Sec. 1, 2, 7-24-79; Ord. No. 2921, Sec. 4, 4-9-85; Ord. No. 3199, Sec. 1, 9-24-92; Ord. No. 3885, 07-25-06)

Sec. 28.105. COMMERCIAL RATE.

(1) Availability. The Commercial rate shall be optional for any non-residential customer whose consumption in any billing period exceeds 10,000 Kwh. The Commercial rate shall be mandatory for any non-residential customer whose metered demand at any time exceeds 55 kVA. If at any time, a non-residential customer's metered demand exceeds 55 kVA, all consumption for the billing period in which that occurs, and for the next succeeding eleven billing periods, shall be charged at the Commercial rate. Any customer for whom the Commercial Rate became mandatory, who subsequently has a metered demand of less than 55 kVA for 12 consecutive months, will again become an optional Commercial rate customer with a choice between Small Commercial and Commercial rates. Any customer for whom the Commercial rate is optional shall not switch rates more than once in a period of 12 months. Any customer on the Commercial rate who has a metered demand of less than 55 kVA, and a consumption of less than 10,000 Kwh, for twelve consecutive months, shall be changed to the Small Commercial rate.

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

(a) shall be charged one hundred fifty dollars (\$150.00) 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 July 1 and October 31 (summer period)
a customer shall be charged a demand of:

\$10.30 per kVA and an energy charge of:
\$0.0619 per kWh

(ii) for bills mailed on or between November 1 and June 30 (winter period) a
customer shall be charged a demand charge of:

\$7.70 per kVA and an energy charge of:
\$0.0619 per kWh

(Ord. No. 3987, 05-12-09)

(c) All charges above shall also be subject to the current applicable energy cost
adjustment per Sec. 28.102.

(3) **Billing Demand:** The "Billing Demand" shall be the greater of:

(a) The peak 15-minute demand measured during the present monthly billing period; or
(b) Seventy-five percent (75%) of the peak demand measured during the most recent four
months of the summer period; or

(c) Sixty percent (60%) of the peak demand measured during the last eleven billing periods.

(d) **Provided, however, that the demand used for billing shall in no case be less than 15
kVA after discounts.**

(4) **Minimum bill:** The minimum bill shall be the customer charge plus the current demand charge.

(5) **RESERVED**

(6) **Service facilities:** The Ames Municipal Electric System shall furnish as a standard installation
facilities adequate to supply service at a single point of delivery to a normal load equal to the maximum 15-minute
demand of the customer. Each standard installation shall include, where necessary, facilities for one standard
transformation and the demand and energy consumption of the entire premises.

(7) **Excess facilities charge:** In the event service facilities in addition to, or different from, a standard
installation are requested by the customer, or are required to serve the customer's load, the Ames Municipal Electric
System shall furnish, install, and maintain such facilities subject to the following considerations:

(a) The type, extent, and location of such service facilities shall be determined by agreement
between the Ames Municipal Electric System and the customer.

(b) Such service facilities shall be the property of the Ames Municipal Electric System.

(c) The customer shall pay a monthly rental charge on those facilities in excess of the
facilities included in a standard installation.

(d) If the optional or nonstandard facilities are used for other customers also, the rental
payable by the customer shall be that portion of the total rental which is reasonably assignable to the customer.

(8) **Primary service:** Customers who take service at primary voltage shall be granted discounts
to demand and energy as follows:

(a) 1-1/2% of the billing demand and measured energy where metering is on the high voltage
side of utility-owned transformers.

(b) 5% of the billing demand and 1-1/2% of the measured energy where metering is on the
high voltage side of customer-owned transformers.

(c) **A minimum billing demand after discount shall be 15 kVA.**

(d) Voltages below 8,000/13,800 Y nominal are considered secondary voltage.

(9) **Conditions:** The Commercial Rate shall be subject to

(a) the general condition in section 28.101 (1), (2), (3) and (5); and,

(b) **the following specific conditions:**

(i) **The customer's total usage on a single premise shall determine whether the
customer qualifies for service under this rate structure. In no event will the customer be billed on both the
Small Commercial and Commercial rates. A premise is defined as the main building of a commercial or
industrial establishment, and shall include the outlying or adjacent buildings used by the same provided the
use of service in the outlying buildings is supplemental and similar to the service used in the main building.**

(ii) **Fluctuating loads. If use of energy is intermittent or subject to violent
fluctuation, the Ames Municipal Electric System may add to the 15-minute measured demand an amount
equal to 65% of the rated capacity in kVA of the apparatus which causes such fluctuations.**

(10) **Load Management Credit:** Any facility that qualified and is equipped with a properly installed central air conditioner shall be eligible to participate in the Load Management Program. Customers who agree to allow the Ames Municipal Electric System to install and maintain a Load Management Switch on their central air conditioner will receive the following credits to their electric bills:

(a) Five dollars (\$5.00) credit for each installed Load Management Switch for bills mailed on or between July 1 and October 31.

(b) The total annual credit for each customer shall not exceed twenty dollars (\$20.00) for each central air conditioner on which a Load Management Switch has been installed.

(Ord. No. 822, Sections 4, 5; Code 1956, Sections 26-4, 26-5; Ord. No. 1038, Sec. 1, 9-4-62; Ord. No. 2172, Sec. 2, 2-7-67; Ord. No. 2271, Sec. 1, 2, 10-22-68; Ord. No. 2505, Sec. 1, 2, 4-22-75; Ord. No. 2586, Sec. 2, 2-22-77; Ord. No. 2657, Sec. 2, 6-6-78; Ord. No. 2723, Sec. 1, 2, 7-24-79; Ord. No. 2921, Sec. 4, 4-9-85; Ord. No. 3199, Sec. 1, 9-24-92)(Ord. No. 3885, 07-5-06)

Sec. 28.106. INDUSTRIAL RATE.

(1) **Availability:** The Industrial rate shall be mandatory for any non-residential customer whose metered demand at any time exceeds 2,500 kVA. If at any time, a non-residential customer's metered demand exceeds 2,500 kVA, all consumption for the billing period in which that occurs, and for the next succeeding eleven billing periods, shall be charged at the Industrial rate.

(2) **Rate Per Billing Period.** For each monthly billing period, an industrial rate customer

(a) shall be charged one hundred fifty dollars (\$150.00) 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 July 1 and October 31 (summer period) a customer shall be charged a demand charge of \$10.00 per kVA of billing demand, and an energy charge of: \$0.0619 per kWh

(ii) for bills mailed on or between November 1 and June 30 (winter period) a customer shall be charged a demand charge of:

\$7.50 per kVA of billing demand, and an energy charge of:

\$0.0619 per kWh

(Ord. No. 3955, 05-27-08; Ord 3987, 05-12-09)

(c) All charges above also shall be subject to the current applicable energy cost adjustment per Sec. 28.102.

(3) **Billing Demand.** The 'Billing Demand' shall be the greater of:

(a) The peak fifteen (15) minute demand measured during the current monthly billing period, or

(b) Seventy-five percent (75%) of the peak demand measured during the most recent four months of the summer period; or

(c) Sixty percent (60%) of the peak demand measured during the last eleven billing periods.

(d) **Provided, however, that the demand used for billing shall in no case be less than 2,500 kVA after discounts.**

(4) **Minimum Bill.** The minimum monthly bill shall be the customer charge plus the current demand charge plus the energy charge and energy cost adjustment for 600,000 Kwh.

(5) **RESERVED**

(6) **Service Facilities.** The Ames Municipal Electric System shall furnish as a standard installation facilities adequate to supply service at a single point of delivery to a normal load equal to the maximum 15-minute

demand of the customer. Each standard installation shall include, where necessary, facilities for one standard transformation and the demand and energy consumption of the entire premises.

(7) **Excess Facility Charge.** In the event service facilities in addition to, or different from, a standard installation are requested by the customer, or are required to serve the customer's load, the Ames Municipal Electric System shall furnish, install, and maintain such facilities subject to the following considerations:

(a) The type, extent, and location of such service facilities shall be determined by agreement between the Ames Municipal Electric System and the customer.

(b) Such service facilities shall be the property of the Ames Municipal Electric System.

(c) The customer shall pay a monthly rental charge on those facilities in excess of the facilities included in a standard installation.

(d) If the optional or nonstandard facilities are used for other customers also, the rental payable by the customer shall be that portion of the total rental which is reasonably assignable to the customer.

(8) **Primary service: Customers who take service at primary voltage shall be granted discounts to demand and energy as follows:**

(a) 1-1/2% of the billing demand and measured energy where metering is on the high voltage side of utility-owned transformers.

(b) 5% of the billing demand and 1-1/2% of the measured energy where metering is on the high voltage side of customer-owned transformers.

(c) **A minimum billing demand after discount shall be 2,500 kVA**

(d) Voltages below 8,000/13,800 Y nominal are considered secondary voltage.

(9) **Conditions. The Industrial rate shall be subject to the following specific conditions.**

(a) the general condition in section 28.101 (1), (2) and (5) and

(b) **the following specific conditions:**

(i) The customer's total usage on a single premise shall determine whether the customer qualifies for service under this rate structure. In no event will the customer be billed on more than one rate. A premise is defined as the main building of a commercial or industrial establishment, and shall include the outlying or adjacent buildings used by the same provided the use of service in the outlying buildings is supplemental and similar to the service used in the main building.

(ii) **Fluctuating loads. If use of energy is intermittent or subject to violent fluctuation, the Ames Municipal Electric System may add to the 15-minute measured demand an amount equal to 65% of the rated capacity in kVA of the apparatus which causes such fluctuations.**

(Ord. No. 2827, 6-15-82; Ord. No. 2832, 9-21-82; Ord. No. 2921, Sec. 1, 4-9-85; Ord. No. 3199, Sec. 1, 9-24-92)

Sec. 28.107. STREET AND SECURITY LIGHTING RATE.

(1) **Availability.** Lighting energy and service shall be available for street lighting and for security lighting where it is impossible or impractical to meter the electrical energy through the customer's normal metering location.

(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 July 1, 2009:

	Monthly Charge	Monthly Consumption Lamp (kWh per Lamp)
1000 Watt - Mercury Vapor	24.45	383
700 Watt - Mercury Vapor	17.80	268
400 Watt - Mercury Vapor	11.15	153
400 Watt - Mercury Vapor-Ornamental	13.50	153
250 Watt - Mercury Vapor	8.00	96
250 Watt - Mercury Vapor-Ornamental	11.90	96
175 Watt - Mercury Vapor	6.60	67
175 Watt - Mercury Vapor-Ornamental	8.90	67

400 Watt - High Pressure Sodium	12.05	153
400 Watt - High Pressure Sodium-Ornamental	13.50	153
360 Watt - High Pressure Sodium	11.40	138
360 Watt - High Pressure Sodium-Ornamental	12.90	138
250 Watt - High Pressure Sodium	8.75	96
250 Watt - High Pressure Sodium-Ornamental	12.35	96
200 Watt - High Pressure Sodium	8.45	77
200 Watt - High Pressure Sodium-Ornamental	12.35	77
150 Watt - High Pressure Sodium	7.30	60
150 Watt - High Pressure Sodium-Ornamental	9.65	60
100 Watt - High Pressure Sodium	5.90	38
100 Watt - High Pressure Sodium-Ornamental	8.00	38
70 Watt - High Pressure Sodium	5.15	27
70 Watt - High Pressure Sodium-Ornamental	7.35	27

Ornamental fixtures are units on poles other than wood.

(Ord. No. 2975, Sec. 1, 5-19-87; Ord. No. 2977, Sec. 1, 6-9-77; Ord. No. 3885, 07-25-06; Ord. No. 3955, 05-27-08; Ord. No. 3987, 05-12-09)

(b) and all lamps shall be charged any applicable energy cost adjustment, per Sec. 28.102, based on the stated average monthly kWh consumption per lamp.

(3) Conditions. The street and security lighting rate will be subject to 28.101(1) and (5) and the following specific conditions:

(a) new service agreements shall be 3 years minimum

(b) new installation for "security lights" will only be made with 175, 400, or 1000 watt mercury vapor or with 70, 100, 150, 200, or 250 watt sodium fixtures on existing poles with a maximum of a 150 foot span of wire.

(c) Customers desiring a change from mercury to sodium fixtures after less than 3 years under an existing service agreement will be charged for conversion costs.

(d) Flood lights, where available from utility stock, shall have an additional monthly charge of \$0.65 per lamp.

(Ord. No. 3885, 07-25-06; Ord. No. 3955, 05-27-08; Ord. No. 3987, 05-12-09)

(e) No new 360 watt sodium fixtures will be installed.

(Ord. No. 2921, Sec. 6, 4-9-85; Ord. No. 3199, Sec. 1, 9-24-92)

(f) Contract for energy only charges will be billed at a rate of \$0.080 per kilowatt hour plus the applicable energy cost adjustment.

(Ord. No. 3955, 05-27-08; Ord. No. 3987, 05-12-09)

Section Two. All ordinances, or parts of ordinances, in conflict herewith are hereby repealed to the extent of such conflict, if any.

Section Three. This ordinance shall be in full force and effect from and after its passage and publication as required by law.

Passed this _____ day of _____, _____.

Diane R. Voss, City Clerk

Ann H. Campbell, Mayor