

ITEM # 25 <sup>18 Old</sup> CAF  
DATE March 25, 2008

## COUNCIL ACTION FORM

**SUBJECT: SEASONAL WATER RATE STRUCTURE**

**BACKGROUND:**

On March 4 2008, staff presented a conceptual water rate structure intended to encourage conservation during the summer peak demand season. The structure included a seasonal inclining block structure for "Residential" and "Irrigation" classes and a seasonal flat rate for "Small Commercial," "Large Commercial," and "Industrial" classes.

During the presentation, staff indicated some areas where additional detail still needed to be developed. Council also indicated its desired modifications to the rate structures. The discussion below describes those areas that have been added or modified following the March 4 presentation. Attachment A is a draft ordinance that is intended to enact the new seasonal water rate structure. No formal action on the ordinance is requested at this time. The purpose is for Council to have an additional opportunity to review the concept before being asked to take action. It is anticipated that the ordinance will be placed on the April 8, 2008 Council meeting for a public hearing and first reading. The second and third readings will take place on the subsequent Council meetings. This will allow the third reading and adoption at the May 13 Council meeting, with the effective date of the rate structure change being June 1, 2008.

Residential Rate Class Definition. Staff indicated that additional work was still necessary to distinguish between residential and commercial accounts and suggested the possibility of establishing small residential customer accounts (generally single-family houses) and large residential customer accounts (multi-plexes).

Staff reviewed other Iowa municipalities' rate structures to learn how other communities have made this distinction. Only three utilities were identified that differentiate residential accounts from other types of accounts.

- Cedar Falls Utilities. Defines a residential account as a "single-family residential dwelling." All others are treated as "general water" accounts.
- Cedar Rapids. Defines domestic accounts as "services having a meter of one inch or smaller in size set in a private dwelling." All others are classified as "commercial" accounts.
- Newton. Has separate rates for residential and non-residential but does not have a formal definition of what constitutes a residential customer. All others are treated as "commercial/industrial" accounts.

After much evaluation, staff now suggest that the following definition of a "residential" account be included in the ordinance.

*"A residential account is defined as customer accounts serving properties that are intended for occupancy by a single family as defined by the Ames Zoning Ordinance, provided that such accounts consist of no more than two dwelling units being served by a single water meter."*

This definition would include multi-plex buildings where each dwelling unit has a single water meter. Where there is a single master meter serving the entire property, staff recommend that the service account be treated as a commercial account instead of a residential account.

Non-residential Classes. During the presentation on March 4, staff showed possible rate structures for three non-residential classes; namely, "Small Commercial," "Large Commercial," and "Industrial." Staff is now recommending that a single, "Non-residential" class be used instead of the three separate rate classes. The rate proposed is 1.35 times the base rate; currently, that would be \$1.88 per hundred cubic feet. The reasons are threefold.

1. The seasonal demand profiles vary considerably among these types of customers. This makes setting block sizes difficult, even when accounts are grouped based on their winter demand patterns.
2. Staff were concerned about having different classes of non-residential accounts charged different rates.
3. Other Iowa communities which use block structures have not attempted to distinguish between types of non-residential users, presumably because of reasons 1 and 2 above.

Large Customers with Flat Demand Profiles. Several Council members expressed concern that large customers with a flat demand profile not be subject to the seasonal flat rate. There was no direction provided as to the desired definition of "large customers" or how "flat" was "flat enough." Staff offer the following definition of a "Non-peaking Industrial" class for Council consideration.

*"The 'Non-peaking Industrial' rate would apply to those non-residential users who meet both of the following requirements.*

1. *Have an average winter demand of greater than 100,000 cubic feet per billing cycle for meter reads during the months of December, January, and February.*

2. *Have a peaking factor of no greater than 120%. Peaking factor is defined as the largest single monthly demand for billing cycles with meter reads during June, July, August, and September divided into the average winter demand.”*

Using billing data for the months of December 2006 through February 2007 for the average winter demand and the months of June 2007 through September 2007 for the peak month demand, currently five customers would qualify for this “Non-peaking Industrial” rate category.

**Customers who would qualify for “Non-peaking Industrial”**

Customer	Winter 2006/07 Average, cf/mo	Summer 2007 Peak, cf/mo	Peaking Factor, %
Flummerfelt Mobile Home Park	101,498	100,699	99
Old Orchard Mobile Home Park	146,153	145,500	100
Sauer-Danfoss	277,067	325,500	117
Barilla	378,000	445,200	118
Ames Power Plant	527,733	425,000	81

From the same data, the following five customers would meet the first criteria but have a peaking factor of greater than 120% and would not meet the second criteria.

**Customers who would NOT qualify for “Non-peaking Industrial” based on the proposed “Peaking Factor” criteria**

Customer	Winter 2006/07 Average, cf/mo	Summer 2007 Peak, cu/mo	Peaking Factor, %
USDA – National Veterinary Services Laboratory	124,000	190,000	153
Ball Plastics	182,333	455,000	250
Mary Greeley Medical Center	186,334	373,418	200
University Village	284,500	409,100	144
USDA – National Animal Disease Center	795,159	1,141,664	144

So that Council knows which customers would be just below the threshold proposed for consideration as a “large customer,” the table below identifies those customer accounts who had a winter average demand of between 75,000 and 100,000 cubic feet per month.

**Customers with an average winter demand of between 75,000 and 100,000 cubic feet per month**

Customer	Winter 2006/07 Average, cf/mo	Summer 2007 Peak, cf/mo	Peaking Factor, %
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Ball Plastic	79,070	375,000	474
Hach Chemical	79,570	86,840	109
Arctic Iowa	90,968	279,864	308

The staff recommendation is that, for each facility with an average winter consumption above 100,000 cubic feet per month, the City will calculate a summer peaking factor annually and will automatically assign those with a peaking factor of 120% or less to the "Non-peaking industrial" rate class for the following summer. Similarly, those accounts with a summer peaking factor greater than 120% will be assigned to the general "Nonresidential" rate class for the following summer. New customer accounts with an anticipated winter demand of more than 100,000 cubic feet per month would be evaluated on a case-by-case basis and may be assigned to the "Non-peaking Industrial" rate with supporting justification.

Based on discussions at the March 4 Council meeting, staff is also proposing a revision to the Municipal Code clarifying the number of billing cycles per year and the maximum volume for which the exemption from the sewer use charges would be allowed. This change would bring the ordinance language in line with the original intent of the sewer use exemption, which was for one-time occurrences. While limiting the exemption would generate revenue for the Sewer Fund and not the Water Fund, it is staff's belief that the additional total expense would serve as a deterrent against excessive watering for these accounts. It also eliminates a loophole where the sewer use exemption can be used in lieu of establishing a yard meter water account.

**ALTERNATIVES:**

1. Indicate that no additional changes are desired. The ordinance will then be placed on the April 8 Council meeting for public hearing and first reading.
2. Indicate that "minor" changes to the proposed rate structure are necessary. This would include changes that Council is comfortable reviewing at the time the ordinance is presented for first reading. Staff will make the changes and place the revised ordinance on the April 8 Council meeting for public hearing and first reading.
3. Indicate that "major" changes to the proposed rate structure are necessary. This would include changes that Council would prefer to review again in draft form prior to holding a public hearing and a first reading. Staff will make the changes and bring the ordinance back in a draft form at the April 8 Council meeting. The ordinance could then be placed on the April 22 meeting for the public hearing and first reading. This schedule would still allow the third reading and final adoption prior to June 1, 2008.

**MANAGER'S RECOMMENDED ACTION:**

Reducing the seasonal peak demand for drinking water is an important goal for the water utility. Voluntary conservation continues to be promoted through the Smart Water

program, which encourages conservation as a socially responsible action. The proposed revisions in the water rate structure provide a financial incentive for customers to conserve water.

The ordinance presented in draft form here is intended to implement the Council's direction from the March 4 discussions. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby directing staff to place the draft ordinance on the April 8 Council meeting for public hearing and first reading.

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE TO AMEND THE MUNICIPAL CODE OF THE CITY OF AMES, IOWA, BY REPEALING SECTION 28.201(1)(2)(3) AND (4) AND ENACTING A NEW SECTION 28.201(1)(a)(b)(i)(ii)(a)(b), (2)(a)(b)(i)(ii)(a)(b), (3)(a)(i)(ii)(b)(c)(i)(ii)(a)(b), (4)(a)(i)(ii)(iii)(b)(i)(ii)(a)(b), (5), (6), (7), (8) AND REPEALING 28.304(9) AND ENACTING A NEW SECTION 28.304(9) THEREOF, FOR THE PURPOSE OF WATER RATE STRUCTURE REVISIONS AND THE PURPOSE OF LIMITING THE SEWER USE EXEMPTION; REPEALING ANY AND ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT TO THE EXTENT OF SUCH CONFLICT; PROVIDING A PENALTY; 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 repealing Section 28.201(1)(2)(3) and (4) enacting Section 28.201(1)(a)(b)(i)(ii)(a)(b), (2)(a)(b)(i)(ii)(a)(b), (3)(a)(i)(ii)(b)(c)(i)(ii)(a)(b), (4)(a)(i)(ii)(iii)(b)(i)(ii)(a)(b), (5), (6), (7), (8) and repealing Section 28.304(9) and enacting Section 28.304(9) as follows:

**“Sec. 28.201. WATER RATES AND CHARGES**

The rates and charges for water supplied to consumers by the water utility of the city, to be billed on or after July 1, 2008 are as follows:

(1) **Residential Rates.**

(a) **Availability.** The residential rate shall apply to all customer accounts serving properties that are intended for occupancy by a single family as defined by the Ames Zoning Ordinance, provided that such accounts consist of no more than two dwelling units served by a single water meter or to multiple unit residential structures (such as apartment buildings) where every dwelling unit is separately metered. The rate does not apply to domestic uses that consist of more than two dwelling units served by a single meter or to water accounts that provide service for common areas such as shared laundry facilities or for general property maintenance.

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

- (i) shall be charged a minimum charge based on meter size, and in addition
- (ii) shall be charged for water usage during the billing periods as follows:

(a) for bills mailed on or between July 1 and October 31 (summer period):

\$0.0139 per cubic foot for the first 1000 cubic feet of usage

\$0.0278 per cubic foot for the next 1500 cubic feet of usage

\$0.0417 per cubic foot for all usage over 2500 cubic feet

(b) for bills mailed on or between November 1 and June 30 (winter period):

\$0.0139 per cubic foot

(2) **Non-residential (Commercial) Rates**

(a) **Availability.** The non-residential rate shall apply to all accounts that do not meet the criteria for residential, irrigation and yard water, or non-peaking industrial rates.

(b) **Rate per billing period:** For each monthly billing period a non-residential customer:

(i) shall be charged a minimum charge based on meter size, and in addition

(ii) shall be charged for water usage during the billing periods as follows:

(a) for bills mailed on or between July 1 and October 31 (summer period):

\$0.0188 per cubic foot

(b) for bills mailed on or between November 1 and June 30 (winter period):

\$0.0139 per cubic foot

(3) **Non-Peaking Industrial Rate**

- (a) **Availability.** The non-peaking industrial rate shall be available to all non-residential rate customers who meet the following criteria:
- (i) Average winter usage greater than 100,000 cubic feet per billing period. Average winter usage per billing period will be calculated by taking the sum of the usage during the most previous December, January, and February billing periods and dividing by three.
  - (ii) A summer peaking factor equal to or less than 120%. The summer peaking factor shall be computed by taking the largest consumption from the previous June, July, August, and September billing periods and dividing it by the average winter usage, with the result expressed as a percentage.
- (b) **Application for Non-peaking Industrial Rate.** The City will calculate each year the summer peaking factor for all accounts with an average winter usage of 100,000 cubic feet or greater. Those accounts with a summer peaking factor equal to or less than 120% will be automatically placed in the "non-peaking industrial" rate structure.
- (i) New customer accounts with an anticipated average winter demand of greater than 100,000 cubic feet per month and an anticipated summer peaking factor of equal to or less than 120% will be evaluated on a case-by-case basis and may be assigned to the "non-peaking industrial" rate with supporting justification.
- (c) **Rate per Billing Period.** For each monthly billing period a non-peaking industrial rate customer:
- (i) shall be charged a minimum charge based on meter size, and in addition
  - (ii) shall be charged for water usage during the billing periods as follows:
    - (a) for bills mailed on or between July 1 and October 31 (summer period):  
\$0.0139 per cubic foot
    - (b) for bills mailed on or between November 1 and June 30 (winter period):  
\$0.0139 per cubic foot

(4) **Irrigation and Yard Water Service Rate.**

- (a) **Availability.** The irrigation and yard water rate shall apply to all separately metered water uses that meet one of the following criteria:
- (i) Serves primarily outdoor water uses, such as irrigation systems and outside hose bibs.
  - (ii) Serves cooling towers, spray ponds, evaporative condensers, chillers, or such similar uses where water is used as a medium for cooling.
  - (iii) Serves as a temporary water service, whether for irrigation purposes or for other outdoor uses.
- (b) **Rate per Billing Period.** For each monthly billing period an irrigation and yard water rate customer:
- (i) shall be charged a minimum charge as described below, and in addition
  - (ii) shall be charged for water usage during billing periods as follows:
    - (a) for bills mailed on or between July 1 and October 31 (summer period):  
\$0.0209 per cubic foot for the first 2000 cubic feet of usage  
\$0.0417 per cubic foot for the next 3000 cubic feet of usage  
\$0.0695 per cubic foot for all usage greater than 5000 cubic feet.
    - (b) for bills mailed on or between November 1 and June 30 (winter period):  
\$0.0139 per cubic foot

(5) **Water Rate and Charge Adjustments.** It shall be the duty of the director of water and pollution control to review and recommend to the city council revisions of the rates and charges established and set out in this division at intervals appropriate to provide for the funding needs of the utility.

(6) **Water and irrigation meter minimum charges.** For each monthly billing, each customer shall be charged a minimum monthly charge based on the size of the water meter (s) and/or irrigation meter (s) at each location. The minimum monthly charge may be prorated, based on a 30-day billing period, for the customer's initial and/or final bills, provided that in no case shall the minimum monthly charge be less than three dollars and fifty cents (\$3.50). The minimum monthly charge for each water meter location shall be as follows:

<u>Size of Meter</u>	<u>Minimum Monthly Charge</u>
5/8 inch or 5/8" x 3/4" .....	7.30
3/4 inch .....	14.60
1 inch .....	29.20
1-1/2 inch .....	58.40
2 inch .....	116.80
2 inch, battery of 2 .....	226.30
2 inch, battery of 3 .....	335.80
3 inch .....	233.60
4 inch .....	394.20
6 inch .....	657.00
8 inch .....	1,314.00
10 inch .....	1,971.00

(7) **Multiple dwellings – Mobile home parks.** Multiple dwellings, including mobile home parks, may be serviced from a single water meter. However, there shall be a surcharge added to the water rates set forth above, to be calculates as follows:

For a 5/8 inch meter serving 2 or more dwelling units .....	2.10/month/unit
For a 3/4 inch meter serving 4 or more dwelling units .....	2.10 /month/unit
For a 1 inch meter serving 8 or more dwelling units .....	2.10/month/unit
For a 1-1/2 inch meter serving 16 or more dwelling units .....	2.10/month/unit
For a 2 inch meter serving 30 or more dwelling units .....	63.00/month
for the first 30 units plus \$3.30/month per unit for each additional unit in excess of 30 units	
For a 3 inch or larger meter serving any number of dwelling units .....	2.90/month/unit

For the purposes of this section, a dwelling unit is defined as a self-contained living facility (i.e., including kitchen and bath) such as an apartment or a licensed independent mobile home space.

(8) **Yard meter minimum charges.**

For each monthly billing after July 1, 2000 each customer shall be charged a minimum monthly charge based on the size of the yard meter (s) at each location. The minimum monthly charge for each yard meter location shall be as follows:

<u>Size of Meter</u>	<u>Minimum Monthly Charged</u>
5/8 inch or 5/8" x 3/4" .....	2.75
3/4 inch .....	4.25
1 inch .....	6.00
1-1/2 inch .....	8.25
2 inch .....	11.00
3 inch .....	14.25
4 inch .....	17.75
6 inch .....	21.25
8 inch .....	24.75
10 inch .....	28.25

(Ord. No. 2338, Sec. 1, 4-28-70; Ord. No. 2412, Sec. 2, 9-5-72; Ord. No. 2461, Sec. 3, 12-18-73; Ord. No. 2653, Sec. 2, 5-2-78; Ord. No. 3167, Sec. 1, 4-28-92; Ord. No. 3199, Sec. 1, 9-24-92; Ord. No. 3278, Sec. 1, 5-24-94; Ord. No. 3326, Sec. 1, 5-9-95; Ord. No. 3568, 6-27-00).

**Sec. 28.304. SEWER RATES ESTABLISHED**

\* \* \* \*

(9) Where a 'yard meter' is not installed, but it appears in any month that more than two thousand (2,000) cubic feet of water was used by the customer in a way that the water did not reach the sanitary sewer, that amount of water shall be exempt from the sewer rate on application to the city manager or the city manager's designee. The total exemption allowed under this provision shall not exceed 5,000 cubic feet per calendar year, with the entire exemption granted over no more than two consecutive billing cycles."

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  
000969

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Ann H. Campbell, Mayor