




CITY OF COLUMBIA, MISSOURI

WATER AND LIGHT DEPARTMENT
COLUMBIA TERMINAL RAILROAD

MEMORANDUM

TO: Water and Light Advisory Board

FROM: Tad Johnsen, Water and Light Director 

DATE: April 26, 2013

SUBJECT: Master Meter and Minimum Meter Charges

The Columbia Water & Light Department has never charged multiple minimum charges for water services to locations that supply multiple residential or small commercial facilities through one meter (commonly referred to as master meter). Until the end of fiscal year 1995, the number of units served by a master meter was tracked. Prior to that time, the total usage through a master meter was divided by the number of units. The resulting consumption amount (CCF) was used to determine the amount charged per CCF. At that time, the block structure was declining block where the first 20 CCF was charged the highest rate, so the calculation would generally keep consumption in the highest block for charging. Once CWLD went to flat rates (starting FY96 – ordinance 14620) the tracking of units was unnecessary and was discontinued.

Rational for Minimum Charge – The minimum charge is based on meter size, and does not include any water consumption. The minimum charge policy is designed to recover fixed costs which do not vary with the volume of water used by a customer.

The primary function of the Minimum Charge is to pay for the following:

- 1.) Meter reading and billing – Includes meter readers' salaries, transportation and equipment, forms, office processing staff, reports, postage and supplies.
- 2.) Maintenance and replacement of the meter and other components of the customer service installation. Includes the meter, meter pit, all accompanying fittings, and the service line from the main to the customer's property line.
- 3.) Peak-hour or peak-day usage potential – Based on the amount of water that can flow through the size of meter in one hour or one day.

Increased Conservation – The Rates & Fiscal Planning Division utilize existing data to identify 73 master meter locations with 246 units. Based on the usage data, the average monthly use per unit was 2.5 CCF. This is about 1,870 gallons. This water usage is consistent with what is seen in individually metered apartments. In those situations, the minimum charge is higher than the consumption charge and there is no significant price signal that would impact change. In addition, water charges are bundled with other utilities (electric, sewer, and solid waste) further diluting any price signal. As information, the average residential customer uses 7 CCF or about 5,236 gallons per month.

Cost to Change to Individual Meters – Since existing master meter locations were following City ordinance when developed, it is assumed that the cost for installation of individual meters would be borne by the water utility. At a minimum, it is estimated that each new meter installation would cost the utility \$1,000. This would include the materials and labor necessary to install each new service line, meter pit and meter. This estimate does not include acquisition of additional easements, replacement of landscaping, replacement of paved areas or sidewalks, or any other disturbance to existing installations. As of April 25, 2013, there are 973 master meter customers. It is unknown how many individual units are served by those 973 master meters. If, as has been speculated, there are 10,000 units, the minimum cost to the water utility would be \$10,000,000.

The cost for plumbing the interiors of the structures would be substantially greater than the cost to install the individual meters. While a discussion has not been held with the City Legal Department, it is unlikely there is justification to require owners to cover the cost of the necessary plumbing changes.

Elimination of Master Meter Option for New Construction – Currently the master meter option is a business decision for the developer and part of the evaluation process for a renter. There does not appear to be significant conservation potential. Under a no new master meter policy, there would be additional costs to the water utility (initial installation, on-going meter reading, billing and maintenance); however, the water utility is neutral on this issue since costs are recovered through the minimum charge and consumption charges. It should be pointed out that developers do pay initial System Equity Charges based on the number of units served by the master meter. Their costs would increase because of the additional meter pits and meters that would be installed.

Staff Recommendation –

- 1.) Staff does not believe there is any justification to charge multiple minimum charges to existing master meter locations.
- 2.) Staff believes it would be financially damaging to the utility to require changing existing master meter installations to individual meters.
- 3.) Staff is neutral on the issue of a no new master meter policy.