



Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: October 15, 2018

Re: Electric Meter Standard Change

Executive Summary

This memo is to notify the Council of the electric utilities intent to change the City's Electric Metering Standard. The current standard electric meter used by the electric utility is an Automatic Meter Reading (AMR) style electric meter. AMR electric meters allow meter reading by mobile devices to collect readings. While meter reading will continue to be done by mobile devices, staff is planning to change the electric meter standard to Advanced Metering Infrastructure (AMI) style meters.

Initially, the cost/benefit justified the use of AMR style electric meters. Since then, the costs for AMI style meters have decreased to a point where the cost/benefit justifies a change to the electric meter standard to the AMI style electric meter.

Discussion

Currently, electric meter data is gathered using mobile or "drive by" devices to interface with the AMR meters. The City currently only collects meter data once a month. A collection network has not been set up to collect this information on a more frequent basis.

Initially, the cost/benefit differential between AMR and AMI style electric meters was not worth the additional investment in AMI meters. Since then, costs for AMI style meters have decreased to a point that they are comparable to that of the City's current AMR electric meters. As a result, staff is planning to change its electric meter standard to AMI style electric meters. This change is expected to have a reduction in cost.

With this change, meter workers will be able to use handheld mobile or "drive by" devices to turn on and off electric service instead of physically removing the meter. With the ability to perform remote on/off, we will gain an increased safety for the service workers with the reduction in arc flash exposure. Use of AMI electric meters has already been adopted by many electric utilities and use of these meters will allow future customer benefits and utility programs to be developed.

At this time, the City offers a non-standard meter option for customers that desire to not have an AMR or AMI style meter. Currently, there are 5 customers with non-standard meters. The monthly charge for non-standard meters is currently \$5 more than a standard meter. This charge covers manual reading of electric meter, increased calibration frequency, and checking for manual data errors. A onetime meter conversion charge of \$75 is assessed to cover purchasing, refurbishing, calibrating and testing of non-standard meters, in addition to the cost to change out metering.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Potential Standard Meter Benefits	 Proposed AMI Meter	 Current AMR Meter	 Analog Meter
No meter readers on property	✓	✓	
Outage detection	✓		
Remote On/Off	✓		
Additional Metering data	✓	Partial	
Meter & home communication capability	✓		
More reliable service	✓	✓	
Cost for new installation including meterbase	\$144.80	\$202.10	*

* Requests for non-standard meters do not typically occur with new installations.

Fiscal Impact

Short-Term Impact: NA

Long-Term Impact: NA

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Not Applicable, Secondary Impact: Not Applicable, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Not Applicable, Secondary Impact: Not applicable, Tertiary Impact: Not Applicable



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Legislative History

Date	Action
June 16, 2014	B151-14 amending Chapter 27 of the City Code to establish a nonstandard electric meter option.

Suggested Council Action

Informational only, no action requested.