

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of The)	
Empire District Electric Company and)	
Liberty Utilities (Missouri Water), LLC d/b/a)	<u>File No. AO-2020-0237</u>
Liberty Utilities for Variances to Enable the)	Tariff Filing No. YE-2020-0133
Deployment of Advanced Metering)	Tariff Filing No. YW-2020-0134
Infrastructures for Electric and Water)	Tariff Filing No. YW-2020-0135
Customers)	

STAFF RECOMMENDATION

COMES NOW the Staff of the Missouri Public Service Commission (“Staff”), through Staff Counsel’s Office, and for its *Staff Recommendation*, states as follows:

1. On February 5, 2020, The Empire District Electric Company (“Empire”) and Liberty Utilities (Missouri Water) LLC (“Liberty Water”) (collectively “Liberty” or “Applicants”) filed their *Application for Variance and Approval of Tariffs and Motion for Waiver* (“Application”), requesting a variance from Commission Rule 20 CSR 4240-10.030(28), approval of various tariff sheets, and waiver of the 60 day notice requirement of Commission rule 20 CSR 4240-4.017(1), to aid in Liberty Water’s and Empire’s deployment of Advanced Metering Infrastructure (“AMI”) in their service areas.

2. On February 10, 2020, the Commission issued its *Order Setting Intervention Deadline and Directing Staff Filing*, directing any person or entity wishing to intervene to do so no later than March 11, 2020, and for Staff to file either a status report or a recommendation regarding Liberty’s application and tariffs by the same date. No interested parties filed requests to intervene.

3. On March 11, 2020, Staff filed its *Status Report* informing the Commission of the date by which it believed it could file its Recommendation. The next day,

March 12, 2020, the Commission ordered Staff to file its Recommendation no later than March 17, 2020, at noon.

4. Staff reviewed Liberty's Application, and as explained in Staff's *Memorandum*, attached hereto as Appendix A, recommends the Commission approve Empire's request for a waiver for good cause shown regarding the electric meter testing requirements, as specified in Commission Rule 20 CSR 4240-10.030(28), in anticipation of an AMI deployment beginning in 2020. Further, Staff recommends the Commission approve the tariff sheets submitted by Empire and Liberty Water, which include Remote and On-site Connection/Disconnection fees and Opt-out charges, Opt-out provisions for customers who prefer a standard meter, and specific to the electric tariffs, changes to the meter types offered, to take effect on April 2, 2020.

5. Commission Rule 20 CSR 4240-10.030(28) requires electric utilities to test each of their induction-type meters at least once every 240 months. In light of its expected AMI deployment, the Applicants state that continued testing of meters that are scheduled to be retired and replaced represents an inefficient use of both time and resources, and good cause exists for a variance in that it will allow Empire to avoid unnecessary and redundant testing of meters and allow Empire to conserve and/or reallocate money and resources that would otherwise be expended on meters that will be replaced within the next two years.

6. As more thoroughly explained in Staff's *Memorandum*, Staff agrees good cause exists to grant Empire's requested variance. However, Staff recommends the Commission include in any order approving Empire's request, the following requirements:

- Empire shall, either upon receipt and/or prior to installation, verify the integrity/operation of the new meters.
- Empire shall request an extension of its waiver from the requirements of 20 CSR 4240-10.030(28) if it is later determined that AMI deployment will extend past the first quarter of 2022.
- Empire shall report to Staff annually the total number of meters in-service and its meter testing results for each electric meter tested over the past 240 months to ensure compliance with the meter testing frequency requirements of 20 CSR 4240-10.030(28).

7. The tariff sheets submitted by the Applicants each bear an effective date of April 2, 2020, and allow for its residential customers (both electric and water) to opt out of AMI and for lesser disconnect and reconnect fees related to AMI. The provisions of these tariff sheets are similar to those of other electric utilities in the state. Staff recommends the following tariff sheets for Empire submitted on February 11, 2020, be approved to become effective April 2, 2020:

P.S.C. MO. No. 5, Section 5

- 7th Revised Sheet No. 18, cancelling 6th Revised Sheet No. 18
- 5th Revised Sheet No. 37, cancelling 4th Revised Sheet No. 37
- 7th Revised Sheet No. 11, cancelling 6th Revised Sheet No. 11

P.S.C. MO. No. 5, Section 3

- 6th Revised Sheet No. 5, cancelling 5th Revised Sheet No. 5

Staff also recommends the following tariff sheets for Liberty Water submitted on February 11, 2020, be approved to become effective April 2, 2020:

P.S.C. MO. No. 4, Section 2

- 2nd Revised Sheet No. 6 Cancelling 1st Revised Sheet No. 6
- 1st Revised Sheet No. 3 Cancelling Original Sheet No. 3

5. Staff does not oppose the Applicants' request for a variance of the Commission's 60 day notice requirement.

WHEREFORE, Staff recommends the Commission grant Empire's requested variance from Commission Rule 20 CSR 4240-10.030(28), and approve the various tariff sheets submitted by the Applicants to become effective April 2, 2020, enabling it to deploy AMI in each of its service territories; and grant such other and further relief as the Commission deems just in the circumstances.

Respectfully submitted,

/s/ Mark Johnson

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/s/ Nicole Mers

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**Attorneys for the Staff of the
Missouri Public Service Commission**

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile, or electronically mailed to all parties and/or counsel of record on this 16th day of March 2020.

/s/ Mark Johnson

MEMORANDUM

TO: Missouri Public Service Commission
Case No. AO-2020-0237, File Nos. YE-2020-0133, YW-2020-0134,
and YW-2020-0135
The Empire District Electric Company and Liberty Utilities (Missouri Water)
LLC for Variances to Enable the Deployment of Advanced Metering
Infrastructure for Electric and Water Customers

FROM: Claire M. Eubanks, P.E., Industry Analysis Division
Engineering Analysis Department

/s/ Natelle Dietrich / March 16, 2020
Industry Analysis / Date

/s/ Mark Johnson / March 16, 2020
Staff Counsel's Office / Date

SUBJECT: Staff Recommendation to Approve The Empire District Electric's Request for a
Waiver from Meter Testing Requirements and Associated Tariffs

DATE: March 16, 2020

STAFF RECOMMENDATION

The Staff of the Missouri Public Service Commission ("Staff") recommends that the Missouri Public Service Commission ("Commission") approve The Empire District Electric Company's ("Empire") request for a waiver for good cause shown regarding the electric meter testing requirements, as specified in 20 CSR 4240-10.030(28), in anticipation of an Automated Metering Infrastructure ("AMI") deployment beginning in 2020. In addition Staff recommends the Commission include in its order the following requirements:

- Empire shall, either upon receipt and/or prior to installation, verify the integrity/operation of the new meters.
- Empire shall request an extension of its wavier from the requirements of 20 CSR 4240-10.30(28) if it is later determined that AMI deployment will extend past the first quarter of 2022.

- Empire shall report to Staff annually the total number of meters in-service and its meter testing results for each electric meter tested over the past 240 months to ensure compliance with the meter testing frequency requirements of 20 CSR 4240-10.30(28).

Additionally, Staff recommends the Commission approve the tariff sheets submitted by Empire and Liberty Utilities (Missouri Water) LLC (“Liberty Water”) (collectively, “Companies”), which include Remote and On-site Connection/Disconnection fees and Opt-out charges, Opt-out provisions for customers who prefer a standard meter, and specific to the electric tariffs, changes to the meter types offered, to take effect on April 2, 2020. Empire and Liberty Water are not at this time requesting any waivers from Chapter 13 requirements.

Staff will also point the Commission and Empire to Commission rule 20 CSR 4240-10.30(25) which requires testing of new electric meters before installation or within thirty days after installation. New meters may be placed into service without testing provided that the manufacturer’s seal is not broken. It is unclear whether or not Empire’s anticipated testing procedure will include testing meters when the manufacturer’s seal is broken. Empire has not requested a waiver from 20 CSR 4240-10.30(25). Staff recommends that Empire clarify its internal meter testing plan to ensure all new electric meters are tested if the manufacturer’s seal is broken.

OVERVIEW

Empire and Liberty Water filed their Application for Variance and Approval of Tariffs and Motion for Waiver with regard to deployment of AMI (YE-2020-0133, YW-2020-0134, and YW-2020-0135) on February 5, 2020. On February 10, 2020, the Commission issued an

“*Order Setting Intervention Deadline and Directing Staff Filing*” in which the Commission set a deadline of March 11, 2020 for any party desiring to intervene. No intervention requests have been received. In addition, the Staff was directed to file a recommendation or a status report by March 11, 2020. Staff filed a status report indicating it expects to file its recommendation by March 17, 2020.

Empire and Liberty Water are current on their annual reports and are not delinquent on any assessment. Staff is not aware of any other matter before the Commission that affects or is affected by this filing.

DISCUSSION

Empire will begin AMI deployment in the second quarter of 2020 and expects it to continue into the first quarter of 2022.¹ Liberty Water will begin AMI deployment in approximately September 2020. The Companies assert AMI meters will allow two-way communication between the utilities and their customers. Potential benefits include reducing bill estimation and operating costs, better detection of theft of service, improved outage detection (leak detection for water) and notification, customer usage analytic tools, and support for future time-of-use rate structures.

To support AMI meter deployment Empire and Liberty Water are also in the process of designing a meter testing lab, designing IT system integrations, and the customer portal. Deployment of these supporting improvements is taking place in conjunction with AMI deployment.²

¹ Response to Staff Data Request 6 indicates the current deployment schedule may continue into 1st quarter 2022.

² Response to Staff Data Request 5.

Empire will be deploying Itron Openway Riva meters for its electric service. The Itron meters utilize Radio Frequency or Power Line Carrier meter mesh with cellular backhaul from Cisco connected grid router devices. The AMI meters will communicate with Itron meter data management systems.³

Liberty Water will be deploying Sensus iPerl meters with the Itron Openway Riva 500W ERT module. The ERT module will communicate using radio frequency with a neighboring electric meter to allow for communication with the meter data management systems.⁴

Empire and Liberty Water provided a break-down of opt-out charges applicable to customers wishing to continue to use a manually read meter.⁵ These charges are identical to the fees proposed by Ameren Missouri (one-time setup fee of \$150.00 and a monthly recurring fee of \$45.00 per month).

Empire proposed revisions to the electric tariff sheet No. 18, changing the requirements for when a self-contained meter is offered versus a current transformer meter based on the size of the service (greater than 320 Amperes).⁶ For existing customers with properly sized breakers for a 400 Ampere service, no change will be required for their metering installation. Empire has approximately 3,818 customers who have 400 Ampere service with self-contained meters. For these customers, Empire will install an adapter at no cost to the customer to support the new AMI meter.

³ Response to Staff Data Request 3.

⁴ *Id.*

⁵ Response to Staff Data Request 7

⁶ A current transformer meter (CT meter) is a meter used in conjunction with an instrument transformer.

Commission rule 20 CSR 4240-10.030(28) requires electric utilities to test each of their induction-type meters⁷ at least once every 240 months. Empire provided meter testing reports dating back to 1980. Over the period from 2000 through 2019, Empire tested 77,627 unique meters⁸ for various reasons including for meter sampling. On average, Empire has had 147,520 single phase meters in-service from 2017 through 2020.⁹ Based on the information provided to date, it is not readily apparent that Empire is complying with the testing frequency required by 20 CSR 4240-10.030(28). However, Empire is sampling meters annually and upon customer request. Staff recommends that the Commission order Empire to report to Staff annually the total number of meters in-service and its meter testing results for each electric meter tested over the past 240 months to ensure compliance with the meter testing frequency requirements of 20 CSR 4240-10.30(28).

Commission rule 20 CSR 4240-10.30(25) requires testing of new electric meters before installation or within thirty days after installation. New meters may be placed into service without testing provided that the manufacturer's seal is not broken. It is unclear whether or not Empire's anticipated testing procedure will include testing meters when the manufacturer's seal is broken. Empire has not requested a waiver from 20 CSR 4240-10.30(25) and further states in response to Staff Data Request 2 that "For the purposes of AMI deployment, LU (Empire) will not perform any sample testing of received goods, except in cases where regulatory restrictions / considerations require LU (Empire) to modify this requirement."

⁷ For meters manufactured during and since 1937. The testing frequency for meters manufactured prior to 1936 is more frequent.

⁸ Value represents all jurisdictions. Based on data from Data Request 1.

⁹ Based on data from Data Request 1.

Staff supported waiver requests from other electric utilities in part because the proposals included meter integrity checks occurring either upon receipt and/or prior to installation.¹⁰ Staff recommends that Empire modify its anticipated testing plan to ensure all new electric meters are tested if the manufacturer's seal is broken to ensure compliance with Commission rule 20 CSR 4240-10.30(25). Further, Staff recommends the Commission order Empire, either upon receipt and/or prior to installation, to verify the integrity/operation of the new meters.

Staff recommends the Commission approve Empire's requested waiver for good cause shown regarding the electric meter testing requirements for a limited period. In addition Staff recommends the Commission include in its order the following requirements:

- Empire shall, either upon receipt and/or prior to installation, verify the integrity/operation of the new meters.
- Empire shall request an extension of its waiver from the requirements of 20 CSR 4240-10.030(28) if it is later determined that AMI deployment will extend past the first quarter of 2022.
- Empire shall report to Staff annually the total number of meters in-service and its meter testing results for each electric meter tested over the past 240 months to ensure compliance with the meter testing frequency requirements of 20 CSR 4240-10.030(28).

¹⁰ Case File No. EE-2019-0383, In the Matter of Union Electric Company d/b/a Ameren Missouri's Request for a Waiver of Various Tariffs and Regulations to Enable the Deployment of Automated Metering Infrastructure Beginning in 2020, *Staff Memorandum Recommending Approval of Waiver Request*, Page 6;
Case File No. EO-2014-0128 In the Matter of the Application of Kansas City Power & Light Company for a Modification of Order Granting Variance in Case No. EO-91-224 for Good Cause Shown, *Staff Memorandum Recommending Approval of Application*, Page 4

Tariff:

Staff recommends the following tariff sheets for Empire filed on February 11, 2020, be approved to become effective April 2, 2020:

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5th Revised Sheet No. 37, cancelling 4th Revised Sheet No. 37
7th Revised Sheet No. 11, cancelling 6th Revised Sheet No. 11

P.S.C. MO. No. 5, Section 3

6th Revised Sheet No. 5, cancelling 5th Revised Sheet No. 5

Staff recommends the following tariff sheets for Liberty Water filed on February 11, 2020, be approved to become effective April 2, 2020:

P.S.C. MO. No. 4, Section 2

2nd Revised Sheet No. 6 Cancelling 1st Revised Sheet No. 6
1st Revised Sheet No. 3 Cancelling Original Sheet No. 3

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of The Empire)	<u>Case No. AO-2020-0237</u>
District Electric Company and Liberty Utilities)	Tariff No. YE-2020-0133
(Missouri Water), LLC d/b/a Liberty Utilities for)	Tariff No. YW-2020-0134
Variances to Enable the Deployment of Advanced)	Tariff No. YW-2020-0135
Metering Infrastructure for Electric and Water)	
Customers)	

AFFIDAVIT OF CLAIRE EUBANKS, PE

State of Missouri)
) ss
County of Cole)

COMES NOW Claire Eubanks, PE, and on her oath declares that she is of sound mind and lawful age; that she contributed to the attached *Staff Recommendation in Memorandum form*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Claire M Eubanks
Claire Eubanks

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 16th day of March, 2020.

Dianna L. Vaught
NOTARY PUBLIC

