COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY-AMERICAN WATER COMPANY FOR AN ADJUSTMENT OF RATES, A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR INSTALLATION OF ADVANCED METERING INFRASTRUCTURE, APPROVAL OF REGULATORY AND ACCOUNTING TREATMENTS, AND TARIFF REVISIONS	)	CASE NO. 2023-00191

O R D E R

On July 7, 2023,[1] Kentucky-American Water Company (Kentucky-American), pursuant to KRS 278.180, KRS 278.190, and 807 KAR 5:001, Section 16(1)(b)(1), filed an application requesting (1) an increase to its rates; (2) approval of a Certificate of Public Convenience and Necessity (CPCN) for Advanced Metering Infrastructure (AMI) meters pursuant to KRS 278.020(1) and 807 KAR 5:001, Section 15(2); (3) approval of a proposed modification to its Qualified Infrastructure Program (QIP); (4) approval to establish regulatory assets or liabilities; (5) establishment of an alternative level of unaccounted for water loss; (6) approval of a universal affordability tariff; and (7) approval of its revised tariffs. This Order will only address the request for approval of a CPCN for

[1] Kentucky-American tendered its application on June 30, 2023. By letter dated July 7, 2023, the Commission rejected the application for filing deficiencies. The deficiencies were subsequently cured, and the application was deemed filed on July 7, 2023. On July 14, 2023, Kentucky-American filed a motion for a ruling from the Commission regarding sufficiency of the June 30, 2023 application. On July 25, 2023, the Commission entered an Order denying Kentucky-American's motion and finding the application deemed filed on July 7, 2023.

AMI meters pursuant to KRS 278.020(1) and 807 KAR 5:001, Section 15(2). All other requests will be addressed in a separate Order.

BACKGROUND

Kentucky-American, a wholly owned subsidiary of American Water Works Company, Inc. (American Water), is a jurisdictional utility that distributes and sells water across three divisions, including its Central Division, which consists of Bourbon, Clark, Fayette, Harrison, Jessamine, Nicholas, Scott, and Woodford counties; its Northern Division, which consists of Gallatin, Owen, Grant, and Franklin counties; and its Southern Division, which consists of Rockcastle and Jackson counties.[2] Kentucky-American provides water service to more than 138,000 customers throughout its three divisions.[3]

PROCEDURE

By Order entered July 21, 2023, the Commission suspended the proposed rates up to and including February 5, 2024. There are two intervenors in this matter: the Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General), and Lexington Fayette Urban County Government (LFUCG). The Attorney General and LFUCG (jointly, Attorney General/LFUCG) entered into a joint participation agreement and co-sponsored testimony from one witness. Kentucky-American responded to three requests for information.[4] Following discovery, the Commission held an evidentiary hearing on December 11, 2023, and December 13,

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[2] Application at 2.

[3] Direct Testimony of Jeffrey Newcomb (Newcomb Direct Testimony) (filed June 30, 2023) at 4.

[4] Kentucky-American's Response to Commission Staff's First Request for Information (Staff's First Request) (filed July 18, 2023); Kentucky-American's Response to Commission Staff's Second Request for Information (Staff's Second Request) (filed Aug. 18, 2023); Kentucky-American's Response to Commission Staff's Third Request for Information (Staff's Third Request) (filed Sept. 21, 2023).

2023, in Frankfort, Kentucky. All parties filed simultaneous post-hearing briefs on January 5, 2024. Kentucky-American and LFUCG filed response briefs on January 12, 2024. On February 5, 2024, Kentucky-American filed a notice of intent to implement proposed rates on or after February 6, 2024.[5] The Commission issued an Order on February 9, 2024, requiring Kentucky-American to maintain its records in such a manner as to allow it, the Commission, or any customer to determine the amounts to be refunded, and to whom, in the event a refund is ordered.[6]

LEGAL STANDARD

The Commission's standard of review regarding a CPCN is well settled. Under KRS 278.020(1), no utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission. To obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.[7]

"Need" requires:

> [A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated.
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> [T]he inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management or disregard of the rights of consumers, persisting over such a period of time as to

[5] Kentucky-American's Notice of Intent to Implement Proposed Rates (filed Feb. 5, 2024), unnumbered page 1.

[6] Order (Ky. PSC Feb. 9, 2024) at 3.

[7] *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 252 S.W.2d 885 (KY. 1952).

> establish an inability or unwillingness to render adequate service.[8]

"Wasteful duplication" is defined as "an excess of capacity over need" and "an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties."[9] To demonstrate that a proposed facility does not result in wasteful duplication, the Commission has held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.[10] Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication.[11] All relevant factors must be balanced.[12]

CPCN FOR AMI METERS

In its application, Kentucky-American requested a CPCN for cellular AMI meters. At the time of filing this application, Kentucky-American explained that its current system consisted of approximately 142,000 meters and almost all are installed with AMR endpoints with the exception of 248 meters that are equipped with Badger cellular AMI endpoints.[13] Kentucky-American explained that it follows a periodic meter replacement

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[8] *Kentucky Utilities Co. v. Pub. Serv. Comm'n* at 890.

[9] *Kentucky Utilities Co. v. Pub. Serv. Comm'n* at 890.

[10] Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005).

[11] *See Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 390 S.W.2d 168, 175 (Ky. 1965). *See also* Case No. 2005-00089, *The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct a 138 kV Electric Transmission Line in Rowan County, Kentucky* (Ky. PSC Aug. 19, 2005).

[12] Case No. 2005-00089, Aug. 19, 2005 Order at 6.

[13] Application, Exhibit A at 8.

program to renew aging meters and endpoints.[14] The Commission granted Kentucky-American a deviation of 807 KAR 5:066, Section 16(1) in Case No. 2009-00253 permitting Kentucky-American to keep its 5/8-inch meters in service for 15 years without testing for accuracy.[15] However, Kentucky-American stated that it has had an increase in meter reading challenges and an increase in corresponding unscheduled meter and endpoint replacements, and therefore plans to revert back to a ten-year target for 5/8-inch meter and endpoint replacement.[16] Kentucky-American noted that as of May 2023, it assessed that more than 71,000 of its 5/8-inch meters or approximately half of its meters are now at, or past, the ten-year target.[17] Additionally, Kentucky-American explained that almost all of its meters, endpoints, and other necessary equipment will need replacing over the next decade as it meets or exceeds its useful life.[18]

Kentucky-American explained that after evaluating a variety of metering technologies in terms of functionality and costs, cellular AMI would be the preferred technology due to the fact that cellular networks are regularly updated to keep up with the latest technologies and provide greater coverage, reliability and security than fixed-network systems.[19] Additionally, Kentucky-American argued that a fixed-network system requires that a utility maintain and periodically update the system, leading to increased

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[14] Application, Exhibit A at 10.

[15] Case No. 2009-00253, *Kentucky-American Water Company's Request for Permission to Deviate from 807 KAR 5:066, Section 16(1)* (Ky. PSC, Oct. 5, 2011), Order.

[16] Application, Exhibit A at 10.

[17] Application, Exhibit A at 11.

[18] Kentucky-American's Post-Hearing Brief (filed Jan. 5, 2024) at 76.

[19] Application, Exhibit A at 5.

and ongoing capital costs.[20] Kentucky-American noted that the benefits of AMI include improving the effectiveness of its operations and customer service, meeting customers' expectations, as well as increased water conservation.[21]

Kentucky-American claimed that it has demonstrated a need for the AMI system in view of the long-range planning necessary in the public utility field.[22] Kentucky-American argued that a "'substantial inadequacy of existing service' is not required to be a currently existing deficiency, but may be a deficiency expected a number of years into the future 'in view of the long range planning necessary in the public utility field.'"[23] Kentucky-American explained that it is not planning to accelerate the installation of AMI meters and that it would be deployed over a ten-year schedule as it completes normal, scheduled, periodic replacement of its existing AMR meters at the end of their service lives.[24] Kentucky-American claimed that a transition to AMI meters over the next decade will result in savings for meter reading labor, field service representative labor, associated vehicle costs, and will improve employee safety, enhance customer service, operational efficiencies, and environmental benefits.[25] Additionally, Kentucky-American claimed that AMI meters will allow it to respond more quickly to potential issues, allow customers to have better access to information related to water usage, improve how customers

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[20] Application, Exhibit A at 5.

[21] Application, Exhibit A at 6.

[22] Kentucky-American's Post-Hearing Brief at 75.

[23] Kentucky-American's Post-Hearing Brief at 74, citing *Pub. Serv. Comm'n*, 390 S.W. 2d 168, 171 (Ky. 1965).

[24] Application, Exhibit A at 12.

[25] Application, Exhibit A at 3.

understand their water usage, empower customers to make changes in their habits and behaviors to increase water conservation, and increase billing accuracy.[26]

Kentucky-American claimed it has demonstrated that the AMI system will not result in wasteful duplication. Kentucky-American stated it considered the following alternatives: (1) continue with AMR Technology; (2) deploy Cellular AMI Technology; (3) deploy Hybrid AMI Technology; and (4) deploy Fixed-Network AMI Technology.[27] Kentucky-American stated that Cellular AMI was selected as the preferred approach because it provided the best cost net of benefit proposition for long-term, more reliability, constant availability of meter reading and customer usage data, safety, customer service, operation efficiency, and environmental benefits.[28] Kentucky-American stated that it considered all reasonable alternatives and that while there was an alternative that had a marginally lower cost, it selected Badger AMI system because the widespread benefits of AMI made it the best long-term option and least cost option.[29] Additionally, Kentucky-American selected Badger from two preapproved vendors (Neptune and Badger) selected by American Water from a 2016 request for proposal (RFP).[30]

Kentucky-American stated it evaluates the performance and renegotiates pricing terms with its vendors every two to three years.[31] Kentucky-American estimated that the total capital expenditures of the AMI project would be $114,011,620 and that deployment

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[26] Application, Exhibit A at 6-7.

[27] Application, Exhibit A at 13.

[28] Kentucky American's Response to Staff's Second Request, Item 10.

[29] Application, Exhibit A at 20 and Kentucky-American's Post-Hearing Brief at 78-79.

[30] Kentucky-American's Response to Staff's Second Request, Item 11.

[31] Kentucky-American's Response to Staff's Second Request, Item 11.

would begin in 2024.[32] Kentucky-American also proposed a tariff provision to allow customers to opt out of an AMI meter for a $28 monthly fee.

In the cost-benefit analysis, Kentucky-American reflected depreciation, property taxes, pre-tax rate of return, and specifically for Neptune Hybrid alternative, the expense associated with the fixed network as capital-related cost assumptions.[33] Additionally, Kentucky-American utilized a net present value (NPV) of 20 years for the AMI system, which resulted in a 20-year annual cost net of benefits of $3.1 million.[34] Kentucky-American explained that it utilized an NPV of 20 years because the lids that must be purchased during the first replacement cycle are not planned for routine replacement within the measured period and that neither field service labor benefits, meter reading benefits, nor vehicle benefits are fully reflected for investments made in the first ten years.[35] Therefore, due to those factors, 20 years was the minimum amount of time that seemed reasonable for the cost benefit analysis and associated NPVs in order to create a reasonable match between costs and benefits.[36] Kentucky-American further stated that the improvement associated with AMI justifies the slight difference in cost.[37]

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[32] Kentucky-American's Response to Attorney General's First Request for Information (filed Aug. 18, 2023), Item 39(c). Kentucky-American noted that the capital expenditures include both the removal and installation costs.

[33] Application, Exhibit A at 17 and Figure 9.

[34] Application, Exhibit A at 19.

[35] Kentucky-American's Response to Staff's Second Request, Item 17.

[36] Kentucky-American's Response to Staff's Second Request, Item 17.

[37] Kentucky-American's Post-Hearing Brief at 79.

The Attorney General argued that Kentucky-American failed to meet its burden of proof under KRS 278.020(1) and has failed to satisfy the need component.[38] The Attorney General stated that none of the alleged benefits demonstrate there is an inadequacy of existing service, let alone a substantial inadequacy of existing service as required by the statute, and there has been no evidence in the record to indicate that current meters are overall not providing reliable service to customers.[39] Additionally, the Attorney General noted that the proposed AMI plan will result in the replacement of approximately 58.55 percent of all of Kentucky-American's 5/8-inch meters from 2024-2026.[40] The Attorney General argued that a replacement of almost 60 percent of meters over three years constitutes an accelerated pace, despite Kentucky-American stating it would not be replacing meters at an accelerated pace.[41] The Attorney General asserted that if Kentucky-American is allowed to revert back to a ten-year replacement cycle for 5/8-inch meters instead of the 15-year replacement cycle currently in place, customers will be required to pay for the substantial amounts still owed on existing meters and the accelerated replacement of the new meters.[42] The Attorney General argued that while Kentucky-American claims there are no stranded investments, that is only accurate if the Commission grants Kentucky-American's proposal to drastically increase and accelerate the depreciation rates for existing meters.[43]

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[38] Attorney General's Post-Hearing Brief (filed Jan. 5, 2024) at 26-28.

[39] Attorney General's Post-Hearing Brief at 26.

[40] Attorney General's Post-Hearing Brief at 27.

[41] Attorney General's Post-Hearing Brief at 27.

[42] Attorney General's Post-Hearing Brief at 27.

[43] Attorney General's Post-Hearing Brief at 27.

The Attorney General further argued that Kentucky-American has not met the wasteful duplication requirement because it limited its review to Badger and Neptune, the cost benefit analysis demonstrates that the existing AMR technology has the least cost net value, and that Kentucky-American did not include any potential savings attributable to the proposed AMI project in the proposed revenue requirement in the pending case.[44]

LFUCG recommended that meter depreciation expense be reduced from $2,243,128 to $326,595, a reduction of $1,916,533 to reflect a more reasonable approach to Kentucky-American's routine meter replacement schedule.[45] It also stated that the monthly service charge should not be increased because meter expenses are primarily allocated to the monthly service charge.[46]

Kentucky-American argued that it is no longer experiencing a reliable 15-year life for its meters and that the reliable life has been closer to ten years.[47] Additionally, Kentucky-American argued that it would be imprudent and irresponsible for it to keep meters in the field beyond their observed useful life and therefore, the Commission should not be persuaded by the arguments of the Attorney General and LFUCG and adopting the intervenor's arguments would penalize Kentucky-American and its customers.[48] Kentucky-American noted that it is not accelerating meter replacements and is only proposing to replace meters in a timely fashion to preserve and support reliability of

[44] Attorney General's Post-Hearing Brief at 28-29.

[45] LFUCG's Post-Hearing Brief (filed Jan. 5, 2024) at 5.

[46] LFUCG's Post-Hearing Brief at 6.

[47] Kentucky-American's Reply Brief (filed Jan. 12, 2024) at 3.

[48] Kentucky-American's Reply Brief at 3.

service which will be done without regard for whether new meters use AMI or AMR communication technology.[49]

Based upon the case record and being otherwise sufficiently advised, the Commissions finds that Kentucky-American failed to demonstrate a need for AMI meters for the following reasons. The Commission notes that it cannot approve a CPCN until both the "need" and "absence of wasteful duplication" prongs are satisfied. While Kentucky-American provided evidence that roughly 42,000 meters of approximately 142,000 total meters will need replacing in 2024,[50] it has failed to provide sufficient evidence that there is a substantial inadequacy of existing service. Instead, the only evidence Kentucky-American provided was that a large number of current meters are nearing the end of their useful lives and would need replacing. Kentucky-American also stated that there is currently no inadequacy of existing service, and its current meters are accurate.[51]

In previous cases, the Commission found that the existing meters used by the electric cooperatives were either discontinued or in the near future would no longer be manufactured or supported, and thus, the utilities established a need to upgrade the metering system in order to provide adequate, reliable service, and that the proposed AMI

[49] Kentucky-American's Reply Brief at 4.

[50] Kentucky-American's Post-Hearing Brief at 76.

[51] Melissa Schwarzell Hearing Video Transcript (HVT) of the Dec. 11, 2023 Hearing at 09:50:08-09:51:08.

systems were the least-cost alternative to address the utilities' metering needs.[52] The Commission acknowledges there is an operational difference between AMI meters used in water and electric utilities, but the requirements of KRS 278.020(1) remain the same regardless of the type of utility. Kentucky-American failed to provide any evidence its current meters will no longer be manufactured or supported in the near future or provided sufficient evidence of any inadequacy of existing service. Rather, Kentucky-American presented evidence that the current AMR model of meters are still available and not obsolete.[53]

Additionally, the Commission is not persuaded by Kentucky-American's argument that 20 years was the minimum amount of time for the cost benefit analysis and associated NPVs in order to create a reasonable match between costs and benefits. The Commission disagrees with the use of an NPV of 20 years because Kentucky-American's only argument for utilizing it was because benefits were not expected to be reflected until year 11. The Commission notes that Kentucky-American's cost-benefit analysis accurately and realistically reflected AMI benefits within the first ten years. The AMI meters only had a ten-year useful life, and therefore, the Commission evaluated the benefits of the meters within the useful life.

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[52] Case No. 2017-00419, *Application of Grayson Rural Electric Cooperative Corporation of Grayson, Kentucky, for Commission Approval Pursuant to 807 KAR 5:001 and KRS 278.020 for a Certificate of Public Convenience and Necessity to Install an Advanced Metering Infrastructure (AMI) System* (Ky. PSC July 16, 2018), Order at 7-8; Case No. 2018-00056, *Application of Cumberland Valley Electric, Inc. for Commission Approval for a Certificate of Public Convenience and Necessity to Install an Advanced Metering Infrastructure (AMI) System Pursuant to 807 KAR 5:001 and KRS 278.020* (Ky. PSC July 9, 2018), Order at 11 ; Case No. 2016-00077, *Application of Licking Valley Rural Electric Cooperative Corporation for an Order Issuing a Certificate of Public Convenience and Necessity* (Ky. PSC Jan. 10, 2017) Order at 5-6.

[53] Melissa Schwarzell HVT of the Dec. 11, 2023 Hearing at 09:50:15-09:50:45.

The Commission also disagrees with Kentucky-American's arguments that AMI benefits are not expected to fully begin until years 11 through 20. The Commission notes that a ten-year NPV would not understate the benefits because Kentucky-American decided not to accelerate AMI deployment and attempt to reflect those benefits any earlier. The Commission agrees with the Attorney General and is skeptical that replacing almost 60 percent of the existing meters in three years is not considered accelerated replacement. The Commission notes that Kentucky-American stated that it could theoretically install AMI meters throughout its entire service territory by 2027, presuming adequate availability of labor and material resources and adequate allocation of capital.[54] The Commission notes that it is apparent that Kentucky-American could complete AMI installation within a shorter time, other than ten years, and still accurately reflect the AMI benefits if it requested and budgeted the appropriate resources to do so. Additionally, if Kentucky-American were to replace meters in a timely fashion, then it should have considered an accelerated replacement so that the meters could be installed in a reasonable and timely manner and provide maximum benefits for the duration of their useful lives. Therefore, the Commission finds that a 20-year NPV potentially significantly overstates the benefits of the cellular AMI meters within the cost-benefit analysis. Additionally, the Commission agrees with the Attorney General's argument that there would be potential stranded costs associated with AMI because Kentucky-American failed to provide sufficient evidence otherwise. The Commission notes that Kentucky-American only stated that it does not anticipate stranded assets rather than providing sufficient evidence that there would be no stranded assets associated with AMI.

[54] Kentucky-American's Response to Staff's First Request, Item 16(b).

The Commission also finds that Kentucky-American failed to prove an absence of wasteful duplication. Pursuant to KRS 278.020(1), a utility must, among other things, prove an absence of wasteful duplication, and demonstrate a thorough review of all reasonable alternatives has been performed.[55] While Kentucky-American considered the four different meter technology options mentioned above, it only reviewed pricing information from two vendors that its parent company, American Water, selected from a 2016 Request for Proposals (RFP).[56] The Commission has serious concern that a thorough review of all reasonable alternatives was not conducted and that Kentucky-American only considered two vendors which were selected by its parent company approximately eight years ago. The Commission expects Kentucky-American to review all viable meter options when considering AMI and cautions Kentucky-American on how it selects it vendors during the RFP process.

For the reasons stated above, the Commission finds that the CPCN for AMI meters should be denied. Additionally, the Commission finds that Kentucky-American's proposed tariff provision that would allow customers to opt-out of an AMI meter for a $28 monthly fee is moot and therefore should be denied.

IT IS THEREFORE ORDERED that:

1. Kentucky-American's request for a CPCN for AMI meters is denied.

2. Kentucky-American's proposed $28 monthly fee to opt-out of an AMI meter is moot and therefore denied.

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[55] Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005).

[56] Kentucky American's Response to Staff's Second Request, Item 11.

3. Nothing in this Order shall be construed as prohibiting the Commission from issuing further Orders in this matter.

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PUBLIC SERVICE COMMISSION

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Chairman

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Vice Chairman

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Commissioner

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