

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

JOINT APPLICATION OF WARREN COUNTY)
WATER DISTRICT, SIMPSON COUNTY WATER)
DISTRICT, AND BUTLER COUNTY WATER) CASE NO. 2011-00220
SYSTEM, INC. FOR A DEVIATION FROM)
APPROVED METER TESTING PROGRAM)

ORDER

Warren County Water District, Simpson County Water District, and Butler County Water System, Inc. ("Joint Applicants") have applied to the Commission for permission to deviate from 807 KAR 5:066, Section 16(1), to allow certain 5/8- x 3/4-inch meters to remain in service without testing for a period of 21 years. At issue is whether the proposed extension of the period in which no meter testing is required is lawful and reasonable. Finding it is neither lawful nor reasonable, we deny the Joint Applicants' application but authorize an extension of the "no testing period" to 15 years.

BACKGROUND

Warren County Water District ("Warren District"), a water district organized pursuant to KRS Chapter 74, owns and operates a water distribution system that serves approximately 25,115 customers in Warren County, Kentucky.¹ It purchases its total water requirements from Bowling Green Municipal Utilities.²

Simpson County Water District ("Simpson District"), a water district organized pursuant to KRS Chapter 74, owns and operates a water distribution system that serves

¹ *Report of Warren County Water District to the Kentucky Public Service Commission for the Year Ended December 31, 2011 (Water Division) ("Warren Annual Report")* at 5 and 27.

² *Id.* at 29-31.

approximately 3,247 customers in Simpson County, Kentucky.³ It purchases its total water requirements from Whitehouse Utility District.⁴ Simpson District has a joint operations agreement with Warren District that provides for Warren District to coordinate and supervise Simpson District's operations.

Butler County Water Systems ("Butler Water"), a water association organized pursuant to KRS Chapter 273, owns and operates a water treatment and distribution system that serves approximately 4,783 customers in Butler County, Kentucky.⁵ Butler Water has a joint operations agreement with Warren District that provides for Warren District to coordinate and supervise Butler Water's operations.

Administrative Regulation 807 KAR 5:066, Section 16(1), governs the testing of water meters. It provides, among other things, that a water utility shall test all of its 5/8- x 3/4-inch meters periodically so that no such meter shall remain in service without test for a period longer than ten years. From as early as 1959⁶ until June 1992, the Commission had by administrative regulation required water utilities to test their 5/8- x 3/4-inch meters at least once every five years for compliance with certain accuracy standards. In 1992, the Commission extended the time for testing to ten years.⁷

³ *Report of Simpson County Water District to the Kentucky Public Service Commission for the Year Ended December 31, 2011* ("Simpson Annual Report") at 5 and 27.

⁴ *Id.* at 29-31. White House Utility District, a water and sewer district organized under Tennessee law, provides water and sewer service to areas of north central Tennessee. It delivers water to a metering point at the Kentucky-Tennessee border for sale to Simpson District.

⁵ *Report of Butler County Water System, Inc. to the Kentucky Public Service Commission for the Year Ended December 31, 2011* ("Butler Annual Report") at 5 and 27.

⁶ PSC: W-1, Rules Governing Water Utilities, Rule XVII (Nov. 28, 1959).

⁷ 18 Ky.R. 3388.

The Joint Applicants have long sought to extend the period for required testing of their water meters. In Case No. 89-110,⁸ they requested a deviation from the then-existing requirement that water meters be tested every five years to permit testing at 14-year test intervals. In support of their request, the Joint Applicants argued that improvements in meter technology supported extension of the testing interval and noted that most meter manufacturers were warranting the operation of their meters for periods of up to 15 years. They offered a statistical study that indicated the revenue gained from meter testing did not offset the expense of testing and meter replacement until meters have been in service at least 14 years.

While we extended the testing interval to ten years, we noted that a purpose of the meter testing requirements was “to ensure that water consumption is accurately measured so that the customer pays and the utility collects no more and no less for the service being rendered.”⁹ It found that a ten-year test interval would balance the customer’s interest in meter accuracy with the Joint Applicants’ cost-benefit concerns.¹⁰

In Case No. 97-434,¹¹ the Joint Applicants again applied for a deviation from the Commission’s periodic-testing regulation. In support of this application, the Joint Applicants presented an internally performed analysis that the cost-effective periodic

⁸ Case No. 89-110, *The Application of Butler County Water System, Inc., Grayson County Water System, Simpson County Water District, and Warren County Water District for a Deviation from 807 KAR 5:066, Section 17(1) Regarding Meter Testing* (Ky. PSC filed Apr. 28, 1989).

⁹ Case No. 89-110, Order of Jan. 31, 1992 at 2.

¹⁰ *Id.* Alleging that the Commission’s Order was unreasonable and arbitrary, the Joint Applicants unsuccessfully brought an action for review of the Commission’s Order. *Butler County Water System, Inc. v. Pub. Serv. Com’n*, No. 92-CI-00243 (Franklin Cir. Ct. June 15, 1994), *aff’d* No. 94-CA-1711-MR (Ky. Ct. App. July 28, 1995).

¹¹ Case No. 97-434, *The Joint Application of Warren County Water District, Simpson County Water District, Grayson County Water District, and Butler County Water Systems, Inc., for a Deviation from 807 KAR 5:066, Section 16(1) Regarding Meter Testing* (Ky. PSC Apr. 28, 1999).

meter-testing frequency for their operation is 13 years. They proposed to institute a meter testing and replacement program to ensure that no 5/8- x 3/4-inch meter remained in service beyond 13 years of age. We approved the requested deviation.

In Case No. 2003-00391,¹² the Joint Applicants proposed to establish a sample group of approximately 200 meters from each year of manufacture from 1990 to 1997 that would remain in service up to 20 years, to test these meters in 2010, and to then report the test results to the Commission. They also proposed to test a sample of meters from each year of manufacture older than 13 years and keep that age group of meters in service until fewer than 80 percent of the meters in the sample test below repaired meter accuracy. We approved testing the sample group but denied the request that meters older than 13 years be permitted to remain in service until fewer than 80 percent of the meters in the sample tested below repaired meter accuracy limits.

CURRENT PROPOSAL

In their current application, the Joint Applicants propose that their meters, all of which are Sensus Model SR II meters,¹³ be permitted to remain in service for a period of 21 years without testing. They further propose that all meters, after being in service for 21 years, will be removed and either sold or rebuilt, with a sample of those meters tested for accuracy. The Joint Applicants have revised their earlier study to reflect the

¹² Case No. 2003-00391, *The Joint Application of Warren County Water District, Simpson County Water District, and Butler County Water System, Inc., for a Deviation from Approved Meter Testing Program* (Ky. PSC Jan. 31, 2005).

¹³ Engineering Staff, Butler, Simpson Warren County Water Districts, "Revised Determination of Cost-Effective Meter Testing Frequency" (May 16, 2011) (*hereinafter* "Revised Determination") at 1-2 (filed June 29, 2011). The Joint Applicants have tested only Sensus Model SR II meters. Joint Applicants' Response to Commission Staff's First Request for Information, Item 7. Joint Applicants anticipate purchasing only Sensus Model SR II meters for the immediate future. *Id.* Item 5.

results of sample meter testing on meters that were in the sample group whose creation the Commission authorized in Case No. 2003-00391 and that have been in service for 13 to 21 years. The results of this testing show that a significant number of the meters sampled begin to fall below the repaired meter accuracy requirements after 15 years of service.¹⁴ They also show that revenue gained from testing and meter replacement does not offset the expense of testing and replacement until the meters have been in service for at least 21 years. The Joint Applicants assert that, by extending meter testing and replacement to a 21-year interval, an annual savings of \$36,415 results.¹⁵

In support of their application, Joint Applicants rely upon KRS 278.210(4), which provides:

If a utility demonstrates through sample testing that no statistically significant number of its meters over-register above the limits set out in subsection (3) of this section, the meter testing frequency shall be that which is determined by the utility to be cost effective. This determination by the utility shall be based on established scientific, engineering, and economic methods and shall be documented in an application properly filed with the commission.

Joint Applicants note that their sample testing shows that none of the meters in the sample testing group over-register by more than two percent¹⁶ and that after 20 years in service, these meters consistently under-register water usage. They assert that a meter testing program is cost-effective “when the increased return in revenue brought about by meter testing and replacement equals or exceeds the cost of testing and

¹⁴ For repaired meter accuracy requirements, see 807 KAR 5:066, Section 15.

¹⁵ Joint Applicants' Response to Commission Staff's Second Request for Information, Item 9.

¹⁶ KRS 278.210(3) establishes an accuracy standard of 2 percent.

replacement.”¹⁷ As the sample testing results show that the increased return in revenue does not exceed the cost of testing and replacement until the meters have been in service 21 years, they contend, KRS 278.210(4) requires approval of their proposal.¹⁸

DISCUSSION

Joint Applicants assert that their proposal ensures fair treatment to all customers “by all customers being treated the same regarding meter replacement.”¹⁹ Under the Joint Applicants’ proposal, “all customers, over time, will have equal experience with both new and old meters. Therefore, the inherent range of accuracy over time is reflected in each customer’s water bill.”²⁰ Distilled to its simplest terms, Joint Applicants’ position is: “All customers are equally treated since every customer’s meter will incorrectly register the customer’s usage at some point in time.”

This position is at odds with concepts long rooted in Kentucky utility law. If a meter fails to record accurately, the customer served by that meter is effectively paying a rate that differs from that set forth in the utility’s filed rate schedule. Such occurrence violates KRS 278.160(2), which provides:

No utility shall charge, demand, collect, or receive from any person a greater or less compensation for any service rendered or to be rendered than that prescribed in its filed schedules, and no person shall receive any service from any

¹⁷ “Revised Determination” at 2.

¹⁸ In response to a request for information, the Joint Applicants concede that, based upon Simpson District’s cost of water, the increased return in revenue for that water utility exceeds its cost of testing and replacement when its meters have been in service 20 years. Joint Applicants’ Response to Commission Staff’s Second Request for Information, Item 2(c).

¹⁹ “Revised Determination” at 13.

²⁰ *Id.*

utility for a compensation greater or less than that prescribed in such schedules.²¹

To the extent that a meter is under-recording water usage, such as would occur for the Joints Applicants' meters in years 16 through 21, that customer receives a reduced rate for service that other similarly situated customers do not. Such rates are expressly prohibited by KRS 278.170(1),²² which provides:

No utility shall, as to rates or service, give any unreasonable preference or advantage to any person or subject any person to any unreasonable prejudice or disadvantage, or establish or maintain any unreasonable difference between localities or between classes of service for doing a like and contemporaneous service under the same or substantially the same conditions.

Assuming *arguendo* that KRS 278.210(4) authorizes Joint Applicants' proposal, such authorization is granted only in the absence of any conflicting provisions of KRS Chapter 278. To the extent that the proposal conflicts with KRS 278.160(2) and KRS 278.170(1), we are unable to conclude that KRS 278.210(4) mandates our acceptance of the proposal.

We continue to take the position that "accurate meters are an integral part of a fair and accurate billing process" and that meter testing is necessary "to ensure that water utilities treat all customers fairly and that all customers pay their fair share for the service provided."²³ We noted two decades ago:

Common reasons for requiring water meter testing are: to ensure that all customers are being treated fairly by the utilities; to ensure that all customers pay their fair share for

²¹ This restriction has been part of the Kentucky law since the enactment of the Public Service Commission Act of 1934. See 1934 Ky. Acts 580, 601.

²² *Id.*

²³ Case No. 2003-00391, Order of Jan. 31, 2005 at 3.

the service provided; to reduce revenue loss to the utility; to monitor operational performance under meter warranty provisions; and to encourage water conservation. **By far the most important of these from a public protection standpoint and for the Commission's purposes is to ensure that customers' bills are fair and accurate.**²⁴

In the present case, the Joint Applicants estimate that their proposal will result in annual savings of \$36,415. In the calendar year ending December 31, 2011, the Joint Applicants had total utility operating expenses of \$10,316,202.²⁵ Therefore, their proposal's estimated annual savings represents approximately 0.35 percent of their combined operating expenses. We find this level of savings does not and cannot justify the risk of undermining public confidence in the fairness and accuracy of the billing process.²⁶

SUMMARY

The Commission finds that the proposed extension of the period for non-testing to 21 years is unreasonable and should be denied. The record shows that the Joint Applicants' meters will remain within required accuracy limits only for 15 years. Of the states that prescribe maximum intervals between meter tests, none permit water utilities

²⁴ Case No. 92-526, *The Application of Kentucky-American Water Company for a Deviation Pursuant to 807 KAR 5:066, Section 15(3), Regarding Meter Testing* (Ky. PSC Dec. 28, 1992) at 1 (emphasis added).

²⁵ *Warren Annual Report* at 11 (\$7,113,037); *Simpson Annual Report* at 11 (\$1,634,162); *Butler Annual Report* at 11 (\$1,569,003).

²⁶ Customers of utilities expect and deserve a fair and accurate billing process which must include accurate meters. A complete and diligent meter testing effort does involve certain costs. However, such costs are far outweighed by the benefits of accurate meters and accurate billings, both of which greatly contribute to customer confidence in the utility. Any real or perceived monetary savings from decreasing the meter testing effort would not be sufficient justification to increase the possibility of undetected meter errors, which in turn could lead to customer billing errors.

to maintain water meters in service for periods longer than 20 years without testing the meter for compliance with accuracy standards.²⁷ Seventy-five percent of those states mandate periodic testing at intervals no greater than 10 years. We have not permitted deviations from 807 KAR 5:066, Section 16(1), to permit testing intervals greater than 15 years²⁸ and have not permitted any deviations for periods where testing results have demonstrated that the meters no longer meet required accuracy standards.

The Commission further finds that the Joint Applicants' have adequately supported an extension of the time period for the meters in question to 15 years and that the Joint Applicants should be authorized to deviate from 807 KAR 5:066, Section 16(1), to permit their Sensus Model SR II meters to remain in service without periodic testing for a period no longer than 15 years.

IT IS THEREFORE ORDERED that:

1. Joint Applicants' application for a deviation from 807 KAR 5:066, Section 16(1), to permit their Sensus Model SR II meters to remain in service without periodic testing for a period no longer than 21 years is denied.

2. Joint Applicants are authorized to deviate from 807 KAR 5:066, Section 16(1), to permit each utility to maintain its Sensus Model SR II meters in service without periodic testing for a period no longer than 15 years.

3. Within 180 days of the date of this Order, Joint Applicants shall test all meters that have been in service for 15 years or longer and have not been tested for accuracy since being placed into service. Testing on these meters shall be performed

²⁷ See Appendix to this Order.

²⁸ See 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).

regardless of whether a Joint Applicant intends to retire the meter from service immediately upon removal.

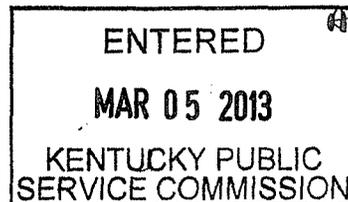
4. Within 210 days of the date of this Order, each Joint Applicant shall file with the Commission the results of all tests performed to comply with ordering paragraph 3 of this Order.

5. Should any of its meters tested in accordance with ordering paragraph 3 fail to meet the accuracy standards set forth in 807 KAR 5:066, Section 15, a Joint Applicant shall proceed in accordance with 807 KAR 5:006, Section 11(2).

6. Authorization to establish and maintain a sample group of Sensus Model SR11 meters from each year of manufacture from 1990 to 1997 that will remain in service 20 years is withdrawn effective 180 days from the date of this Order.

7. Nothing contained in this Order shall limit the Commission's authority to review the authorized deviation while the deviation remains in effect.

By the Commission



ATTEST:

Executive Director

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2011-00220 DATED **MAR 05 2013**

State	Max. Interval Between Test Years*	Reference	Notes
Alabama	10	Rule W-17	A representative sample of 10 percent of all 5/8-inch x 3/4-inch meters in service must be periodically tested at intervals not exceeding 10 years.
Alaska	—	—	No time interval is specified.
Arizona	—	Ariz. Admin. Code §14-2-408	Water utility is required to establish a regular program of meter testing, taking into account the size of meter, age of meter, consumption, characteristics of water.
Arkansas	20	126-03-6 Ark. Code R. § 7.04	Tests on meters 1-inch or less must be performed every 20 years; customer may request no charge test if meter not tested in last 10 years.
California	20	General Order 103-A	
Colorado	10	4 Colo. Code Regs. § 723-5:5304	Every 5/8-inch x 3/4-inch service meter must be tested every 10 years.
Connecticut	8	Conn. Agencies Regs. § 16-11-88	
Delaware	15	26-2000-2001 Del. Admin. Code § 4.2.4.1.1	5/8-inch x 3/4-inch meters must be tested at least every 15 years.
Florida	10	Fla. Admin. Code r. 25-30.265	Each utility shall inspect and test a representative sample of its 5/8-inch x 3/4-inch meters in service at least once every 10 years.
Georgia	—	—	State PSC does not regulate water utilities.
Hawaii	—	—	No time interval is specified.
Idaho	—	—	No time interval is specified.
Illinois	10	Ill. Adm. Code tit. 83, § 600.340	5/8-inch meters must be tested every 10 years or for each 100,000 cubic feet registered.
Indiana	10	170 IAC 6-1-10	5/8-inch meters must be tested every 10 years or for each 100,000 cubic feet registered.
Iowa	—	Iowa Admin. Code r.199-21.6(1)	Each utility shall adopt schedules approved by the Utilities Board for periodic and routine tests and repair of its meters.
Kansas	—	—	State Corporation Commission does not regulate water utilities.
Kentucky	10	807 KAR 5:066 § 16	

State	Max. Interval Between Test Years*	Reference	Notes
Louisiana	—	—	No time interval is specified.
Maine	8	65-407-62 Me. Code R. § 3G	5/8-inch meters must be tested every 8 years or for each 100,000 cubic feet registered.
Maryland	10	Md. Code Regs. 20.70.06.09	Interval between testing 5/8-inch meters cannot exceed 10 years.
Massachusetts	—	—	No testing period specified.
Michigan	—	—	State PSC does not regulate water utilities.
Minnesota	—	—	State PUC does not regulate water utilities.
Mississippi	10	39-1 Miss Code R. § 2:67	5/8-inch x 3/4-inch meters must be tested every 10 years or for each 20,000 cubic feet registered.
Missouri	10	4 Mo. Code. Regs. § 240-10.030(38)	5/8-inch x 3/4-inch meters must be tested every 10 years or 200,000 cubic feet registered, whichever occurs first.
Montana	—	Mont. Admin. R. 38.5.2513	Water utility must select a sample of five percent of all of its meters in service each year for testing the accuracy of its registration.
Nebraska	—	—	State PSC does not regulate water utilities.
Nevada	—	—	No testing period specified.
New Hampshire	10	N.H. Code Admin. R. PUC 605.04	
New Jersey	10	N.J.A.C. § 14-9-4.1	5/8-inch meters must be tested every 10 years or 750,000 gallons registered
New Mexico	—	—	No testing period specified.
New York	15	16 NYCRR § 500.1	
North Carolina	—	—	No testing period specified for 5/8-inch x 3/4-inch meters.
North Dakota	—	—	State PSC does not regulate water utilities.
Ohio	—	OAC 4901:1-15-19	No testing period specified. Water utility required to perform routine testing of billing meters and maintain records of individual meters.
Oklahoma	10	Okla. Admin. Code § 165:65-7-11	
Oregon	—	OAR 860-036-0110	No testing period specified. Water utility must adopt schedules for periodic tests. The length of time meters may be allowed to remain in service before receiving periodic tests and repairs is to be determined from periodic analysis of the accuracy of meters tested.

State	Max. Interval Between Test Years*	Reference	Notes
Pennsylvania	20	52 Pa. Code § 65.8(b)	
Rhode Island	20	53-2 R.I. Code R. §17V	
South Carolina	—	—	No testing period specified.
South Dakota	—	—	State PUC does not regulate water utilities
Tennessee	—	Tenn. Comp. R. & Regs. 1220-04-03-.34	No testing period specified. Utility is required to adopt schedule for periodic tests.
Texas	—	30 TAC § 291.89	No testing period specified. Meter must be tested prior to installation and, if removed from service, prior to being returned to service
Utah	—	Utah Admin Code r746-330	No testing period specified. Utilities are to establish testing intervals satisfactory to the Commission.
Vermont	5	Vt. Admin. Code § 18-1-30:24	
Virginia	—	Va. Code Ann. § 56.245.1	No testing period specified. Utility is required to maintain meter in good order.
Washington	—	WAC 480-110-405	No testing period specified.
West Virginia	10	W. Va. Code R. § 150-7-6.4.a.	
Wisconsin	10	Wis. Admin. Code PSC §185.76	
Wyoming	10	WY Rules and Regulations PSC UA Ch. 6 § 608	5/8-inch meters must be tested every 10 years of 100,000 cubic feet registered

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