BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

ROMAN DZHURINSKIY,	)	
	)	
Complainant,	)	
	)	
v.	)	**File No. WC-2010-0215**
	)	
MISSOURI-AMERICAN WATER COMPANY	)	
	)	
Respondent.	)	

RECOMMENDED REPORT AND ORDER

Issue Date: April 12, 2011

Effective Date: May 12, 2011

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The Missouri Public Service Commission is denying the relief sought in the complaint of Roman Dzhurinskiy ("Mr. Dzhurinskiy") against Missouri-American Water Company ("MAWC"). Mr. Dzhurinskiy's own evidence proves that his new water heater is the source of the water running back out of his house ("backflow") on which he bases each charge against MAWC. MAWC has committed no violation of any statute, Commission regulation, tariff, or Commission order ("violation"). MAWC has not overbilled Mr. Dzhurinskiy and has no obligation to Mr. Dzhurinskiy for any expense associated with a backflow preventer.

I. Procedure

The procedural background of this action is as follows.

A. History

Mr. Dzhurinskiy filed the complaint on January 19, 2010. MAWC filed the answer on February 26, 2010. The Commission's staff ("Staff") filed its report on March 12, 2010.

October 10, 2010, was the effective date for the Commission regulation that governs actions "involving less than three thousand dollars"[1] ("small complaint regulation"). The Commission issued notice[2] that the Commission intended to conduct this action under the small complaint regulation. As required by that regulation, the Commission convened the evidentiary hearing on November 15, 2010, at a location within 30 miles of where the service was rendered.[3] Mr. Dzhurinskiy presented his case. Kenneth C. Jones represented MAWC. Staff Counsel Rachel Lewis represented staff. Mr. Dzhurinskiy filed the last brief on March 1, 2011.

The small complaint regulation sets time limits for deciding the case, but all those time limits had already passed by the time they became effective. Also, the parties agreed to, sought, and received extensions of the briefing schedule, which constituted an extension of the time to issue a decision. Further, the Commission ordered a corrected transcript on March 25, 2011. On April 8, 2011, a partly corrected transcript was filed. At the Commission's request, the reporter filed more corrected pages on April 11, 2011.

Those facts constitute good cause to extend the time for issuing the recommended report and order, so the time for issuing the recommended report and order is extended.

This report and order is subject to 4 CSR 240-2.070(14)(H) and Section 386.500, RSMo 2000.[4]

[1] 4 CSR 240-2.070(14).
[2] On December 14, 2010.
[3] 4 CSR 240-070(14)(E).
[4] 4 CSR 240.2-070(13).

B. Jurisdiction

The Commission has jurisdiction to decide whether a public utility has committed a violation as the statutes provide.

Findings of Fact

1. MAWC is a Missouri corporation. MAWC has its principal offices at 727 Craig Road, St. Louis, MO 63141.

2. MAWC owns facilities that it uses to distribute, supply and sell water for profit and holds a certificate of public convenience and necessity for several service territories.

3. MAWC's service territories also include the County of St. Louis, Missouri, where Mr. Dzhurinskiy receives water service from MAWC for his residence at 32 Crab Apple Ct., St. Louis, MO 63132.

Discussion

Mr. Dzhurinskiy wants MAWC to either:

- Fix the backflow at MAWC's expense; or
- Reduce his past, present and future bills by the backflow amount.

Mr. Dzhurinskiy also asks for an engineering report from MAWC. The Commission may order a public utility to file a report, and to change its equipment and billing upon complaint. [5] The complaint statutes provide:

> Complaint may be made by . . . any . . . person . . . in writing, setting forth any [conduct] done by any . . . public utility . . . claimed to be in violation, of any provision of law, or of any rule or order or decision of the commission [.[6]]

[5] Section 393.140(2) and (5), RSMo 2000.
[6] Section 386.390.5, RSMo 2000.

MAWC is a public utility because it is a water company,[7] so it is subject to Mr. Dzhurinskiy's complaint. The complaint therefore vests the parties with the right to a pre-decision[8] evidentiary[9] hearing, so that filing institutes a contested case. [10]

Conclusions of Law

The Commission has jurisdiction to decide Mr. Dzhurinskiy's complaint by contested case procedure under the regulation for small complaints.

C. Burden of Proof

The burden of proving a violation is with Mr. Dzhurinskiy. [11] Mr. Dzhurinskiy must carry that burden with a preponderance of the evidence,[12] which means the greater weight. [13] The Commission has made determinations of credibility as shown in its findings of fact.

II. The Charges

Mr. Dzhurinskiy alleges that the source of the backflow is reductions in MAWC's water pressure and that MAWC has not responded to his service calls about that problem.

A. Backflow

Mr. Dzhurinskiy's own evidence shows that his new water heater is the source of the backflow.

[7] Section 386.010(43) and (59), RSMo Supp. 2009.
[8] Section 386.390.5, RSMo 2000.
[9] *Jamison v. Dept. of Soc. Servs*, 218 S. W. 3d 399, 408-09 (Mo. banc 2007); *Mathews v. Eldridge,* 424 U.S. 319, 332 (1976).
[10] Section 536.010(4), RSMo Supp. 2009 and 536.063(1), RSMo 2000.
[11] *State ex rel. GSTechnologies Operating Co., Inc. v. Public Serv. Comm'n*, 116 S. W. 3d 680, 693 (Mo. App. W.D. 2003).
[12] *State Board of Nursing v. Berry*, 32 S.W. 3d 638, 641 (Mo. App., W.D. 2000).
[13] *Id*. at 642.

Findings of Fact

4. MAWC has a main running beneath the street in front of Mr. Dzhurinskiy's house ("the house"). From the main, a service line runs beneath Mr. Dzhurinskiy's front yard, through the water meter ("meter") that is outside the house, and into the house ("inflow"). On Mr. Dzhurinskiy's side of the meter, the line divides into the two lines that service the house.

5. One line ("primary supply") services everything in the house except Mr. Dzhurinskiy's water heater. The primary supply has a valve ("primary valve") inside Mr. Dzhurinskiy's house. The primary valve shuts off water to everything in the house except the water heater. That valve has a worn-out washer, and cannot close, so the primary supply is always open.

6. The other line ("water heater supply") connects solely to Mr. Dzhurinskiy's water heater through a valve ("water heater valve") inside the house.

7. On September 14, 2009, Mr. Dzhurinskiy replaced his old water heater with a new water heater ("new water heater"). The new water heater, unlike the old water heater, includes an expansion tank. The expansion tank has a flexible bladder that absorbs pressure from water as it heats.

8. Any body of water naturally equalizes pressure so, when the pressure in the tank is greater than the pressure in the main, the pressure from the tank will push water back through the meter toward the main. That event is the backflow. Closing the water heater supply stops the backflow.

9. Backflow is preventable through a plumbing device called a backflow preventer. A backflow preventer operates only if it is on Mr. Dzhurinskiy's line. Mr. Dzhurinskiy has no backflow preventer, so the pressure in his tank results in backflow.

Discussion

Mr. Dzhurinskiy's testimony showed that his new water heater causes the backflow. In their initial pleadings, all parties agreed that backflow stopped when a valve inside the house closed, which only showed that backflow stopped when a connection between the main and the house closed. That proved nothing about the backflow's source.

But at the hearing, Mr. Dzhurinskiy testified that there were two separate lines, each with its own valve,[14] and described the effect of closing only the water heater valve. Closing off the water heater valve stops the backflow—even though the primary supply is always open to the main.[15] That testimony shows that the primary supply experiences no backflow despite its unbreakable connection to the main, so pressure reductions in the main cannot be the backflow's source. The water heater valve alone determines the backflow, and the water heater supply connects only to the new water heater. Therefore, the new water heater must be the source of the backflow.[16] And Mr. Dzhurinskiy alleges no instance of backflow before he installed the new water heater.

Thus, all the evidence necessary to pinpoint the backflow's source at Mr. Dzhurinskiy's new water heater is in Mr. Dzhurinskiy's evidence as to the events of December 4, 2009.[17] Those facts are undisputed, unaltered by any other evidence or

[14] Transcript, volume 2, page 179, lines 19-23.
[15] Transcript, volume 2, page 181, lines 18-23.
[16] Transcript, volume 2, page 195, line 19-page 196, line 4.
[17] Transcript, volume 2, page 198, line 19-page 199, line 7.

authority, and determinative of every charge against MAWC. The Commission need rely on nothing else.

And, if the Commission needed expert testimony, to apply a specialized knowledge to observed facts ("opinion"), it is available from witnesses for MAWC and Staff. Mr. Dzhurinskiy argues that those witnesses lack a certification from the American Water Works Association ("AWWA") so the Commission should not consider their opinions. But, in his reply brief, Mr. Dzhurinskiy states that he also possesses no AWWA certification.

Opinions are admissible as follows:

> In any civil action, if scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise.[18]

In his reply brief, Mr. Dzhurinskiy states that he possesses no qualification (knowledge, skill, experience, training, or education) to support his opinions. He has training as a construction engineer and works in maintenance in a long term care facility, but holds no license as a registered professional engineer and cannot install a water heater or a backflow preventer. All other witnesses were qualified by knowledge, skill, experience, training, or education to describe the functions of water pressure, household plumbing, and MAWC's system.

Also, Mr. Dzhurinskiy fails to offer empirical support for his opinions. For example, Mr. Dzhurinskiy argues that the pressure tank bladder absorbs all pressure increases, but offers no evidence that it is actually doing so. Mr. Dzhurinskiy alleges that

[18] Section 490.065.1, RSMo 2000.

St. Louis County plumbing inspections have twice affirmed the new water heater's conformance with St. Louis County's building code, but he offers no evidence that code compliance eliminates backflow. Mr. Dzhurinskiy argues that absence of ratcheting overnight is because of less pressure fluctuation in the mains at night, but reduced household activity is a better explanation in the context of this record.

Mr. Dzhurinskiy argues that the costs of installation and inspection make it unfair for him to bear the cost of a backflow preventer. Yet Mr. Dzhurinskiy, like the other parties, cites the following provision of MAWC's tariff ("plumbing provision"):

> All Water Service Line installations, including . . . backflow preventers . . . are not the property of the Company and must be kept operational, maintained and repaired by the owner or customer as a condition of service. [[19]]

Also, MAWC's tariff provides that, if MAWC knows that Mr. Dzhurinskiy's plumbing cross connects with MAWC's main, MAWC must disconnect Mr. Dzhurinskiy until Mr. Dzhurinskiy installs a backflow preventer according the Department of Natural Resources' standards. Those standards also make Mr. Dzhurinskiy liable for a backflow preventer.[20] Under those provisions, Mr. Dzhurinskiy—not MAWC and not anyone else—is responsible for the operation of Mr. Dzhurinskiy's new water heater and the installation of a backflow preventer.

Mr. Dzhurinskiy argues that he is under no requirement to install a backflow preventer. No party seeks an order requiring Mr. Dzhurinskiy to install a backflow preventer. The Commission will not issue an order compelling Mr. Dzhurinskiy to install a backflow preventer.

[19] P.S.C. MO. No. 6, First Revised Tariff Sheet No. R19.1 (MAWC Exhibit 8, eighth page).
[20] MAWC Tariff P.S.C. Mo. No. 6, First Revised Sheet No. R20.0(a). (MAWC Exhibit 8, ninth page, second paragraph); 10 CSR 60-11.010.

Conclusions of Law

Backflow from Mr. Dzhurinskiy's house shows no violation by MAWC.

B. Water Pressure

The record also refutes Mr. Dzhurinskiy's theory that pressure reduction in MAWC's main causes the backflow. And, even if pressure fluctuations caused the backflow, those facts would not constitute a violation. The record shows that MAWC complies with the only applicable regulation on water pressure.

Findings of Fact

10. In MAWC's St. Louis County service territory alone, MAWC maintains 4,200 miles of water main, which is enough to stretch from Los Angeles, California; to New York, New York; and then to Miami, Florida.

11. MAWC uses elevated tanks and pumps to maintain pressure of 30 pounds per square inch ("psi") at its highest elevations, ensuring at least 20 psi throughout the system. The pressure in MAWC's mains is high enough to prevent gravity from causing backflow. The pipes are always full.

12. Pressure levels in MAWC's system necessarily vary over times and places. At different times in the same place, differences in pressure occur because of system demand and usage, filling and backing up storage tanks, fire department use of hydrants, and main breaks. In different places at the same time, differences in pressure occur because of changes in elevation.

13. The pressure inside a typical customer residence is between 30 to 80 psi, depending on whether the residence has a pressure regulating valve. The house's

smaller diameter pipe also reduces the pressure relative to the main. The backflow at the house would not occur but for the new water heater or other mechanical device.[21]

Discussion

Mr. Dzhurinskiy alleges that regulations require MAWC to measure and maintain uniformity in pressure across its entire system and charges that MAWC has failed to do so. Mr. Dzhurinskiy cites no provision supporting that charge. The only regulation setting a standard for water pressure provides:

> Public water systems must maintain a minimum positive pressure of twenty pounds per square inch (20 psi) throughout the distribution system under all normal operating conditions. [[22]]

Pressure in the system must be at least 20 psi and Mr. Dzhurinskiy has shown no instance in which MAWC's pressure was below 20 psi. Also, the more persuasive testimony of MAWC's witnesses shows that measurement and uniform pressure across MAWC's entire system is physically not possible.

Mr. Dzhurinskiy also cites Staff's expert testimony that described backflow from the house as impossible without a "mechanical" device inside the house. Mr. Dzhurinskiy argues that the house has no such mechanical device. The mechanical device is the new water heater.

Pressure fluctuations in MAWC's main do not constitute a violation by MAWC.

Conclusions of Law

Pressure fluctuations in MAWC's main do not constitute a violation by MAWC.

[21] Transcript, volume 2, page 167, lines 16-24.
[22] 10 CSR 60-4.080(9).

C. Service Calls

Most of Mr. Dzhurinskiy's complaint addresses his service calls after December 4, 2009, when the crew showed him that the new water heater was the source of the backflow. Mr. Dzhurinskiy charges that MAWC was insufficiently responsive to his service calls. His testimony shows no violation.

Findings of Fact

14. On November 13, 2009, Mr. Dzhurinskiy saw his meter registering backflow. Mr. Dzhurinskiy's neighbors don't have that problem. Mr. Dzhurinskiy made a service call to MAWC.

15. On December 4, 2009, about 10 a. m. MAWC's technician arrived at the house. MAWC's technician inspected MAWC's lines and the house's plumbing. MAWC's technician suspected a leak but could not diagnose the meter's behavior.

16. Also on December 4, 2009, about 30 minutes after MAWC's technician left, MAWC's two-man crew ("crew") arrived. The crew inspected MAWC's main and Mr. Dzhurinskiy's lines. MAWC's two-man crew diagnosed the matter as backflow caused by the new water heater and lack of a backflow preventer.

17. The crew proved its diagnosis in Mr. Dzhurinskiy's presence as follows. It stopped the backflow by closing the water heater valve. The crew explained to Mr. Dzhurinskiy that backflow is a common problem with new water heaters like his and that a backflow preventer fixes that problem.

18. The crew's demonstration was repeated in Mr. Dzhurinskiy's presence on February 11, 2010, when Staff visited the house and, upon the closing of the water heater valve, the backflow stopped.

19. On December 4, 2009, the technician left a written report with Mr. Dzhurinskiy but the crew did not. Mr. Dzhurinskiy received no follow-up telephone call. A week after the crew's visit, Mr. Dzhurinskiy began repeatedly making service calls to MAWC on the backflow issue.

20. On December 11, 2011, an MAWC employee replaced the meter. On December 18, 2011, MAWC made a follow-up telephone call to Mr. Dzhurinskiy. On December 23, 2011, Mr. Dzhurinskiy made contact with an MAWC representative who described how low his usage was.

Discussion

Mr. Dzhurinskiy cites the following regulation:

> Utilities shall determine the characteristics of service to be made available to each consumer, based upon the location of the premises, size and operating characteristics of the consumer's equipment and shall furnish information, upon request, as to the standard class of service to be furnished [.[23]]

Under that regulation, MAWC must provide the "standard class of service" appropriate to the house. The regulation does not require MAWC to specially adapt its meter to a house in which a water heater is causing backflow. MAWC did not violate that regulation.

Mr. Dzhurinskiy also cites the following regulation.

> Utilities, when requested, shall provide reasonable assistance to consumers in the selection of equipment best adapted to the service to be furnished and inform consumers as to conditions under which efficient use of service may be realized. [[24]]

[23] 4 CSR 240-10.030(43).
[24] *Id.*

MAWC fully complied with that regulation on December 4, 2009, when MAWC's crew demonstrated that the new water heater is the source of the backflow and informed Mr. Dzhurinskiy that a backflow preventer would end it.

Mr. Dzhurinskiy's rejection of that solution led him to initiate repeated service calls to MAWC. But repetition of the same question required neither repetition of the same answer nor a different answer under any cited regulation. No provision cited requires MAWC to deliver an engineer's report to him and MAWC's extensive pleading, evidence and briefing renders that relief moot.

Conclusions of Law

MAWC's responses to Mr. Dzhurinskiy's service calls show no violation by MAWC.

III. Other Matters

As quoted above, the complaint statute requires Mr. Dzhurinskiy to set forth his allegations in his complaint. Also, the parties jointly filed a list of issues, which the Commission addressed in the opening paragraph of the report and order. But Mr. Dzhurinskiy's briefing is not confined to the complaint and list of issues, and raises additional allegations as to the meter's accuracy, records of meter testing, and billing. ("other matters").

Mr. Dzhurinskiy's purpose in raising the other matters is unclear. If true, such violations do not support any of the relief that Mr. Dzhurinskiy seeks from MAWC:

- Fix the backflow at MAWC's expense;
- Reduce his past, present and future bills by the backflow amount;
- File an engineer's report.

If intended as impeachment—to show that MAWC is not credible—they do not alter the Commission's determinations of credibility and resultant findings of fact.

Nevertheless, the Commission reviews the other matters for the sake of completeness.

A. Meter Accuracy

Mr. Dzhurinskiy alleges that the meter does not register the backflow accurately, but no provision requires the meter to register backflow at all, and MAWC has no liability for the backflow.

Findings of Fact

21. The make and model of the meter was a Neptune T10 residential meter.

22. Flow drives a gear train in the meter so that when water flows, the two readout dials on the meter must move. The first dial to move is the smaller of the two, a small red triangle called the leak indicator because it detects small amounts of water. The leak indicator moves visibly.

23. The leak indicator drives a larger dial, a larger red pointer that looks like the sweep hand of a wrist watch. But the pointer is more like an hour hand because it measures large amounts of water so that its movement is sometimes impossible to detect with the naked eye.

24. The readout shows flow as follows.

Flow	*Dial*	*Motion*
Inflow	Leak Indicator	Counterclockwise
	Pointer	Clockwise
Backflow	Leak Indicator	Clockwise
	Pointer	Counterclockwise

If the meter does not register backflow as much as it registers inflow, the meter will register the same water repeatedly ("ratcheting").

25. For the meter, full maximum flow is 20 gallons per minute ("gpm"), full normal flow is 10 gpm, and 1/10 full normal flow is 1 gallon per minute ("gpm") gpm.

26. After removing the meter from the house, MAWC delivered it to the City of St. Louis's water meter testing facility for testing. On December 27, 2009, inflow registered on the meter with percent accuracy ("accuracy") and percent error ("error") at average service pressure[25] as follows:

GPM	*Accuracy*	*Error*
10.000	100.6	0.6
2.000	99.7	0.3
0.125	99.0	1.0

Those results show that, at 1.0 GPM, the accuracy must have been between 99.0 percent and 99.7 percent.

27. The meter's purpose is to register inflow, not backflow, so the meter's manufacturer did not design the meter to register backflow. Nevertheless, backflow moves the gear train backwards, erasing usage as follows.

a. On December 27, 2009, at average service pressure:

GPM	*Accuracy*	*Error*
10.000	98.0	2.0
2.000	99.7	0.3
0.125	0.0	100.0

[25] Of record forms for four meter tests, two make a note of the pressures used—60 psi and 100 psi—which implies that the other two were at average service pressure, and nothing in the record suggests otherwise. MAWC Exhibit 4.

b. On November 10, 2010, under pressure of 100 psi:

GPM	*Accuracy*	*Error*
2.000	99.5	0.5
1.000	99.0	1.0
0.125	10.0	90.0

c. On November 10, 2010, under pressure of 60 psi:

GPM	*Accuracy*	*Error*
20	97.2	2.8
10	98.6	1.4
5	99.0	1.0

28. Together, the test results from December 27, 2009, and November 10, 2010, show that the meter erred by more than five percent only on backflow of a pint per minute.

29. MAWC's average customer in St. Louis County uses 22,500 gallons per quarter. From 2006 to August 2009, Mr. Dzhurinskiy's average usage has been about 4,500 gallons per quarter. Thus, Mr. Dzhurinskiy used about a fifth of the volume that the average customer does. His bill for water usage at the house is about $50 per year.

Discussion

Mr. Dzhurinskiy calculates that, of his $50 per year for water usage, $40 is an overbilling due to ratcheting. But ratcheting violates no provision because no provision requires the meter to register backflow. Moreover, the meter complies with every definition of accuracy, which bars a billing adjustment.

The Commission's regulations forbid the use of an inaccurate meter as follows:

> No water service meter shall be allowed in service which has an incorrect gear ratio or dial train or is mechanically defective or shows [inaccurate measurement;[26]]

and require adjustment of an inaccurate meter:

[26] 4 CSR 240-10.030(37).

> When adjustment is necessary, the adjustment shall be made as accurately as practical for average rate of flow under actual conditions of installation. [27]

To determine accuracy, the regulation requires testing:

> . . . over each meter's range of minimum to maximum flow [.28]

The testing starts at the minimum—zero—but zero flow cannot measure accuracy.

Therefore, there are two points in the range of operation for measuring accuracy:

part way and all the way. A meter is inaccurate if it shows an error:

> . . . in excess of five percent (5%) when registering water at stream flow equivalent to approximately one-tenth (1/10) and full normal rating under the average service pressure.[29]

That regulation finds a reflection in MAWC's tariff definition of inaccuracy:

> more than five percent (5%) defective or incorrect to the prejudice of the customer or the Company [when] inspected and tested using the Company's intermediate and maximum flow rate testing procedure [.30]

Compared to the tariff and regulation standards, the meter performed as follows:

"rating under . . . average service pressure"	*"error in measurement"*
"one-tenth . . . normal"/"intermediate"	0.3 -1.0 percent
"full normal"/"maximum"	0.6 percent

The meter met the standards.

Compliance with standards of accuracy prohibits a rate adjustment:

> Where, upon test, an error in measurement is found to be within the limits prescribed by commission rules, no billing adjustment will be made [.31]

That provision bars a billing adjustment based on the meter.

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[27] *Id*.
[28] *Id*.
[29] *Id*.
[30] P.S.C. Mo. No. 6, Original Sheet No. R7.0 (MAWC Exhibit 5).
[31] 4 CSR 240-13.025(1)(D).

Mr. Dzhurinskiy argues that the tests cannot have complied with the regulation because the average service pressure is unknown. But the record shows that the average service pressure is near 30 psi and never below 20 psi. The Commission has inferred that such was the pressure unless otherwise marked on the records because the regulation prescribes the pressure for running tests, the records have no space for recording the pressure, and the two forms showing pressure are for backflow tests at above average pressure.

Mr. Dzhurinskiy further argues that MAWC violated regulations on meter testing. The regulation provides how to test for accuracy:

> Tests for accuracy shall be made with a suitable testing device in accordance with the best modern water meter practice [.[32]]

Specifically, in his reply brief, Mr. Dzhurinskiy argues that MAWC violated the following regulation:

> It is suggested that those utilities not required to maintain certain testing equipment specified in the rule arrange to perform the tests by making use of the testing equipment of some nearby utility required to maintain the testing equipment. [[33]]

That provision did not require or forbid MAWC to do anything. It merely "suggested" conduct. No conduct can violate it.

Mr. Dzhurinskiy's testimony shows his lesser understanding of meter issues. He testified that the meter did not deduct backflow because, when the leak indicator indicated backflow, he could not see the pointer moving backwards. But the pointer may move so slowly as to be undetectable. In his reply brief, Mr. Dzhurinskiy also disputes

[32] 4 CSR 240-10.030(37).
[33] 4 CSR 240-10.030(6).

MAWC's characterization of his usage compared to the average customer's usage as follows:

> By the MAWC account the average customer's usage is 22,500 g/p/quarter and it means not 20% but all 500% (5 times!) of mine, 4,500 gals per quarter I regularly spend.

MAWC showed that the average customer's usage is five times Mr. Dzhurinskiy's usage. Mr. Dzhurinskiy's usage is therefore 20 percent—or one fifth—of the average customer's usage.

Conclusions of Law

The meter's testing and accuracy show no violation by MAWC.

B. Test Records

In his initial brief, Mr. Dzhurinskiy argues that MAWC has violated provisions related to recordkeeping.

Findings of Fact

30. MAWC retained records of the meter tests ("records") consisting of two pages.[34] Each page shows two forms, upper and lower. Page 1 (upper) is a cover page[35] with space for test results, and the other three forms are for subsequent tests.

31. Page 1 (upper) and Page 1 (lower) relate to the tests on December 27, 2009. Page 2 (upper) and Page 2 (lower) relate to the tests on November 10, 2010. All show accuracy of registration as a percentage.

[34] MAWC Exhibit 4.
[35] Transcript, Volume 2, page 96, lines 4-16.

32. The forms have no notation of the following information as marked.

Information Absent	*Page 1 (upper)*	*Page 1 (lower)*	*Page 2 (upper)*	*Page 2 (lower)*
date when it was performed		x		
reason for the test		x	x	x
name who performed test	x	x	x	x
average water pressure	x	x	x	x
that test was in backflow			x	x

Discussion

In his initial brief, Mr. Dzhurinskiy alleges that MAWC's records are inadequate under the following regulation:

> Each utility shall keep records of tests of the accuracy of each of its meters, until superseded by a later test but not less than two (2) years. These records shall give sufficient information to identify the meter; the reason for the test; the date of the test and reading of the meter; the name of the person making the test; the accuracy as found and as left, together with enough of the data taken at the time of the test to permit the convenient checking of the methods employed; and the calculations. Systems of meter and test records already in use will meet with the approval of the commission [if] they conform substantially with the rule. [36]

Mr. Dzhurinskiy notes that the records lack certain entries. But the records nonetheless show substantial conformity with the regulation for two reasons.

The first reason has to do with the forms. Page 1 (upper) is a cover page with space for test results, and the other three forms are for subsequent tests. As long as the forms are together, the records show sufficient information without later forms repeating information from an earlier form.

Thus, Page 1 (upper) shows the reason for the test as "Complaint" and that applies to subsequent forms. Page 1 (upper) shows the date and that applies to the subsequent form. Page 1 (upper) shows an identifying employee number in lieu of the

[36] 4 CSR 240-10.030(3).

name of the person who performed the test and that applies to subsequent forms. Compliance is not perfect, but it is "substantial." That is what the regulation requires.

The second reason has to do with the regulation. It does not require the records to show pressure or backflow, so failure to show those items is not a violation. The regulation prescribes the pressure—average—for testing so no form need note the psi and direction. Nevertheless, Page 1 (lower) notes "Backwards" and that applies to subsequent forms. Page 2 (upper) and Page 2 (lower) each note the respective pressure.

In his initial brief, Mr. Dzhurinskiy also cites the following regulation:

> Systems of meter and test records already in use will meet with the approval of the commission [if] they conform substantially with the rule. Application shall be made to the commission for this approval. [[37]]

Mr. Dzhurinskiy argues that MAWC violated that regulation by failing to produce some document but it is indiscernible whether he refers to an application for approval or an order granting approval, why MAWC must present this document, and to whom MAWC must present this document. Mr. Dzhurinskiy has not shown a violation of that regulation.

Conclusions of Law

The meter testing records show no violation by MAWC.

C. Billing

In his initial brief, Mr. Dzhurinskiy charges that MAWC's billing could be deceptive.

[37] 4 CSR 240-10.030(3).

Findings of Fact

33. The meter shows a 6-digit number. For any given cycle, when reading any meter to prepare a bill, MAWC rounds units of service incurred in that cycle down by dropping the last two digits. The net effect is to defer collection on rounded-down units until the next cycle, which has two effects.

34. First, if the next billing cycle is subject to a higher rate than the given cycle, MAWC bills the deferred units at a higher rate than when the units were incurred.

35. Second, because MAWC defers billing units every cycle, a certain amount of units is perpetually unbilled.

Discussion

In his initial brief, Mr. Dzhurinskiy cites the following regulation:

> Except for the provisions of this rule, all bills rendered to customers for metered service furnished will show the reading of the meter at the beginning and end of the period for which the bill is rendered and shall give the dates of readings, the number of units of service supplied and the basis of charge or reference. [38]

Mr. Dzhurinskiy does not argue that MAWC violated that regulation and the facts he describes do not show a violation of any provision cited. While deferring the billing of minute service amounts until after the effect of date of a new tariff applies the new rate to such amounts, it also leaves amounts unbilled in every cycle. The facts that Mr. Dzhurinskiy describes do not show a violation of any provision cited.

Conclusions of Law

Rounding down does not constitute a violation by MAWC.

[38] 4 CSR 240-10.040(2).

IV. Summary

The backflow's source is Mr. Dzhurinskiy's new water heater, not pressure fluctuations in MAWC's main. MAWC has not overbilled Mr. Dzhurinskiy and has no obligation to Mr. Dzhurinskiy for any expense associated with a backflow preventer. MAWC has committed no violation of any statute, Commission regulation, tariff, or Commission order.

V. Ruling

THE COMMISSION ORDERS THAT:

1. The complaint of Roman Dzhurinskiy ("Mr. Dzhurinskiy") is denied.

2. This order is effective 30 days from issuance.

3. This file shall close in 31 days from issuance.

BY THE COMMISSION

(S E A L)

Steven C. Reed
Secretary

Daniel Jordan, Senior Regulatory Law Judge,
by delegation of authority pursuant
to Section 386.240, RSMo 2000.

Dated at Jefferson City, Missouri,
on this 12th day of April, 2011.