

**Exhibit No.:** \_\_\_\_\_  
**Issue(s):** AMI/Accounting Timing and  
Treatment of Meters/Late Fees/Public Notification  
**Witness/Type of Exhibit:** Marke/Surrebuttal  
**Sponsoring Party:** Public Counsel  
**Case No.:** WR-2023-0344

**SURREBUTTAL TESTIMONY**

**OF**

**GEOFF MARKE**

Submitted on Behalf of the Office of the Public Counsel

**RAYTOWN WATER COMPANY**

CASE NO. WR-2023-0344

November 8, 2023

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**SURREBUTTAL TESTIMONY**  
**OF**  
**GEOFF MARKE**  
**THE RAYTOWN WATER COMPANY**  
**CASE NO. WR-2023-0344**

1 **I. INTRODUCTION**

2 **Q. Please state your name, title and business address.**

3 A. Geoff Marke, PhD, Chief Economist, Office of the Public Counsel (OPC or Public Counsel),  
4 P.O. Box 2230, Jefferson City, Missouri 65102.

5 **Q. Are you the same Geoff Marke that filed direct and rebuttal testimony in WR-2023-**  
6 **0344?**

7 A. I am.

8 **Q. What is the purpose of your rebuttal testimony?**

9 A. I am responding to the rebuttal testimony of other parties' witnesses on select topics. The  
10 following is a list of those topics and the witnesses:

- 11 • Advanced Metering Infrastructure ("AMI")
  - 12 ○ Staff witnesses David A. Spratt and Daronn A. Williams
  - 13 ○ Raytown Water Company ("RWC") witness Chiki Thompson;
- 14 • Accounting Timing and Treatment of Meters
  - 15 ○ Staff witness Angela Niemeier; and
- 16 • Late Fees
  - 17 ○ Staff witness Melanie Clark
  - 18 ○ RWC witness Chiki Thompson

19 My silence regarding any issue should not be construed as an endorsement of, agreement  
20 with, or consent to any party's filed position.

21

1 **II. ADVANCED METERING INFRASTRUCTURE**

2 **Response to Staff witness Daronn A. Williams**

3 **Q. What issues did Staff witness Williams have with your AMI testimony?**

4 A. Mr. Williams's rebuttal touched on four points where he disagreed with the analysis put  
5 forth in my direct testimony and was silent on the rest of my objections. Mr. Williams's  
6 rebuttal has been paraphrased as follows:

- 7 1. Raytown's small, densely located customer base is a good setting for AMI meters;
- 8 2. Despite the Company's AMI, its meter readers also have other tasks, such as taking  
9 monthly water testing samples for MO DNR;
- 10 3. RWC will continue to notify customers at the end of the month for high/low usage;  
11 and
- 12 4. Even though the AMI investment does not contain leak detection valves, the  
13 Company still has to conduct a third-party annual leak loss survey.

14 I will respond to his counter-arguments in turn now.

15 **Q. Is Raytown a good setting for AMI meters?**

16 A. No.

17 I am operating under the assumption that Mr. Williams misunderstood my argument here.  
18 Raytown is a small water utility that is not geographically dispersed. If it was, then there  
19 would be a greater argument for operational efficiencies gained from the elimination of  
20 expensive meter readers or potential weather-related water usage variation. As such, there  
21 are no stated operational savings (in fact there is at least a two-fold increase in O&M costs)  
22 and utility rates are not going to be set based on persistent drought-like conditions that may  
23 only be present for some customers that might justify this high of an expenditure.

1 Historically, RWC has been operating for ninety-eight years without AMI and a couple of  
2 meter readers who make a little over \$40K a year.

3 Now, the Company is seeking to charge \$3.8M for AMI (including a healthy profit margin  
4 on top of this expenditure), retain its meter readers, *and* add an additional \$100K annual  
5 AMI maintenance fee. Mr. Williams seems to believe that these meters will result in cost  
6 savings for customers, but his testimony is silent on the savings' derivation.

7 Simply put, the small, dense size of Raytown's service area means that the O&M savings  
8 that RWC could, theoretically, gain through AMI were already very small because there  
9 were only a couple of meter readers and they did not have to travel as far as other utility  
10 meter readers.<sup>1</sup> RWC's less than 7,000 service connections underscores how important  
11 identifying and verifying savings are when the investment will cost ratepayers over \$5M  
12 within the first ten years of the AMI.

13 **Q. Why is that?**

14 A. With such a small customer base there is very little room for managerial error in accessing  
15 the prudence of capital investments without inducing a "rate shock" like scenario. If savings  
16 don't materialize then costs will increase unnecessarily. Which is exactly what RWC's  
17 customers are now facing.

18 Contrast Raytown's situation with a large utility like Missouri American Water Company  
19 ("MAWC") who has many more customers to absorb high fixed capital investments.  
20 MAWC can induce cost savings from economies of scale, competitive bidding, and  
21 operational efficiencies that are absent from RWC's case.

22 Now consider, for a moment, that the meter investment (and ancillary supporting  
23 hardware/software) is largely driving the double-digit rate increase in this case *and*,

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<sup>1</sup> Again, it is worth stressing that no O&M savings materialized as the \$100K additional annual maintenance costs and failure to eliminate meter readers ensures that costs will outweigh benefits.

1 depending on how the Commission rules, may very well drive the double-digit rate increase  
2 request that will shortly follow this case.

3 The fact that RWC neither conducted a cost-benefit study nor solicited any competitive bids  
4 further underscores this managerial imprudence.

5 **Q. Mr. Williams suggests that the requirement for water utility companies to take**  
6 **monthly water samples negates any O&M savings from reduced personnel due to the**  
7 **AMI investment. Do you agree?**

8 A. I reject the premise of his argument. Water testing and meter reading are not mutually  
9 exclusive. Nor are RWC's water testing requirements labor or time intensive.

10 Based on my discussions with the Missouri Department of Natural Resources ("DNR"),  
11 RWC is required to take fifteen routine bacteriological samples every month, two  
12 disinfection byproduct samples every quarter and thirty lead and copper samples every three  
13 years. No additional testing is currently required.<sup>2</sup>

14 More importantly, water testing would continue to occur with or without AMI. It should not  
15 factor into whether or not the AMI investments were a prudent expenditure. If anything,  
16 Mr. Williams' argument directly refutes one area where Staff has claimed AMI will create  
17 cost savings. Mr. Williams appears to believe that meter readers are still required in order  
18 to take monthly water samples for DNR; therefore, cost savings from reduced O&M would  
19 not materialize.

20 **Q. Mr. Williams argues that Raytown is going to still manually alert customers of**  
21 **high/low monthly usage even after the AMI investment. Do you agree?**

22 A. After speaking with the Company it appears as though it *may* continue that practice. This  
23 belief is based on the Company's response to OPC DR-2054:

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<sup>2</sup> See GM-1.

1 Question: Please confirm whether Raytown Water expects to issue its exception list for  
2 the Company, or, is that feature now dependent on the customer affirming it  
3 on the individual customer portal.

4 Answer: Company will continue to review the exception list at time of billing.  
5 Customers will have the opportunity to sign-up if they want to receive  
6 automatic alerts from Aclara between billings.<sup>3</sup>

7 The Company can confirm in the evidentiary hearing whether or not its promise to “continue  
8 to review the exception list” equates to actively contacting customers and informing them  
9 of their high/low usage on a monthly basis with written communication.

10 **Q. Is that practice a benefit for customers?**

11 A. If true, it is now a redundant benefit. To clarify the difference between customers notice  
12 around high/low water usage before and after Raytown implemented this AMI technology:

13 Pre-AMI

- 14 • Company notified customers of high or low usage on a monthly basis

15 Post-AMI (\$3.8M in initial capital costs)

- 16 • Company continues to notify customers of high or low usage on a monthly basis  
17 (just like before)
- 18 • At some point in the future, a customer can set their customer portal to receive daily  
19 high/low usage; and
- 20 • At some point in the future, a customer could ask the utility of copies of historic  
21 hourly usage.

22 The Number of customers who contacted RWC about metering issues (January 2018- June  
23 2023)

- 24 • 1,299 meter related inquiries; or
- 25 • Slightly fewer than 20 calls a month on average over a five-and-half-year period

26 Importantly, what we don’t know is how many of these calls were reoccurring (same  
27 account and thus double-counted) or were actually about water usage let alone leakage.

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<sup>3</sup> See GM-2.

1           Regardless, even if we assume that each and every call was a unique account with a leakage  
2           issue it would still result in a very small amount of monthly inquiries.

3   **Q.    What is your response to Mr. Williams’s assertion that this \$3.8M AMI investment**  
4   **will still benefit customers, despite not having leak-detection valves, because the**  
5   **Company still has to conduct annual third-party leak loss surveys?**

6   A.    I fail to see how these two issues are connected other than more costs for customers. Mr.  
7    Williams appears to insinuate the annual leak loss survey and the AMI’s leak detection valve  
8    are equal or measure the same things. They’re not. Despite Mr. William’s belief, that is not  
9    the case. The annual third-party leak loss survey assesses the quality of the communal  
10   distribution and transmission lines. Alternatively, a leak detection valve provides an  
11   automatic water shut-off either by monitoring flows in the pipe or by detecting water on the  
12   floor of a given domicile. Therefore, despite Mr. Williams assertion otherwise, these  
13   methods of leak detection are not the same.

14           Further, as Mr. Williams should be aware, the Company is required to conduct the third-  
15   party leak loss surveys and post the results on its website annually, due to a stipulation and  
16   agreement from a past rate case.<sup>4</sup> More to the point, this survey does not have any bearing  
17   on the Company’s choice of AMI investment.

18           To be clear, according to Staff and RWC, the \$3.8M AMI investment and \$100K annual  
19   reoccurring fee:

- 20           • Cannot remotely disconnect or reconnect customers;
- 21           • Will not eliminate meter readers (in fact, it will be increasing its maintenance  
22           costs for its meters by over \$100K annually);
- 23           • Cannot tell the Company or regulators about leaks on its distribution system;
- 24           • Was chosen without the due diligence of a cost-benefit analysis;

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<sup>4</sup> It should not be lost on the Commission that RWC was not in compliance with this stipulation because they were not posting the results of its leak loss surveys for several years on its website until it was brought to their attention through discovery issued by OPC in mid-October of this year.



- 1                   • Was chosen without the benefit of any cost competitive solicitation from other
- 2                   vendors;
- 3                   • Results in *at least* one double-digit rate increase; and
- 4                   • Adds a layer of operational complexity by introducing 3<sup>rd</sup> party cyber security
- 5                   threats;

6           The espoused benefits include:

- 7                   • Water usage data on a daily basis on a customer web portal with hourly usage
- 8                   available upon request for a Company with a customer base that has at most, a
- 9                   little less than twenty calls a month related to meters.

10 **Q. Can you summarize Mr. Williams’s rationale for supporting the \$3.8M investment in**

11 **AMI?**

12 A. Yes. Mr. Williams effectively argues:

- 13                   • Raytown is a better location to invest in AMI, generally, because the customer base
- 14                   is smaller and densely located;
- 15                   • RWC’s meter readers (or somebody at the Company) will still have to take periodic
- 16                   water samples;
- 17                   • RWC will continue to notify customers about high/low water usage at the end of the
- 18                   month (just like they have been doing); and
- 19                   • Ratepayers will still pay for the annual one-week leak detection survey by a third-
- 20                   party.

21           That’s it. To refute the OPC’s legitimate concerns surrounding the AMI technology

22           Raytown chose, and the method through which the Company chose this technology, Mr.

23           Williams presents these four counter-arguments. Importantly, each of his last three points

24           would occur regardless of the Company’s AMI investment.

25           That leaves the first argument, which directly conflicts with Commission’s findings in the

26           Report and Order for Case No WR-2023-0006:

1 OPC's analysis fails to consider the unique geographical locations of the Confluence  
2 Rivers' water systems. The Indian Hills and Hillcrest systems are both the only  
3 system that Confluence Rivers operates in their respective counties. The location of  
4 these two systems relative to each other and other Confluence Rivers systems would  
5 likely indicate that operational savings would not only include a meter reader salary,  
6 which OPC acknowledged, but would also include additional operation cost saving  
7 and saving worker travel time between systems.

8 The Commission correctly asserts that geographic location has an impact on cost savings  
9 assumptions. Raytown, contrasted with Confluence, is a small, densely populated utility that  
10 does not have the cost burden of servicing customers in remote locations. Additionally,  
11 unlike Confluence, Raytown's service area is not growing so the customer impact over  
12 managerial imprudence is magnified when costs grossly outweigh benefits.

13 However, Mr. Williams is not the only Staff witness to file rebuttal testimony addressing  
14 my concerns. I will now turn my attention to MO PSC witness Mr. David A. Spratt.

15 **Response to Staff witness David A. Spratt**

16 **Q. What issues did Staff witness Spratt have with your AMI testimony?**

17 A. Mr. Spratt raised the following counter-arguments, paraphrased below:

- 18 1. AMI meters are superior at helping customers detect leaks;
- 19 2. Are more accurate than conventional meters;
- 20 3. Customers can see daily usage that could empower them;
- 21 4. Water leaks within a domicile can be expensive;
- 22 5. Remote shut-off options were not selected because of excessive costs;
- 23 6. "Staff would suggest that more customers means more investment at probably about  
24 the same cost per customer."<sup>5</sup>
- 25 7. Small utility companies do not always have the capability to conduct internal cost  
26 benefit analysis or issue request for proposals;

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<sup>5</sup> Case No. WR-2023-0344 Rebuttal Testimony of David A. Spratt p. 5, 15-16.

1 I will respond to his counter-arguments in turn.

2 **Q. Does Staff present any evidence that these AMI meters are “far superior” at helping**  
3 **customers detect leaks?**

4 A. No. At least not directly. Mr. Spratt’s evidence is purely anecdotal without context.

5 No meter is going to tell you where a leak is coming from. AMI merely tells you how much  
6 water usage you are going to be billed at a more finite temporal level. If a customer is  
7 proactive in checking their water usage on their phone (after the software application is  
8 presumably up and running), they may be able to see patterns over a long enough period  
9 that could help identify that an internal leak is occurring but not where.<sup>6</sup>

10 **Q. Are these AMI meters more accurate than conventional meters?**

11 A. A new meter will be more accurate than an old meter whether it is an AMI or not. The only  
12 variable AMI minimizes within the accuracy department is the potential for meter reader  
13 (human) error. To the best of my knowledge human error has not been a reported problem  
14 for RWC. Of course, this unknown benefit would be offset by the increased liability from  
15 cybersecurity threats, 3<sup>rd</sup> party suppliers going out of business, or technological obsolesce.

16 **Q. Are customers more empowered by these AMI water meters?**

17 A. I do not believe so. Affordable and just water rates will result in more empowerment for  
18 customers than the ability to check daily water usage data.

19 Additionally, it has been my professional experience that a certain segment of the population  
20 is entirely against AMI due to perceived health and/or safety concerns. So, it stands to  
21 reason that at least some customers are not going to want to have anything to do with a smart  
22 meter. It has also been my experience that very few customers take advantage of the

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<sup>6</sup> It may apply this same argument to electric customers. Theoretically, the same “benefit” could occur from someone monitoring their electric usage if they have an electric AMI. But we never hear utilities claim that the potential to identify energy leakage as a benefit for electric AMI investment. Nobody would take that benefit seriously or be able to assign a value to that analysis because a costly blow-door test would need to be employed to find out exactly where the energy leakage was occurring. Again, the meter only shows your consumption usage.

1 customer portals that utility companies have enabled. Even in more pronounced situations  
2 where customers can choose their electric rate (see Evergy TOU), most are passive  
3 recipients of their utility service. If you factor in the assumed costs of the meters and  
4 supporting ancillary hardware/software, the Company is effectively asking each of its  
5 account holders to make a \$600+ investment in a meter that may someday show daily water  
6 usage. If customer empowerment was the goal of this AMI choice, Raytown missed the  
7 mark.

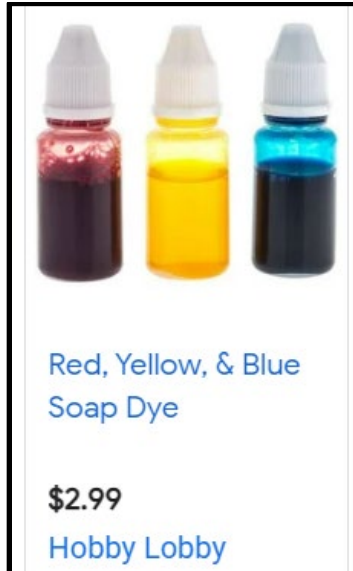
8 **Q. Are water leaks expensive?**

9 A. They can be. A leaky pipe within a home should be detected relatively quickly if those  
10 account holders live in the location (e.g. a busted pipe splashing water on the ground). A  
11 more likely out-of-sight, out-of-mind scenario would involve a toilet whose flush valve  
12 (“flapper”) was not properly seated. Of course, if this was the main argument (benefit) for  
13 consumers a thorough analysis would also look at all available options to address the issue.

14 **Q. Are there other, inexpensive alternatives to the \$600 AMI investment for detecting**  
15 **leaks in a toilet?**

16 A. Of course. One cost-effective option would be to put 10-15 drops of food coloring or a dye  
17 tablet in the toilet tank and wait thirty minutes without flushing. Figure 1 provides an  
18 illustrative example of three colored dye that cost \$2.99 at Hobby Lobby, which is  
19 approximately a 99.5% cheaper than the cost of the AMI. I have no doubt a more  
20 comprehensive cost review of food dye options could bring those costs down further.

1 Figure 1: \$2.99 Hobby Lobby Colored Dye



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3 **Q. Do you agree with Mr. Spratt that the remote shut-off function should not have been**  
4 **secured because it cost too much money?**

5 A. My position is that this entire AMI investment costs too much money. Mr. Spratt's  
6 testimony is unfortunately silent on how much more money a remote shut-off function  
7 would cost as it appears as though he's just repeating the Company's testimony at this point.  
8 Regardless, it is yet another benefit that has failed to materialize.

9 **Q. Mr. Spratt states, "Staff would suggest that more customers means more investment**  
10 **at probably about the same cost per customer."<sup>7</sup> Do you agree?**

11 A. No.  
12 This statement is of course false, as economies of scale should drive cost advantages that a  
13 business obtains due to its size. As a business grows, it can spread its fixed costs over a  
14 larger number of units of output, which reduces the average cost per unit.

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<sup>7</sup> Case No. WR-2023-0344 Rebuttal Testimony of David A. Spratt p. 5, 15-16.

1 The economies of scale argument is a central concept of utility regulation and natural  
2 monopolies. It is also literally one of American Water’s primary propositions for investors  
3 and why issues like single-tariff pricing never go away despite that concept conflicting with  
4 the principles of cost causation.

5 It is also one of the primary reasons why consolidation is taking place across all industries  
6 at such a rapid clip. More customers allows for more market and negotiating power.

7 It’s why Ford can buy steel in bulk at a lower price per unit than small machine shop. Why  
8 Wal-Mart can negotiate lower prices from its suppliers because it buys in bulk. It is also  
9 why it is incumbent that regulated utilities are held accountable when they make imprudent  
10 investments. Public utility regulation should not be a risk free world. At least, it is not  
11 supposed to be if economic regulation is truly operating as a proxy for the market and  
12 looking out for the best interest of our captive Missouri customers when we review our  
13 utilities who have no competition. This leads into Mr. Spratt’s next argument that RWC is  
14 somehow incapable of conducting a cost benefit analysis or issuing a competitive bid for  
15 multi-million dollar AMI investments because it is “less sophisticated”.

16 **Q. In his rebuttal testimony, Mr. Spratt states:**

17 **“While Dr. Marke might like to see thorough calculations, oftentimes small**  
18 **companies are conducting much less sophisticated analysis using the**  
19 **information that is available to them when determining what investments are**  
20 **prudent.”<sup>8</sup>**

21 **What is your response?**

22 A. I believe Mr. Spratt is arguing that math and facts are not necessary in making multi-million  
23 dollar capital investment decisions and that RWC (and similarly non-sophisticated utilities)  
24 can apparently operate prudently based on pure intuition. This belief is dangerous. Further,  
25 Mr. Spratt’s argument ignores the fact that this Commission recommended that the

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<sup>8</sup> Ibid. p. 6, 9-11.

1 Company conduct this exact analysis for all large equipment purchases in its Managerial  
2 Audit that took place in 1994.

3 Mr. Spratt’s statement elicits many more questions for me surrounding the Staff’s small  
4 water rate case process, Staff’s clear preferential treatment for certain utilities, and even  
5 what Mr. Spratt’s threshold is for “sophisticated” versus “non-sophisticated” analysis. I can  
6 assure the Commission my objection to RWC’s AMI investment is not based on a  
7 complicated mathematical computation but common sense and simple arithmetic with the  
8 Company’s own numbers taken at face value (and arguably to a fault). Mr. Spratt, in  
9 contrast, is perpetuating a moral hazard<sup>9</sup> and shifting risks onto captive customers when he  
10 makes declarative statements that excuse utilities of the consequences of their poor  
11 managerial decisions.

12 The Raytown Water Company has operated for ninety-eight years. This Company has a  
13 multi-million dollar rate base and the blessing from the Missouri Public Service  
14 Commission to provide service to over 6,541 accounts for well over 10,000 captive  
15 ratepayers. However, according to Mr. Spratt, we shouldn’t expect the Company to have  
16 the wherewithal to issue a competitive bid or check the cost/benefit assumptions  
17 surrounding its investments.

18 RWC did not have any information around AMI-provider options outside of Utility Service  
19 Group (“USG”) because it was uninterested in obtaining any information around AMI-  
20 provider options outside of the first sales pitch. It’s as simple as that. The first and only sales  
21 pitch was good enough for the Company.<sup>10</sup>

22 To be completely up front, I believe both Staff *and* OPC are continuing a trend of treating  
23 RWC with “kid gloves” in this case. For example, my recommendation around AMI does

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<sup>9</sup> “Moral hazard” refers to the risks that someone or something becomes more inclined to take because they have reason to believe that an insurer (or ratepayer in this case) will cover the costs of any damages. The concept describes financial recklessness.

<sup>10</sup> This of course raises all sorts of other questions about RWC’s operations.

1 not disallow any costs related to the actual investment itself. I am merely recommending  
2 that the Company should not profit off of its managerial imprudence. If the Commission  
3 elects to disallow more than a return on investment—I believe that choice would be  
4 appropriate and that any Report and Order issued in that vein would adhere to the regulatory  
5 principles that should guide this administrative process. Simply put, RWC operates in the  
6 coveted realm of a competition-free business, and unlike a competitive industry where  
7 imprudent decisions are imperative to survival of the business, utility companies regulated  
8 by this Commission will continue to make imprudent public-impacting decisions unless the  
9 Commission holds utilities to a heightened standard.

10 **Response to RWC witness Chiki Thompson**

11 **Q. What issues did RWC witness Thompson have with your AMI testimony?**

12 A. Ms. Thompson offered rebuttal to six points where she disagreed with my analysis and was  
13 silent on the rest of my objections. Ms. Thompson’s rebuttal has been paraphrased as  
14 follows:

- 15 1. Raytown does not have a fully exclusive service territory;
- 16 2. Meter readers will have to take fewer trips to houses;
- 17 3. OPC should include the annual maintenance fee;
- 18 4. OPC analysis did not take into account leaks found during the billing process;
- 19 5. Safety benefits extend to meter readers not having to read meters; and
- 20 6. Meters still needed to be replaced per Commission rule

21 I will respond to her counter-arguments in turn now.

22 **Q. Does Raytown experience competition for water customers?**

23 A. No. This was confirmed in the response to OPC DR-2050:

24 Question: The rebuttal testimony of Chiki Thompson p. 2, 8-11 states:

25 *Q. Does Raytown have a fully “exclusive” service territory?*

26 *A. No. The Raytown Water service territory overlaps in places with the Jackson*  
27 *County Water District No. 2 and the City of Independence.*



1 Are Raytown customers able to switch their water service provider to Jackson  
2 County Water District No. 2 or the City of Independence? If so, are there any  
3 additional costs for a customer who elects to switch provider?

4 Answer: We do not believe so. Only new construction customers have a choice of water  
5 provider where there are other water providers available. We assume the Customer  
6 would need to pay for tapping fees and expenses at the rate of the entity chosen.

7 **Q. Will meter readers have to make fewer trips to homes?**

8 A. Yes. Meter readers are no longer reading meters.

9 Since the meter readers do not need to drive to each location to check each meter, that should  
10 result in some gasoline savings. However, the meter readers will shift to field technician  
11 positions and Raytown is seeking to add a \$100K maintenance fee. For these reasons and  
12 more, the costs outweigh the benefits.

13 **Q. Should the annual maintenance fee be included in the revenue requirement if the  
14 Commission supports your recommendations?**

15 A. Yes. I believe that would be appropriate.

16 **Q. Did you take into account leaks found as a result of the Company's monthly billing  
17 process?**

18 A. No. I do not believe the Company can legitimately claim that leaks are occurring at any of  
19 those premises outside of on-site verification or affirmation from the customer. Ms.  
20 Thompson, for her part, is silent on how many customers are affected by such leaks. Again,  
21 all the Company should know from the billing process is that water usage is higher or lower  
22 than average, not what is causing the usage variation or where it is coming from.

23 **Q. Are meter readers safer now that they don't have to read meters?**

24 A. I am not aware of any attacks on meter readers or imminent threats. The Company has been  
25 reading meters for ninety-eight years. But I will concede that, yes, not physically reading a  
26 meter would minimize risk to a meter reader.

27 Again, as it pertains to meter readers, no positions have been eliminated and a maintenance  
28 fee for an additional \$100K annually will be added. The costs still outweigh the benefits.

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**Q. What is your response that the meters needed to be replaced anyway?**

A. I am not recommending disallowance of the AMI meters, annual maintenance fee, or ancillary software/hardware necessary for this investment even though the Commission would be justified in disallowing more. I am simply recommending a disallowance of the “return on” the AMI investment and recommending that all meters be placed into the rate base. This recommendation results in a small overall increase from the Staff and the Company’s stipulated position.

Ms. Thompson’s own testimony acknowledges that the Company would benefit from more than \$1M in cost savings if it had elected to go to AMR instead of AMI. No doubt these costs savings would be even greater if a competitive bid were issued or the Company chose a direct-read meter.

As it stands, the investment has effectively been gold-plated and will result in financial harm to ratepayers.

**Q. What is gold-plating?**

A. In the context of utility regulation, "gold-plated" refers to utility investments or expenses that are excessive or unnecessary, and that are likely to lead to higher rates for consumers.

A non-exhaustive list of examples include the following:

- Over-engineering infrastructure projects;
- Using more expensive materials or construction methods than necessary;
- Duplicating existing infrastructure;
- Investing in projects that are not cost-effective or that do not meet the needs of consumers;
- Hiring more staff than necessary or paying higher salaries than necessary; and
- Engaging in wasteful or inefficient practices

1 **Q. Why would RWC want to gold plate?**

2 A. To make more money.

3 Under rate-of-return regulation, a utility company's profits are capped at a certain  
4 percentage of its rate base, which is the value of its assets. This means that the Company  
5 has a perverse incentive to increase its rate base by investing in more capital assets, such as  
6 AMI meters.

7 This is also known as the Averch-Johnson effect in economics and explains why a regulated  
8 company will tend to over-invest in capital in order to expand the volume of their profits.<sup>11</sup>

9 If regulators do not hold utilities accountable, a utility's perverse incentive to overspend  
10 on capital can be like a bottomless pit of cost inefficiencies that gradually and then  
11 suddenly increase the cost of service to captive customers.

12 **Q. Do you have any final comments to make on this topic?**

13 A. Yes, I have two. First, neither this case nor RWC's financing case (Case No. WF-2021-  
14 0427) did the MO PSC Staff issue any discovery surrounding the prudence of the AMI  
15 investment. No issued discovery for a cost benefit analysis, competitive bids, explicit  
16 benefits, or other related inquires. This is extremely concerning and raises additional  
17 questions above and beyond this filing.

18 Second, on the off chance that the Commission feels compelled to support the AMI  
19 investment because of the financing order I would remind the Commission of several things.

20 1.) I am not recommending a disallowance on the "return of" the meters. Only the  
21 "return on."

22 2.) Missouri is not a pre-approval state;

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<sup>11</sup> Per the New Palgrave Dictionary of Economics: "The Averch-Johnson effect is produced when fair rate of return regulation encourages a firm to invest more than is consistent with the minimization of its costs. This can happen when the allowed rate of return exceeds the cost of capital, since the difference between the two represents pure profit." See also Averch, H.A., and L.L. Johnson. 1962. Behavior of the firm under regulatory constraint. *American Economic Review* 52: 1052-1069.

1           3.) Page 4A of the Commission’s Order approving the Finance Authority in Case No.  
2           WF-2021-0427 states:

3           “Nothing in this Order shall be considered a finding by the Commission of the  
4           prudence of this transaction for rate making purposes, and the Commission reserves  
5           the right to consider the rate making treatment to be afforded the financing  
6           transaction, and its impact on the cost of capital, in any later rate proceeding.”

7           4.) Prudence issues are largely reserved for rate cases or in statutorily approved single-  
8           issue ratemaking adjustments (e.g., fuel adjustment clause, energy efficiency,  
9           etc...); and

10          5.) Finally, the National Regulatory Research Institute (“NRRI”) produced a white  
11          paper in 2008 by Scott Hempling titled “Pre-Approval Commitments: When and  
12          Under What Conditions Should Regulators Commit Ratepayer Dollars to Utility-  
13          Sponsored Capital Projects?” That white paper contains a fair amount of useful  
14          information and guidelines including the following excerpt from the first  
15          hypothetical pre-approval scenario that involves a small water utility seeking pre-  
16          approval in connection with a relatively large—but otherwise routine—investment:

17                **Each of these questions have a common theme: cost-benefit analysis.** The  
18          Commission should be satisfied that the risks associated with providing  
19          approvals in advance—including the constraints on the Commission’s ability to  
20          take actions after the fact because of approvals granted before-the-fact—are  
21          outweighed by the benefits derived from the timely implementation of the  
22          infrastructure upgrade. **Then the Commission should ensure that those**  
23          **benefits arrive** (emphasis added).<sup>12</sup>

24          Based on NRRI’s guidelines, conditions necessary for appropriate pre-approval were not in  
25          place nor were they met at any point during their deployment. Benefits were not assured

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<sup>12</sup> See GM-3A and GM-3B. The former includes the specific case study with the excerpt highlighted. The latter includes the entire white paper.

1 and ratepayers are being financially harmed which results in my recommendation for partial  
2 cost disallowance.

3 **III. ACCOUNTING TIMING AND TREATMENT OF METERS**

4 **Q. What is the matching principle in utility regulation?**

5 A. The matching principle is a concept that states that revenues should be matched to the costs  
6 that were incurred to generate those revenues. This principle is used to ensure that utilities  
7 are earning a fair return on their investment, while also protecting consumers from paying  
8 excessive rates.

9 When setting rates, regulators will consider the utility's total costs in providing service and  
10 regulators will then match these costs to the utility's expected revenues. In Missouri, the  
11 Commission utilizes a historic test year with adjustments or "true ups" made to test year  
12 data to account for known and measurable changes that are expected in the future.

13 **Q. Staff witness Angela Niemeier argues that the matching principle prevents Staff from**  
14 **including the rest of the AMI investment. Do you agree with Ms. Niemeier's**  
15 **argument?**

16 A. No. This is a case where a known and measureable cost is being incurred. RWC currently  
17 has all but a couple hundred meters in operation with the remainder to be deployed by the  
18 end of the year. The Company's maintenance fee went into effect in September.

19 My recommendation to include the rest of the meters is an attempt to defer another  
20 immediate rate case and yet more costs to ratepayers. This recommendation is a unique  
21 departure from how OPC historically approaches this issue due to expected rate shock of  
22 another rate case. As such, my recommendation is more than reasonable given the  
23 circumstances. I would add that this Commission has included known and measurable  
24 capital investments immediately outside of a test year in the past on a case-by-case basis  
25 under unique and/or pragmatic situations.

1 My additional recommendation to disallow the profit margin on this imprudent investment  
2 of AMI meters, which minimizes the cost impact to ratepayers and leaves the Company very  
3 close to the already agreed-to language of the stipulation that the Staff and the Company  
4 entered into. It also means that these meters can begin depreciating sooner which will result  
5 in a long-term cost benefits to consumers.

6 If the Commission decides to support Staff's position of not including the known and  
7 measurable meters currently in operation the end result will most certainly be a new  
8 immediately filed rate case with more needless cost increases.

9 That being said, I would not support including all of the known and measurable meters and  
10 annual maintenance fee if the Commission also elects to rewards RWC for its gold-plated  
11 investment with a return on that investment. The public has not been made adequately aware  
12 of the rate increase that would occur as a result and is already in a position to receive  
13 approximately a 60% increase from what the Company filed if the Commission adopts the  
14 Staff and the Company's position in it entirety.

#### 15 **IV LATE FEES**

##### 16 **Q. What was Staff's response to your request to remove late fees?**

17 A. Staff witness Melanie Clark argues that Raytown's customers are not financially struggling.  
18 She states:

19 Staff is cognizant that there are many customers who struggle to pay their bill on  
20 time and adding a small late charge adds to that burden. However, generally  
21 speaking, the City of RWC has a median household income of \$59,049 RWC. Based  
22 on this, Staff does not believe a \$5 fee will be a burden to the majority of RWC  
23 customers.<sup>13</sup>

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13 Case No. WR-2023-02344 Rebuttal Testimony of Melanie Clark p. 2, 14-17.

1 **Q. What is your response?**

2 A. Raytown is not an affluent suburb. Raytown's median household income is 3% less than  
3 that of the median household income in Missouri at \$61,043.

4 As stated in my direct testimony, the rationale behind late fees is being called into question  
5 in many domains and has, at best, questionable empirical support to substantiate their  
6 existence. Context matters as well. Late fees may be more acceptable in a competitive  
7 market or tied to an obligation that does not result in immediate health and safety concerns.  
8 That is not the case here. RWC customers are captive and cannot choose their provider and  
9 water is an essential service whose absence would quickly have a detrimental impact on  
10 one's health. I maintain that late fees are needlessly punitive, regressive in nature, and do  
11 not reflect actual cost causation. The reality of the situation is that many of RWC's  
12 customers are economically unstable, on fixed incomes, and will struggle at greater levels  
13 if any sort of rate increase is granted. They have every incentive to pay their bills or run the  
14 risk that their service be disconnected.

15 **Q. What was RWC's response to your request to remove late fees?**

16 A. RWC witness Chiki Thompson believes costs for a variety of customer service related  
17 ancillary functions will increase as a result. She states:

18 I believe the number of delinquent accounts would increase, therefore, we would  
19 need to hire additional help to handle the calls for payments, payment arrangements,  
20 and complete the disconnect/reconnect process. Of course, this may also increase  
21 our printing and posting expense because these processes require additional  
22 customer notifications.

23 A. There is no factual basis for this discourse.

24 Nor does it reflect the lived experience of any water utility that has removed their late fees  
25 in Missouri. Importantly, neither Staff nor RWC address my observation that RWC's  
26 current practice of charging delinquent customers \$5 or 1% of the customer's bill is an  
27 arbitrary amount and does not reflect cost causative principles.

28

1 **Q. What do you mean?**

2 A. To answer that question, I would direct the Commission to the following discovery  
3 responses.

4 OPC DR-2071 asks and received the following:

5 Question: What is the cost basis for setting late fees at either \$5 or 1% of a monthly bill  
6 (whichever is greater)?

7 Answer: It is our memory that the \$5 or 1% provision was implemented in Case No.  
8 WR-2009-0098 based on a Staff proposal. We believe costs will not have  
9 been reduced during that time. Also see the response to DR 2072 below.<sup>14</sup>

10 OPC DR-2072 asked and received the following:

11 Question: Would the Company be opposed to setting late fees at just 1%? If not, why  
12 not?

13 Answer: Yes, the Company would be opposed. Late fees at 1% of a monthly bill,  
14 would not cover our current costs just to issue the late notices. The average  
15 bill is around \$45. 1% of \$45 is only \$0.45. 1% would not cover the cost of  
16 the first delinquent notice expense, let alone the cost of a second notice.

17 Estimated Cost of 1 delinquent notice = \$1.14 each, which does not include  
18 Overhead or taxes, or any impact of delayed cash flow on RWC's operations.

- 19
- Billing stock - \$0.02 ea
  - Envelopes - \$0.14 ea
  - Postage - \$0.68 ea
  - Printing - \$ .04 ea
- 20  
21  
22

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<sup>14</sup> See GM-2.



- Labor: min 2 hr. @ \$52.28/hr for a batch of such notices (includes taking to post office) \$0.26 ea<sup>15</sup>

At a minimum, the actual cost of the late fee is \$1.14. If I give Ms. Thompson the benefit of the doubt that a second delinquent notice will always be issued then the total cost is \$2.28. Which is still 54% less than what customers are being charged.

Regardless of the amount, it still does not get at the underlying premise of my argument which is that the threat of disconnection is a greater motivator for timely payments than a punitive late fee.

**Q. Has your position changed at all in light of this information?**

A. My primary recommendation remains. As an alternative, I would recommend a \$2.50 late fee that would at least align with cost causative principles and cover the mailing notice expense. I believe this is a suboptimal outcome for ratepayers but it would at least be a step in the correct direction as there is no basis for charging customers \$5 for a late fee.

**Q. Does this conclude your testimony?**

A. Yes.

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<sup>15</sup> *Ibid.*

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


In the Matter of the Application of a Rate     )  
Increase of Raytown Water Company         )     Case No. WR-2023-0344

**AFFIDAVIT OF GEOFF MARKE**

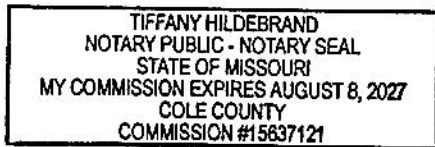
STATE OF MISSOURI     )  
  )     ss  
COUNTY OF COLE     )

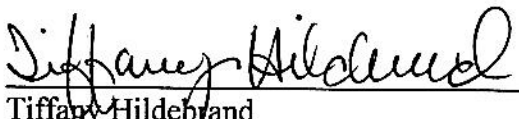
Geoff Marke, of lawful age and being first duly sworn, deposes and states:

1. My name is Geoff Marke. I am a Chief Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
\_\_\_\_\_  
Geoff Marke  
Chief Economist

Subscribed and sworn to me this 8<sup>th</sup> day of November 2023.



  
\_\_\_\_\_  
Tiffany Hildebrand  
Notary Public

My commission expires August 8, 2027.