KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2022-00299
ATTORNEY GENERAL'S SECOND REQUEST FOR INFORMATION

Witness: Andy Lewis

9. Reference the response to PSC-DR-1-6.

   a. Regarding the statement at p. 3 of that response that KAW ". . . has changed wireless carriers to achieve better connectivity," provide a discussion regarding whether this change has helped reduce the number of consecutive meter estimates. If so, explain how the Company knows this, and provide supporting data; conversely, if the Company knows that the change has not reduced the number of consecutive meter estimates, provide an explanation of how the Company knows this, and provide supporting data.

   b. Regarding p. 3 of this response where it is stated that KAW has recently consolidated some of its meter reading routes, explain in detail whether the Company has obtained any data indicating that this consolidation has: (i) yielded increased efficiencies; and (ii) reduced the number of difficult meter reads.

   c. In the last paragraph of the narrative response on p. 3, KAW stated that "There has been a recent upward trend in these,[2]. . . ." Discuss the measures KAW has taken to reduce this recent upward trend, and if so: (i) whether those efforts have been successful; and (ii) provide supporting data.

Response:

   a. The purpose of the wireless carrier switch was to improve the communication between the truck computer system and reading database. The original reason for the change was to achieve better cell service inside all work vehicles. Besides switching carriers, KAW also installed cell signal boosters into all meter reading vehicles to further enhance signals. Meters are still read by radio devices and stored inside the truck computer until uploaded to the database. Giving the meter reading trucks a more reliable wireless service improved upload and download latency and made meter readers more efficient but did not have a direct effect on consecutive estimate numbers.

   b. The meter re-route initiative went into effect December 27, 2022. KAW has yet to determine if this change will result in efficiencies or reduction of difficult to read meters.

[2] Referring to the number of consecutive estimates.

c. KAW has implemented the following actions to reduce consecutive estimates, and improve visibility and response to conditions that may cause consecutive estimates:

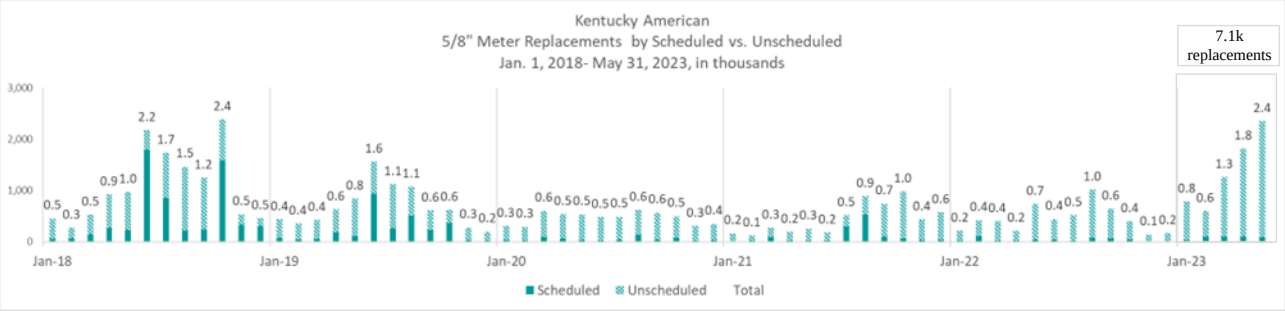
1. A consecutive estimate reporting dashboard was created in Q4 2022 to monitor the number of consecutive estimates and probable cause of meter reading issues that result in a skipped automatic meter reading. For example, the dashboard identifies the number of meter reading "skips" and their associated cause, such as communication errors. Refer to PSC 2-7 for a list of skip codes. Local operations use information from the dashboard to target meters needing replacement, MIUs that need repair, and meters that may need to be manually read to reduce consecutive estimates.
2. KAW, in concert with American Water Works Service Company, Inc. ("Service Company"), implemented an interim practice to mitigate automatic route estimation by the SAP system. On a daily basis, the local KAW operations team coordinates with the Service Company meter team to ensure as many meter readings, whether automatically read or manually read, are uploaded to SAP prior to the cutoff period at which SAP automatically estimates the entire meter route. In this case, the large number of manually read meters increases the risk of a long meter reading cycle, and the interim practice focuses on uploading available readings within the proper SAP window, while providing more time to read and upload manually obtained readings.
3. KAW continues to work with the Service Company work order management team to issue an automatically generated work order to investigate or change a meter after the meter has been estimated for 2 consecutive months. This initiative is currently a work in progress as it requires reprogramming of the enterprise work management system.
4. The industry availability of new meters impacted KAW's ability to obtain meters in the second half of 2022 due to supply chain shortages. Upon receipt of additional meter inventory in December 2022, KAW has been able to replace 1409 meters associated with the list of consecutively estimated accounts.
5. To date, KAW has identified approximately 6,700 meters that require manual reading each month. Manual reading of meters at this monthly volume increases risk of future estimates. An accelerated meter replacement plan has been implemented to replace those meters by May 1, 2023.

KAW is continuing to monitor consecutive estimate activity, but has not yet seen a reduction in overall consecutive estimates relative to the fall of 2022.

Supplemental Response Filed June 7, 2023

KAW has once again seen a reduction in overall consecutive estimated reads. KAW completed ~ 7,100 meter replacements from January 2023 through the end of May 2023, including ~6,800 5/8" meters as shown in the chart below as well as ~300 meters of other sizes. Please see Figure 1 below.

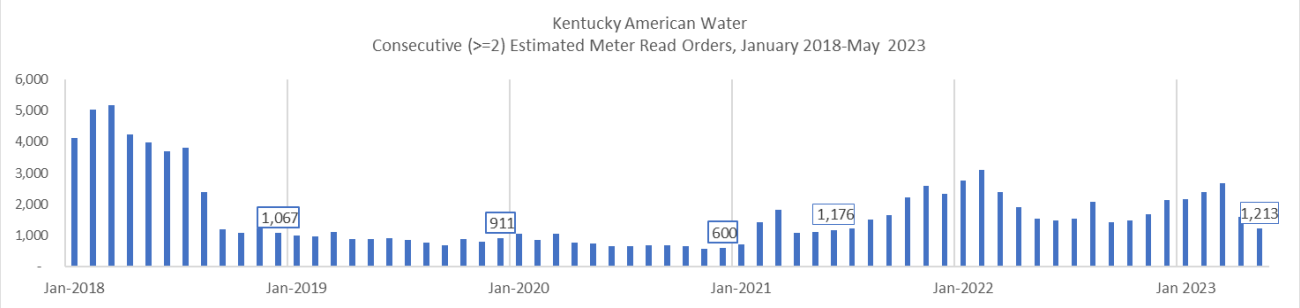
Figure 1:



This replacement work was primarily facilitated by the receipt of meters ordered August 17, 2022. The 12,000-unit order (6,000 meters and 6,000 endpoints) experienced a 3–7-month delay in delivery. KAW received just 200 units after 3 months, another 4,000 units in December 2022 (after ~4 months), and the final 7,800 units in March and April 2023 (after 7-8 months).

The compounding effects of aging meters, supply chain restrictions, and loss of tenured field service employees resulted in increased estimated meter readings in 2021 and 2022. As we've seen historically, significant increases in meter replacements coupled with ongoing process improvements, are once again reducing consecutive estimated reads. In May 2023, these were at their lowest level since June 2021 (as shown in the chart) and are beginning to approach the level achieved from the end of 2018 to the end of 2020. Please see Figure 2 below.

Figure 2:



*Note, the chart above includes meter read orders at vacant premises (~16% of the 1,213 consecutive orders in May 2023) and does not reflect subsequent corrections achieved through RBL (Priority Read for Billing) orders.