

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00300**  
**COMMISSION STAFF'S REQUEST FOR INFORMATION ON REHEARING**

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**Witness: Shelley Porter**

1. Refer to Kentucky-American's Petition for Rehearing, Timing of KAW's Future QIP Filings. Describe, in detail, Kentucky-American's Qualified Infrastructure Program (QIP) project planning process and how adjusting the QIP effective date to January 1 will create significant constructability and efficiency advantages.
  - a. Describe any specific cost savings from adjusting the QIP effective date to January 1.
  - b. Describe how Kentucky-American's coordination with Lexington-Fayette Urban County Government would change if the QIP effective date was adjusted to January 1.
  - c. Describe specific difficulties Kentucky-American has had in its QIP planning process using the past effective periods.

**Response:**

(a – c)

Initially, KAW notes that the *only* reason that previous QIP years were from July 1 to June 30 was the timing of KAW's 2018 rate case (Case No. 2018-00350). The forecasted test year in that case was from July 1, 2019 to June 30, 2020, so the first QIP year after that test year was likewise based on a July 1 to June 30 year. There was no budgeting, construction, or engineering reason for a July 1 to June 30 year. Now, with multiple years of QIP experience, KAW has learned that a move to a true calendar year will have budgeting, construction, and engineering advantages. The timing of KAW's pending rate case (Case No. 2023-00191) and the proposed future timing of QIP filings Mr. Newcomb made in that case would have created those advantages. However, the Commission's proposed schedule in this case (Case No. 2023-00300) will not allow for those advantages. Thus, as explained in KAW's Petition for Rehearing in this case and in more detail below, there is no reason to adhere to QIP years based on rate case timing and there are many reasons to move to a calendar year.

KAW's QIP planning process begins with the utilization of the pipeline prioritization model which equates a numerical score for both likelihood of failure (LOF) and consequence of failure (COF) incorporating weighted criteria such as pipe age, historical leaks, diameter, and material. Based on the limiting criteria of cast-iron and galvanized main, KAW takes a systematic approach of running the model with a selection criterion for pipeline segments with a likelihood of failure score above three (on a scale of 1 to 5), an installation year of pre-1900s and subsequently advancing through the decades, and filtering data to focus on the material types of cast iron and galvanized main. Based on these highlighted pipeline segments, adjacent pipeline segments are reviewed for similar vintage and material types for project inclusion, as the pipe segment performance criteria based on historical leaks can be skewed if leaks are not surfacing, which is common for the karst topography

in KAW's service territory or when leakage is associated with pinhole leaks seeping into the ground that do not cause breaks.

Once the prioritization model desktop analysis is complete, a field evaluation of the initial list of projects occurs to evaluate site considerations in preparing preliminary estimates. Considerations such as any recent paving activities are noted, as there may be a lag from LFUCG's paving condition ratings and new paving activities, which would prevent the allowance of construction activities when applying for street opening permits. Also noted are customer considerations such as hospitals, schools, business areas and parks that would be impacted by the construction activities, as these may require additional considerations for emergency services, construction timing considerations to avoid major festivals or school activities, and additional safety considerations for high pedestrian areas or road closures for narrow streets. If any potential projects occur in historic districts or may potentially impact trees, this is also noted to make sure additional projects costs associated with granite curbs, potential lead services, and brick streets are considered, along with the coordination of additional LFUCG departments, which are in addition to the LFUCG departments that handle street closing and paving activities. Construction areas downtown and in historic areas with narrow streets will be more costly per linear foot due to the work zone safety and traffic control needs, mobilization considerations on locating project materials, and possible increased restoration requirements.

Local hot asphalt plants are not open in colder months. Thus, when projects take place during those colder months, temporary paving, commonly referred to as "cold patch asphalt," must be used. Maintenance of that temporary pavement that is damaged by snow plowing and the freeze and thaw cycles increase contractors' construction costs indirectly or directly through the installation of concrete that must be later milled down until final "hot asphalt" paving can begin after temperatures increase and hot asphalt paving plants reopen. Current temporary cold patch asphalt costs are approximately \$150/ton versus hot mix asphalt cost of \$90/ton. Due to many customer complaints and continual maintenance costs for the reapplication of cold patch damaged by freeze/thaw and plowing impacts, winter restoration utilizing a concrete cap is being used which ranges from approximately \$9 to \$10.50 per square foot, in addition to milling and final paving costs. A move to a calendar year for QIP will allow more projects to use hot asphalt exclusively because KAW will be able to use the colder months for project planning and design. Under the existing QIP "calendar" or the Commission-mandated calendar of September 1 to August 31, which straddle the hot asphalt production season, KAW cannot maximize the opportunities to complete projects wholly in the hot asphalt season. Although it is not possible to calculate those savings precisely, based on the cost differences between cold patch asphalt and hot asphalt, savings will happen which, of course, will be passed on to KAW's customers.

Once field evaluations are complete, KAW schedules a utility coordination meeting inviting LFUCG's Streets and Roads Division, LFUCG's Water Quality Division (both sewer and stormwater), and Columbia Gas to evaluate these specific projects and any potential opportunities or conflicts. Additional feedback gathered during this meeting regarding other stakeholders' planning activities is considered and analyzed to establish the final list that is presented to the Commission for approval by KAW in a QIP case.

As explained in prior QIP cases, KAW, LFUCG, and Columbia Gas have agreed to participate in paving cost sharing agreements by which all paving activities are coordinated among all stakeholders to maximize efficiencies for all. That process includes an initial coordination meeting in August of each year with a follow-up in December, to align with the calendar year construction activities for Columbia Gas and LFUCG's annual paving list activities under LFUCG's Ordinance 17C-18 Subsection c, with LFUCG paving program activities to occur in the new fiscal year beginning on July 1<sup>st</sup>. The current construction period for QIP, which straddles two calendar years, places paving activities at the end of LFUCG's fiscal year, in addition to the middle of the QIP construction period taking place over the winter, requiring additional temporary cold patch pavement activities until final restoration can occur once temperatures increase and hot asphalt is available.

Aligning construction to a calendar year allows for construction to start and be completed, with paving sharing opportunities to be realized early in LFUCG's fiscal budget year. Additionally, in mid-June, LFUCG's Streets and Roads Division provides a paving list to KAW for an additional review for their July 1 – June 30 paving projects, to recheck and solicit feedback on which streets may be experiencing current utility activities and future utility work, as paving lists may adjust based on dollars designated under the LFUCG city council representative district-controlled portion of paving budget projects.

Additional direct communications, meetings, and data are passed between parties throughout the year as changes related to pipeline repairs from various stakeholders, LFUCG paving program changes, and the portion of LFUCG paving dollars that are managed by LFUCG city council representatives for their district are directed. KAW joins LFUCG's Monday morning weekly scheduled paving update meeting between LFUCG, its paving contractor, and utility partners for roadway maintenance activities to make sure roadways aren't inadvertently paved for projects that have been put forth during project planning coordination meetings or that have been recently paved through our main replacement activities. Additional partnership meetings with stakeholders occur throughout the year to address pavement sharing agreements, continual pavement sharing program improvements, and to propose and pilot restoration ideas presented to LFUCG to lessen cost impacts to customers, while improving paving performance.

In addition to the challenges experienced in the past with not aligning with other stakeholders' planning cycles, KAW's QIP period occurring at the end of LFUCG's fiscal year, and costs associated with maintaining temporary pavement patching over winter construction, receiving Commission approval for the rigid list of QIP projects, and subsequently starting bid activities in mid-summer has made it challenging to start construction and complete approved projects during the late spring/summer construction time period that would be most desirable to avoid traffic and pedestrian conflicts around schools. It would be most ideal to bid any projects around public schools, the University of Kentucky, and Transylvania University in the first quarter with construction starting in May after graduations take place or when schools are on summer recess. The current QIP calendar simply does not allow for this. Additionally, KAW has found it challenging to be able to take advantage of opportunities presented when unplanned work or adjustments occur by LFUCG and other utilities stakeholders such as Columbia Gas that have more flexibility in their main replacement programs. Taking advantage of those opportunities would present a benefit to customers and qualify for QIP replacement projects, but they are

typically outside the annual Commission approved QIP list and KAW's budgeted activities. A move to a calendar year for QIP may be helpful.

The adjustment in timing of KAW's future QIP periods to a calendar year will maximize the efficient construction of its QIP projects by eliminating the straddling of current QIP over pipeline construction seasons. Pipeline construction projects are usually completed in the warmer months. Nearly all QIP projects require some level of road repaving and must be finally completed (even if cold patch asphalt is used temporarily) exclusively in the warmer months because those are the only months in which hot asphalt is available for final paving. The straddling of past QIP years over two calendar years with the middle of the QIP cycle occurring in the winter has been more difficult than necessary to manage from a budgeting and timing perspective and has not been beneficial to customers and the community in order to seamlessly bid and start construction on approved projects during the late/spring and summer construction period. A shift to align QIP years with a calendar year will allow KAW to do its QIP assessment, planning, and move to some internally designed projects during the colder months when construction is limited, align with other stakeholders, and then focus its resources on construction execution during the warmer months when construction is actually occurring.