

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC GRAVES COUNTY WATER)	
DISTRICT'S UNACCOUNTED-FOR WATER)	CASE NO.
LOSS REDUCTION PLAN, SURCHARGE,)	2019-00347
AND MONITORING)	

ORDER

On September 30, 2019, the Commission initiated this proceeding to monitor Graves County Water District's (Graves District) unaccounted-for water loss surcharge proceeds collection and expenses. The Commission authorized Graves district to collect a monthly surcharge of \$5.00 per customer, for 72 months for a total of \$1,721,600 to fund Graves District's water loss detection and repair program. Among the requirements established by the Commission, Graves District must file an annual schedule of the estimated and actual progress of the water loss detection and repair program, and estimated and actual expenditures made with the surcharge proceeds, so that the Commission can evaluate whether adjustments to the program or surcharge are needed. Graves District received an extension of time to file the schedule, which was filed on January 4, 2021.

Graves District provided data for the water loss and detection program's first year, from October 1, 2019, through September 30, 2020, as compared to the projected cost estimates and program results when the program was approved. Graves District argued that no adjustments should be made to the surcharge amount or program elements due to certain challenges in the first year, including initial startup and the impact of the COVID-

19 pandemic. Additionally, Graves District asserted, as it did in its initial request for approval of the program, that the results could not be gauged accurately until the second year of the program.

Graves District stated that program implementation is proceeding as scheduled. Graves District proposed to expand the number of district metered areas (DMA), which are specific distribution sectors in which Graves District installs meters that monitor water usage in that sector, and thus allow Graves District to quickly identify excessive water usage within the DMA. With quicker detection, Graves District can reduce the volume of unaccounted-for water. During this program year, Graves District established 19 DMAs, bringing the total to 23. Graves District originally planned to establish 35 DMAs in the second year of the program, but now plans to establish up to 53 additional DMAs in the second program year.

Graves District collected \$240,030 in surcharge revenues between December 2019 and September 2020, which is slightly more than expected due to a greater number of customers than initially projected. Because of the increased customer count, Graves District expects to collect \$290,040 in the next program year. Graves District predicted that the revenue increase will result in the \$1,721,600 total revenue to be generated from the surcharge will be reached in 71 months, one month sooner than the 72 months allowed by the Commission.

Graves District reported \$252,563 in total actual expenditures for the 10-month review period ending September 30, 2020. The following is a breakdown of these expenditures:

- \$109,832 for establishment of DMAs

- \$52,084 for lease of the hydro-excavator truck
- \$4,400 for leak detection equipment
- \$57,936 for loss detection
- \$28,311 for loss repair (labor & transportation).

Graves District projects that it will expend \$403,237 in the first 12 months of the program, which is significantly less than the budgeted amount of \$440,228. Graves District explained that the reduced first year expenditures were largely due to a lower cost of meters for the DMAs, and Mayfield Electric and Water System's (Mayfield) purchase of leak detection equipment and sharing the equipment at no cost to Graves District.¹ The savings will allow Graves District to establish more DMAs at a faster rate in the first two years than initially proposed.

Graves District initially proposed to hire two part-time employees to work on water loss detection and prevention. However, Graves District determined that one full-time person dedicated to water loss would be more effective and ensure a greater level of expertise. Graves District stated that it will continue the program with the one full-time employee dedicated to water loss. That employee will be supported by other Mayfield employees as needed.

Graves District projected that a total of 500 leaks would be located and repaired over the six-year program period, with 200 leaks located and repaired in the first year of the program at an estimated cost of \$80,000, or \$400.00 per leak, and a reduced number of leaks over the remaining five years. During this review period, 68 leaks were located

¹ Mayfield is a municipal electric and water utility. Mayfield operates Graves District under a management agreement.

and repaired at a total cost of \$28,310. Graves District revised its estimate and now expects that 87 leaks per year will be located and repaired over the next five years at an annual cost of \$36,220.

Graves District argued that it is premature to draw conclusions regarding the success of the water loss detection and repair program, but that, in the first ten months of the program, the results appear positive. For example, Graves District experience water loss of 38.3 percent in January 2020, which was reduced to 20.8 percent in November 2020.²

Based upon the annual report and the monthly filings contained in the case record, the Commission concurs that additional time is needed to determine the overall success of the water loss detection and repair program because the initial steps of purchasing leak detection equipment, establishing DMAs, and training staff will not result in immediate water loss reduction. However, a review of Graves District's annual report and monthly water loss filings in this case indicates that Graves District may have improved its unaccounted-for water loss, with an annual water loss for 2020 of 26.36 percent as compared to 31.05 percent in 2018 and 34.13 percent in 2019.³ Additionally, Graves District's annual report and monthly filings demonstrate that Graves District matched expenditures for leak detection efforts with the monthly revenues generated by the surcharge and maintained a positive balance in the surcharge bank account.

² There is a discrepancy between the November 2020 water loss amount of reported in the annual filing in this proceeding and the November 2020 water loss amount of 21.25 percent reported in the monthly filing in this proceeding. However, the discrepancy is to be due to rounding.

³ *2018 Annual Report of Graves District* (filed June 19, 2019) at 57 of 67; *2019 Annual Report of Graves District* (filed May 19, 2020) at 57 of 67.

For the reasons set forth above, the Commission finds no changes should be made to the water loss detection and prevention surcharge or program elements and that Graves District should continue to collect the previously authorized monthly surcharge of \$5.00 per customer.

The Commission further finds that, to promote consistency in comparing the program periods, Graves District should file its next annual water loss detection and repair program report on or before January 4, 2022, and that the report should contain the same type of data and format as the report filed on January 4, 2021.

IT IS THEREFORE ORDERED that:

1. Graves District shall continue to implement the water loss detection and prevention surcharge and program as set forth in the September 30, 2019 Order in this proceeding.
2. Graves District shall file its next annual schedule of the estimated and actual progress of the water loss detection and repair program, and estimated and actual expenditures made with the surcharge proceeds on or before January 4, 2022.

By the Commission



ATTEST:


Executive Director

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