

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC SOUTH HOPKINS WATER	)	
DISTRICT UNACCOUNTED-FOR WATER LOSS	)	CASE NO.
REDUCTION PLAN, SURCHARGE AND	)	2023-00018
MONITORING	)	

ORDER

By letter dated August 9, 2024, South Hopkins Water District (South Hopkins District) requested authorization to use water loss surcharge funds to purchase 200 ultrasonic radio read meters and necessary materials to repair leaks.<sup>1</sup> On February 12, 2025, South Hopkins District filed two further requests for approval to use water loss surcharge funds to purchase, respectively, a portable flow meter and a thermal-imaging drone.<sup>2</sup>

BACKGROUND

On February 14, 2023, this case was initiated by Commission Order for the purpose of monitoring South Hopkins District’s unaccounted-for water loss reduction plan surcharge. South Hopkins District was required to file a qualified infrastructure improvement plan (QIIP) within 120 days of service of the Order, and to seek Commission approval before using any water loss surcharge funds.<sup>3</sup>

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<sup>1</sup> South Hopkins District’s Request to Use Funds (Request to Use Funds) (filed Aug. 16, 2024).

<sup>2</sup> South Hopkins District’s Request to Buy Flow Meter (Request to Buy Flow Meter) (filed Feb. 12, 2025); South Hopkins District’s Request to Buy Drone (Request to Buy Drone) (filed Feb. 12, 2025).

<sup>3</sup> Order (Ky. PSC. Feb. 14, 2023), ordering paragraphs 1 and 5.

South Hopkins District has a history of excessive unaccounted-for water loss, which increased from 17.68 percent in 2017 to 37.77 percent in 2021.<sup>4</sup> As of February 2025, South Hopkins District reported its water loss at 52.49 percent and the water loss surcharge account had a balance of \$200,716.717.<sup>5</sup>

On May 31, 2023, South Hopkins District filed an initial QIIP.<sup>6</sup> By Order issued March 27, 2024, the Commission granted South Hopkins District approval to use water loss surcharge funds to purchase two leak detectors.<sup>7</sup> South Hopkins District filed an updated QIIP on October 7, 2024.<sup>8</sup> As part of the updated QIIP, South Hopkins District proposed projects to identify and assist with unidentified water loss, including replacing older manual meters with radio read meters, installing more master meters, installing more or replacing existing shut-off valves, hiring part-time staff for leak detection, purchasing materials to have on hand for leak repairs, and continuing replacement of lines when leaks are found.<sup>9</sup>

### DISCUSSION AND FINDINGS

In its letter dated August 9, 2024, South Hopkins District requested permission to use water loss surcharge funds to purchase Diehl-hydrus ultrasonic meters and the materials needed for installation and use of those meters.<sup>10</sup> South Hopkins District

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<sup>4</sup> Feb. 14, 2023 Order at 1.

<sup>5</sup> South Hopkins District's February 2025 Activity Report (filed Mar. 11, 2025).

<sup>6</sup> South Hopkins District's QIIP (filed Oct. 7, 2024).

<sup>7</sup> Order (Ky. PSC Mar. 27, 2024).

<sup>8</sup> South Hopkins District's Updated QIIP (filed Oct. 7, 2024).

<sup>9</sup> South Hopkins District's Updated QIIP at 4.

<sup>10</sup> Request to Use Funds (filed Aug. 16, 2024).

requested to purchase 200 meters initially and gradually purchase meters for the entirety of South Hopkins District.<sup>11</sup> South Hopkins District stated the meters being used presently can wear down over time and not accurately count all water being used, which can be a significant source of water loss.<sup>12</sup> South Hopkins District further stated the ultrasonic meters it proposed to purchase are more precise in the detection of water usage and will decrease the time spent reading meters, giving technicians more time to look for and repair leaks.<sup>13</sup> South Hopkins District provided a quote for the 200 meters in response to Commission Staff's Requests for Information.<sup>14</sup>

South Hopkins District also requested approval to use water loss surcharge funds to purchase an inventory of materials necessary to have on hand to repair and replace leaks on a regular basis and claimed this would greatly help South Hopkins District financially and with its ability to adequately fix problems to reduce water loss.<sup>15</sup> South Hopkins District stated it had attached invoices for the necessary parts and materials requested,<sup>16</sup> but no such invoices were attached, nor have they been provided in response to Commission Staff's requests for information.<sup>17</sup>

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<sup>11</sup> Request to Use Funds (filed Aug. 16, 2024).

<sup>12</sup> Request to Use Funds (filed Aug. 16, 2024).

<sup>13</sup> Request to Use Funds (filed Aug. 16, 2024).

<sup>14</sup> South Hopkins District's response to Commission Staff's Third Request for Information (Staff's Third Request)(filed Oct. 7, 2024); South Hopkins District's response to Commission Staff's Fourth Request for Information (Staff's Fourth Request)(filed Dec. 18, 2024).

<sup>15</sup> Request to Use Funds (filed Aug. 16, 2024).

<sup>16</sup> Request to Use Funds (filed Aug. 16, 2024).

<sup>17</sup> South Hopkins District's Response to Staff's Third Request (filed Oct. 7, 2024); South Hopkins District's Response to Staff's Fourth Request (filed Dec. 18, 2024)

The Commission finds that further information is required regarding South Hopkins District's plans for its meter replacement project along with details and documentation to support its request for approval of expenditures to purchase an inventory of materials necessary for leak repairs. Therefore, South Hopkins District's August 9, 2024, requests are continued for further discovery.

On February 12, 2025, South Hopkins District filed two further requests for approval of expenditures of water loss surcharge funds. Firstly, it requested approval to purchase a portable flow meter, in the amount of \$7,435.<sup>18</sup> South Hopkins District stated the flow meter can be moved to different areas to monitor how much water is passing through a certain area and would assist in finding leaks by examining how much water is passing through selected zones.<sup>19</sup>

Secondly, South Hopkins District requested approval to purchase a DJI Mavic 3T Enterprise thermal imaging drone, in the amount of \$7,226.<sup>20</sup> This drone offers thermal imaging along with a regular camera and can show temperature variations, showing water flow. South Hopkins District stated this type of drone has been used by other districts to find water leaks in in very rural and hard to reach areas, and it believed the drone could help South Hopkins District in finding and preventing water loss.<sup>21</sup>

Based on the evidence in the record, the Commission finds that the purchase of a portable flow meter is likely to assist South Hopkins District in decreasing its

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<sup>18</sup> Request to Buy Flow Meter (filed Feb. 12, 2025).

<sup>19</sup> Request to Buy Flow Meter (filed Feb. 12, 2025).

<sup>20</sup> Request to Buy Drone (filed Feb. 12, 2025).

<sup>21</sup> Request to Buy Drone (filed Feb. 12, 2025).

unaccounted-for water loss, that South Hopkins District has the funds in the water loss surcharge account to purchase this item, and that this request should be granted. The Commission further finds that further information is required to review South Hopkins District's request regarding the thermal imaging drone, materials for repairs, and meter request and those requests are continued for further discovery.

IT IS HEREBY ORDERED that:

1. South Hopkins District is authorized to use water-loss surcharge funds in an amount up to \$7,435 to purchase the portable flow meter as described in its request.
2. South Hopkins District shall file proof of purchase, which includes the cost of the flow meter, with its monthly activity report that follows the purchase.
3. South Hopkins District's requests for approval to use water loss surcharge funds for 200 ultrasonic radio read meters, materials for leak repairs, and the thermal imaging drone are continued for further discovery.

PUBLIC SERVICE COMMISSION

  
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Chairman

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Vice Chairman

  
\_\_\_\_\_  
Commissioner

ATTEST:

  
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Executive Director



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