

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**ELECTRONIC INVESTIGATION            )  
INTO THE MEASURING,                 )  
RECORDING, AND REPORTING OF        ) CASE NO. 2018-00394  
WATER LOSS BY KENTUCKY'S            )  
JURISDICTIONAL WATER                )  
UTILITIES                                )**

**RESPONSE OF  
GREEN RIVER VALLEY WATER DISTRICT  
TO  
COMMISSION'S REQUEST FOR INFORMATION  
DATED DECEMBER 18, 2018**

**FILED: January 17, 2019**

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

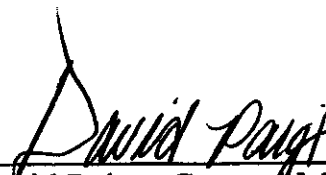
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**CERTIFICATION OF RESPONSE OF GREEN RIVER VALLEY WATER  
DISTRICT TO COMMISSION'S REQUEST FOR INFORMATION**

This is to certify that I have supervised the preparation of Green River Valley Water District's Response to the Commission's Request for Information. The response submitted on behalf of Green River Valley Water District is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Date: Jan. 17, 2019

  
\_\_\_\_\_  
David Paige, General Manager  
Green River Valley Water District

**GREEN RIVER VALLEY WATER DISTRICT**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 1**

**Responding Witness: David Paige**

- Q-1. Explain in detail the manner in which you measure, calculate, and track water loss, and:
- a. Identify whether you use any manual form (including Excel spreadsheet) or electronic or mechanized system to calculate and track water loss.
  - b. Provide a copy of any form used (including Excel spreadsheet).
  - c. Identify the source of any form or system used.
- A-1. Green River Valley Water District (GRVWD) calculates water loss on a monthly basis. All water meters are read in routes monthly and the water treatment plant maintains record of all water produced and plant water usage. These monthly totals are plugged into an excel spreadsheet which adds up all the water sold (including residential, commercial, and wholesale customers), and water plant usage. The sum is subtracted from the total gallons of water produced, and the difference is divided by the gallons produced equaling the water loss percentage. Total water loss is calculated for the PSC report yearly by adding all sales, water treatment plant use, system flushing, fire department use, and any other water that is used in the water operating system. The sum

is subtracted from total water produced and the difference is divided by the total water produced equaling water loss percentage.

- a. GRVWD uses a manual Excel worksheet to calculate and track water loss.
- b. A copy of the form used by GRVWD is attached.
- c. The Excel sheet has been used by GRVWD for many years and was generated by management of GRVWD based on PSC reporting requirements.

**GREEN RIVER VALLEY WATER DISTRICT**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 2**

**Responding Witness: DAVID PAIGE**

**Q-2. Explain in detail your understanding of the information to be provided in each of the categories on the Water Statistics page (reference page 30) of the annual report required of jurisdictional water utilities, accessed through the Commission's website.**

**A-2. The information provided in the annual report is reported per calendar year (January 1 – December 31) and entered in thousand-gallon format.**

- 1. Records all water produced, sold and distributed**
- 2. Records all water produced**
- 3. Records all water purchased**
- 4. Total of all water produced and purchased**
- 6. Category tracking all water sold**
- 7. Total gallons of water sold to residential customers**
- 8. Total gallons of water sold to commercial customers**
- 9. Total gallons of water sold to Industrial customers (GRVWD has no industrial customers)**
- 10. Total gallons sold at bulk loading stations (GRVWD has one bulk loading water station)**

11. Total gallons of water re-sold (sales of water to wholesale customers)
12. Total of all other water sales (GRVWD has none)
13. Calculates a total of all water sold
15. Category tracking the water used in the operation of the water system
16. Total water used by the water treatment plant for cleaning of basins, clarifiers, chemical feed machines, etc.
17. Total water used by wastewater plant (GRVWD has no wastewater plant)
18. Records the total gallons of water used for system flushing
19. Records the total gallons used by local fire departments.
20. Records the total of other water used for system operation not defined elsewhere.
21. Calculates a total of water used in system operations
23. Category tracking water loss
24. Records the total gallons of water lost due to tank overflows
25. Records the total gallons of water lost due to line breaks that have been repaired (GRVWD keeps water loss logs on all leaks repaired)

26. Records total of gallons lost due to line leaks that have not been found or repaired.

27. Records the total gallons of water lost in other situations not defined elsewhere.

28. Records the total line loss. This line is divided by line #4 to get the percentage of water loss.

32. Category tracking water loss percentage

33. Line #28 divided by Line #4 equals the water loss percentage.

**GREEN RIVER VALLEY WATER DISTRICT**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 3**

**Responding Witness: David Paige**

Q-3. State any questions you have regarding how to use the updated Commission Form described and attached as Appendix A to this Order.

A-3. No Questions.



**GREEN RIVER VALLEY WATER DISTRICT**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 4**

**Responding Witness: David Paige**

**Q-4. State any suggestions or improvements you have for the updated Commission Form described and attached as Appendix A to this Order.**

**A-4. No suggestions or improvements.**

**GREEN RIVER VALLEY WATER DISTRICT**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 5**

**Responding Witness: David Paige**

- Q-5. State any questions you have regarding how the information in the updated Commission Form described and attached as Appendix A to this Order is to be incorporated into annual reports.
- A-5. No questions.

**GREEN RIVER VALLEY WATER DISTRICT**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 6**

**Responding Witness: David Paige**

Q-6. State any concerns you have regarding the use of the updated Commission Form described and attached as Appendix A to this Order.

A-6. No concerns.

**GREEN RIVER VALLEY WATER DISTRICT**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 7**

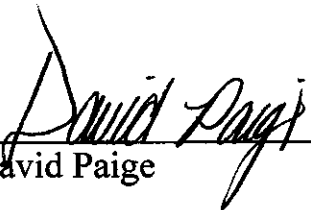
**Responding Witness: David Paige**

Q-7. State whether you believe it is reasonable, proper, and appropriate for the Commission to require jurisdictional water utilities to maintain and use the updated Commission Form described and attached as Appendix A to this Order. Fully explain your answer

A-7. I do not agree that the Commission should require jurisdictional water utilities to use the updated Commission form, IF the form that the district is currently utilizing gives a definite account of water loss. If the Commission requires the utilities to use the updated form, GRVWD will utilize the form for official reporting.

## CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that Green River Valley Water District's electronic filing of this Response is a true and accurate copy of the same document being filed in paper medium; that the electronic filing was transmitted to the Public Service Commission on January 17, 2019; that there are currently no parties that the Public Service Commission has excused from participation by electronic means in this proceeding; and that an original paper medium of this Response will be delivered to the Public Service Commission within two business days.

  
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David Paige

**Green River Valley Water  
District  
Line Loss Report**

**Month/Year  
Dec. 2018**

|             |                   |  |                  |
|-------------|-------------------|--|------------------|
|             |                   |  | <b>Customers</b> |
| District I  | 14,408,800        |  | 3020             |
| District II | <u>19,209,600</u> |  | 4019             |
|             | 33,618,400        |  | <u>7039</u>      |

|                    |                   |                          |
|--------------------|-------------------|--------------------------|
| Horse cave         | 24,888,700        |                          |
| District Coin      | 0                 |                          |
| Munfordville Meter | 10,229,300        |                          |
| CEA                | 10,984,700        | <b>Glasgow 3,985,500</b> |
| Bonnieville        | 1,815,000         |                          |
| Green-Taylor Meter | 3,931,700         |                          |
| Larue Co. #1       | 3,096,000         |                          |
| Larue Co. #2       | 2,661,600         |                          |
| Larue Co. Hwy. 357 | 1,915,300         |                          |
| County Manor       | 256,400           |                          |
| Meter at Plant     | <u>387,940</u>    |                          |
| <b>Total</b>       | <b>96,374,330</b> |                          |

|                           |                       |
|---------------------------|-----------------------|
| <b>Total Water Pumped</b> | <b>106,237,000</b>    |
| <b>Glasgow Meter</b>      | <u><b>955,800</b></u> |
| <b>Total</b>              | <b>107,192,800</b>    |

**Green River Line Loss**

|   |                          |
|---|--------------------------|
| <b>Total Water Pumped &amp; Purchased</b> | <b>107,192,800</b>       |
| <b>Total Water Accounted for</b>          | <u><b>93,785,040</b></u> |
|   | <b>13,407,760</b>        |

**87.49% Acc't for  
12.51% Loss**