

**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**

**Barkley Lake Water District**

**TO**

**COMMISSION'S REQUEST FOR INFORMATION**

**DATED DECEMBER 18, 2018**

**FILED: January 15, 2019**



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

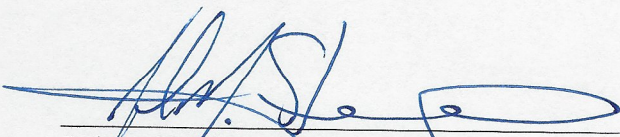
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**CERTIFICATION OF RESPONSE OF Barkley Lake Water District TO  
COMMISSION'S REQUEST FOR INFORMATION**

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

Date: 1-15-19

  
\_\_\_\_\_  
John Herring, General Manager  
Barkley Lake Water District



## **Barkley Lake Water District**

**CASE NO. 2018-00394**

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

#### **Question No. 1**

##### **Responding Witness: John Herring**

- 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. The Water District tracks, measures, and calculates water loss using an excel spread sheet. We impute the amount of water pumped for the month from the raw water pumps, subtract the amount of water sold (both residential and wholesale). From the remaining gallons the Water District subtracts the amount of water used by the plant, the amount of water flushed, the amount used by the local fire departments, and other amounts (this would be water that is used by the District but does not fit into the other categories i.e. disinfecting tanks). The remaining gallons is considered the lost water for the month. This number is then divided by the amount of raw water pumped to give a percentage of water lost for the month.
- a. The Water District tracks, measures, and calculates water loss using an excel spread sheet.
  - b. Please see attached spreadsheet titled "Water Loss Report"
  - c. The base form was provided by the Public Service Commission, but the formulas and yearly totals were created by the water district.



**Barkley Lake Water District**

**CASE NO. 2018-00394**

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

**Question No. 2**

**Responding Witness: John Herring**

- 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. 1. Water Produced, Purchased and Distributed: This is the amount of water that is produced or purchased by the Water District, this is the base amount. For Barkley Lake Water District this would be the raw water withdrawn from our source.
2. Water Produced: This is the amount of water that the District produces, for Barkley Lake Water District this is the raw water pumped from our source.
3. Water Purchased: This would be the amount of water the District purchases from other producers. Barkley Lake Water District very rarely buys water.
4. Total Produced and Purchased: This is the combined amount of line two and three.
6. Water Sales: This the amount of water the District sells to its customers. Each category is broken down by rates which are set by the District's tariff.
7. Residential: This the water that is sold to individual customers/home owners.
8. Commercial: This is water that is sold to small businesses or shops i.e. gas stations or restaurants. Barkley Lake Water District does not differentiate between non-wholesale customers. The District does not offer a separate rate for Commercial operations.
9. Industrial: This is water that is sold to large scale customers i.e. factories or plants. Barkley Lake Water District does not differentiate between non-



wholesale customers. The District does not offer a separate rate for Industrial operations.

10. Bulk Loading Stations: These are stations that are equipped to sell water in bulk for water trailers or home owners with cisterns. Barkley Lake Water District no longer provides this service.

11. Resale: This is water that is sold with the express purpose to be resold to the public i.e. other water districts. Barkley Lake Water District has interconnections with four other public water systems and sells water to them at a discounted price.

12. Other Sales: Any water sold that does not fit into the categories seven through eleven.

13. Total Water Sales: This is the total amount of water sold from categories seven through twelve.

15. Other Water Used: This is the water used by the Water District in the production and delivery of potable water.

16. Utility/water treatment plant: This is any water that is used in the production of water at the Water Districts water treatment plant i.e. backwashing filters or cleaning basins. Barkley Lake Water District finds this number by subtracting the amount of water pumped from the high service pumps from the raw water pumps.

17. Wastewater plant: Any water that is used in the treatment or operation of waste water facility. Barkley Lake Water District does not have a wastewater facility.

18. System flushing: Water that is flushed from the distribution system to either facilitate water quality or chorine levels i.e. flushing dead water to raise CL2 levels or flushing mains after a line break.

19. Fire department: Any water that is used by the local fire departments either in training or fighting of fires.

20. Other: Any water that does not fit into categories sixteen through nineteen i.e. water used to disinfect a tank.



21. Total Other Water Used: The sum of water in categories sixteen through twenty.

23. Water Loss: Any water that has not been included in water used or water sold. This would be water that has not been used in the production or distribution of water or been sold to customers.

24. Tank Overflows: Water lost due to the overfilling of water tanks.

25. Line Breaks: Water lost due to main or service line breaks. This is water that is lost when transmission lines fail, resulting in a full flow break.

26. Line Leaks: Water lost due to a main or service line leaking. This is water that is lost when transmission lines are still partially functional but have are losing water due to cracks or leaking joints.

27. Other: This would be water loss that does not fit into categories twenty-four through twenty-six, examples would be theft or unknown loss.

28. Total Line Loss: This is the sum of categories twenty-four through twenty-seven.

Note: Line 13 + Line 21 + Line 28 must equal Line 4: Total line categories must equal the total amount produced or purchased. This is so that all water is accounted for in some form or fashion.

32. Water Loss Percentage: This is the amount of water lost that did not benefit the Water District either through production or revenue. The percentage of water lost is achieved by dividing line twenty-eight by line four.

33. Line 28 divided by Line 4: The formula to find the water lost percentage.



**Barkley Lake Water District**

**CASE NO. 2018-00394**

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

**Question No. 3**

**Responding Witness: John Herring**

- 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. Barkley Lake Water District does not currently have any questions. Without prior knowledge of how the Commission intends to utilize the form the District cannot formalize any questions.



**Barkley Lake Water District**

**CASE NO. 2018-00394**

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

**Question No. 4**

**Responding Witness: John Herring**

- 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. Using the water loss calculator utilized by the Water District as a template, we would suggest yearly totals for each category as well as a monetary calculator to help conceptualize the financial liability of the unaccounted water.



**Barkley Lake Water District**

**CASE NO. 2018-00394**

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

**Question No. 5**

**Responding Witness: John Herring**

- 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. Barkley Lake Water District does not currently have any questions.



**Barkley Lake Water District**

**CASE NO. 2018-00394**

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

**Question No. 6**

**Responding Witness: John Herring**

- 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. Currently Barkley Lake Water District uses a similar form to calculate our water loss. Our only concern is the use of a form that displays less information and will result in duplication of paper work i.e. one form to report water loss internally and one form to report to the Commission.



**Barkley Lake Water District**

**CASE NO. 2018-00394**

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

**Question No. 7**

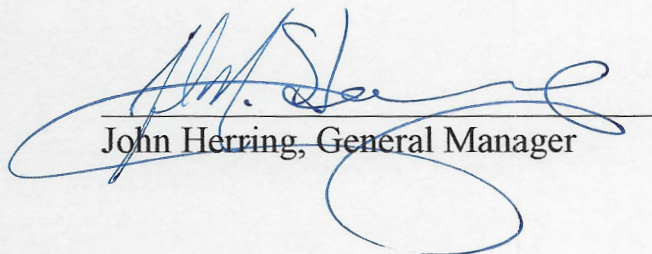
**Responding Witness: John Herring**

- 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. The Commission Form is an improvement over the original word document that was previously released by the Commission, but not every District has the means nor the ability to utilize the excel sheet. Some Districts might not have the staff knowledge nor the hardware to use the program. Therefore, the Water District cannot in good conscious support the mandatory use of the new Commission Form.



## CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that Barkley Lake 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 15, 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.



John Herring, General Manager