

**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  
Southern Madison Water District  
TO  
COMMISSION'S REQUEST FOR INFORMATION  
DATED DECEMBER 18, 2018**

**FILED: January 14, 2018**

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


**In the Matter of:**

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

**CERTIFICATION OF RESPONSE OF Southern Madison Water District TO  
COMMISSION'S REQUEST FOR INFORMATION**

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

Date: 1-14-19

  
\_\_\_\_\_  
Tommy Bussell / Manager  
Southern Madison Water District

**Southern Madison Water District**

**CASE NO. 2018-00394**

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

**Question No. 1**

**Responding Witness: Tommy Bussell**

- 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. We at SMWD have our system divided into separate zone with a master meter feeding each zone that we read daily and we know what the average should be in each zone if the usage has went up we start looking for leaks. We read all our customers' meters monthly and then we compare that usage to what we have purchased from our supplier for that month to get our water loss before any breaks, hydrant flushing, tank overflow, fire department usage etc. is taken off to get our unaccounted for water loss.
- a. SMWD uses the monthly water loss report spreadsheet that was a product of WKU and KRWA and also we have used the monthly water use report approved by EPPC/DEP/DOW, KY PSC, and KRWA.
  - b. Copy's included

c. KRWA

**Southern Madison Water District**

**CASE NO. 2018-00394**

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

**Question No. 2**

**Responding Witness: Tommy Bussell**

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. Water Statistics

1. Tracking water produced, Purchased, & Distributed
2. Water Produced N/A to SMWD
3. Total amount Purchased from Supplier
4. Total amount Purchased from Supplier
5. N/A
6. Total of all water sold to SMWD customers
7. Total sold to Residential customers
8. Total sold to Commercial customers
9. Total sold to Industrial customers
10. Total sold to Bulk loading stations N/A to SMWD at this time
11. Total sold to Wholesale customers N/A to SMWD at this time
12. Total sold to Public Authorities
13. Other sales N/A
14. Total of all water sold to all types of customers
15. N/A
16. Water used that might not be metered
17. Water used for distribution or water plant
18. Water used at wastewater plant N/A for SMWD
19. Water used for system flushing
20. Water used by fire departments
21. All water for other usage
22. Total of all other water used
23. N/A
24. Water Loss
25. Water lost due to tank overflow

26. Repaired line breaks with estimated water loss
27. Repaired line leaks with estimated water loss
28. Leaks due to excavation damages
29. Some stealing water
30. Unknown Loss
31. Total of all water lost for any reason
32. N/A
33. Total water sales + other water used + Total line lost must equal total water Purchased
34. N/A
35. Water loss percentage for rate making purposes
36. Total line loss divided by total water purchased equals line lost percentage

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
 COMMISSION IN CASE NO. 2018-00394 DATED DEC 18 2018

**PUBLIC SERVICE COMMISSION**

**Monthly Water Loss Report**

Water Utility:

For the Month of:  Year:

LINE #	ITEM	GALLONS (Omit 000's)
1	<b>WATER PRODUCED, PURCHASED, &amp; DISTRIBUTED</b>	
2	Water Produced	
3	Water Purchased	
4	<b>TOTAL PRODUCED AND PURCHASED</b>	-
5		
6	<b>WATER SALES</b>	
7	Residential	
8	Commercial	
9	Industrial	
10	Bulk Loading Stations	
11	Wholesale	
12	Public Authorities	
13	Other Sales (explain)	
14	<b>TOTAL WATER SALES</b>	-
15		
16	<b>OTHER WATER USED</b>	
17	Utility and/or Water Treatment Plant	
18	Wastewater Plant	
19	System Flushing	
20	Fire Department	
21	Other Usage (explain)	
22	<b>TOTAL OTHER WATER USED</b>	-
23		
24	<b>WATER LOSS</b>	
25	Tank Overflows	
26	Line Breaks	
27	Line Leaks	
28	Excavation Damages	
29	Theft	
30	Unknown Loss	
31	<b>TOTAL LINE LOSS</b>	-
32		
33	<b>Note:</b> Line 14 + Line 22 + Line 31 <b>MUST</b> Equal Line 4	
34		
35	<b>WATER LOSS PERCENTAGE FOR RATEMAKING PURPOSES</b>	
36	(Line 31 divided by Line 4)	0.00%

**Southern Madison Water District**

**CASE NO. 2018-00394**

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

**Question No. 3**

**Responding Witness: Tommy Bussell**

- 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 at this time.



**Southern Madison Water District**

**CASE NO. 2018-00394**

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

**Question No. 4**

**Responding Witness: Tommy Bussell**

- 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 Improvement at this time.

**Southern Madison Water District**

**CASE NO. 2018-00394**

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

**Question No. 5**

**Responding Witness: Tommy Bussell**

- 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 at This Time

**Southern Madison Water District**

**CASE NO. 2018-00394**

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

**Question No. 6**

**Responding Witness: Tommy Bussell**

- 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 at this Time

**Southern Madison Water District**

**CASE NO. 2018-00394**

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


**Question No. 7**

**Responding Witness: Tommy Bussell**

- 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. Yes I believe it is reasonable, proper and appropriate for all utilities to use the same form.

## CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that Southern Madison 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 14, 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.

  
\_\_\_\_\_  
[Name]

# Monthly Water Loss Report

Water Company: Southern Madison Water District

For the Month of:  Year:

Water Produced this month:  gallons  
 Water Purchased this month:  gallons

**A: Total Water Produced and Purchased = 0 gallons**

Sold: Residential  gallons  
 Commercial  gallons  
 Water Salesman  gallons

**Total Sold = 0 gallons**

**B: Difference: (Produced+Purchased) - Sold = 0 gallons**

**% Difference = #DIV/0! % total water loss**

**Gallons of Water Accounted For:**

Breaks (Estimated Total)	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	gallons
Hydrant Flushing	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	gallons
Storage Tank Overflow	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	gallons
Water Treatment Plant Use	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	gallons
Wastewater Treatment Plant Use	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	gallons
Fire Department Use	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	gallons
Net Computer Adjustment + / -	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	gallons
Other	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	gallons

**C: Total Gallons Accounted For = 0 gallons**

**Loss: Unaccounted-for Water: (B-C) = 0 gallons**

**% Loss: Unaccounted-for Water: (B-C)/A %= #DIV/0! % unaccounted - for loss**

**Gallons / Day Loss =**  days in month **#DIV/0! gallons/day**  
**Gallons / Minute Loss =** **#DIV/0! gallons/min.**

This spreadsheet is a product of the Technical Assistance Center for Water Quality at Western Kentucky University and the Kentucky Rural Water Association. Feel free to contact us at (270) 745-5948 or at <http://water.wku.edu/>. This spreadsheet may be freely distributed. Please let us know if you use it, like it, or have suggestions for improvement!

# Monthly Water Use Report

Water Utility:

For the Month of:      January

Year:

LINE #	ITEM	GALLONS (Omit 000's)	%
1	<b>WATER PRODUCED or PURCHASED</b>		
2	Water Produced		
3	Water Purchased		
4	<b>TOTAL PRODUCED AND PURCHASED</b>		
<hr/>			
	<b>WATER SOLD</b>		
5	Residential		
6	Commercial		
7	Industrial		
8	Bulk Loading Stations		
9	Wholesale		
10	Other Sales (explain) _____		
11	<b>TOTAL WATER SOLD</b>		
12	<b>TOTAL WATER NOT SOLD</b>		
<hr/>			
	<b>BREAKDOWN OF UNSOLD WATER USED</b>		
13	Utility and/or Water Treatment Plant		
14	Wastewater Plant		
15	System Flushing		
16	Fire Department		
17	Other (explain) _____		
<hr/>			
	<b>TOTAL UNSOLD WATER USED</b>		
<hr/>			
	<b>BREAKDOWN OF WATER LOST</b>		
18	Tank Overflows		
19	Line Breaks		
20	Other Loss		
<hr/>			
	<b>TOTAL WATER LOST</b>		
<hr/>			

<b>"OTHER LOSS" FLOW RATE CALCULATION:</b>	
21	"Other Loss"
22	% "Other Loss"
23	Number of Days in Period
24	"Other Loss" per Day (1,000's gallons per Day)
25	"Other Loss" per Minute (GPM)



This form approved by: EPPC/DEP/DOW, KY PSC, KRWA

Revised: January 10, 2007