COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION
INTO THE MEASURING,
RECORDING, AND REPORTING OF
WATER LOSS BY KENTUCKY’S
JURISDICTIONAL WATER
UTILITIES

RESPONSE OF
NORTH SHELBY WATER COMPANY

TO

COMMISSION’S REQUEST FOR INFORMATION

DATED DECEMBER 18, 2018

FILED: January 11, 2019
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION
INTO THE MEASURING,
RECORDING, AND REPORTING OF WATER LOSS BY KENTUCKY’S JURISDICTIONAL WATER UTILITIES

CASE NO. 2018-00394

CERTIFICATION OF RESPONSE OF NORTH SHELBY WATER COMPANY TO COMMISSION’S REQUEST FOR INFORMATION

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

Date: 1/11/19

Pete Hedges, Manager
North Shelby Water Company
NORTH SHELBY WATER COMPANY

CASE NO. 2018-00394

Response to Commission’s Request for Information

Question No. 1

Responding Witness: Pete Hedges

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 North Shelby Water Company (NSWC) utilizes a Monthly Water Loss Report spreadsheet to manually calculate and track water loss for the system. The spreadsheet allows system personnel to enter values for water purchased, water sold (by customer type), water used but not sold (flushing and fire department use), and water loss (tank overflows, line breaks and line leaks). NSWC does not produce water and purchases all water for re-sale to our customers from the Louisville Water Company, Frankfort Electric & Water Plant Board and Shelbyville Municipal Water & Sewer Commission. Information regarding water purchased is obtained from readings taken at purchase point master meters and the total monthly usage for all purchase points is combined to give the total amount of water purchased for the system.
Likewise, information regarding water sold is obtained from readings taken at all active customer meters once per month. The total usage for all customer meters is totaled via our billing software to determine the total amount of water sold for the system. Regarding water which is used but not sold, the spreadsheet allows for system personnel to input the amount of water which is used for both system flushing and fire department use. In the case of flushing, the inputs are recorded in the field by the service technician who is performing the flushing. The inputs are recorded on a “Flushing Report” worksheet which is then taken back to the office and then the estimated volume is calculated for input into the spreadsheet at the end of the month. Similarly, inputs relative to fire department usage are recorded in the field by fire department personnel on a "Fire Department Monthly Report” worksheet which is delivered to the NSWC office monthly as applicable for input into the spreadsheet. Regarding water loss, known water loss events are recorded in field on "Line Break Logbook" forms by service technicians and then taken back to the office for input into the spreadsheet before the end of the month.

a. NSWC utilizes a Monthly Water Loss Report Excel spreadsheet to manually calculate and track water loss for the system.

b. See attached the following:
   - Monthly Water Loss Report Excel spreadsheet
   - “Flushing Report” worksheet
c. The Monthly Water Loss Report Excel spreadsheet was sourced from the Kentucky Rural Water Association. All other forms referenced were created by NSWC.
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. NSWC’s understanding of the information to be provided in each of the categories on the Water Statistics page of the annual report is as follows:

1. “Water Produced, Purchased, and Distributed” – Heading

2. “Water Produced” – The total volume of water produced by NSWC. Not applicable for NSWC.

3. “Water Purchased” – The total volume of water purchased by NSWC from our suppliers.

4. “Total Produced and Purchased” – The sum of Line 2 “Water Produced” and Line 3 “Water Purchased”. More specifically, this is the total volume of water which enters the NSWC system.

6. “Water Sales:” – Heading

7. “Residential” – The total volume of water sold by NSWC to residential customers.
8. “Commercial” – The total volume of water sold by NSWC to commercial customers.


10. “Bulk Loading Stations” – The total volume of water sold by NSWC to customers at bulk loading stations, automatic water sales stations, or similar type sales. Not applicable to NSWC.

11. “Resale” – The total volume of water sold by NSWC to other water utilities or customers for resale to their customers or users. Not applicable to NSWC.

12. “Other Sales” – The total volume of water sold by the NSWC to customers which are not considered residential, commercial, or industrial type users. For NSWC this includes schools, governmental entities, temporary users such as contractors, and other similar unusual customer categories.


15. “Other Water Used” – Heading

16. “Utility/water treatment plant” – The total volume of water used by NSWC at a water treatment plant or similar type facility. Not applicable to NSWC.
17. “Wastewater plant” – The total of volume of water used by NSWC at a wastewater treatment plant or similar type facility. Not applicable to NSWC.

18. “System flushing” – The total of volume of water used by NSWC to flush transmission and distribution mains throughout the system. This includes routine system flushing, flushing related to leak and break repairs, flushing of newly constructed mains, and flushing related to the control of Disinfection Byproducts.

19. “Fire Department” – The total of volume of water used by fire departments within the NSWC system for firefighting and fire hydrant testing and maintenance.

20. “Other” – The total of volume of water used by NSWC within the system for purposes other than Utility/Water Treatment Plant, Wastewater plant, System Flushing, and Fire Department. Not applicable to NSWC.


23. “Water Loss” – Heading

24. “Tank Overflows” – The total of volume of water lost by NSWC due to inadvertent water storage tank overflows.
25. “Line Breaks” – The total of volume of water lost by NSWC due to known water line breaks.

26. “Line Leaks” – The total of volume of water lost by NSWC due to line leaks within the system. This includes accidental leaks due to excavation damage by others as well as other spontaneous regular leaks within the system that are found and repaired.

27. “Other” – The total of volume of water lost by NSWC within the system due to causes other than Tank Overflows, Line Breaks, and Line Leaks. NSWC considers all lost water which cannot be accounted for by known tank overflows or line breaks to be classified as “Other” water loss.


32. “Water Loss Percentage” – Heading

33. “Line 28 divided by Line 4” – This is the amount Line 28 “Total Line Loss” divided by Line 4 “Total Produced and Purchased”. More specifically, this is the percentage of the amount of water which was lost within the NSWC system as compared the amount of water which entered the NSWC system.
Response to Commission’s Request for Information

Question No. 3

Responding Witness: Pete Hedges

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. NSWC currently has no questions.
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. NSWC currently has no suggestions or improvements.
NORTH SHELBY WATER COMPANY

CASE NO. 2018-00394

Response to Commission’s Request for Information

Question No. 5

Responding Witness: Pete Hedges

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. NSWC currently has no questions.
Response to Commission’s Request for Information

Question No. 6

Responding Witness: Pete Hedges

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. NSWC currently has no concerns.
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. NSWC does believe it is reasonable, proper, and appropriate for the Commission to require jurisdictional water utilities to maintain and use the updated Commission Form. The updated Commission Form includes all appropriate categories to measure, calculate, and track water loss for all water systems, regardless of the size and type. As the Commission continues to emphasize water loss in rate making and other proceedings, it is logical that all utilities should be required to use the same form to report the information to the Commission.
CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that North Shelby Water Company'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 11, 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.

Pete Hedges, Manager
North Shelby Water Company
### Monthly Water Loss Report

**Water Company:** [Blank]

**For the Month of:** [Blank] **Year:** [Blank]

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

#### A: Total Water Produced and Purchased =

| 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) |  | gallons |
| Hydrant Flushing |  | gallons |
| Storage Tank Overflow |  | gallons |
| Water Treatment Plant Use |  | gallons |
| Wastewater Treatment Plant Use |  | gallons |
| Fire Department Use |  | gallons |
| Net Computer Adjustment + / - |  | gallons |
| Other |  | 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 = | #DIV/0! gallons/day |
| Gallons / Minute Loss = | #DIV/0! gallons/min. |
Flushing Report

NSW       US60

Date: ____________________________________________

Location: ________________________________________

Type:     Fire Hydrant or Blow Off

Size: ____________________________________________

Pressure: ________________________________________

Time Flushed: ____________________________________

Residual: ________________________________________

Performed By: ____________________________________
FIRE STATION MONTHLY REPORT

Month of ___________________________

Department Name _________________________

Chief/Contact ____________________________

<table>
<thead>
<tr>
<th>DATE</th>
<th>LOCATION</th>
<th>ESTIMATED GALLONS USED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL GALLONS (ESTIMATED) ____________________________
LINE BREAK LOGBOOK

*Required by 401 KAR 8:150, Section 4(2)

<table>
<thead>
<tr>
<th>*DATE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>*LOCATION OF BREAK</td>
<td></td>
</tr>
<tr>
<td>*TIME IT WAS DISCOVERED</td>
<td></td>
</tr>
<tr>
<td>*POPULATION AFFECTED</td>
<td></td>
</tr>
<tr>
<td>*LENGTH OF TIME TO REPAIR</td>
<td></td>
</tr>
<tr>
<td>*DATE &amp; TIME CL2 RESIDUALS DETECTED</td>
<td></td>
</tr>
<tr>
<td>*DATE &amp; TIME BACT SAMPLES TAKEN</td>
<td></td>
</tr>
<tr>
<td>TURNED WATER OFF (yes or no)</td>
<td></td>
</tr>
<tr>
<td>BWA REQUIRED (yes or no)</td>
<td></td>
</tr>
<tr>
<td>OTHER COMMENTS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>*DATE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>*LOCATION OF BREAK</td>
<td></td>
</tr>
<tr>
<td>*TIME IT WAS DISCOVERED</td>
<td></td>
</tr>
<tr>
<td>*POPULATION AFFECTED</td>
<td></td>
</tr>
<tr>
<td>*LENGTH OF TIME TO REPAIR</td>
<td></td>
</tr>
<tr>
<td>*DATE &amp; TIME CL2 RESIDUALS DETECTED</td>
<td></td>
</tr>
<tr>
<td>*DATE &amp; TIME BACT SAMPLES TAKEN</td>
<td></td>
</tr>
<tr>
<td>TURNED WATER OFF (yes or no)</td>
<td></td>
</tr>
<tr>
<td>BWA REQUIRED (yes or no)</td>
<td></td>
</tr>
<tr>
<td>OTHER COMMENTS</td>
<td></td>
</tr>
</tbody>
</table>