

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

In the Matter of:

**ELECTRONIC APPLICATION OF SOUTH)
EASTERN WATER ASSOCIATION, INC. FOR)
COMMISSION APPROVAL PURSUANT TO)
807 KAR 5:001 AND KRS 278.020 FOR A) CASE NO. 2021-00222
CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY TO DEPLOY AN)
ADVANCED METERING INFRASTRUCTURE)
(AMI) SYSTEM)**

RESPONSE OF

SOUTH EASTERN WATER ASSOCIATION, INC.

TO

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

DATED JUNE 30, 2021

FILED: July 16, 2021

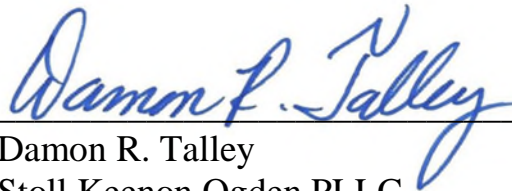
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**RESPONSE OF SOUTH EASTERN WATER ASSOCIATION, INC. TO
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

Comes South Eastern Water Association, Inc., for its Response to Commission Staff's First Request for Information, and states as shown on the following pages.



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Association, Inc.*

**COMMONWEALTH OF KENTUCKY
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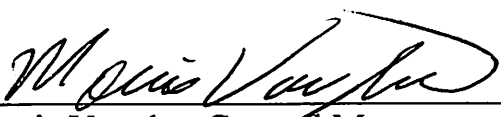
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**CERTIFICATION OF RESPONSE OF SOUTH EASTERN WATER
ASSOCIATION, INC. TO COMMISSION STAFF'S FIRST REQUEST FOR
INFORMATION**

This is to certify that I have supervised the preparation of South Eastern Water Association, Inc.'s Responses to Commission Staff's First Request for Information. The response submitted on behalf of South Eastern Water Association, Inc. is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Date: 7-16-2021



Morris Vaughn, General Manager
South Eastern Water Association, Inc.

CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8 and the Commission's March 16, 2020 and March 24, 2020 Orders in Case No. 2020-00085 regarding electronic filings, I certify that South Eastern Water Association, Inc.'s Response to Commission Staff's First Request for Information was electronically transmitted to the Public Service Commission on July 16, 2021 and South Eastern Water Association, Inc. will file original paper copies of this filing within 30 days of the lifting of the State of Emergency.


Damon R. Talley

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's First Request for Information

Question No. 1

**Responding Witnesses: Morris Vaughn, General Manager; Brooke Bates,
President of Allied Utility Solutions, LLC**

Q-1. Name another utility that uses this technology/system. State the results/findings of how well the technology/system worked for that utility.

A-1. According to representatives of Kamstrup and Allied Utility Solutions, LLC, the AMI System and technology that South Eastern Water plans to deploy has been used successfully throughout the United States in both small and large systems with almost universal utility satisfaction. The chief complaint has been that customers often complain that their water usage and bill amount has gone up after the Kamstrup ultrasonic meters have been installed. Typically, old, less accurate meters are replaced with the very accurate Kamstrup ultrasonic meters. This results in more water being billed to the customer and lowers the non-revenue water amount for the utility. In 2019 and 2020, the Sharyland Water Supply Corporation in Sharyland, Texas installed 20,000 AMI meters utilizing the same Kamstrup meters and technology that South Eastern Water plans to deploy. A Sharyland spokesperson issued the following official statement: "The Kamstrup water meter is the best meter

produced in the industry that I have ever witnessed. The accuracy of the meters are exceptional and the coverage of the Kamstrup AMI collectors provides reliable readings at very long ranges.”

Below are a list of some of the utilities, which are located in the Mid-west and Southeastern portions of the United States, which have installed the AMI System and technology that South Eastern Water plans to deploy:

Mount Vernon, Illinois	7,200 meters
Mount Vernon, Indiana	3,000 meters
Milcrofton Utility District, Tennessee	10,000 meters
Madison County, Alabama	35,000 meters
Eastern Band of Cherokee, North Carolina	3,300 meters
Dade County (Outer Banks), North Carolina	25,700 meters
Lincolnton, North Carolina	6,250 meters
Lovettsville, Virginia	1,200 meters
Floral City, Florida	2,200 meters
Cortland, Illinois	1,200 meters
Clay Township, Michigan	5,000 meters
Melvindale, Michigan	4,000 meters
New Baltimore, Michigan	4,500 meters
Sharyland Water Supply Corporation	20,000 meters

While South Eastern Water will be the **first** water district in Kentucky to deploy the Kamstrup AMI System and technology, other water districts and municipalities in Kentucky are already using similar AMI technology offered by competing manufacturers (e.g. Graves County Water District, Southeast Daviess County Water District, West Daviess County Water District, and the City of Danville). For more information, see Footnotes 2, 3, and 4, to South Eastern Water's Application in this case.

In 2018, McCreary County Water District obtained Commission approval in Case No. 2018-00038 to deploy Kamstrup Flow IQ ultrasonic meters for an AMR (drive-by "radio read") system. These meters are the "AMR" version of the "AMI" meters that South Eastern Water plans to deploy. McCreary County Water District's extreme satisfaction with the Kamstrup meters is the primary reason why South Eastern Water decided to utilize Kamstrup meters for its AMI System. See South Eastern Water's Response to Question 5 for more discussion of this topic.

Recently, the Commission approved Estill County Water District's Application for a CPCN to deploy Kamstrup Flow IQ ultrasonic meters throughout its system. See Order dated, June 25, 2021 in Case No. 2021-00207. Again, these meters are the "AMR" version of the "AMI" meters that South Eastern Water plans to deploy.

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's First Request for Information

Question No. 2

Responding Witnesses: Morris Vaughn; Barry Dalton, CPA

Q-2. State the depreciation rate used for the old meters.

A-2. South Eastern Water assumes a useful life of 40 years for its meters and meter service installations. This results in a depreciation rate of 2.5% per year. Since the new Kamstrup meters have a full 20-year warranty, South Eastern Water plans to assume a useful life of 20 years for the Kamstrup meters.

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's First Request for Information

Question No. 3

Responding Witness: Morris Vaughn

Q-3. State how many current meters remain in service.

A-3. 8,023 meters

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's First Request for Information

Question No. 4

Responding Witness: Morris Vaughn

Q-4. State the remaining useful lives of the current meters.

A-4. All of South Eastern Water's current meters, except for about 1,250 to 1,500 meters, have been in service longer than their useful lives.

Below is an approximate breakdown of the age of South Eastern Water's current meters:

Age of Meter	Approximate Number
Less than 10 years	1,250 to 1,500
From 10 to 20 years	1,500 to 1,750
From 20 to 30 years	2,500
Over 30 years	2,500
Total	8,000

History & Background. South Eastern Water acquired the assets of the Elihu Tateville Water Association and the Nelson Valley Water Association in 1993. In 1996 it acquired the assets of Barnesburg Water

Association. These other water associations did not maintain adequate records to enable South Eastern Water to determine the age of the water meters at the time of the mergers. Based upon “word-of-mouth” information, many of these water meters had already been in service for more than 10 years at the time of the mergers. South Eastern Water has never undertaken a wholesale replacement of its water meters until now. South Eastern Water has its own certified meter test bench which is operated by a certified technician. Five (5) of South Eastern Water employees are certified to test meters. South Eastern Water diligently tests approximately 10% of its meters each year so that no meter remains in service longer than 10 years without being tested. If a meter tests within the allowable accuracy limits under the Commission regulations, it is placed back into service for another 10 years. Many of these meters have been tested at least two (2) or three (3) times and are still in service today. If a meter tests outside the allowable accuracy limits (usually too slow), it is repaired and placed back into service or it is sold for surplus.

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's First Request for Information

Question No. 5

Responding Witnesses: Morris Vaughn; Joe Crawford, President

Q-5. State whether South Eastern Water consulted with any other utilities to discuss how the new Kamstrup AMI meters are functioning for them.

A-5. South Eastern Water's General Manager, President, and other members of its Board of Directors consulted with McCreary County Water District officials numerous times to educate themselves about Kamstrup Flow IQ ultrasonic meters and McCreary County Water District's experience with these meters. South Eastern Water's due diligence included multiple trips to McCreary County and observing these meters after they had been installed. The very positive experience of McCreary County Water District with the Kamstrup Flow IQ ultrasonic meters was one of the most influential factors in South Eastern Water's decision to utilize Kamstrup meters for its AMI System Project.

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's First Request for Information

Question No. 6

Responding Witness: Morris Vaughn

Q-6. State the system upgrades that South Eastern Water intends to utilize. State the costs of the system upgrades.

A-6. At present, South Eastern Water has no plans to utilize any system upgrades.

In the future, it might consider remote shut-off and turn-on of a small portion of its meters that are located in areas where there are vacation or lake homes with seasonal usage. Also, this feature might prove feasible in remote areas of the system where there are customers with a poor payment history which require several disconnections during a calendar year. Kamstrup and Allied have advised South Eastern Water that this remote turn-off and turn-on feature is still in the final stages of development and is not yet available for purchase. The cost for this upgrade is not known at this time.

Another feature that might be considered by South Eastern Water in the future is purchasing a small number of meters that have the Acoustic Leak Detection ("ALD") feature built into the meter. Currently, these ALD meters cost approximately \$100 more per meter than the standard Flow IQ 2250 meters that South Eastern Water is purchasing for its AMI System Project. In areas

with high water loss where it is difficult to pinpoint the location of the leak, a few of these meters might be feasible.

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's First Request for Information

Question No. 7

Responding Witness: Brooke Bates

Q-7. State the average life of the internal lithium battery.

A-7. The average life of the internal lithium battery exceeds 20 years. It has a 20-year warranty. Kamstrup and Allied have advised South Eastern Water that 99.5% of its lithium batteries last for 20 years or longer.

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's First Request for Information

Question No. 8

Responding Witness: Morris Vaughn

Q-8. Describe how South Eastern Water intends to use the data collected by the Kamstrup AMI meters.

a. State how often South Eastern Water will collect information from the meters.

b. State how South Eastern Water will store information collected by the meters.

A-8. South Eastern Water will use the data collected by the Kamstrup AMI meters for the following purposes: to obtain water usage information for billing purposes in a timely manner; to eliminate the need to issue estimated bills because of inclement weather; to monitor customer usage; to provide enhanced customer service by enabling South Eastern Water to inform customers in near-real-time if their usage is above a certain threshold; to enable South Eastern Water to respond to customer inquiries with near-real-time water usage data; to monitor whether a customer whose meter has been disconnected for non-payment is using water; to quickly resolve customer complaints because a customer's usage history can be easily and quickly

downloaded and shown to the customer; and to enhance leak detection efforts because all meters will be read on the same day (and, perhaps, within the same hour of the day). Currently, it takes the meter readers 15 to 20 meter reading days per month to read all 8,000 meters. Thus, it is usually at least three (3) weeks from the time the first meter is read until the last meter is read. This makes it nearly impossible to “track” water purchases from SEWA’s wholesale supplier with its customers’ usage. This problem will be eliminated by the installation of the AMI System Project.

- a. The AMI System will collect data from each meter on an hourly basis. Water usage in gallons, the flow rate (gallons per minute), maximum daily flow rate, minimum daily flow rate, and maximum, minimum, and average water temperature will be collected.
- b. South Eastern Water will not store the information collected. It will be stored in an encrypted Kamstrup hosted server. South Eastern Water employees can then log-in to the protected server and download the needed information for all its meters or a specific meter. South Eastern Water can retrieve data as old as 460 days.