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 CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO DEPLOY AN ADVANCED METERING INFRASTRUCTURE (AMI) SYSTEM	)))))))	**CASE NO. 2021-00222**

RESPONSE OF

SOUTH EASTERN WATER ASSOCIATION, INC.

TO

COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION

DATED JULY 26, 2021

FILED: August 5, 2021

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

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

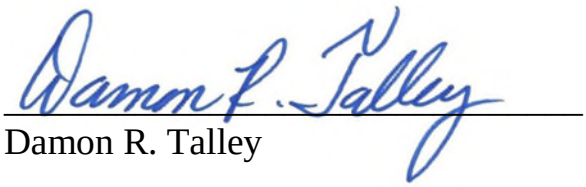
This is to certify that I have supervised the preparation of South Eastern Water Association, Inc.'s Responses to Commission Staff's Second Request for Information. The response submitted on behalf of South Eastern Water Association, Inc. is true and accurate to the best of my knowledge, information,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

Date: 8-5-2021

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

CERTIFICATE OF SERVICE

In accordance with the Commission's Order of July 22, 2021 in Case No. 2020-00085 (Electronic Emergency Docket Related to the Novel Coronavirus COVID-19), this is to certify that the electronic filing has been transmitted to the Commission on August 5, 2021; and that there are currently no parties in this proceeding that the Commission has excused from participation by electronic means.



Damon R. Talley

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's Second Request for Information

Question No. 1

Responding Witnesses: Joe Crawford, President; Morris Vaughn, General Manager

Q-1. Provide a detailed list of all alternative meters and meter projects South Eastern Water considered instead of the AMI System Project proposed in this matter.

A-1. The following are the four (4) alternatives South Eastern Water considered: (1) status quo; (2) read existing meters with it own employees; (3) deploy AMR meters system-wide; and (4) deploy the AMI System Project described in its Application for a CPCN.

1. **Status Quo.** The Status Quo alternative is the "do nothing" alternative, meaning South Eastern Water will continue to contract with Tru-Check to read its meters. This alternative is **unacceptable** and not realistic because Tru-Check cannot satisfactorily perform its meter reading duties. As discussed in the Application, Tru-Check has not been timely with its meter reading and has experienced a significant turnover rate in its employees responsible for reading South Eastern Water's meters.

2. **South Eastern Water Reads Current Meters with Its Own Employees.** This alternative would require South Eastern Water to employ at least three (3) new employees and purchase three (3) new trucks for the new employees to drive. The annual cost of three (3) new employees is $157,836 ($52,612 x 3 = $157,836, which includes salary and benefits). In addition, there would be an initial capital expense of approximately $105,000 to purchase the three (3) new trucks ($35,000 x 3 = $105,000). Annual costs associated with the depreciation and maintenance of the trucks is estimated to be $31,080. See **Exhibit 1** to this Response for a detailed schedule of the salaries and benefits for the new employees and the annual operating expenses for the trucks. Given that Tru-Check cannot hire, train, and maintain qualified personnel, the odds of South Eastern Water doing so are very slim. Furthermore, this alternative has the highest annual operating cost of any of the four (4) alternatives.

Assuming that South Eastern Water were able to recruit, train, and retain qualified, dependable meter readers, there are other considerations that weigh heavily against this alternative. For example, historically, it has taken Tru-Check's three (3) meter readers approximately 15 to 20 meter reading days to read all of South Eastern Water's meters. This means it

takes nearly an entire month from the day the first meter is read until the last one is read. This makes it impossible to "track" unaccounted for water loss on a timely basis because of the lag time between reading the master meters on one day and the customer meters over a 30-day period. The proposed AMI System Project will allow all meters to be read on the same day (probably within the same hour). This will enhance water loss audits and will enable South Eastern Water to immediately notify customers if they have extremely high water usage. Furthermore, the proposed AMI System Project will eliminate the need to render estimated bills. If the meters are manually read, an estimated bill will need to be rendered if there is inclement weather, such as snow, ice, or freezing rain or if the meter is inaccessible. Human error is always a problem with manually reading meters. Now, if a customer has a leak, it may have been leaking from 30 to 60 days before the customer will receive a bill and realize the water leak.

3. **South Eastern Water Deploys AMR Meters System-Wide.** This alternative is almost as expensive as the AMI System Project proposed by South Eastern Water. One vendor, Consolidated Pipe & Supply Company, Inc. ("Consolidated"), submitted a bid for providing AMR meters. Consolidated "partnered" with another vendor, Envo Core, who would actually install the AMR meters. The total amount of Consolidated

and Envo Core's "joint" bid is $1,888,062.28, plus applicable sales tax. A copy of this "joint" bid is attached as **Exhibit 2** to this Response. In order to make a true comparison between the total Project Cost for the AMR Meter Alternative Project and the AMI System Project, additional project costs, including contingencies, need to be considered. Attached as **Exhibit 3** is the Project Cost Summary for the AMR Meter Alternative Project. The total Project Cost is **$2,074,659**. The vendor plans to use a positive displacement meter made by a manufacturer that South Eastern Water has never used. If the Commission were to reject South Eastern Water's Application and require it to deploy an AMR System rather than the proposed AMI System, it would not use the meters which Consolidated has proposed. Instead, it would use Kamstrup ultrasonic AMR meters similar to the Kamstrup AMR meters installed by McCreary County Water District and which Estill County Water District is now installing. The AMR meters are only warranted for 15 years instead of 20 years. Furthermore, South Eastern Water would still need to hire additional employees to drive the meter reading routes to "radio-read" the AMR meters. Because South Eastern Water's system is so large, at least one (1) to two (2) more employees would be necessary. The AMR system does not have the "real time" data that the AMI System will have, nor the

ability to instantaneously download all the data that is available from the AMI System. Additionally, if a customer had a complaint about a leak or a question about usage, a South Eastern Water employee would need to drive to the customer's location and "drive by" the meter to download this information.

4. **South Eastern Water Deploys AMI System Project.** This is the best alternative. In addition to the meter reading savings from no longer contracting with Tru-Check, the AMI System Project will allow South Eastern Water to provide enhanced customer service by alerting the utility if a customer exceeds a threshold water usage and allowing South Eastern Water to respond to customer issues with near real-time water usage data. The AMI System Project will provide a significant amount of customer usage data by the hour, day, and week, which will be useful to both customers and the utility. The AMI System will also eliminate the need to issue estimated bills and eliminate human errors associated with the current reading system. It will enable South Eastern Water to remotely read the meters regardless of weather or obstacles, will enhance water loss audits, and will reduce non-revenue water by enabling South Eastern Water to quickly identify leaks, meter tampering, and theft of service. The

AMI System will also avoid the lag time between reading the master meters on one day and the customer meters over a 30-day period.

Q-1(a). Provide a comparison of the costs associated with the alternative projects compared with the costs of the AMI System Project.

A-1(a). See the attached **Exhibit 4** for a side-by-side comparison of the annual operating costs of each of the four (4) alternatives considered by South Eastern Water. The proposed AMI System Project is the least expensive alternative in terms of annual operating expenses. The second least expensive alternative is the AMR Meters, but it is more than two and one-half times as expensive as the AMI System Project with respect to annual operating costs. The most expensive alternative is Alternative Number 2 (South Eastern Water reads its own meters). This alternative is nearly nine times more expensive than the AMI System Project.

Q-1(b). Describe in detail South Eastern Water's reasoning for selecting the AMI System Project instead of alternative projects.

A-1(b). For the past few years the Board of Directors and the General Manager of South Eastern Water have been considering various alternatives for replacing its very old meters and implementing a method for reading the meters in a very timely and cost-effective manner. The obvious alternatives were to deploy AMR or AMI meters system-wide. The Board members and the General Manager attended several Kentucky Rural Water

Association conferences and had many discussions with vendors and representatives of meter manufacturers in the Exhibit Hall at these conferences.

On at least eight (8) different occasions since 2018, various vendors and manufacturer's representatives have made presentations about both AMR and AMI systems at South Eastern Water Board meetings or at nearby utility systems. Several Board members and the General Manager attended a presentation at the City of Science Hill where both AMR and AMI systems and meters were demonstrated. As previously stated in response to Question 5 of Commission Staff's First Request for Information, numerous South Eastern Board members and its General Manager made multiple trips to the McCreary County Water District ("McCreary District") and consulted with McCreary District on numerous occasions concerning that district's decision to purchase Kamstrup meters. The very positive experience of McCreary 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 determined that the proposed AMI System Project was the best of the four (4) alternatives for numerous reasons, including, but not limited to, the following:

1. Quality of the Kamstrup meters;

2. Accuracy of the Kamstrup meters;

3. Full 20-year non-prorated warranty offered by Kamstrup;

4. Ability of Kamstrup meters to measure low water flows;

5. Customer satisfaction from McCreary District and other utilities that use Kamstrup meters;

6. Ability to obtain meter readings in less than a single day rather than over a three (3) or four (4) day period with a "drive-by" AMR system;

7. Monitor customer usage in near-real-time;

8. Enhance customer service by enabling it to inform customers of potential leaks in near-real-time. The AMI System will be programmed to notify staff if a customer is using water continuously for a 24-hour period or if the customer's usage is above a certain threshold. South Eastern Water's staff will then notify the customer;

9. Enable it to respond to customer inquiries with near-real-time water usage data;

10. Eliminate the need to dispatch an employee and drive to a customer's location to obtain meter readings in the event of a billing dispute or other issue;

11. Ability to quickly resolve customer complaints because a customer's usage history can be easily and quickly downloaded and shown to the customer;

12. Enable it to alert a customer that the customer's meter lid may have been removed (The AMI System will monitor the temperature of the water and the ambient temperature inside the meter box). In cold weather, this could prevent frozen meters, piping, and equipment inside the meter box;

13. Eliminate need to issue estimated bills because of inclement weather;

14. Eliminate human error in manually reading meters;

15. Monitor whether a customer who has been disconnected for non-payment is using water;

16. Enhance water loss audits;

17. Provide enhanced leak detection because all meters can be read on the same day as the master meters are read;

18. Provide enhanced leak detection because some of the meters will be utilized as zone meters. This will enable the usage within a zone to be compared to the water flowing into that zone;

19. Detect theft of service;

20. Eliminate the need to recruit, train, and retain meter readers to "drive-by" and "radio read" the AMR meters;

21. Eliminate the need to purchase and maintain trucks for the meter readers; and

22. As shown in **Exhibit 4**, the proposed AMI System Project is the lowest cost alternative from an annual operating cost perspective.

Q-1(c). Provide a detailed description of the cost of repairs associated with South Eastern Water's current meters.

A-1(c). Approximately 5,000 of South Eastern Water's 8,000 meters are more than 20 years old. Historically, when a meter was tested, it was repaired if it

tested outside the allowable limits. In recent years, however, South Eastern Water has stopped repairing these meters. This decision was made for various reasons, including the following: (1) inability to find replacement parts for meters that are 20 or 30 years old or older; (2) it is not prudent to put a 20 or 30 year old meter back into service because it is very unlikely that the meter will remain accurate for another 10 years; and (3) it is not cost-effective to repair an old meter (assuming that parts could be found) when a similar new meter costs approximately $70. Therefore, South Eastern Water's meter repair costs is not really relevant.

Q-1(d). Confirm whether South Eastern Water anticipates repair costs to increase over time.

A-1(d). Because South Eastern Water is no longer repairing its old meters, it does not expect its repair costs to increase over time. See the answer to Question 1(c) above. Instead, if the Commission denies South Eastern Water's request to deploy its proposed AMI System Project, its new meter purchases will increase.

Q-1(e). Provide a comparison of repair costs associated with existing meters compared to repair costs associated with AMI System Project meters.

A-1(e). This question is not applicable. See the answers to Questions 1(c) and 1(d) above. Since the new Kamstrup AMI meters have a full (not prorated) 20-

year warranty, there will not be any repair costs incurred by South Eastern Water.

SOUTH EASTERN WATER ASSOCIATION, INC.

CASE NO. 2021-00222

Response to Commission Staff's Second Request for Information

Question No. 2

Responding Witnesses: Morris Vaughn and Joe Crawford

Q-2. Confirm whether the funds saved from no longer utilizing a third-party meter reading service are net or gross savings. If gross, detail the costs expended to ascertain those savings.

A-2. Net. The annual savings of approximately $100,800 from no longer utilizing a third-party meter reading service are **net** savings.

EXHIBIT 1

ANNUAL COST OF HIRING METER READERS

Salary	ONE EMPLOYEE	THREE EMPLOYEES
$19.50 per hour x 2,080 hours	$40,560	$121,680
Benefits[1]	$12,052	$36,156
Truck Expense		
Depreciation[2]	$7,000	$21,000
Mileage[3]	$3,360	$10,080
TOTAL COST	**$62,972**	**$188,916**

[1] Includes social security and health insurance.

[2] Assumes $35,000 purchase price with 5 year useful life.

[3] Assumes 500 miles per month times 12 months = 6,000 miles per year times IRS mileage rate of $0.56 per mile = $3,360.

EXHIBIT 2

Consolidated
PIPE & SUPPLY COMPANY, INC.
265 Thoroughbred Dr. Ferguson, KY 42533
Phone: (606)679-1999 Fax: (606)679-1942
www.consolidatedpipe.com
martinharris@consolidatedpipe.com or ebrewer@consolidatedpipe.com

Company: South Eastern Water Association, Inc.
Date: 5/4/2021
Job: Furnishing and Installing Migratable AMR system
Location: 147 East Somerset Church Rd. Somerset, KY 42503
Mueller Systems MiNode M AMR solution

ITEM	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	EXT.
1	8000	ea.	5/8X3/4 SSM meter with 5' NICOR	$ 119.50	$ 956,000.00
2	10	ea.	1" SSM meter with 5'NICOR	$ 218.75	$ 2,187.50
3	5	ea.	2" SSM meter with 5'NICOR	$ 645.00	$ 3,225.00
4	1	ea.	3" HBMAG meter with 25' NICOR incl. grounding rings	$ 2,657.75	$ 2,657.75
5	1	ea.	4" HBMAG meter with 25' NICOR incl. grounding rings	$ 3,049.10	$ 3,049.10
6	1	ea.	6" HBMAG meter with 25' NICOR incl. grounding rings	$ 4,945.00	$ 4,945.00
7	8018	ea.	MiNet M with 5' NICOR	$ 65.00	$ 521,170.00
7	2	ea.	MINET M MOBILE TRANSCEIVER	$ 4,999.00	$ 9,998.00
5	2	ea.	EZREADER MOBILE SOFTWARE SUITE	Incl with Order	
6	2	ea.	MINET M MOBILE HW LAPTOP KIT	Incl with Order	
7	2	ea.	HANDHELD MiNet install tools	Incl with Order	
			Total		**$ 1,503,232.35**
			Prices are based on complete order		
			Quote expires 8/04/2021		

Payment Terms: Net 30 days.
FOB Terms: Jobsite
Taxes: Prices quoted are excluding any applicable taxes.
Quantities shall be verified and approved before placing an order. Return of any materials ordered are subject to a restock fee

We appreciate the opportunity to provide you with this quotation, and hope we may be favored with your valued business.

Sincerely,
Consolidated Pipe And Supply
Marty Harris
Sales

ENVO CORE

RTS RTS Energy Solutions RTS Water Solutions Light Water

Metering Unit Pricing Summary

South Eastern Water Assn, AMR

5/3/2021

Bid Item Number	Scope of Work Description	Qty in Scope		Total Unit Price	Extended Total Price
1	Installation of 5/8 X 3/4-inch meter, assumes like-for-like meter swap with minimal box cleanout in "soft dig" conditions	8,000		$ 44.63	$ 357,040.00
2	Installation of 1-inch meter, assumes like-for-like meter swap with minimal box cleanout in "soft dig" conditions	10		$ 44.63	$ 446.30
3	Installation of 2-inch meter, assumes like-for-like meter swap with minimal box cleanout in "soft dig" conditions	5		$ 179.62	$ 898.10
4	Installation of 3-inch meter, assumes like-for-like meter swap with no box cleanout will be required	1		$ 262.56	$ 262.56
5	Installation of 4-inch meter, assumes like-for-like meter swap with no box cleanout will be required	1		$ 477.85	$ 477.85
6	Installation of 6-inch meter, assumes like-for-like meter swap with no box cleanout will be required	1		$ 696.04	$ 696.04
7	Installation of External Antenna	400		$ 15.70	$ 6,280.00
8	Installation of Polymer Pit Lid	100		$ 5.09	$ 509.00
	Mobilization				$ 11,677.97
	Payment and Performance Bond				$ 6,542.11
	TOTAL LABOR ONLY IMPLEMENTATION PRICE				$ 384,829.93

EXHIBIT 3

PROJECT COST SUMMARY
AMR METER ALTERNATIVE
South Eastern Water Association, Inc.

PROJECT EXPENSES

1. Equipment Purchase & Installation[1]	$ 1,888,062
2. Kentucky Sales Tax[2]	90,194
3. Advertising and Miscellaneous	2,000
4. Contingency (Approx. 5% of Bid Amount)	94,403
TOTAL PROJECT COST	**$ 2,074,659**

[1] Based upon actual bids received on May 4, 2021 from Consolidated Pipe & Supply Company, Inc. and Envo Core.

[2] Kentucky Sales Tax is based on material cost of $1,503,232 (Bid Items 1-7) that will be subject to Kentucky Sales Tax of 6%.

EXHIBIT 4

Exhibit 4

Annual Operating Costs of Alternative Projects

	Description of Cost	Alt #1 Status Quo	Alt #2 South Eastern Reads Meters	Alt #3 AMR Meters	Alt #4 AMI Project
1	Contractual Services	$100,800			
2	Employee Salaries & Benefits		$157,836	$21,045	
3	Truck Expense		$31,080	$12,880	
4	Annual Software Licensing			$19,369	$19,369
5	Annual Meter Exchange Licensing & Support Services			$1,747	$1,747
	Totals	**$100,800**	**$188,916**	**$55,041**	**$21,116**