RECEIVED

March 20, 2013

MAR 2 3 2013

Mr. Jeff R. Derouen, Executive Director Kentucky Public Service Commission 211 Sower Blvd. P.O. Box 615 Frankfort, KY 40602-0615 PUBLIC SERVICE COMMISSION

Re: Symsonia WD Case No. 2012-00517

Dear Mr. Derouen,

Please find attached Symsonia Water District's responses to the PSC data request of March 7, 2013.

Jem acirl

Sincerely,

Jim Waid, Manager Symsonia Water District

1. List and describe all alternative construction projects that were considered.

The District had considered rehabilitation and upgrade to the existing plant as the main alternative to this project. There are several negative aspects to this option. First of all there isn't a lot of property around the current location to do the upgrade, and additional wells would need to be drilled in order to expand the capacity of the system. Again the lack of real estate at this property causes problems with the cones of depression intersecting if additional wells were to be drilled there. In addition, the existing tank is not only under-sized, but requires extensive maintenance that the District has not been able to do, due to the lack of a long term water storage alternative. The major setback with this as a viable option is that with it being the only water source and storage for the District, there is no way to take if off line long enough to complete the construction for the upgrades required.

The District does have an emergency connection to Benton Water; however, this is for short-term emergency use only and is not capable of serving the entire Symsonia Water District for the number of months the upgrade would take.

The second alternative that the District considered was to drill the new wells at the location in this project and construct a trunk line to the existing plant for treatment and storage. The cost and route for such a trunk line would have been difficult; however, the main downfall to this option is fairly obvious. The main issues of storage capacity and treatment capacity would remain, and as stated earlier, neither issue can be resolved in an economical manner at the existing site.

2. Explain why the proposed construction project was selected.

The proposed project was selected for a number of positive reasons. First of all a second water source and storage location for the district provides the redundancy that is required by the DOW for most systems. With a new polishing plant, wells, and storage the District can meet all the requirements for capacity at this location and can serve their existing customer base from this site alone. The District can remain functioning with the existing facility during construction of the new facility. construction is complete and running the District may take the old facility off-line to do the needed maintenance on it. The new facility is designed to serve the entire system while the existing facility is off-line, as well as. function as two different pressure zones once the existing facility is brought back on-line. The location for the proposed project was selected because of geographic lay out of the town. On the side of town where the new facility will be built, there are a number of propose subdivisions and property that is ready for development. With the new facility at this location, the District will be ready to serve these areas as they develop.

3. Provide an explanation as to the need for the new for the new plant versus the rehabilitation of the existing plant.

The two previous answers have addressed this issue fairly thoroughly. However in addition, the old plant is approaching 50 years of age and again has reached its expected service life. Without the major upgrades required it is not affective to serve the District service area or the two additional subdivisions that have been developed. New plant will have the capacity for the existing service area, as well as, any expected additional developments for the area. The new plant will also include some upgrades such as soft start boosters to provide for better service for future generations of consumers.

Exhibit A – Purchase Area Water Management Planning Council Minutes



PURCHASE AREA WATER MANAGEMENT PLANNING COUNCIL Minutes

May 27, 2008

I. Call to Order

Acting Chairman Kevin Murphy called the May 27, 2008, Purchase Area Water Management Council meeting to order at 10:00 a.m. Those in attendance were as follows:

Ballard County

Mayor John Wood, City of Barlow Tim Walker, Barlow W & S

Calloway County

Lee Roy Barnett, Dexter-Almo Heights W.D. Glen Windsor, Murray W.D. 3

City of Murray

Dennis Thompson

Carlisle County

Jerry Bowman, Carlisle SD No. 1 David Garrett, City of Arlington Fulton County

Graves County

Sam Davis, Hickory W. D. Gene A. Mason, Hardeman W.D. Lowell Smith, Hardeman W.D. Jimmy Waid, Symsonia W.D.

Hickman County

Marshall County

Kevin Murphy, Calvert City L.A. Landers, Marshall SD NO.1

McCracken County

John Hodges, Paducah/McCracken JSA John Webb, Paducah/McCracken JSA

Guests

Clem Wethington, Ky. Rural Assoc. Nathan Hicklin, Jackson Purchase, Found/TNC Jason Enlow, Hunter Martin & Associates

Purchase Area Development District

Adam Scott
Bob Jost
Jeremy Buchanan
Kim DeRenard
Cathy Holshouser

II. Welcome and Introduction

Chairman Murphy thanked everyone for attending the meeting and welcomed each guest.

III. Approval of November 15, 2007 Minutes

Chairman Murphy referred the council to the minutes of the meeting November 15, 2007 which were on pages 1-5 in the meeting packet. Mr. Greg Terry made the motion to approve the minutes followed by a second from Mr. Dennis Thompson. The motion passed unanimously.

IV. Call for Projects

The following Water & Sewer projects on pages 6-10 in the packet were brought before the board for approval. Mr. Adam Scott gave a brief description of their submitted project and Mr. Bob Jost presented the projects on the large screen for the board to review and discuss.

A. New Water Projects for Council Approval 5/27/2008

- Mayfield Electric & Water Project # WX21085053
- Symsonia Water District Project # WX21083055

Mr. John Hodges made the motion to approve the Mayfield Electric & Water project & Symsonia Water District project followed by a second from Mr. Dennis Thompson.

B. New Sewer Project of Council Approval 5/27/2008

City of Arlington Line Project # SX21039014

Mr. Dennis Thompson made the motion to approve the City of Arlington emergency project followed by a second from Mr. Greg Terry.

V. HB 608-Legislative Projects

Mr. Adam Scott commented on the HB 608 Legislative Projects. Mr. Scott stated that our area did really well with funding for projects. Mr. Scott with assistance from Mr. Bob Jost presented to the board Water & Wastewater Projects that were approved for funding on the large screen.

Mr. Scott asked everyone to turn to page 27, in the packet and review the article in the Lexington Herald Leader. The article reveals the conundrum they are in for bonds. Mr. John Herald, at KIA told Mr. Scott that they would not be cutting projects but that they are going to try and do two different bond dates. First they will do the ones that need to be done immediately and then the projects that haven't had engineering done yet. Mr. Scott spoke with Mr. Richard Tidwell and he told him that he had heard from Debbie Milton, and she told him that there will be an announcement in the middle of June that they would not be able to draw funds until after January. Mr. Scott will keep everyone informed about when the money will be available.

VI. Draft of Intended Use Plan for Clean Water SRF

Mr. Scott directed the board to the list of projects that are listed starting at page twenty five of the Intended Use Plan for Clean Water. The following is the list of Project Priority List for the Plan for Clean Water SRF.

RANK	COMMUNTIY	WRIS#
10	Paducah/McCracken JSA	SX21145079
11	So. 641	SX21035008
17	Paducah/McCracken JSA	SX21145028
31	Paducah/McCracken JSA	SX21145172
58	Barlow	SX21004011
92	Marshall Co. Dist. #2	SX221157023
95	City of Murray	SX221035015
96	Marshall Co. Dist. #2	SX21157022
125	Clinton	SX21105004
129	Calvert City	SX21157027
130	Calvert City	SX21157017
131	Calvert City	SX21157025
134	Calvert City	SX21157010
139	Calvert City	\$X21157024
146	Fancy Farm	N/A
162	City of Murray	SX21035017
169	City of Murray	SX21035009
172	City of Murray	SX21035016

VII. Draft of Intended Use Plan for Drinking Water SRF The following is the Project Priority List for the Drinking Water SRF

RANK	COMMUNTIY	WRIS#	
18	McCracken Co./Paducah Water	WX21145059	
39	Ballard County	WX21007019	
40	Calloway County	WX21035019	
43	Calloway County	WX21035017	

If you have any questions or comments on the listings please contact Ms. Sandy Williams at KIA (502) 573-0260 or e-mail Sandy.williams@ky.gov.

VIII. Other Business

Mr. Scott asked for volunteers to be on a committee to establish Water Management Council procedures to be put in writing. KIA would like for them to be submitted for the next contract year.

A. Committee for the Purchase Area Water Management Council Procedures
Three members volunteered to be on the committee for the Purchase Area Water
Management Council to develop Council Procedures.

- Dennis Thompson
- Rod Martin
- Mayor John Wood

B. Nominations Committee

Three members volunteered to be on the committee for the Nominations Committee to select officers for the Council.

- Shannon McCleary
- John Hodges
- Kevin Murphy

C. Rates Book

Mr. Scott explained the Rates Book for the Water Management Council. The Rates Book contains Water & Sewer Rates for the Purchase Area. The book is available to view for examples of rates in the Purchase Area. Mr. Scott asked everyone that if you raise your rates please bring in a copy of them to the meeting, so that we can put it in the Rates Book. This will be available on the internet in the near future along with minutes from the meetings.

IX. Comments

Mayor John Wood asked if anyone knew about recoating a clear well. Committee members discussed the issue and explained what they had done in the past.

Mr. Clem Wethington, with Kentucky Rural Water reported on the following events & new projects.

- Water Operators training will be held on June 3-4, 2008, in Princeton at the UK Research Farm.
- Annual Technical Conference and Exhibition will be held August 25-27,
 2008 at the Hyatt Regency & Lexington Convention Center in Lexington,
 Kentucky.
- Water & Waste Water training will be held on June 17, 18, & 19th, at Kentucky Dam Convention Center. There will be a mail out about the training.

- Kentucky Rural Water Association has been working with Western Kentucky University and has developed a new program called the WITTI Program. This program is intended to target high school or college students to get them interested in Water & Waste Water Management. The plans are to take the program nation wide.
- The Lateral Line is a new publication for Kentucky on site septic systems and it will be published on a quarterly basis. Members were encouraged to let anyone who was involved in the KOWA know about this publication.

Mr. Scott told the committee what a great job Judge/Ex. Tony Smith on had done on the merger of Consumers, South Graves, Fancy Farm, and the Hardeman Water Districts into the new Graves County Water District.

X. Adjourn

There being no other business to discuss, Chairman Murphy adjourned the meeting.

4. Explain the need for the new wells and the new 150,000-gallon ground storage tank.

Not only does the District need additional capacity that the new wells will provide, the old wells have had issues with sand screens deteriorating due to age. They need to be retired to back up use only, or redrilled and entirely new casings, screens, and filters installed. The size of the new clear well / ground storage tank has been designed for the expected 20 year growth and average daily storage capacity required for such demand. This tank is designed to function at several different levels of capacity. This was done so that the District can maintain the required turnover rate and the required storage for the existing demand as well as the 20-year projected demand as required by the DOW.

Purchase Area Water Management Plan

Mayfield	1
Sedalia	3 TO 4
South Graves	1.5
Symsonia	1
Tri-City	LESS THAN 1
Wingo	2
Fullon County	
Fulton	2
Hickman	2
Elickman County:	
Columbus	4
US Utilities	3
Marshall County	
Benton	1 TO 2
Calvert City	1 TO 2
Hardin	1
Jonathan Creek	2
North Marshall	1
McCracken County	
Hendron	1
Paducah	1 TO 2
Paducah/Reidland	2
West McCracken	1 TO 2

*DENOTES WATER SYSTEMS RELYING ON WATER STORAGE ROME URGHASE SOURCE: THERE IS NO STORAGE CAPABILITIES WITHIN THESE WATER SYSTEMS:

5. State whether the emergency connection with the city of Benton will provide adequate water service to all Symsonia customers.

The City of Benton contract is for emergency water only and only if their system can oblige. The connection isn't intended for servicing the entire Symsonia Water District service area, nor is it capable of doing so for any length of time. It is a useful connection for a short-term need due to a failure in the Symsonia District's system; however if there were a major drought situation, that would likely affect the source water for both Symsonia and Benton system. In this case, Benton's counsel stated their customers would obviously be served first. Therefore while this connection is a convenient emergency back-up, it does not replace the Districts need for storage and additional source water.

Exhibit B – Contract between Symsonia Water District and City of Benton



RESOLUTION APPROVING A CONTRACT FOR THE SALE/PURCHASE OF WATER WITH SYMSONIA WATER AND SEWER DISTRICT

BE IT RESOLVED that the City Council of the City of Benton, KY hereby approves and consents to the Mayor and City Clerk signing that Water Purchase/Sales Agreement with the Symsonia Water and Sewer District, a copy of which is attached hereto and incorporated by reference.

This the 17	T th day of	f Spotember	2007
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STEVE CARY, MAYOR

ATTEST:

MICHELE EDWARDS

COUNCIL MEMBERS VOTING

	<u>AYE</u>	NAY
GLEN BREWER TIM KING CHARLES EDMONDS KENTON HOLLAND MICKEY SIRLS RITA DOTSON	Absent Absent	

WATER PURCHASE CONTRACT

The Contract made and entered into by and between the SYMSONIA WATER AND SEWER DISTRICT (DISTRICT) Graves County, Kentucky, and the CITY OF BENTON, (CITY), Marshall County, Kentucky.

WITNESSETH

WHEREAS, the District is a Water and Sewer District chartered and existing under the laws of the Commonwealth of Kentucky and operates a water distribution system serving water users within Graves County, Kentucky, and desires to procure an alternate source of water for distribution to its users should it have need for same; and

WHEREAS, the City, a City of the 4th Class, owns and operates a water distribution system in Marshall County and wishes to procure an alternate service of water for distribution to its user, should it have a need for same; and

WHEREAS, by Resolution enacted on the 12 day of June. 2007, by the Symsonia Water and Sewer District authorized, the purchase and/or sale of water to the City of Benton in accordance with the provisions of this Contract was approved by the Board of the District and the execution of this Contract by the Chairman, Keith Cooper, was duly authorized; and

WHEREAS, by Resolution enacted on the 17 day of September, 2007, by the City of Benton authorized the purchase and/or sale of water from Symsonia Water and Sewer District in accordance with the terms set forth in this Contract was approved by the City Council of the City of Benton, Kentucky, and the execution of this Contract by the Mayor was duly authorized.

NOW, THEREFORE, IN CONSIDERATION OF THE FOREGOING and the mutual agreements hereinafter set forth,

A. EACH PARTY AGREES:

1. Quality and Quantity. To furnish at a point of delivery herein specified, during the term of this Contract or any renewal or extension thereof, portable treated water meeting applicable purity

standards of the Kentucky Division of Water Quality in such quality as may be required, but not to be in excess of the capacity each entity may have for its existing customers. Each Party shall provide the other with notice in advance of its intent to procure water from the other under the provisions of this agreement.

- Point of Deliver and Pressure. That water will be furnished at a reasonably constant pressure by both Parties. The connecting point will be at an existing ____ inch water main supply belonging to District, this being located approximately, (approximate location). Emergency failures of pressure or supply due to main line breaks, power failures, flood, fire, use of water to fight fire, earthquake or other catastrophe shall excuse either Party from this provision for such period of time as shall be necessary to restore the service.
- Metering Equipment. The District will furnish, install, operate and maintain, at the point of delivery all fittings, meter and any building required for connection of the two facilities shall be and remain the property of the District. The metering equipment will be tested, but not more frequently that once every twelve (12) months, with that expense to be shared equally by the Parties. A meter registering not more than three percent (3%) above or below the test result shall be deemed to be accurate. If any meter fails to register for any period, the amount of water furnished will correspond with the period immediately prior to the failure, unless both Parties shall agree upon a different amount.
- 4. <u>Billing Procedures</u>. The meter shall be read between the 1st and 5th of each month, by a representative of the Party furnishing the water to the other, and if a representative of the receiving Party wishes to be present at the time the meter is read, it shall let the other Party know by the 30th of each month. The Party furnishing water shall provide the other an itemized statement of the amount of water bought or sold during the preceding month.
- 5. Rates and Payment Date. The City agrees to pay no later than the 5th day of the following month, for water delivered in accordance with this agreement, the approved tariff for each 1,000 gallons of water furnished or as said tariff may be adjusted periodically in any general rate increased approved by the City Council or the Public Service Commission if its approval of said rates and tariff is required. There shall be no minimum rate per month when water is not being used. District agrees to pay no later

than the 5th day of the following month for water delivered to it in accordance with this agreement, the wholesale rate Benton charges for each 1,000 gallons of water furnishes to its wholesale customers and as may be adjusted periodically in any general rate increase made pursuant to an Ordinance establishing said rate or rates enacted by the City Council and approved by the Public Service Commission if its approval of said rates and tariff is required.

B. IT IS FURTHER MUTUALLY AGREED BETWEEN BOTH PARTIES AS FOLLOWS:

- Term of Contract. That this Contract shall extend for a term of five (5) years from the date of the signing of this Contract, thereafter shall be automatically renewed or extended for such term or terms, unless terminated by one of the Parties, pursuant to paragraph 4 hereof.
- 2. <u>Connection Charge</u>. There shall be no connection charge for either of the Parties associated with this Contract.
- 3. <u>Modification of Contract</u>. The provision of this Contract pertaining to the schedule of rates to be paid by either Party for water delivered are subject to modification at the end of every one (1) year period. Any increase or decrease in rates may be subject to the approval of the Public Service Commission, and will be based on the increase or decrease in the cost of performance hereunder, but such cost shall not include capitalization of either Parties' system. All other provisions of this Contract may be modified or altered by mutual agreement.
- 4. <u>Termination Provision</u>. Each Party reserves the exclusive right to terminate this Contract upon giving written notice of ninety (90) days in advance of the date of termination. Notice of termination by the City shall be in writing sent to the Chairman of the Water District. Notice of termination by the District shall be in writing sent to the Mayor of the City.
- 5. <u>Regulatory Agencies</u>. This Contract is subject to all rules, regulations and laws as may be applicable to similar agreements in this State.
- 6. Replacement of 4" line. Benton intends to replace a portion of its lines required to service this Contract which is 4" in diameter and District acknowledges that this line replacement is a part

of a county wide water improvement project the cost and expense of which is to be paid by a grant, and 'the City's obligation under this Contract are contingent upon the completion of this project.

IN WITNESS WHEREOF, the Parties hereto, acting under authority of their respective governing bodies, have caused this Contract to be duly executed in three counterparts, each of which shall constitute an original.

SYMSONIA WATER AND SEWER

DISTRICT

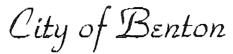
3Y:

KEITH COOPER, CHAIRMAN

CITY OF BENTON

BY:

STEVE CARY, MAYOR



1009 Main Street Benton, Kentucky 42025 (270) 527-8677

June 30, 2008

Symsonia Water System:

The current wholesale water rate for Benton Water & Sewer System is \$1.49 per 1,000 gallons of water.

Michele Edwards, City Clerk

Water Projects within the Purchase Area Development District

WRIS			Number of	KIA	0-2
Project	Project	Cost	Customers	Timeframe	Year
<u>Number</u>	Owner	Estimate	Affected	(in years)	Rank

GRAVES COUNTY

WX21083001

WINGO WATER & SEWER

\$91,780

1,240

0-2

THE WINGO WATER SYSTEM NEEDS TO CONNECT WITH THE SOUTH GRAVES WATER SYSTEM BY EXTENDING THEIR LINES ON KY 339 AND ON WINGO ROAD. THIS WOULD ENABLE THE TWO SYSTEMS TO BE ACTING AS A BACKUP SOURCE FOR ONE ANOTHER. IT WILL ALSO PICK UP THE CUSTOMERS THAT ARE CURRENTLY UNSERVED BETWEEN THE TWO SYSTEMS. THE SOUTH GRAVES WATER DISTRICT LINES WOULD NEED TO BE REPLACED AT THESE TWO CONNECTING POINTS. THE CITY OF WINGO ALSO NEEDS TO PROVIDE WATER TO THE KNOB HILL SUBDIVISION JUST OUTSIDE THE CITY LIMITS. THIS IS A NEW SUBDIVISION THAT IS RAPIDLY BEING DEVELOPED. THIS WOULD PROVIDE POTABLE WATER TO THE CURRENT RESIDENTS AND WOULD ALLOW THEM BETTER FIRE SUPPRESSION.

WX21083003

SOUTH GRAVES WATER DISTRICT

\$133,755

50

11-20

TO COMPLETE THE LOOP BETWEEN SYSTEMS AND SUPPLY WATER TO 50 CUSTOMERS SOUTH GRAVES NEEDS TO CONNECT WITH THE CUBA WATER WORKS. THIS CONNECTION IS EXPECTED TO BE MADE IN THE VACINITY OF THE INTERSECTION OF KY 94 AND KY 303.

WX21083004

MAYFIELD ELECTRIC & WATER

\$20.904

40

3-10

TO CLOSE THE GAP BETWEEN MAYFIELD ELECTRIC & WATER SYSTEM (MEWS) AND CONSUMER WATER DISTRICT (CWD), MAYFIELD SHOULD CONNECT WITH CWD AT KY 303 AND ON OLD DUKEDOM ROAD. THIS WILL ALLOW CWD TO USE MEWS AS A BACK UP AND ALSO PROVIDE WATER TO AN ESTIMATED 40 CUSTOMERS.

WX21083005

CONSUMERS WATER DISTRICT

\$20,436

158

3-10

THE CONSUMERS WATER DISTRICT CURRENTLY SURROUNDS THE SEDALIA WATER DISTRICT. THIS PROJECT WOULD MERGE THE SEDALIA WATER DISTRICT WITH CONSUMERS WATER DISTRICT WHILE TAKING IN 18 NEW CUSTOMERS AT THE CONNECTING POINTS.

WX21083007

MAYFIELD ELECTRIC & WATER

\$400,712

275

11-20

THIS WILL ALLOW MEWS TO CONNECT WITH THE FANCY FARM WATER DISTRICT AND TO PROVIDE WATER TO THOSE CUSTOMERS WHO ARE CURRENTLY BETWEEN THE TWO SYSTEMS. THE GROWTH POTENTIAL IS VERY HIGH IN THIS AREA ESPECIALLY ALONG KY 80.

WX21083008 SYMSONIA WATER DISTRICT

\$259,558

64

0-2

EXTEND 6" WATER MAIN EAST 1.5 MILES TO MARSHALL COUNTY TO COMPLETE AN INTERCONNECTION WITH BENTON WATER & SEWER SYSTEM. THERE ARE APPROXIMATELY 16 HOUSES TO PICK UP AS WELL AS PROVIDING AN ALTERNATIVE OR BACK-UP WATER SOURCE. FIRE PROTECTION CAPABILITIES WOULD BE PROVIDED BY LARGER MAINS AND FIRE HYDRANTS. ALSO, THE PRESSURE IRON FILTER AT THE WATER TREATMENT PLANT IS TO BE REPLACED, AND NEW PLUMBING WILL BE INVOLVED.

WX21083010

HARDEMAN WATER DISTRICT

\$122,096

45

3-10

THE HARDEMON WD SHOULD BE LOOPED TOGETHER AT THE NORTHERN AND EASTERN POINTS. MAYFIELD ELECTRIC AND WATER SYSTEM SHOULD CONNECT WITH HARDEMON WATER DISTRICT ALONG KY 80 TO PROVIDE A BACK UP SYSTEM FOR EACH SUPPLIER. HWD ALSO HAS A NEED FOR A NEW WELL, TOWER, AND SEVERAL TRANSMISSION LINES.

Last updated: 8/17/05 at 3:00pm

Priority

0. Submitted

6. Refer to Item 13 of Exhibit 10. Provide a detailed breakdown of the first-year cost to operate the new plant in comparison with the cost to operate the old plant.

The following is an estimate of the changes in O&M cost that the District is likely to experience in the leading cost categories.

SYMSONIA WATER DISTRICT ESTIMATED 0&M							
		EXISTING AVG		PROPOSED AVG ANNUAL		PROPOSED AVG ANNUAL	
	ANNUAL		(,	AT 2/3 CAPACITY)	(A	T FULL CAPACITY)	
OPERATOR SALARY	\$	41,000.00	\$	41,000.00	\$	41,000.00	
BOOKKEEPING SALARY	\$	25,000.00	\$	25,000.00	\$	25,000.00	
GENERAL MAINTENANCE	\$	5,000.00	\$	2,500.00	\$	5,000.00	
CHEMICALS	\$	7,000.00	\$	10,000.00	\$	14,000.00	
GAS (HEAT)	\$	600.00	\$	-	\$	-	
ELECTRICAL	\$	3,500.00	\$	5,400.00	\$	8,000.00	
SAMPLING / TESTING	\$	4,000.00	\$	4,000.00	\$	4,000.00	

The table above depicts a current cost, a cost at 2/3 the capacity, and a cost at full capacity. This has been shown due to the fact that the system will not initially need to run at full capacity on a regular basis. As per design standards, the new facility is sized for potential future growth as well as current demand.

The salary expenses are not expected to change due to this upgrade, other than the District's normal cost-of-living or salary increases already in place, which are irrelevant to this project. Also, it is important to note that the same staff serves both the water and wastewater departments for the District; therefore, those costs are shared between the two departments. The general maintenance estimate assumes the majority of maintenance in the first year will be covered within the warrantee and manufacturer agreements. However, as those agreements expire, general maintenance costs should be similar to the existing costs.

The remaining cost items shown are the primary expenses for O&M. Considering that water samples from the new wells tested similarly to the existing wells' water quality, one can assume the chemicals used to treat the new facility should be proportionally equal, but with a slight vendor cost increase over time being a possibility. The next line item is gas used for heating the existing facility. The new facility will utilize packaged terminal AC and heating units that will not require gas, so this line item

has been omitted. However, it should be noted that while natural gas will not be used or even provided to the site, diesel gas will be needed on an emergency basis only. This has not been included in the line items because at this point there is no way to estimate this expense, nor would one expect this to be a primary cost item. There will be a back-up diesel-powered generator at the site for emergency power outage use.

The electrical cost for the new facility is hardest to estimate. The basic ideology behind the estimates shown is first that with the new equipment there is approximately a 15-20% efficiency savings. For this application, there will still be an overall cost increase for several reasons. Increased electrical costs will occur because all temperature controls for the building will now be on electricity; there will be more equipment items installed in the new facility; and as the capacity increases, so will well pump, chemical pump, and booster pump run times. So even though each piece of equipment is more efficient than the existing equipment, the capacity expansion will cause increased electrical use.

The final line item is for testing and sampling. The new facility will not require any additional testing and sampling cost from what is currently being expensed unless the laboratory that process the samples has a price increase.

COMMONWEALTH OF KENTUCKY)) SS
COUNTY OF GRAVES)
and states he is the Manager of Symproceedings; that he has read the fore thereof; that the same is true of his ow	being duly sworn, deposes asonia Water District, Applicant, in the above egoing responses and has noted the contents on knowledge, except as to matters which are and as to those matters, he believes same to be
IN TESTIMONY WHEREOF, with 3-21-2013.	ness the signature of the undersigned on this
	Symsonia Water District
Subscribed and sworn to before Water District, on this 3-21, 2013.	me by Jimwai L, Manager of Symsonia
My Commission Expires 3-7	<u>7-, 2017</u>
	McLissa Allock Notary Public In and for said County and State