

**DAMON R. TALLEY, P.S.C.**

112 N. LINCOLN BLVD.  
P.O. BOX 150  
HODGENVILLE, KENTUCKY 42748

TEL. (270) 358-3187  
FAX (270) 358-9560

DAMON R. TALLEY

ATTORNEY AT LAW

April 19, 2010

Mr. Jeff Derouen  
Executive Director  
Public Service Commission  
PO Box 615  
Frankfort, KY 40602

**RECEIVED**

APR 19 2010

**PUBLIC SERVICE  
COMMISSION**

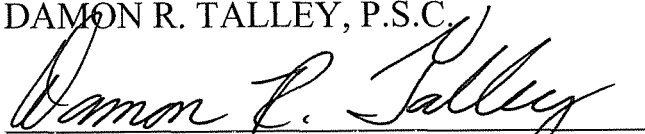
RE: Case No. 2009-00373  
Hopkinsville Water Environment Authority

Dear Mr. Derouen:

Enclosed for filing are the original and six (6) copies of Hopkinsville Water Environment Authority's Responses to Christian County Water District's Data Request.

Yours truly,

DAMON R. TALLEY, P.S.C.



DAMON R. TALLEY, Counsel For  
Hopkinsville Water Environment Authority

DRT:ms

Enclosures

cc: Hon Jack Hughes, Attorney for CCWD  
James Owen, General Manager, CCWD  
Hopkinsville Water Environment Authority

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

PROPOSED ADJUSTMENT OF THE )  
WHOLESALE SERVICE RATES OF ) CASE NO.  
HOPKINSVILLE WATER ENVIRONMENT ) 2009-00373  
AUTHORITY )

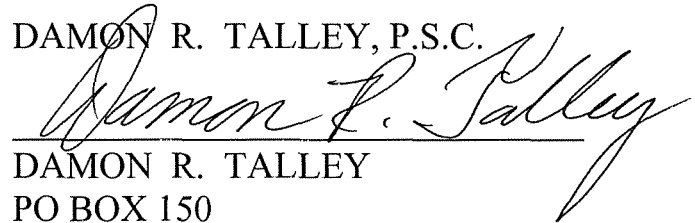
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**RESPONSES OF HOPKINSVILLE WATER  
ENVIRONMENT AUTHORITY TO  
CHRISTIAN COUNTY WATER DISTRICT'S  
DATA REQUEST**

\*\*\*\*\*

Comes the Hopkinsville Water Environment Authority ("HWEA"),  
for its Responses to Christian County Water District's Data Request, and  
states as shown on the following pages.

DAMON R. TALLEY, P.S.C.



DAMON R. TALLEY  
PO BOX 150  
HODGENVILLE, KY 42748  
COUNSEL FOR HWEA

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

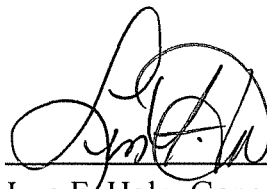
In the Matter of:

PROPOSED ADJUSTMENT OF THE )  
WHOLESALE SERVICE RATES OF ) CASE NO.  
HOPKINSVILLE WATER ENVIRONMENT ) 2009-00373  
AUTHORITY )

**CERTIFICATION OF RESPONSES TO CHRISTIAN  
COUNTY WATER DISTRICT'S DATA REQUEST**

This is to certify that I have supervised the preparation of the  
Hopkinsville Water Environment Authority's Responses to the Christian  
County Water District's Data Request. The responses are true and accurate  
to the best of my knowledge, information and belief formed after reasonable  
inquiry.

Date: April 19, 2010



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Len E. Hale, General Manager  
Hopkinsville Water Environment Authority

## CERTIFICATE OF SERVICE

This is to certify that a true copy of ~~the~~ attached pleading was served by first class U.S. Mail, postage prepaid, this 19<sup>th</sup> day of April, 2010, to the following:

Hon. Jack N. Hughes  
124 W. Todd St.  
Frankfort, KY 40601

Mr. James Owen, Gen. Mgr.  
Christian Co. Water District  
PO Box 7  
Hopkinsville, KY 42241-0007

Mr. Len F. Hale, Gen. Mgr.  
HWEA  
PO Box 628  
Hopkinsville, KY 42241-0628

DAMON R. TALLEY, P.S.C.

BY: 

DAMON R. TALLEY

1.

- a. What is the maximum capacity of HWEA's water treatment plant?

**RESPONSE:** 8.5 million gallons per day (MGD)

- b. Is any portion of the plant's treatment capacity reserved for any customer?

**RESPONSE:** No amount of HWEA's water treatment plant capacity is reserved for Christian County Water District (CCWD) nor for any other customer. CCWD has the contractual right to purchase up to a maximum of 2 million gallons per day and 49 million gallons per month from HWEA. HWEA has honored, and will continue to honor, this contractual obligation.

- c. Describe the changes, if any, that HWEA expects within the next 3 years in the level of water treatment capacity reserved for each of the customers listed in (b) above and state the reason(s) for HWEA's expectations.

**RESPONSE:** In the past, CCWD has expressed interest in increasing its maximum daily purchase amount from 2 MGD to 4 MGD once the Moss Water Treatment Plant Improvement and Expansion Project has been completed. HWEA does not know if CCWD still desires to increase its daily maximum.

**WITNESS:** Derrick W. Watson

2.

- a. Who owns the master meter(s) through which HWEA provides water to Christian County Water District (CCWD)?

**RESPONSE:** HWEA

- b. Who is responsible for maintaining these master meters?

**RESPONSE:** HWEA is responsible for maintaining the master meters at all 13 different delivery points. See Section A.3. of the Water Purchase Contract dated June 28, 1973 between HWEA and CCWD.

**WITNESS:** Derrick W. Watson

3. What portion, if any, of HWEA's water main(s) that serve the CCWD are gravity fed?

**RESPONSE:**

No portion of HWEA's transmission and distribution mains are "gravity-fed". All potable water is pumped from the Moss Water Treatment Plant via high service pumps into the HWEA transmission and distribution mains. CCWD is served by this pressurized transmission and distribution system.

**WITNESS:** Derrick W. Watson

4. Does HWEA provide unmetered water service to any entities (e.g. service to municipal buildings, fire departments or protection services)?

**RESPONSE:** Yes

- a. If unmetered service is provided, then for each type of service, estimate the percentage of the total unmetered amount.

**RESPONSE:** See Response to Item 21 of the PSC First Information Request.

- b. On Schedule B, Table B-1 of the Cost of Service Study (COS), does total unaccounted water include Flushing/Hydrants and plant use?

**RESPONSE:** Table B-1 of Appendix E (Page E8) specifically identifies “Flushing/Fire Hydrants” and “HWEA facilities.” This usage is attributed to HWEA in Table B-2 on Page E8 as “Excessive Unaccounted For” water. See Response to Question 4c below for additional explanation.

- c. In Table B-2, explain the “Modified Meet 15% Lost Water” calculations.

**RESPONSE:** The purpose of the calculations in Table B-2 on Page E8 is to allocate all unaccounted for water in excess of 15% to HWEA. For ratemaking purposes, the PSC has traditionally disallowed all unaccounted for water in excess of 15%. Thus, the terms “excessive unaccounted for water” or “excessive line loss” means all line loss in excess of 15%. The result of the Table B-2 calculations is to reduce the average water sales ratio for CCWD from 25.4% to 23.18%. This, in turn, reduces the amount of various expenses that are allocated to CCWD by the COS.

**WITNESS:** Derrick W. Watson and Brent A. Tippey, P.E.



5. How were the maximum day and maximum hour demand factors used in the COS determined for the retail and wholesale customers?

a. If estimated, explain the method and assumptions used.

**RESPONSE:** HWEA does not record wholesale purchases daily from the 13 master meters located around HWEA's system. These meters are read and recorded monthly. Therefore, the maximum daily demand factor was arrived at by taking the maximum monthly usage (for both retail and wholesale) and dividing by the number of days in the month. The largest value was considered to be the maximum day. These retail and wholesale values could actually be considered an "average" maximum day. Regardless, the values were determined by using a consistent methodology based on available data.

The maximum hour demand is based on CCWD's contract maximum. The contract enables CCWD to draw up to 1,390 GPM (or 2.0 MGD) from HWEA at any time. Therefore, that volume was identified as the CCWD maximum hour. To be consistent, the HWEA maximum hour was considered to be the remaining available capacity at the WTP or 6.5 MGD (4,514 GPM).

This information was provided in Appendix E (Pages E5 and E6) of the COS. Please see those pages for additional details.

**WITNESS:** Brent A. Tippey, P.E.

6. On page 1-1 of the COS, it is stated that demand for the last three years has exceeded 80% of design capacity of the MWTP 858 times. For 2009, provide the percentage demand by customer class for the days that demand exceeded 80% of design capacity at MWTP.

**RESPONSE:** Daily usage information by customer class is not available. Therefore, the requested information can not be provided.

**WITNESS:** Derrick W. Watson

7. Will CCWD's contractual 2.0 mgd increase as a result of the installation of the new raw water main or improvements to the Moss WTP?

**RESPONSE:** The contractual provision which enables CCWD to purchase up to a maximum of 2.0 mgd will not change upon the completion of the improvements to the Moss WTP. Thus, CCWD's maximum daily purchase amount will not automatically increase. If CCWD is still interested in increasing its maximum daily purchase amount, however, HWEA is willing to seriously consider this request.

**WITNESS:** Derrick W. Watson

8. Provide CCWD's annual purchases from 2005 through 2009.

**RESPONSE:** The information is set forth in **Table 8** below:

**TABLE 8**

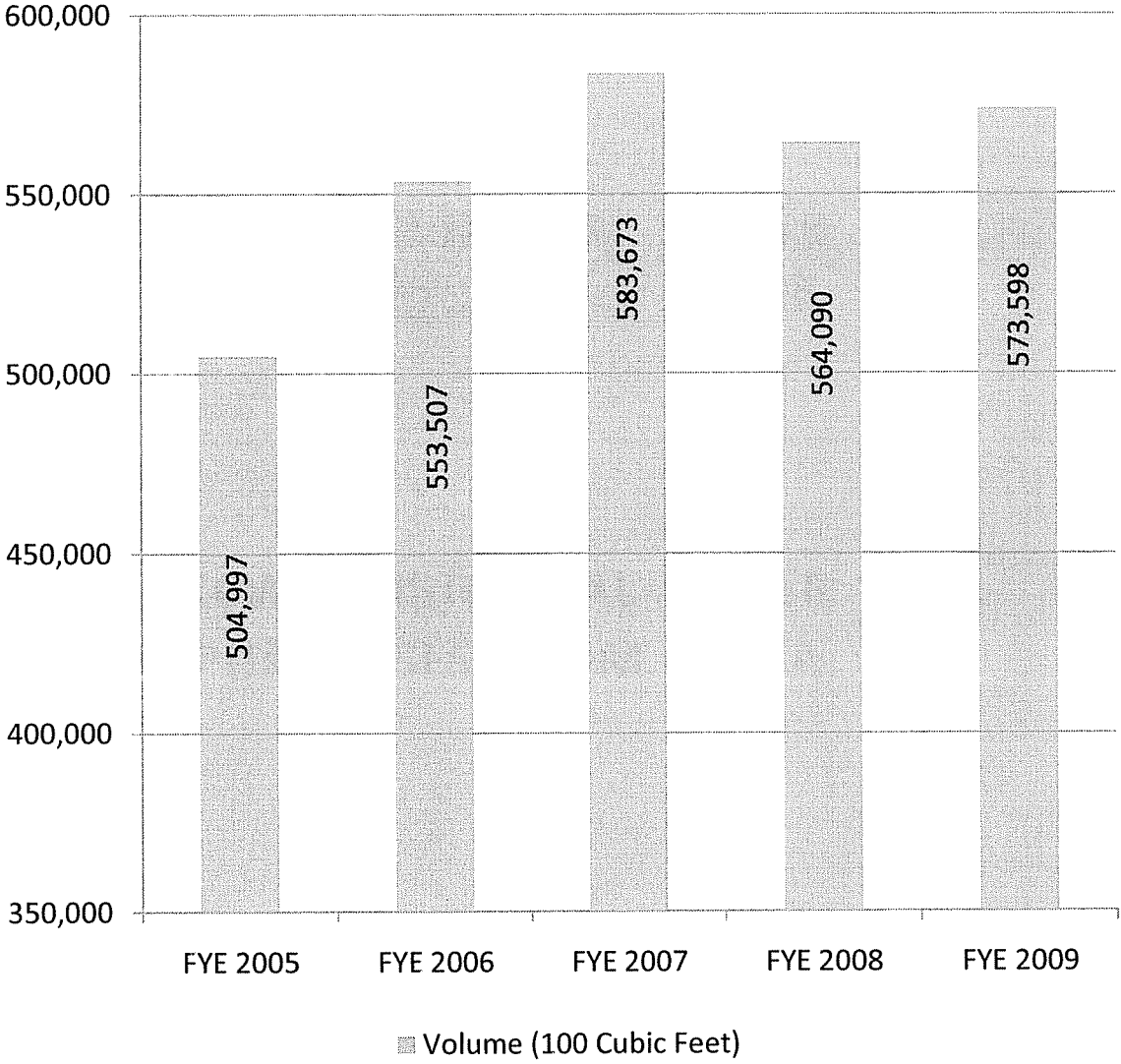
**CCWD ANNUAL PURCHASES FROM HWEA**

<b>FYE</b>	<b>Volume (100 Cubic Feet)</b>
2005	504,997
2006	553,507
2007	583,673
2008	564,090
2009	573,598

From reviewing this sales data, CCWD's annual purchases from HWEA have increased by 13.6% from FYE 2005 to FYE 2009. This increased usage is illustrated by the bar graph which is included as Attachment 8. Also included in Attachment 8 are the actual CCWD purchases from HWEA on a monthly and yearly basis for the past five (5) fiscal years.

**WITNESS:** Derrick W. Watson

# CCWD HISTORICAL WATER PURCHASES FROM HWEA



## WHOLESALE WATER STATISTICS

### July 2004 - June 2009

Month	CCWD Usage 100 Cubic Feet	CCWD Usage Cubic Feet	CCWD Usage Gallons	CCWD Water Sales Revenue
<b>July 2004</b>	40,249	4,024,900	30,186,750	\$55,323.03
August	40,835	4,083,500	30,626,250	\$49,317.31
September	43,553	4,355,300	32,664,750	\$52,542.83
October	38,929	3,892,900	29,196,750	\$47,099.88
November	40,076	4,007,600	30,057,000	\$48,397.87
December	40,155	4,015,500	30,116,250	\$48,492.16
January 2005	48,207	4,820,700	36,155,250	\$58,095.89
February	40,139	4,013,900	30,104,250	\$48,460.84
March	43,168	4,316,800	32,376,000	\$52,145.67
April	42,395	4,239,500	31,796,250	\$51,221.97
May	36,135	3,613,500	27,101,250	\$43,779.73
June 2005	51,156	5,115,600	38,367,000	\$56,506.21
<b>Sub-Totals</b>	<b>504,997</b>	<b>50,499,700</b>	<b>378,747,750</b>	<b>\$611,383.39</b>
<b>July 2005</b>	46,242	4,624,200	34,681,500	\$55,820.09
August	48,231	4,823,100	36,173,250	\$58,180.87
September	43,676	4,367,600	32,757,000	\$52,750.21
October	51,534	5,153,400	38,650,500	\$62,037.60
November	45,271	4,527,100	33,953,250	\$54,583.83
December	42,630	4,263,000	31,972,500	\$51,438.90
January 2006	45,702	4,570,200	34,276,500	\$55,094.04
February	45,368	4,536,800	34,026,000	\$54,775.71
March	39,555	3,955,500	29,666,250	\$47,782.50
April	42,541	4,254,100	31,905,750	\$51,340.74
May	50,429	5,042,900	37,821,750	\$60,793.55
June 2006	52,328	5,232,800	39,246,000	\$69,575.05
<b>Sub-Totals</b>	<b>553,507</b>	<b>55,350,700</b>	<b>415,130,250</b>	<b>\$674,173.09</b>

Month	CCWD Usage 100 Cubic Feet	CCWD Usage Cubic Feet	CCWD Usage Gallons	CCWD Water Sales Revenue
<b>July 2006</b>	58,764	5,876,400	44,073,000	\$80,977.03
August	49,512	4,951,200	37,134,000	\$68,300.57
September	48,509	4,850,900	36,381,750	\$66,889.44
October	46,088	4,608,800	34,566,000	\$63,576.30
November	43,500	4,350,000	32,625,000	\$60,009.92
December	40,436	4,043,600	30,327,000	\$55,812.14
January 2007	46,406	4,640,600	34,804,500	\$64,007.87
February	45,910	4,591,000	34,432,500	\$63,327.29
March	43,300	4,330,000	32,475,000	\$59,746.87
April	51,230	5,123,000	38,422,500	\$70,615.64
May	52,862	5,286,200	39,646,500	\$72,852.54
June 2007	57,156	5,715,600	42,867,000	\$78,775.62
<b>Sub-Totals</b>	<b>583,673</b>	<b>58,367,300</b>	<b>437,754,750</b>	<b>\$804,891.23</b>
<b>July 2007</b>	51,101	5,110,100	38,325,750	\$70,479.42
August	55,432	5,543,200	41,574,000	\$76,413.57
September	52,536	5,253,600	39,402,000	\$72,445.25
October	52,652	5,265,200	39,489,000	\$72,605.13
November	45,009	4,500,900	33,756,750	\$62,133.25
December	45,795	4,579,500	34,346,250	\$63,210.48
January 2008	43,889	4,388,900	32,916,750	\$60,599.40
February	47,560	4,756,000	35,670,000	\$65,626.04
March	36,023	3,602,300	27,017,250	\$49,813.42
April	39,204	3,920,400	29,403,000	\$54,180.33
May	44,850	4,485,000	33,637,500	\$61,916.37
June 2008	50,039	5,003,900	37,529,250	\$69,024.88
<b>Sub-Totals</b>	<b>564,090</b>	<b>56,409,000</b>	<b>423,067,500</b>	<b>\$778,447.54</b>
<b>July 2008</b>	45,195	4,519,500	33,896,250	\$63,484.34
August	53,261	5,326,100	39,945,750	\$73,401.20
September	54,780	5,478,000	41,085,000	\$75,513.31
October	53,988	5,398,800	40,491,000	\$74,428.06
November	50,250	5,025,000	37,687,500	\$69,307.07
December	48,475	4,847,500	36,356,250	\$66,878.05
January 2009	54,509	5,450,900	40,881,750	\$75,141.48
February	51,502	5,150,200	38,626,500	\$71,061.97
March	34,039	3,403,900	25,529,250	\$47,093.44
April	38,259	3,825,900	28,694,250	\$52,879.08
May	43,950	4,395,000	32,962,500	\$60,703.99
June 2009	45,390	4,539,000	34,042,500	\$62,684.53
<b>Sub-Totals</b>	<b>573,598</b>	<b>57,359,800</b>	<b>430,198,500</b>	<b>\$792,576.52</b>

9. Provide any projections, studies, reports or other information prepared by or in the possession of HWEA about the future water needs of CCWD.

**RESPONSE:** HWEA does not have any written information about the future water needs of CCWD.

**WITNESS:** Derrick W. Watson



10. On page 1-1 of the Cost of Service Study (COS) there is a reference to rising demand for water in Christian County. Provide any studies, reports or other information supporting the rising demand.

**RESPONSE:** See the Response to Question 8 and the supporting data shown in Attachment 8. CCWD's demand has increased by 13.6 % over the past five (5) years.

a. Provide the demand for each customer class for the last five years.

**RESPONSE:** The requested information is set forth in **Table 10** below:

**TABLE 10**  
**HISTORICAL DEMAND BY CUSTOMER CLASS**

<b>FYE</b>	<b>CCWD Sales 100 Cubic Feet</b>	<b>Retail Sales 100 Cubic Feet</b>	<b>Total Sales 100 Cubic Feet</b>
2005	504,997	1,712,123	2,217,120
2006	553,507	1,691,918	2,245,425
2007	583,673	1,728,175	2,311,848
2008	564,090	1,645,872	2,209,962
2009	573,598	1,574,147	2,147,745

b. Provide the average and maximum day usage for each customer class for the last five years.

**RESPONSE:** As stated in Response to Question 6, daily usage information by customer class is not available. Therefore, the requested information can not be provided.

**WITNESS:** Brent A. Tippey, P.E., and Derrick W. Watson

11. Provide the analysis of the current retail rate structure referenced on page 1-1 of the COS.

**RESPONSE:** Prior to the retail water rate adjustment that became effective on September 1, 2009, HWEA's retail rate schedule for its Hopkinsville Division customers (the "City Rates") utilized a declining block rate structure with three (3) usage blocks (0-3,000; 3,001-6,000; and all over 6,000 cubic feet). These were the same usage blocks that were, and still are, used in the CCWD wholesale rate schedule. As part of the 2009 City Rate adjustment, the declining block rate structure was replaced with a uniform volume rate. As a result, the City Rates are now \$2.95 per 100 cubic feet regardless of the volume used by a particular customer. As a result, some City customers received a rate increase much larger than 37%. For example, large City users (those using over 6,000 cubic feet per month) experienced a rate increase of approximately 92% (from \$1.54 to \$2.95 per 100 cubic feet). On the other hand, City customers using only a small volume of water each month (e.g. less than 300 cubic feet) experienced a rate increase of approximately 19%. The average rate increase for City customers was 37% (the same percentage as is proposed for CCWD).

**WITNESS:** Russell King

12. Explain why distribution mains eight inches and smaller are allocated to CCWD as reflected in Table B-5 of the COS.

**RESPONSE:** As identified in Table B-5 of Appendix E (Page E9) of the COS and in Item 13 of HWEA's Response to PSC's First Information Request, 6-inch and 8-inch lines comprise approximately 64% of HWEA's potable water lines. Since CCWD receives water at 13 locations spread around the entire HWEA service area perimeter (in essence surrounding HWEA), it is only fair and reasonable to assume that these lines collectively contribute to the transmission of water from HWEA to CCWD. Lines of this size (6" and 8") have substantial carry capacity and commonly serve as transmission lines. For this cost allocation, no 4-inch or smaller lines were considered joint use lines although they comprise over 10% of HWEA's system.

**WITNESS:** Derrick W. Watson and Brent A. Tippey, P.E.

13. On Schedule C of the COS, Transmission and Distribution provide a breakdown of the “Repairs to Distribution Mains”, Repairs to Services, Repairs to Meters, Removing and Re-setting Meters, Repairs to Fire Hydrants, and “Misc. Expense.”
- a. Explain why each of these expenses should be allocated to CCWD.

**RESPONSE: Repairs to Distribution Mains.** This expense category reflects costs incurred to keep HWEA’s transmission and distribution (“T & D”) system in service. Without this T & D system, HWEA could not provide wholesale water service to CCWD at 13 different delivery points located around the entire perimeter of HWEA’s T & D system. Therefore, it is appropriate for a portion of the repair costs to be allocated to CCWD.

**Repairs to Services, Repairs to Meters, Removing and Re-setting Meters and Repairs to Fire Hydrants.** None of these costs were allocated to CCWD. These costs were all classified as “Customer Costs.” The COS allocated 100% of “Customer Costs” to the Retail customer class. See HWEA’s Response to Item 1 of the PSC’s Second Information Request for a very comprehensive analysis of these expense categories.

**Miscellaneous Expense.** The COS lists \$381 in T & D Miscellaneous Expenses (see Schedule C of Appendix E at Page E11). This expense category was classified by function just as all other expenses were classified. It was then allocated to the appropriate customer class using an inch – mile allocation methodology (see Item B7 on Page E7 of the COS). Less than \$100 was allocated to CCWD.

**WITNESS:** Brent A. Tippey, P.E.

14. On Schedule C of the COS, provide a breakdown of the Transportation Expense and Water Technical Services – Miscellaneous Expense.

**RESPONSE:** Presumably, you are referring to the “Transportation Expenses” (\$3,752) and “Miscellaneous Expenses” (\$800) under the “Water Technical Services” category as shown on Page E11 of the COS. A portion of the Water Technical Services expenses are ultimately allocated to CCWD (see Schedule B of Appendix E at Page E3). Taken as a whole, approximately 21% of the Water Technical Services expenses are allocated to CCWD.

The methodology utilized was the same method as described in HWEA’s Response to Question 13 of the CCWD Data Request and HWEA’s Response to Item 1 of the PSC’s Second Information Request.

**WITNESS:** Brent A. Tippey, P.E.

15. On Schedule C of the COS - Water Administrative and General, provide an explanation of each expense and why each of those expenses should be allocated to CCWD?

**RESPONSE:** Only two (2) categories of Water Administrative and General (“A & G”) expenses impact the wholesale rate to be charged CCWD: “Employee Benefits” and “Insurance and Bonds”.

**Employee Benefits.** See HWEA’s Response to Item 1e of the PSC’s Second Information Request for a detailed explanation of the allocation of a portion of Employee Benefits to CCWD. Only **\$73,247** of the \$528,203 in Employee Benefits incurred by HWEA for water employees was allocated to CCWD.

**Insurance and Bonds.** A portion of the premiums paid for the Worker’s Compensation, Package Liability & Umbrella (which includes property damage coverage on facilities) and Excess Earthquake insurance policies were allocated to CCWD. Since Worker’s Compensation insurance premiums are based on payroll, the premium for Worker’s Compensation insurance was allocated by using the same method as Employee Benefits. The other two (2) insurance premiums were allocated in the same manner as depreciation expense. As a wholesale customer, CCWD benefits from HWEA’s insurance coverage on facilities such as the water treatment plant, pumps, storage tanks, etc. If HWEA did not insure its facilities and a loss occurred, HWEA would be required to repair or replace the damaged facility without reimbursement from the insurance company. These costs would have to be borne by HWEA’s customers, including CCWD.

**WITNESS:** Brent A. Tippey, P.E.

16. On Schedule C-3 of the COS, explain why the expenses for accounts 7010, 7020, 7080, 7090, 7110, and 7140 are included in the allocation factor calculation for CCWD.

**RESPONSE:** Presumably, you are referring to Table C-3 shown on Page E19 of Appendix E of the COS. Table C-3 is used only **once** in the COS. Its sole purpose is to determine the amount of Employee Benefits associated with the Pembroke and Crofton water employees' salaries so these benefits can be **excluded** from the expenses allocated to CCWD. The exclusion of the Employee Benefits for the Pembroke and Crofton salaries is shown on Page E13 of the COS under "Adjustments To Test-Year", Item 3.

**WITNESS:** Brent A. Tippey, P.E.



17. On Schedule C-3 of the COS, explain why the total expenses for Meter Reading salaries are included in the allocation factor calculation for CCWD.

**RESPONSE:** None of the Meter Reading Salaries have been allocated to CCWD. Elsewhere in the COS, 100% of the Meter Reading Salaries were classified as “Customer Costs.” All Customer Costs were, in turn, allocated to the Retail customer class. See HWEA’s Response to Item 1 of the PSC’s Second Information Request.

The Meter Reading Salaries were included in Table C-3 on Page E19 so the ratio of Pembroke and Crofton water salaries to total water salaries could be determined. See HWEA’s Response to Question 16 of CCWD’s Data Request.

**WITNESS:** Brent A. Tippey, P.E.

18. On Schedule C-3 of the COS explain the inclusion of the Pembroke - Distribution Labor; Administrative Labor and the Crofton Distribution Labor and Administrative Labor in the allocation factor calculation for CCWD.

**RESPONSE:** See HWEA's Response to Questions 16 & 17 of CCWD's Data Request.

None of the employee salaries and employee benefits, nor any other expenses, of the Pembroke and Crofton Divisions were allocated to CCWD.

**WITNESS:** Brent A. Tippey, P.E.

19. On page 3, Exhibit 4, it is stated that the HWEA's operating revenues increased 8.38% and operating expenses increased 4.47% in 2009. Do these figures include the 37% retail rate increase for 2009?

**RESPONSE:** Presumably, you are referring to page 3 of HWEA's Audit Report for FYE 2009 which was provided in Response to Item 2 of the PSC First Information Request and not as Exhibit 4.

**No.** The 37% retail rate increase did not become effective until September 1, 2009. HWEA's fiscal year ended on June 30, 2009.

**WITNESS:** Russell King

20. On page 7 of Exhibit 4, it is stated that the rate increase will be used to expand the Moss WTP and to consolidate sewage treatment at Hammond Wood facility. Is the 37% retail rate increase to the HWEA customers a water rate increase only or a water and sewer rate increase?

- a. If a water and sewer rate increase, provide a breakdown of the portion of the increase that is applicable to sewer.

**RESPONSE:** Once again, HWEA assumes you are referring to information contained on page 7 of HWEA's Audit Report for FYE 2009. The 37% retail rate increase applies only to water customers. A separate sewer rate increase was also implemented by HWEA, effective September 1, 2009. Details of the sewer rate increase are shown in Ordinance 15-2009 enacted by the Hopkinsville City Council on August 20, 2009. The Ordinance was attached to HWEA's Response to Item 25 of the PSC First Information Request.

**WITNESS:** Russell King

21. What is the rate that HWEA is proposing to charge CCWD?

**RESPONSE:** In this rate case proceeding, HWEA is seeking approval from the PSC to charge CCWD the following wholesale water rates:

<b>Usage</b>	<b>Rate per 100 cubic feet</b>
First 3,000 cubic feet	\$ 2.96
Next 3,000 cubic feet	\$ 2.59
Over 6,000 cubic feet	\$ 1.88

These rates are the same rates approved by the Hopkinsville City Council on August 20, 2010, set forth in the Notice provided to CCWD on September 1, 2009, and filed with the PSC on September 23, 2009. The rates represent a 37% increase for all usage blocks.

In addition, in accordance with PSC precedents, HWEA is seeking a surcharge for its rate case expenses. HWEA proposes for the rate case expense surcharge to extend for 36 months.

**WITNESS:** Len F. Hale

22. Provide a revised Table 4-1 of the COS showing the effect of the 37% increase in retail rates effective in 2009.

**RESPONSE:** This information is already provided in Schedule A of Appendix E (Page E1) of the COS. See Columns 8 and 9 on the right hand side of Schedule A.

The amount of water sales revenue projected to be generated by the 37% increase to HWEA's retail customers is \$5,042,134.

**WITNESS:** Brent A. Tippey, P.E.

23. See Exhibit D to the COS. Provide any study, report or other information that supports the 50 year life for Distribution Mains.

**RESPONSE:** York, Neel & Co. has been HWEA's auditor on a continuous basis since 1992. York, Neel & Co. concurs with HWEA's use of a 50 year life for distribution mains.

The most notable and recent report identifying the use of a 50 year design life for ductile iron pipe is a 2009 review completed by a select committee of the National Research Council of the National Academy of Sciences, the National Materials Advisory Board and the Committee on the Review of the Bureau of Reclamation's Corrosion Prevention Standards for Ductile Iron Pipe. This review entitled "Corrosion Prevention Standards for Ductile Iron Pipe" utilizes 50 years as the minimum target for the service life of ductile iron pipe and recommends various corrosion prevention methods to meet this service life. It should be noted that the Bureau of Reclamation is heavily involved in a wide range of technical matters related to water quality and supply in the western United States. As such, it is likely the foremost agency in the federal government in topics of material selection and performance

**WITNESS:** Russell King and Brent A. Tippey, P.E.

24. See Exhibit D to the COS. Explain why Services, Meter & Installation, Hydrants, and distribution mains 8 inches and smaller are included in the Depreciation allocation to CCWD.

**RESPONSE:** Appendix D of the COS is not related to the inclusion or exclusion of any depreciable asset. Appendix D is offered to reflect the increase in depreciation expense from new assets which were placed into service during FYE 2009.

Appendix C provides an identification of FY 2009 depreciation values that are included in the CCWD cost-of-service. As detailed on Pages C3 and C4, all depreciation related to Group 107 – Services and Group 108 – Meter & Installation are attributed to the Administrative and General Expense category. As shown in Allocation item C10 (Page E17 of Appendix E of the COS), this expense classification is entirely allocated (100%) to the Retail customer class.

Group 109-Hydrants depreciation (see Pages C4 and C5) is attributed as a Transmission and Distribution Expense as they serve a flushing role as well as a fire protection role. This depreciation expense is then allocated like other T&D expenses as shown on Item C10 (Page E17).



Group 106-Distribution Mains and Group 112- Cast Iron Pipelines depreciation is attributed as Transmission & Distribution expense. This expense is then allocated to its functional classification based on the allocation method used for other T&D assets as shown on Allocation Item C4 (Page E15) and Allocation Item C10 (Page E17). No historical information is available to classify these asset groups by size (8-inch and below or otherwise) in order to further subdivide the historical depreciation values.

**WITNESS:** Brent A. Tippey, P.E.

25. In the attachment to the testimony of Russell King, a depreciation schedule includes Sewer Mains and Laterals. Are any of those expenses included in the wholesale water rate calculation or allocations?

**RESPONSE:** No.

**WITNESS:** Russell King

26. What was the daily pumping capacity of the city's raw water supply prior to the completion of the Lake Barkley Intake and Raw Water Main Projects?

**RESPONSE:** 10 MGD. Increasing the raw water pumping capacity was not the only reason that HWEA elected to pursue the Lake Barkley Raw Water Supply Project ("Lake Barkley Project").

An unreliable raw water source was one of the primary factors which caused HWEA to undertake and complete the Lake Barkley Project. Before Lake Barkley, HWEA's raw water source was the North Fork of the Little River. This source became unreliable. In October 1999, HWEA's raw water supply reached a low of **72 days**. In November 2000, it reached a low of **43 days**. In October 2007, HWEA's raw water supply reached a low of **62 days**.

Sink holes formed in the North Fork of the Little River and drained the river. In 1999 HWEA hired a geotechnical firm to investigate, identify and resolve the problem. Unfortunately, the underground caverns were too extensive to repair. HWEA spent over \$100,000 in its unsuccessful efforts to solve the reliability issues.

In addition, the water quality of the North Fork of the Little River had deteriorated to the point that HWEA could not consistently meet the more stringent requirements of the federal Safe Drinking Water Act.

**WITNESS:** Brent A. Tippey, P.E.

27. What is the daily pumping capacity of the city's raw water supply after the completion of the Lake Barkley Intake and Raw Water Main Projects?

**RESPONSE:** The capacity is 20 MGD.

**WITNESS:** Derrick W. Watson

28. What is the current rated treatment capacity of the Moss WTP?

**RESPONSE:** 8.5 MGD

a. What is the expected rated capacity of the Moss WTP after completion of improvements?

**RESPONSE:** 13.5 MGD

**WITNESS:** Derrick W. Watson

29. Provide any studies, reports, analyses or other information about the city's retail customer growth and water demand for the next five years.

- a. Provide any studies, reports, analyses or other information about the city's retail customer growth and water demand that were used to support the need for the Lake Barkley Intake and Raw Water Main Project and improvements to the Moss WTP.

**RESPONSE:** There are no studies about HWEA's expected retail customer growth and future water demand projections.

There were multiple reasons why HWEA undertook and completed the Lake Barkley Raw Water Supply Project, including: (i) raw water source reliability; (ii) raw water quality; and (iii) raw water capacity. See HWEA's Response to Question 26 of CCWD's Data Request for a more detailed discussion.

The decision to expand and improve the Moss Water Treatment Plant (WTP) was based on HWEA's policy of expanding when water demands consistently exceed 80% of water treatment capacity. (See page 1 of the Cost of Service Study). In addition, the Moss WTP Improvement and Expansion Project currently under construction includes numerous treatment process upgrades. These upgrades will enable HWEA to consistently meet and exceed the new, more stringent Safe Drinking Water Standards that will become effective in 2011 and 2012.

**WITNESS:** Len F. Hale

30. Are any revenues and expenses allocated among the Water and Sewer Divisions? If yes, explain how the revenues and expenses are allocated.

**RESPONSE:** Yes. See HWEA's Response to Item 8 of the PSC's First Information Request for a very detailed explanation of the allocation procedure.

**WITNESS:** Russell King