

PUBLIC SERVICE COMMISSION

Case No. 2007-00134

KENTUCKY-AMERICAN WATER COMPANY

**Responses to Lexington-Fayette Urban County
Government's Supplemental Requests for
Information**

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PUBLIC SERVICE
COMMISSION

**KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2007-00134**

**LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT'S
REQUEST FOR INFORMATION**

Item 1 of 6

Witness: Linda C. Bridwell

1. Refer to Response to LFUCG Request for Information Item 3. Is KAWC willing to remove its application for a drought tariff?

Response:

KAW does not currently have an application pending for its drought tariff.

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**LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT'S
REQUEST FOR INFORMATION**

Item 2 of 6

Witness: Linda C. Bridwell

2. Refer to Response to LFUCG Request for Information Item 5.
- a. Provide a breakdown similar to that found in the table for each year 2001-06 that the information is available. If it is not available, please explain why.
 - b. What is the basis for the 13% “unaccounted-for amount”? (i.e., how was the percentage derived)
 - c. What is the basis for the 1.8% “non-revenue amount”? (i.e., how was the percentage derived)
 - d. Is “unaccounted-for water” as it is utilized in your response driving the increase in the “total amount” for 2006?

Response:

a.

Year	Other Public Use	Non Revenue Use	Unaccounted-For-Water	Total
2001	2.64	0.67	5.10	8.41
2002	0.86	-----	5.84 (total)	6.70
2003	0.75	-----	4.98 (total)	5.06
2004	1.30	-----	7.86 (total)	9.16
2005	0.32	-----	6.41 (total)	6.73

- b. It was developed as a target number from the 1991 Brown and Caldwell demand model study.
- c. Please refer to the response to Item b above.
- d. Yes, an increase in unaccounted-for-water in 2006 was reflected in an increase in the “Total” amount in 2006.

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Item 3 of 6

Witness: Linda C. Bridwell

3. Refer to Response to LFUCG Request for Information Item 6. Indicate all ways in which the "criteria for evaluating water withdrawal permits had been modified to include volumes of return flows."
- a. With respect to KAWC's withdrawal permits, how much "return flow" is being provided by KAWC in relation to any "return flow" being provided by other persons or entities?

Response:

It is our understanding from conversations with personnel at the Kentucky Division of Water that the quantity and location of return flows are now considered as part of water withdrawal permit applications. Previously they were not considered at all. KAW does not have any additional information.

KAW does not have any return flows other than through its contract operations of the Bluegrass Station sanitary sewer and the residuals supernatant discharge at the Kentucky River Station, both of which are negligible compared to withdrawals. Any other "return flows" would come from sanitary sewer providers to KAW's water customers. KAW does not have information about the quantity of those flows.

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**LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT'S
REQUEST FOR INFORMATION**

Item 4 of 6

Witness: Michael A. Miller

4. Refer to Response to LFUCG Request for Information Item 7. Is it KAWC's intent that all divisions and customers of KAWC bear the cost of the construction of the proposed treatment plant and its facilities?

Response:

Yes, under a cost of service allocation.

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FIRST SUPPLEMENTAL REQUESTS FOR INFORMATION
Item 5 of 6

Witness: Richard C. Svindland

5. Has KAWC performed any analysis or study of what the cost to construct and/or operate a treatment facility with a lesser million gallon per day treatment capacity at the same location as the proposed plant would be? If so, please summarize the results and provide a copy of any supporting documentation.
- a. What would be cost of constructing and operating a facility that could treat up to 15 MGD? —
 - b. What would be the cost of constructing and operating a facility that could treat up to 10 MGD?

Response:

In early 2006, KAW discussed the option of constructing an initial 10 MGD plant that could be expanded to 20 MGD. Draft costs were developed and discussed but never finalized. This option was ultimately discarded because it contained two fatal flaws. One, this option did not solve the source of supply deficit and secondly the plant would be undersized in terms of meeting the projected maximum day demand from the first day of service.

- a. Not applicable.
- b. Not applicable.

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FIRST SUPPLEMENTAL REQUESTS FOR INFORMATION
Item 6 of 6

Witness: **Richard C. Svindland**

6. Based upon an “average” or “typical” year weatherwise, how frequently (meaning the number of days in a week, month, or year), and under what scenarios (average day demand, maximum day demand, etc.) does KAWC anticipate that the proposed plant will actually be providing up to 10 MGD of water for use by its customers in the years 2010, 2015 and 2020?
- a. Provide the same information for providing up to 15 MGD.
- b. Provide the same information for providing up to 20 MGD.

Response:

Refer to KAW’s response to the Commission Staff’s First Set of Interrogatories and Request for Production of Documents Item 23 of 34. In that response, KAW shows the percent utilization of all three of KAW’s plants under three different demand scenarios for the years 2010, 2020 and 2030.

In a drought, the new plant will be operating in excess of 10, 15 and 20 MGD throughout the drought. The drought of record is estimated to be as long as 180 days and could occur any year.

KAW does not compute the number of days per week, month or year that a plant will exceed its capacity. KAW uses a confidence interval analysis based on a historical relationship between peak and average day demands and then computes the projected maximum day demand at various confidence intervals. A 95% confidence interval (95%CI) was used to compute the maximum day demands for 2010, 2020 and 2030. Using this 95%CI, the new plant will need to operate near 10 MGD as soon as it is put into service in 2010. By 2020, it will be operating above 15 MGD to meet maximum day demands and by 2030 is will be operating above 20 MGD to meet maximum days demands. Note that using a 95%CI still means that there is a 1 in 20 chance that the maximum day demand will be exceeded in any given year.

On an average day, the new plant will not need to operate above 10 MGD in 2010, 2020 or 2030 unless there is a problem or maintenance need at one of the other water treatment plants.