

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY-AMERICAN )  
WATER COMPANY FOR A CERTIFICATE OF )  
CONVENIENCE AND NECESSITY AUTHORIZING ) CASE NO. 2007-00134  
THE CONSTRUCTION OF KENTUCKY RIVER )  
STATION II, ASSOCIATED FACILITIES AND )  
TRANSMISSION MAIN )

COMMISSION STAFF'S FIRST SET OF INTERROGATORIES  
AND REQUEST FOR PRODUCTION OF DOCUMENTS TO  
KENTUCKY-AMERICAN WATER COMPANY

Kentucky-American Water Company ("Kentucky-American"), pursuant to 807 KAR 5:001, shall file with the Commission on or before May 21, 2007 the original and 8 copies of the following information, with a copy to all parties of record. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the person who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible.

Each response shall be under oath or, for representatives of a public or private corporation, a partnership, an association or a governmental agency, be accompanied by a signed certification of the preparer or person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

Kentucky-American shall make timely amendment to any prior response if it obtains information upon the basis of which it knows that the response was incorrect when made, or though correct when made, is now incorrect in any material respect. For any request to which Kentucky-American fails to furnish all or part of the requested information, Kentucky-American shall provide a written explanation of the specific grounds for its failure to furnish.

Careful attention shall be given to copied material to ensure its legibility. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be provided for total company operations and jurisdictional operations, separately.

1. Refer to Kentucky-American's application at ¶ 6(3). State Kentucky-American's interpretation of the phrase "total reasonable requirements of its customers under maximum consumption."

2. a. State the maximum safe yield at Pool 3 of the Kentucky River.  
b. Identify all entities that currently are permitted to make withdrawals from Pool 3 of the Kentucky River and state the maximum amounts that each entity is permitted to make.

3. Refer to Kentucky-American's Application at ¶ 9. State the reasons why Kentucky-American "conclude[d] it was inappropriate to implement its plans to purchase water from Louisville Water Company."

4. Provide all memoranda, correspondence, electronic mail messages, studies, reports and any other documents in which Kentucky-American or American

Water Works Company (“AWWC”) officials, employees, or consultants discuss Kentucky-American’s plans to purchase water from Louisville Water Company.

5. Provide all studies and analyses that Kentucky-American has conducted, commissioned, or otherwise relied upon to determine the safe yield of Pool 9 of the Kentucky River. If a study has previously been provided to the Commission, identify the Commission proceeding in which the study or analysis was submitted and state whether any revisions or updates to the study or analysis have been made since its submission.

6. Refer to Kentucky-American’s application at ¶ 11. Provide all studies and analyses that Kentucky-American has conducted, commissioned, or otherwise relied upon to determine “the most cost effective and feasible solution” is the proposed project.

7. Refer to Kentucky-American’s application at Exhibit B, Volume II, Drawing 18. This drawing shows the proposed pipeline crossing existing 12-inch and 8-inch water mains.

a. Provide the names and addresses of the owners of these water mains.

b. State whether Bluegrass Water Supply Commission (“BWSC”) or Kentucky-American has considered connecting the proposed water main with either of the two existing water mains.

8. State whether Kentucky-American will be able to provide wholesale water service through the proposed transmission main to any public water suppliers along the proposed route of the water transmission main. Explain.

9. State whether Kentucky-American will be able to provide retail water service through the proposed transmission main directly to persons or entities located along the proposed transmission main's route. Explain.

10. According to Exhibit D of Kentucky-American's application, the proposed water transmission main will connect to existing Kentucky-American facilities at the intersection of Ironworks Pike and Newtown Pike in Fayette County.

a. Describe the extent of the hydraulic impact upon Kentucky-American's system when the proposed water treatment plant is producing at the following rates:

- (1) 6 million gallons per day ("MGD");
- (2) 13 MGD;
- (3) 20 MGD;
- (4) 25 MGD; and,
- (5) 30 MGD.

b. Provide all hydraulic analyses and modeling that Kentucky-American has conducted reflecting the operation of Kentucky-American's treatment and distribution system with the proposed facilities while operating at the levels of production set forth in Item 10(a) above.

c. List and describe each system improvement on the existing Kentucky-American system beyond the connection at Ironworks Pike and Newtown Pike necessary to accommodate water transported from the proposed water treatment plant. State the cost of each improvement.

11. Refer to Kentucky-American's Application, Exhibit D. The proposed route of the transmission main from the proposed booster station to the connection with existing Kentucky-American facilities follows Route 1262 south and then east along US Highway 460 to the intersection of US Highway 460 and State Route 3378.

a. State whether Kentucky-American considered routing the transmission main cross country from the proposed booster station to State Route 3378 and then along State Route 3378 south to US Highway 460. Explain.

b. Describe the advantages and disadvantages of using the proposed route from the booster station to US Highway 460.

c. State the cost of the segment of the proposed transmission main from the proposed booster station to the intersection of US Highway 460 and State Route 3378.

d. Describe the advantages and disadvantages of using the cross-country route described in Item 11(a) above.

e. State the cost of the segment of the proposed transmission main from the proposed booster station to the intersection of intersection of US Highway 460 and State Route 3378 if the cross-country route described in Item 11(a) above is used.

12. At page 5 of his testimony, Richard C. Svindland states: "By the first week of April [2006], KAW had aerial PVA maps for all of Southern Owen County and Northern Franklin County. . . . An option for the intake property was obtained in June 2006, the option for the WTP [water treatment plant] site was obtained in August 2006 and an option for an intermediate booster station was obtained in October 2006."

a. Provide a map showing the complete boundaries for the options for the intake property and the water treatment plant property, all adjacent properties and their owner's names and addresses, as well as the Franklin-Owen County boundary, with the August 2006 aerial photography as a background.

b. (1) State whether Owen County has a planning and zoning commission.

(2) If yes, identify each Owen County planning and zoning regulation that relates to the construction of the proposed water treatment plant and state the current status of Kentucky-American's efforts to comply with that regulation.

c. Provide a map showing the complete property boundaries for the intermediate booster station, with adjacent parcels and their owner names and addresses, with the August 2006 aerial photography as a background.

d. (1) State whether Franklin County has a planning and zoning commission.

(2) If yes, identify each Franklin County planning and zoning regulation that relates to the construction of the proposed booster station or proposed intake facility and state the current status of Kentucky-American's efforts to comply with that regulation.

13. State whether land on the optioned property for the proposed water treatment plant and intake facility will be available for "solids reuse." If yes, provide a map of these properties outlining those areas available to be used for "solids reuse," tract boundaries, existing and proposed roads and driveways, and the proposed water treatment plant and intake facilities.

14. Refer to Direct Testimony of Richard C. Svindland at 14. State why Kentucky-American is not seeking permits for the property for “solids reuse” until the construction phase of the project.

15. a. State the number of tons of dewatered solids that will be generated for disposal per week when the proposed water treatment plant is operating at:

(1) 6 MGD;

(2) 20 MGD.

b. State the annual cost for disposal of dewatered solids off-site if the proposed water treatment plant is operating at full capacity.

c. State the annual cost for disposal of dewatered solids on-site if the proposed water treatment plant is operating at full capacity.

16. Refer to Direct Testimony of Richard C. Svindland at 8-9. For each of the criteria that Mr. Svindland sets forth in his direct testimony, explain how the proposed locations for the water treatment plant and raw water intake facility meet the selection criteria.

17. Refer to Direct Testimony of Richard C. Svindland at 10. The raw water intake land value is \$3,500 per acre, the treatment plant land value is \$13,500 per acre, and the booster pump station land is \$21,250 per acre. Explain the wide ranges in the cost of land on a per acre basis.

18. Refer to Direct Testimony of Richard C. Svindland at 11. List and describe the advantages that newer technologies have over the technology that Kentucky-American selected for use at the proposed water treatment plant.

19. Refer to Direct Testimony of Linda Bridwell at 22.

a. Provide all studies, analyses, reports, and estimates that Kentucky-American, any Kentucky-American affiliated entity, or person retained or commissioned by Kentucky-American has prepared since March 1, 2004, on the cost of constructing a pipeline to the Louisville Water Company.

b. If no updates have been made to the study in which Kentucky-American participated and which the BWSC issued in February 2004, provide an updated estimate of the costs to construct a pipeline to the Louisville Water Company and compare the updated costs to those of constructing the 20 MGD treatment facility on the Kentucky River at Pool 3. Provide all workpapers, show all calculations, and state all assumptions used to develop the updated costs.

20. a. Provide a comparison of the capital costs of the ACTIFLO<sup>®</sup> system to the flocculation process currently proposed. Provide all workpapers, show all calculations, and state all assumptions that Kentucky-American used to develop the comparison.

b. Provide a comparison of the operational and maintenance costs of the ACTIFLO<sup>®</sup> system to the flocculation process currently proposed. Provide all workpapers, show all calculations and state all assumptions that Kentucky-American used to develop the comparison.

c. State whether the ACTIFLO<sup>®</sup> treatment process requires a one-year pilot study. Explain.

d. State whether Kentucky-American considered membrane technology as an alternative for the filtration part of the treatment process. If yes, explain why Kentucky-American did not select this technology.

e. State whether Kentucky-American considered riverbank filtration as an alternative for the filtration part of the treatment process. If yes, explain why Kentucky-American did not select this technology.

21. Refer to Direct Testimony of Linda Bridwell at 13. Provide a schedule comparing the daily flow of the Kentucky River in Pool 9 and Pool 3 during the 1999 drought.

22. Refer to Direct Testimony of Linda Bridwell at 27-28. Provide Kentucky-American's current projections for annual customer water consumption for the calendar years 2010, 2020, and 2030.

23. Provide Kentucky-American's current projections for plant availability in terms of percentage production available for 2010, 2020, and 2030. Provide a composite number for all three plants.

24. At pages 30 and 31 of her direct testimony, Ms. Bridwell states that Kentucky-American requested its customers to restrict their water usage for four months due to the inadequate raw water supply during the drought of 1999.

a. List the months that the water restrictions were in place.

b. List the months in 1999 in which the drought occurred.

25. Refer to Direct Testimony of Linda Bridwell at 32-34.

a. State the criteria that Kentucky-American used to determine the optimal point for interconnection to its existing system.

b. Identify the other points that Kentucky-American considered for interconnection and describe how each of these points compared to the point chosen.

c. Describe how Kentucky-American determined the initial three pipeline routes.

d. List and describe the criteria that Kentucky-American used to establish the potential routes.

e. Describe how the three pipeline routes were evaluated. Provide all evaluations of the routes.

f. Provide the attendance records and meeting summaries for the four public meetings to which Ms. Bridwell refers at page 33 of her direct testimony.

g. Explain why the middle route, which has the transmission main collated along an electric transmission line corridor, is not a desirable route.

26. Refer to Direct Testimony of Linda Bridwell at 34-35.

a. Provide a copy of the survey used at the December open houses and a summary of the responses received from the survey.

b. Provide a current copy of the log maintained as part of the toll free number established to communicate with property owners.

27. Refer to Direct Testimony of Linda Bridwell, Table 4, "Annual Operation and Maintenance Costs New Water Treatment Plant – Pool 3 of Kentucky River."

a. Provide the workpapers and show the calculations that Kentucky-American used to develop its projections of the annual operational and maintenance costs in the column entitled "Total."

b. State all assumptions that Kentucky-American used to develop its projections of the total annual operational and maintenance costs in the Total column.

c. Describe how the annual operational and maintenance costs in the Total column are allocated between Kentucky-American and the BWSC. This description should include all workpapers, show all calculations, and state all assumptions that Kentucky-American used to develop the cost allocations.

d. A note to Table 3 states that “no costs for disposal have been included as KAW intends to apply for beneficial re-use on adjacent KAW property similar to RRS and KRS operation.” Provide estimates of the disposal costs if Kentucky-American’s re-use proposal is allowed. This response should include all workpapers, show all calculations, and state all assumptions that Kentucky-American used to develop the disposal cost estimates.

e. List and describe each disposal alternative to beneficial re-use that Kentucky-American has considered. This description should include a cost estimate for each alternative and include all workpapers, show all calculations, and state all assumptions used to develop the cost estimates.

28. At pages 4 and 5 of his Direct Testimony, Louis M. Walters states that Kentucky-American will use its short-term borrowing capacity to meet the periodic needs for construction capital and will permanently finance the treatment facility with 60 percent long-term debt and 40 percent common equity. Provide Kentucky-American’s projections for the conversion of short-term borrowings into long-term debt and common equity, to include the date of the conversion, the amount of long-term debt and common equity that will be issued, and the capital structure as of the date of the short-term debt conversion.

29. At pages 4 and 5 of his Direct Testimony, Mr. Walters explains that obtaining tax-exempt financing entails significant added internal and external costs. Provide a comparison of the issuance costs that Kentucky-American will incur for conventional long-term debt as opposed to tax-exempt debt. This comparison should include all workpapers, show all calculations, and state all assumptions used.

30. Provide all correspondence, electronic mail messages, analyses, notes, memoranda, studies and related documents that Kentucky-American, AWWC, or any AWWC affiliate prepared or commissioned, that discuss the possible solutions to Kentucky-American's supply deficit.

31. Provide all correspondence, electronic mail messages, analyses, notes, memoranda, studies and related documents from RWE Aktiengesellschaft, Thames Water Aqua Holdings GmbH or AWWC directing Kentucky-American to construct the 20 MGD treatment facility at Pool 3 of the Kentucky River to solve the supply deficit.

a. Assume that the Commission grants Kentucky-American a Certificate of Public Convenience and Necessity to construct the treatment facility on Pool 3 of the Kentucky River and that construction commences in January 2008. Provide Kentucky-American's estimate as to the construction's effect on general rates for water service for the period from 2008 to 2012. This response should include all workpapers, show all calculations, and state all assumptions that Kentucky-American used to develop its estimate.

32. Refer to Kentucky-American's application, Exhibit G, "Water Withdrawal Permit: #1572."

a. Kentucky-American is allowed to withdraw 20 MGD per day during the 3-month period from June through August. Explain what would happen if a drought extended beyond the month of August requiring Kentucky-American to withdraw 20 MGD per day in September or October.

b. If the proposed water treatment plant capacity is expanded by 5 MGD to serve BWSC, state whether Kentucky-American may increase its withdrawals from the Kentucky River from 20 MGD to 25 MGD per day during the period from June through August.

c. List and describe each meeting that Kentucky-American has had with Division of Water officials regarding increasing its withdrawals from Pool 3 from 20 MGD to 25 MGD during the months of June through August.

d. Provide all correspondence, including electronic mail messages that Kentucky-American officials and employees have received from or sent to Division of Water officials regarding increasing its withdrawals from Pool 3 from 20 MGD to 25 MGD per day during the months of June through August.

33. Exhibit A to the application shows two access roads to the raw water pump station. Plan C2 shows a 12 foot paved utility road from the water treatment plant to the raw water pump station. Plan C1 shows a paved/gravel road for access to the water treatment plant.

a. Explain why there are two routes to the raw water pump station.

b. Identify the route that Kentucky-American will use for construction of the raw water intake and pump station.

c. Identify the route that Kentucky-American will use for maintenance of the raw water intake and pump station.

d. Describe the surface (e.g., pavement, gravel) of the existing access road on Plan C1.

e. Describe the additional roads and their surfaces (e.g., pavement, gravel) that Kentucky-American intends to construct under Plan C1 in addition to the existing access roads.

f. The access road on Plan C1 does not appear to terminate at a local public road or at the proposed water treatment plant. Provide a map that depicts the access road with a complete route to the proposed water treatment plant.

g. Describe Kentucky-American's legal access rights throughout the entirety of the access road route shown on Plan C1.

h. At page 10 of his direct testimony, Mr. Svindland states that Kentucky-American has obtained an option to purchase 80 acres of land for the intake, raw water pump station, and sludge disposal area from the Cartwright Trust. State whether the access road on Plan C1 is located on the optioned 80 acres. Provide a map that clearly shows the boundary of the optioned property and its relationship to the access road in Plan C1.

i. At page 10 of his direct testimony, Mr. Svindland states that "the final land acreage amount [is] to be determined upon completion of design." State whether Kentucky-American may purchase additional land from the Cartwright Trust in addition to the optioned 80 acres of land. If yes, provide a map that clearly shows the boundary of other possible land available from the Cartwright Trust.

j. (1) State whether Kentucky-American intends to use any of the Cartwright Trust property for sludge disposal.

(2) If yes, describe how sludge would be delivered to the site. If Kentucky-American intends to truck sludge, identify the route from the proposed water treatment plant to the Cartwright Trust property and the part of that route that is a public road.

34. The map in Exhibit A to the Application, Plan C2, indicates that the proposed water treatment plant will be built in close proximity to residences along state highway 127.

a. Describe Kentucky-American's plans, if any, to mitigate the noise or visual impact on these landowners caused by the construction and operation of the treatment plant.

b. State whether Kentucky-American has contacted these adjoining landowners to discuss its construction plans. If yes, state the landowners' concerns and describe Kentucky-American's efforts to address these concerns.



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Dated: May 7, 2007

cc: Parties of Record