

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY-AMERICAN )  
WATER COMPANY FOR A CERTIFICATE OF )  
PUBLIC CONVENIENCE AND NECESSITY ) CASE NO. 2012-00096  
AUTHORIZING CONSTRUCTION THE )  
NORTHERN DIVISION CONNECTION )

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION  
TO KENTUCKY-AMERICAN WATER COMPANY

Pursuant to 807 KAR 5:001, Kentucky-American Water Company ("Kentucky-American"), shall file with the Commission no later than July 23, 2012, an original, one paper copy and one electronic copy of the following information, with a copy to all parties of record. Responses to requests for information shall be appropriately bound, tabbed and indexed. Each response shall include the name of the witness responsible for responding to the questions related to the information provided.

Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the 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 which indicates 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 or refuses to furnish all or part of the requested information, it shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

1. Provide all studies and reports that Kentucky-American prepared or commissioned since January 1, 2006 that review or discuss the operation of the Owenton Water Treatment Plant. Omit the "Engineering Feasibility Study Report" that was appended to Kentucky-American's Application.

2. Provide all studies and reports that Kentucky-American prepared or commissioned prior to January 1, 2006 that review or discuss the operation of the Owenton Water Treatment Plant and any repairs or improvements to that plant.

3. Provide all correspondence, memoranda, electronic mail messages and any other documents since January 1, 2000 in which Kentucky-American or its agents discuss the condition of the Owenton Water Treatment Plant and possible repairs to that plant.

4. Provide all reviews or estimates regarding the cost of needed improvements to the Owenton Water Treatment Plant that Kentucky-American commissioned or performed prior to January 1, 2006.

5. List for the period from January 1, 2006 until December 31, 2011 each instance in which water pressure at any point in the Northern Division fell below the minimum pressure that Commission regulations or Kentucky Division of Water ("KDOW") permit and state the cause of the low pressure.

6. State the maximum daily production of the Owenton Water Treatment Plant and the date upon which that production occurred.

7. Provide a map on which is marked the areas that cannot hydraulically be served from the Owenton Water Treatment Plant. Identify on this map the locations of the master meters through which Kentucky-American purchases water to supply these areas.

8. Provide hydraulic analyses, supported by computations and actual field measurements, of typical operational sequences of the Northern Division's distribution system. These hydraulic analyses should demonstrate the operation of all pump stations and the "empty-fill" cycle of all water storage tanks. Computations are to be documented by a labeled schematic map of the system that shows pipeline sizes, lengths, connections, pumps, water storage tanks, wells, and sea level elevations of key points, as well as allocations of actual customer demands. Flows used in the analyses shall be identified as to whether they are based on average instantaneous flows, peak instantaneous flows, or any combination or variation thereof. The flows used in the analyses shall be documented by actual field measurements and customer use records. Justify fully any assumptions used in the analyses.

9. Identify the persons who prepared "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" and provide each person's curriculum vitae.

10. Provide the current water withdrawal permit for the Kentucky River Station II ("KRS II") water treatment plant.

11. State the daily amount of water that Kentucky-American may withdraw from Pool 3 of the Kentucky River for KRS II.

12. a. State the average flow rate of water that is being treated through KRS II during summer months since KRS II began operation.

b. State the average flow rate of water that is being treated through KRS II during non-summer months since KRS II began operation.

c. State the highest flow rate of that water that can presently be treated through KRS II during summer months.

d. State the highest flow rate of that water that can presently be treated through KRS II during non-summer months.

13. State whether supplying the Northern Division through KRS II will require Kentucky-American to seek revisions to its current water withdrawal permit for KRS II. If revisions will be required, explain why revisions will be required and describe the revisions that Kentucky-American will seek.

14. State whether supplying the Northern Division through KRS II will affect water availability to Kentucky-American's Central Division in drought or heavy use periods. If water availability to Kentucky-American's Central Division in drought or heavy use periods will be affected, describe how water availability will be affected.

15. Provide for each year from January 1, 2006 to December 31, 2011, in total gallons and as a percentage of total water produced and purchased, the Northern Division's:

a. Unaccounted-for water; and

b. Non-revenue water.

16. Provide a schedule showing the ages of the components of the Northern Division's water distribution system.

17. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" at 5. For each capital improvement project listed, provide all work papers, studies, reports, notes,

correspondence and preliminary estimates that were used to derive the estimated cost of the improvement.

18. Provide all correspondence between Kentucky-American and KDOW since January 1, 2005 regarding the Owenton Water Treatment Plant.

19. Provide each notice of violation that KDOW has issued against the Owenton Water Treatment Plant since Kentucky-American's acquisition of the plant.

20. a. State whether Kentucky-American has a systematic water loss prevention and leak detection plan for the Northern Division.

b. If yes:

(1) State when this plan was developed;

(2) State when Kentucky-American implemented this plan;

(3) State the level of the Northern Division's unaccounted for and non-revenue water when the plan was initially implemented; and

(4) State the number of Kentucky-American employees who are devoted to water loss prevention efforts for the Northern Division.

21. State the required average daily production required of the Owenton Water Treatment Plant if unaccounted-for water loss in the Northern Division is reduced to 15 percent.

22. Describe the effect on the need for the proposed facilities if unaccounted-for water loss within the Northern Division is reduced to 15 percent.

23. State the estimated salvage value of the Owenton Water Treatment Plant when decommissioned. Show all calculations, state all assumptions, and provide all work papers that were used to produce this estimate.

24. State the expected cost of decommissioning the Owenton Water Treatment Plant. Show all calculations, state all assumptions, and provide all work papers that were used to produce this estimate.

25. State whether, upon completion of the proposed facilities, any portions of the Owenton Water Treatment Plant will remain in service or be retained for emergency operations. If yes, identify the existing facilities to be retained and explain how each facility will be used.

26. State whether any hazardous material or other materials with special disposal requirements will result from the decommissioning of the Owenton Water Treatment Plant. If yes, identify the materials and the special disposal requirements.

27. Provide the projected maximum daily demand for the Northern Division for each year from 2013 until 2032.

28. State for each year for the period from January 1, 2006 through December 31, 2011 Kentucky-American's total annual purchases from each water supplier for the Northern Division.

29. Refer to Direct Testimony of Lance E. Williams at 2. Mr. Williams states that small areas of the Northern Division "cannot hydraulically be served from the [Owenton] treatment plant."

a. State the number of customers who presently cannot be hydraulically served from the Owenton Water Treatment Plant.

b. State whether the proposed facilities will enable Kentucky-American to hydraulically serve these areas without purchasing water from other water suppliers. Explain.

c. State whether Kentucky-American intends to continue purchases from other water suppliers once the proposed facilities are constructed. Explain.

30. Refer to Direct Testimony of Lance E. Williams at 3; "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" at 1.

a. Define the term "redundancy."

b. Identify the statutes or administrative regulations that require redundancy in a water treatment or distribution system.

c. Describe how redundancy can be employed in a surface water treatment plant.

d. State whether Kentucky-American's reliance on a single 16-inch water transmission from KRS II to the Northern Division would meet the requirement of redundancy. Explain.

e. Assume a disruption at KRS II or a rupture in the proposed 16-inch water transmission main from KRS II to the Northern Division. Describe how Kentucky-American would provide water service during the disruption. Identify the number of customers whom Kentucky-American would not be able to serve through alternative means.

f. State whether the requirement of redundancy would require Kentucky-American to continue to operate the Owenton Water Treatment Plant, but construct a connection from KRS II to the Northern Division. Explain.

31. a. List and describe all disruptions in service or service degradations (e.g., boiled water advisories) that the Northern Division has experienced since January 1, 2006 due to the lack of redundancy in its treatment process. The description

should include the date of the disruption, its length, and the actions taken to resolve the disruption.

b. For each disruption listed in Item 31(a), state whether Kentucky-American was required to notify KDOW of the disruption. If notification was required, provide a copy of the notification.

c. For each disruption listed in Item 31(a), state whether Kentucky-American was required to notify the Commission of the disruption. If notification was required, provide a copy of the notification.

32. Refer to Direct Testimony of Lance E. Williams at 4; "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" at 2.

a. Define or describe "minor treatment upsets" with the claricone.

b. State for each year from January 1, 2006 to December 31, 2011 the number of times that a "minor treatment upset" with the claricone required the Northern Division to rely solely on its storage capacity.

33. a. State the number of Northern Division customers who would be unserved or under-served if the claricone at the Owenton Water Treatment Plant is out of service for more than a few hours.

b. State the total number of customers presently within the Northern Division.

34. Refer to Direct Testimony of Lance E. Williams at 4; "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" at 2.



a. List the chemicals used in the treatment process at the Owenton Treatment Plant.

b. List the chemicals used in the treatment process at KRS II.

c. Describe the size of each chemical storage facility presently available at the Owenton Water Treatment Plant and state the amount of chemicals that each can hold.

d. Provide the invoices for all chemical purchases for the Owenton Water Treatment Plant for the period between January 1, 2006 and December 31, 2011.

e. For each chemical listed in Item 34(a), state the purchase size that constitutes a bulk purchase.

f. Provide an estimate of the annual savings in chemical expense if modifications were made to the Owenton Water Treatment Plant to enable bulk chemical purchases. State all assumptions, show all calculations, and provide the work papers used to derive this estimate.

g. Identify the changes or modifications to the Owenton Water Treatment Plant to enable bulk purchases of chemicals.

35. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" at 5.

a. Identify the local and state regulations that require the "Chemical Bulk Storage Improvements."

b. Identify the Kentucky-American guidelines that require the "Chemical Bulk Storage Improvements." Provide a copy of each guideline.

36. Refer to Direct Testimony of Lance E. Williams at 4. Identify and describe the environmental risks to which Mr. Williams refers.

37. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System," Appendix D. Portions of the Notes are truncated. Provide a revised version of this document that shows the complete notes.

38. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System," Appendix D. Provide a table in the same format as Appendix D that reflects the same expense items for each year from January 1, 2006 through December 31, 2011.

39. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System," Appendix D. State whether the expense estimates take into account improvements to the Owenton Water Treatment Plant.

40. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System," Appendices D and E. State all assumptions, show all calculations, and provide all work papers used to derive both appendices. Where such calculations and work papers are in Microsoft Excel worksheet format, provide an electronic copy in Microsoft Excel format.

41. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System," Appendix E. Explain why no increase in KRS II's sludge disposal costs occurs if KRS II supplies water to the Northern Division.

42. List all water storage tanks serving the Northern Division and their storage capacity, age, type, and current condition.

43. At pages 4 and 5 of its Application Kentucky-American states: “[T]he project will be initially funded by available funds from a previous financing or short-term bank borrowings.”

a. Identify the Commission proceeding in which the previous financing referenced by Kentucky-American was authorized. State the effective interest rate, the debt term, list the construction projects Kentucky-American originally intended to fund with the financing, identify the projects that were not financed, and provide the amount of the previous financing remaining that Kentucky-American will use to fund this project.

b. State the amount of short-term bank borrowings that will be used to fund the construction project. 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, Kentucky-American’s capital structure as of the date of this information request, and the capital structure as of the date of the short-term debt conversion.

44. a. Provide a list of all employees that operate the Owenton Water Treatment Plant. For each employee listed, provide:

- (1) Name.
- (2) Title.
- (3) Length of employment.
- (4) Job duties.
- (5) 2011 and 2012 pay rates.
- (6) Test-period regular time worked and overtime worked.

(7) Percentage of payroll capitalized in 2011. Include any calculations used to develop the percentage.

(8) Type of employee benefits (i.e., health insurance, dental insurance, vision insurance, pension, etc.) and amounts paid for each by Kentucky-American.

b. Identify any employee positions listed in Kentucky-American's response to Item 44(a) that will be eliminated if the Owenton Water Treatment Plant is decommissioned.

c. Identify any employee positions listed in response to Item 44(a) that will be transferred to KRS II.

d. Describe the effect of the employee transfers listed in the response to Item 44(d) labor costs at KRS II. State separately for each year from January 1, 2014 to December 31, 2020 the effect on payroll expenses, payroll capitalized, retirement, payroll taxes, and insurance benefits. State all assumptions, show all calculations, and provide all work papers used to determine the effect on labor costs at KRS II. If this information exists in a Microsoft Excel format, provide in such format.

45. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System," Appendix D. For each year listed, provide a breakdown of projected labor costs into the following categories: payroll, retirement, payroll taxes, and insurance benefits.

46. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System," Appendix D. Describe how Kentucky-American determined the inflation factor used for each expense:

a. Chemical: 7 percent;

- b. Fuel and Power: 10 percent;
- c. Labor: 3 percent; and
- d. Sludge Disposal: 5 percent.

State all assumptions, show all calculations and provide all work papers that Kentucky-American used to determine each inflation factor.

47. a. Provide a schedule detailing all expenditures that have occurred to the date of this Request that relate to the application filed in this proceeding. State the nature and amount of each charge and provide a copy of the vendor invoice. The invoices should contain detailed descriptions of the services, the amount of time billed for each service, and the hourly billing rate. Identify the account number and title to which each amount was charged.

b. Provide the anticipated total cost of this case upon completion. The projected amount should be detailed by type of service and vendor with supporting documentation for each.

c. Provide a monthly update of the schedule requested in Item 47(b) showing all of the costs incurred as of that date and include the supporting detailed vendor invoices.

48. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System," Appendix C.

a. Provide a table listing all of the construction overhead costs (e.g., design, engineering, construction inspections, permits, licenses, contingencies, etc.) that are associated with the proposed project.

b. State whether the overhead construction costs listed in the response to Item 48(a) are included in the Northern District Connection Project Cost

Estimate.

(1) If yes, state where the overhead construction costs are reported.

(2) If no, explain why the overhead construction costs were not included in the Northern District Connection Project Cost Estimate.

49. Refer to “Engineering Feasibility Study Report for Supplying Kentucky American Water’s Northern District Distribution System” at 5.

a. For each capital improvement project listed in the table, list all required governmental permits, licenses, and other approvals.

b. (1) For each capital improvement project, state whether a Certificate of Public Convenience and Necessity is required. Explain.

(2) For any project that would require a Certificate of Public Convenience and Necessity, state the expected costs of obtaining such certificate.

50. State Kentucky-American’s present revenue requirement and rate base assuming approval and construction of the proposed facilities. State all assumptions, show all calculations, and provide all work papers to reach this result. If the requested information exists in a Microsoft Excel format, also provide in such format.

51. State Kentucky-American’s present revenue requirement and rate base assuming approval and construction of the capital improvements necessary to maintain the Owenton Water Treatment Plant. State all assumptions, show all calculations, and provide all work papers to reach this result. If the requested information exists in a Microsoft Excel format, also provide in such format.

52. Explain why the water storage tank at Monterey should be decommissioned.

53. Describe the present condition of the Fairgrounds Water Storage Tank.
54. Provide all reports of inspections and maintenance performed on the Fairgrounds Water Storage Tank since January 1, 2006.
55. Identify and describe the repairs and maintenance necessary to maintain the Fairgrounds Water Storage Tank in operation.
56. State when the City of Owenton and KDOW agreed to relocate the raw water intake from Severn Creek to the Kentucky River.
57. State the location of the Owenton Water Treatment Plant raw water intake if relocated.
58. Describe the difference in the quality of the raw water at the current water intake location and the proposed new location.
59. Explain why Kentucky-American has delayed moving the location of the raw water intake.
60. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" at 5.
  - a. List and describe each of the improvements for "Raw Water Intake Improvements."
  - b. Identify the local and state regulations that require the "Raw Water Intake Improvements."
  - c. Identify the Kentucky-American guidelines that require the Raw Water Intake Improvements." Provide a copy of each guideline.
  - d. Identify all cost savings that will result from the Raw Water Intake Improvements."

e. State all assumptions, show all calculations, and provide all work papers used to derive the cost estimate of \$1,400,000.

61. Describe the effects on the operation of the Owenton Water Treatment Plant if the raw water intake is moved to the Kentucky River.

62. Describe the security and safety measures currently in place at the Severn Creek raw water intake.

63. List each security and safety measure that Kentucky-American has implemented for the Severn Creek raw water intake since January 1, 2006 and its cost.

64. List each incident involving the Severn Creek raw water intake since January 1, 2006 that resulted in a report or complaint to local law enforcement authorities.

65. Provide the bids submitted to Kentucky-American for the proposed facilities.

66. State the date upon which the submitted bids will expire.

67. Describe the current status of easement acquisition for the proposed water transmission mains.

68. Describe the current status of property acquisition for the sites of the proposed water storage tanks and pumping stations.

69. State the purpose(s) of the 12-inch magnetic flow meter that is included in the plans for the proposed facilities.

70. Describe how Kentucky-American selected the route of the proposed water transmission main. Provide all correspondence, memoranda, electronic mail messages and other documents in which the route for the proposed water transmission main is discussed.



71. Describe the basis for the sizing of the proposed water transmission main. State all assumptions, show all calculations, and provide all work papers used to determine the main size.

72. For each water storage tank that Kentucky-American proposes to construct:

- a. Describe the need for the storage tank.
- b. Describe the basis for its size. State all assumptions, show all calculations, and provide all work papers used to determine the main size.
- c. Describe how Kentucky-American determined its location.

73. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" at 6.

- a. State the capacity of the "new elevated storage tank" that is required to "address reliability and operation inefficiencies with the existing Fairgrounds Tank."
- b. State whether the proposed 600,000 gallon water storage tank that is part of the Northern Division Connection Project is the same facility as the "New Storage Tank."
- c. Explain how the "New Storage Tank" will improve reliability in the Owenton area.
- d. State the expected location of the "New Storage Tank."

74. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" at 5-6.

- a. State whether all the capital improvement projects identified in Section IV-B must be performed simultaneously. Explain.

b. State whether Kentucky-American has considered whether system reliability can be improved by performing only some of the capital improvement projects listed in Section IV-B.

75. a. State whether Kentucky-American has conducted or commissioned any studies to evaluate the Owenton Water Treatment Plant in terms of enhanced distribution system storage and increased water purchases from neighboring water systems.

b. (1) If yes, provide a copy of such studies.

(2) If no, explain why not.

76. a. Provide a schematic of the Owenton Water Treatment Plant's pretreatment sedimentation unit.

b. Regarding the Owenton Water Treatment Plant's existing pretreatment sedimentation, state:

(1) The volume of the basin in cubic feet;

(2) The level of sediment in the basin; and,

(3) The corresponding volumetric percentage in the basin.

c. Explain why a second basin is needed.

d. State whether Kentucky-American would have to purchase additional land to construct a second basin.

e. Provide a breakdown of the estimated project cost of \$1.2 million for "Pretreatment Reliability Improvements." State all assumptions, show all calculations and provide all work papers used to derive the estimated cost.

77. a. Provide a schematic of the Owenton Water Treatment Plant's existing filter.

- b. State the existing filter rate in gallons per minute per square foot.
- c. Explain why a second filter is needed.
- d. Provide the dimensions and location of the new filter unit.
- e. Provide a breakdown of the estimated project cost of \$1.2 million

for "Filter Reliability Improvements." State all assumptions, show all calculations and provide all work papers used to derive the estimated cost.

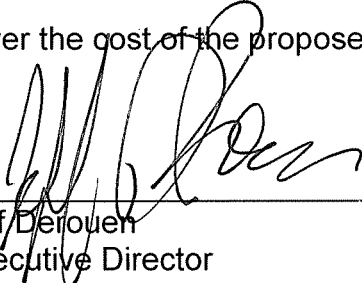
78. Refer to "Engineering Feasibility Study Report for Supplying Kentucky American Water's Northern District Distribution System" at 5-6.

- a. Describe the improvements that are included in the "SCADA Improvements."
- b. Identify the increased efficiencies that will result from the "SCADA Improvements."
- c. Describe the effect of the "SCADA Improvements on the number of Owenton Water Treatment Plant employees.

79. a. State whether Kentucky-American intends to recover the cost of the proposed facilities through general rates.

b. State whether Kentucky-American has considered recovering the costs of the proposed facilities through a surcharge on Northern Division customers. If no, explain why not.

c. Refer to the Direct Testimony of Lance E. Williams at 7. State whether Kentucky-American has discussed with the city of Owenton the possibility of a surcharge on Northern Division customers to recover the cost of the proposed facilities.



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DATED:           JUL 09 2012          

cc: Parties of Record

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