COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF BARKLEY LAKE)	
WATER DISTRICT FOR APPROVAL TO ISSUE)	CASE NO.
EVIDENCE OF INDEBTEDNESS AND A)	2024-00052
CERTIFICATE OF PUBLIC CONVENIENCE AND)	
NECESSITY)	

ORDER

On August 23, 2024, Barkley Lake Water District (Barkley Lake District) filed an application pursuant to KRS 278.020, KRS 278.300, and 807 KAR 5:007. Section 15, seeking financing approval and a Certificate of Public Convenience and Necessity (CPCN) to replace Asbestos Cement (AC) water lines with polyvinylchloride (PVC) pipe (Pipe Replacement Project). The Commission established a procedural schedule by Order dated September 6, 2024. No party requested intervention or a hearing. Barkley Lake District responded to one request for information. This matter now stands submitted for decision by the Commission.

BACKGROUND

Barkley Lake District is a water district organized pursuant to KRS Chapter 74. It owns and operates a water distribution system through which it provides water service to

¹ Application (filed Aug. 23, 2024) at 1.

² Barkley Lake District's Response to Commission Staff's First Request for Information (Staff's First Request) (filed Sept. 24, 2024).

approximately 6,405 customers in Caldwell, Christian, and Trigg counties, Kentucky.³ Barkley Lake District is engaged in the production, distribution, and sale of water.⁴ Barkley Lake District also provides water for resale to Christian County Water District, Lyon County Water District, Stewart County (Tennessee) Water District, and the city of Cadiz, Kentucky.⁵ Barkley Lake District also owns and operates a water treatment plant, five pumping stations, nine water storage tanks, and 2,621,902 feet of distribution lines across six pressure zones.⁶ A rate increase was approved for Barkley Lake District on September 13, 2022, in Case No. 2021-00454.⁷ Barkley Lake District's water loss in 2023 was 13.5485 percent.⁸

CPCN

Barkley Lake District requested a CPCN to replace approximately 98,865 linear AC water lines with PVC pipe.⁹ The AC lines proposed to be replaced are 1,410 linear feet of three-inch, 85,311 linear feet of four-inch, and 12,144 linear feet of six-inch diameter distribution lines. ¹⁰ These lines were installed when Barkley Lake District was created in 1965 and are fully depreciated. ¹¹ According to the application, PVC pipes will

³ Annual Report of Barkley Lake Water District to the Public Service Commission for the Calendar Year Ended December 31, 2023 (2023 Annual Report) at 12 and 49.

⁴ Application at 3, paragraph 6.

⁵ Application at 3, paragraph 5.

⁶ Application at 3, paragraph 6.

⁷ Case No. 2021-00454, Electronic Application of Barkley Lake Water District for a Rate Adjustment Pursuant to 807 KAR 5:076 (Ky. PSC Sep. 13, 2022), Order.

^{8 2023} Annual Report at 58.

⁹ Application at 1.

¹⁰ Application at 4, paragraph 8.

¹¹ Barkley Lake District's Response to Staff's First Request, Item 5.

be installed to replace leaking AC lines of the same diameter.¹² The AC lines will be abandoned in place.¹³ Barkley Lake District stated that no new easements would be required as all construction would take place in areas where it already has easements.¹⁴

Barkley Lake District stated that the Pipe Replacement Project was divided into eight divisions (Division A through Division H).¹⁵ Barkley Lake District stated that there is a variation in elevation in the area which results in some low-lying areas having high pressure, causing the AC lines to be more vulnerable to breakage and leaks.¹⁶ Barkley Lake District stated that from January 2021 through May 2024, 31 of the 207 line breaks were in the Pipe Replacement Project area¹⁷ and the repair of each break resulted in a customer outage of approximately three hours duration.¹⁸ The Pipe Replacement Project represents approximately three percent of the pipe in Barkley Lake District's system but was responsible for approximately 15 percent of the line breaks.¹⁹ Barkley Lake District explained that replacing AC lines will improve the reliability of its water service by eliminating one source of line breaks and leaks and reducing the likelihood of customer outages.²⁰

¹² Application at 4, paragraph 8.

¹³ Application at 4, paragraph 8.

¹⁴ Application at 4, paragraph 8.

¹⁵ Application at 4, paragraph 9.

¹⁶ Application at 4-5, paragraph 9.

¹⁷ Application at 5, paragraph 9.

¹⁸ Barkley Lake District's Response to Staff's First Request, Item 7.

¹⁹ Application at 5, paragraph 9.

²⁰ Application at 5, paragraph 9.

Barkley Lake District also argued that the Pipe Replacement Project would eliminate hazards associated with asbestos.²¹ Barkley Lake District stated that the maintenance and repair of AC pipes is more labor intensive and dangerous to its personnel than maintaining PVC pipes because exposing AC lines and repairing them can disturb the asbestos pipe material which is a known carcinogen.²² Barkley Lake District argued that replacing the AC lines with PVC pipe will make future maintenance of water lines much less labor intensive.²³ Barkley Lake District also stated that the new lines will be laid adjacent to the existing lines and the AC lines will be replaced with PVC lines of the same diameter, with the AC lines being taken out of service and abandoned in place.²⁴ Additionally, Barkley Lake District stated that it will not need to obtain any new easements for the Pipe Replacement Project as it already holds easements on the property for which the construction will take place.²⁵

Barkley Lake District considered two alternatives to replacing the AC lines with PVC pipe.²⁶ The first alternative was to keep the AC lines and repair or replace them as the lines broke.²⁷ Barkley Lake District stated that, given the increase time and money spent on repairing leaks and maintaining AC waterlines, it thought it was a better decision

²¹ Application at 6, paragraph 10.

²² Application at 6, paragraph 10.

²³ Application at 6, paragraph 10.

²⁴ Application at 6, paragraph 10.

²⁵ Application at 6, paragraph 10

²⁶ Application at 6, paragraph 11.

²⁷ Application at 7, paragraph 11.

to pursue orderly and systematic replacement of the AC lines.²⁸ Barkley Lake District explained that planned replacement permits it to communicate with customers when the construction will occur and regarding any inconveniences that might occur.²⁹ Additionally, Barkley Lake District argued that when an AC line breaks, it cannot prepare ahead of time by obtaining appropriate pipe and any necessary repair or replacement materials to make the repair or replacement.³⁰ Barkley Lake District stated that planned and orderly replacement is better use of its resources and would result in a stronger more reliable water distribution system than a piecemeal approach to replacement.³¹

The second alternative that Barkley Lake District considered was replacing the AC lines with ductile iron pipe.³² Barkley Lake District stated that ductile iron pipe and PVC generally has a useful life of at least 100 years, with some ductile iron pipe in service in excess of 150 years. However, the cost of small-diameter ductile iron pipe is higher than PVC pipe of the same diameter.³³ Barkley Lake District stated that ductile iron pipe would cost an additional \$3,495,530 in material costs for the entire project than the PVC pipe of the same diameter³⁴ and an estimated cost of \$9,331,767 to complete Divisions A through

²⁸ Application at 7, paragraph 11.

²⁹ Application at 7, paragraph 11.

³⁰ Application at 7, paragraph 11.

³¹ Application at 8, paragraph 11.

³² Application at 8, paragraph 11.

³³ Application at 8, paragraph 11.

³⁴ Application at 8, paragraph 11.

Divisions F³⁵ as compared to the PVC estimated cost of \$6,334,767 to complete those same divisions.³⁶

Barkley Lake District stated that it advertised for bids for construction of the Pipe Replacement Project in the June 13, 2024 editions of the *Kentucky New Era* and the *Cadiz Record*.³⁷ Barkley Lake District stated that it received three bids to complete the Pipe Replacement Project and all three bids exceeded the funds available for the project.³⁸ Since all the bids exceeded the funds available, the amounts for each division were removed in reverse alphabetical order and the bids retabulated until the low bidder came within the funds available.³⁹ Barkley Lake District stated that Youngblood Excavating and Contracting, LLC (Youngblood) of Mayfield, Kentucky was selected as the lowest bid.⁴⁰ Youngblood's bid was \$5,089,181 for Divisions A through E.⁴¹

Barkley Lake District stated that the estimated cost to construct Divisions A through E is \$5,484,642 which included administration costs and contingencies.⁴² Barkley Lake District further stated that the estimated cost to construct Division F was \$847,125,⁴³

³⁵ Barkley Lake District's Response to Staff's First Request, Item 3.

³⁶ Application at 11, Paragraph 21.

³⁷ Application at 10, paragraph 18.

³⁸ Application at 10, paragraph 19.

³⁹ Application at 10, paragraph 19.

⁴⁰ Application at 11, paragraph 19.

⁴¹ Application at 10, paragraph 19.

⁴² Application at 11, paragraph 21.

⁴³ Application at 11, paragraph 21.

Division G was \$815,539,⁴⁴ and Division H was \$1,027,855.⁴⁵ Barkley Lake District stated that no increase in the cost to operate the system is anticipated⁴⁶ and that the Pipe Replacement Project will not require it to seek an immediate rate adjustment.⁴⁷ Barkley Lake District further stated the no additional pumping stations would be needed and since the lines would be replaced with the same size lines, there would be no increase in the use of electricity or chemicals.⁴⁸ Barkley Lake District argued that the construction will not result in wasteful duplication of utility facilities or inefficient investment.⁴⁹

Financing

Barkley Lake District proposed to finance the Pipe Replacement Project by entering into an Assistance Agreement with the Kentucky Infrastructure Authority (KIA) for KIA Loan F23-002 to borrow an amount not to exceed \$3,678,453 from the Drinking Water State Revolving Fund (Fund F).⁵⁰ Barkley Lake District stated that the proposed loan would have a 2.25 percent per annum interest rate to be repaid over a period not to exceed 20 years from the date of the last draw of funds.⁵¹ Barkley Lake District further stated that the proposed loan would be subject to principal forgiveness of 27 percent of the assistance amount, not to exceed \$1,001,207 resulting in the net loan amount to be

⁴⁴ Barkley Lake District's Response to Staff's First Request, Item 8.

⁴⁵ Barkley Lake District's Response to Staff's First Request, Item 8.

⁴⁶ Application at 11, paragraph 22.

⁴⁷ Application at 14, paragraph 27.

⁴⁸ Application at 12, paragraph 22.

⁴⁹ Application at 12, paragraph 23.

⁵⁰ Application at 12, paragraph 24.

⁵¹ Application at 12, paragraph 24.

repaid of \$2,677,246.⁵² Barkley Lake District also stated that the proposed loan would be secured by a pledge of Barkly Lake District's revenues and a loan servicing fee of 0.25 percent of the outstanding loan balance would be assessed semi-annually.⁵³ Additionally, Barkley Lake District stated that payments on the proposed loan would begin six months after funds are first drawn.⁵⁴

Barkley Lake District stated that no proceeds from the proposed Assistance Agreement would be used to refund any outstanding obligation.⁵⁵ Barkley Lake District further stated that the proposed loan would not require it to seek an immediate rate adjustment, and it did not propose to issue any stock or bonds.⁵⁶

Barkley Lake District also stated that portions of the Pipe Replacement Project would also be financed using \$376,651 of Clean Water Program (CWP) grant funds from Grant 21CWW205 and \$1,113,760 of CWP grant funds from 22CW357.⁵⁷ According to Barkley Lake District, it was originally awarded \$427,065 in CWP grant funds for Grant 22CWW357, however, when the bids to complete the Pipe Replacement Project were higher than expected, KIA increase the grant award by \$686,695.⁵⁸ This resulted in a total grant of \$1,113,760 for Grant 22CWW357.⁵⁹

⁵² Application at 12, paragraph 24.

⁵³ Application at 13, paragraph 24.

⁵⁴ Application at 13, paragraph 24.

⁵⁵ Application at 14, paragraph 29.

⁵⁶ Application at 14, paragraphs 27–28.

⁵⁷ Application at 14, paragraph 26.

⁵⁸ Application at 14, paragraph 26.

⁵⁹ Application at 14, paragraph 26.

Barkley Lake District stated that currently funds cover the expenses to complete Division A through Division E, but it expects grant funds may become available to complete Division F.⁶⁰ Additionally, Barkley Lake District stated that it is seeking additional state and federal grant funds to complete Divisions G and H, and it would have no issue beginning construction on the remaining Divisions within one year of obtaining a CPCN.⁶¹

LEGAL STANDARD

The Commission's standard of review regarding a CPCN is well settled. No utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission.⁶² To obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.⁶³

"Need" requires:

[A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated. [T]he inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management, or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.⁶⁴

⁶⁰ Application at 4, paragraph 9.

⁶¹ Barkley Lake District's Response to Staff's First Request, Item 2.

⁶² KRS 278.020(1). Although the statute exempts certain types of projects from the requirement to obtain a CPCN, the exemptions are not applicable.

⁶³ Kentucky Utilities Co. v. Pub. Serv. Comm 'n, 252 S.W.2d 885 (Ky. 1952).

⁶⁴ Kentucky Utilities Co., 252 S.W.2d at 890.

"Wasteful duplication" is defined as "an excess of capacity over need" and "an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties." To demonstrate that a proposed facility does not result in wasteful duplication, the Commission has held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed. Although cost is a factor, selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication. All relevant factors must be balanced.

KRS 278.300 requires Commission authorization before a utility may "issue any securities or evidence of indebtedness or assume any obligation or liability in respect to the securities or evidence of indebtedness of any other person." KRS 278.300(3) establishes the legal standard and clarifies the scope of Commission review, stating:

The commission shall not approve any issue or assumption unless, after investigation of the purposes and uses of the proposed issue and proceeds thereof, or of the proposed assumption of obligation or liability, the commission finds that the issue or assumption is for some lawful object within the corporate purposes of the utility, is necessary or appropriate for or consistent with the proper performance by the utility of its service to the public and will not impair its ability to perform

⁶⁵ Kentucky Utilities Co., 252 S.W.2d at 890.

⁶⁶ Case No. 2005-00142, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky (Ky. PSC Sept. 8, 2005), Order at 11.

⁶⁷ See Kentucky Utilities Co. v. Pub. Serv. Comm'n, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of a 138 kV Electric Transmission Line in Rowan County, Kentucky (Ky. PSC Aug. 19, 2005), Order.at 6.

⁶⁸ Case No. 2005-00089, Aug. 19, 2005 Order at 6.

⁶⁹ KRS 278.300(1).

that service, and is reasonably necessary and appropriate for such purpose.

DISCUSSION AND FINDINGS

<u>CPCN</u>

Need

Having considered the application and all evidence in the record, the Commission finds that Barkley Lake District has demonstrated a need for the pipe replacement project. Barkley Lake District needs to replace the AC pipes to help reduce leaks. As noted above, the area of the Pipe Replacement Project consists of AC pipes that were installed in the 1960s and are currently responsible for approximately 15 percent of the breaks in Barkley Lake District's system, even though it only comprises three percent of the total system. In addition, the Commission notes that leaks increase overall utility water loss and at approximately 13 percent water loss, Barkley Lake District should take the appropriate steps, such as this project, to address leaks.

Wasteful Duplication

The Commission also finds that the Pipe Replacement Project will not result in wasteful duplication. As noted above, the Pipe Replacement Project is intended to replace existing systems that are fully depreciated and need replacement with PVC lines of the same size. The Pipe Replacement Project was also competitively bid with the lowest bid for Divisions A-E being accepted. Barkley Lake District also considered two alternatives: maintain current AC pipes and repair when breaks occur or replace with ductile iron pipe. While maintaining its current AC pipes would result in the lowest current cost for Barkley Lake District, the Commission finds that it would be unreasonable to require Barkley Lake District to continue to maintain those pipes as they have been

responsible for approximately 15 percent of Barkley Lake District's line breaks. The pipe had also exceeded its useful life and has no remaining depreciable value. Additionally, the cost of ductile iron pipe would cost approximately \$3,000,000 more than the cost of the PVC lines.

For these reasons, the Commission finds that Barkley Lake District's decision to replace the AC lines with PVC lines is reasonable. Since Barkley Lake District established a need for the Pipe Replacement Project and that it will not result in wasteful duplication, the Commission further finds that Barkley Lake District's request for a CPCN should be granted.

Financing

The Commission finds that the requested financing is necessary for the completion of the Pipe Replacement Project discussed above and will not impair Barkley Lake District's ability to provide service. In fact, as noted above, the Commission finds that the Pipe Replacement Project at issue is necessary and will not result in wasteful duplication. Further, the Commission finds that the financing for which Barkley Lake District requests approval is for the lawful object within the corporate purposes of Barkley Lake District's utility operations.

Additionally, the Pipe Replacement Project and associated financing are necessary, appropriate for, and consistent with the proper performance of Barkley Lake District's service to the public. The financing will not impair Barkley Lake District's ability to perform that service, and is reasonably necessary and appropriate for such purposes, and therefore, the Commission finds that the approval of the financing should be granted. The financing does include principal forgiveness which provides the utility with an

opportunity to pay less than the district otherwise would, and the Commission encourages

Barkley Lake District to monitor and take steps to comply with all portions of the funding
related to loan forgiveness.

The Commission reminds Barkley Lake District that, if it borrows any funds pursuant to KRS 278.300, to complete Divisions F through H, it must get approval from the Commission. The Commission also reminds Barkley Lake District that if it does not begin construction on any Division within one year from the date the CPCN is granted, it will need to seek a new CPCN.

Commission Staff performed a limited review of Barkley Lake District's financial records on file for the immediately preceding five years. Barkley Lake District's last rate increase pursuant to the alternative rate filing procedure was in Case No. 2021-00454. ⁷⁰ In its review, Commission noted that rate-based income (adjusted net income minus principal payments) while improving, was negative each year. Based on the financial analysis conducted in this proceeding, ⁷¹ the Commission finds that Barkley Lake District should file an application for a general rate adjustment pursuant to 807 KAR 5:001, Section 16, or an application for an alternative rate adjustment pursuant to 807 KAR 5:076 no later than October 31, 2026, to ensure its revenue is sufficient to support adequate and reliable service.

⁷⁰ Case No. 2021-00454, Electronic Application of Barkley Lake Water District for a Rate Adjustment Pursuant to 807 KAR 5:076, (Ky. PSC Sept. 13, 2022).

⁷¹ The financial analysis was conducted using the following: *Annual Report of Barkley Lake Water District to the Public Service Commission for the Calendar Year Ended December 31, 2019, Annual Report of Barkley Lake Water District to the Public Service Commission for the Calendar Year Ended December 31, 2020, Annual Report of Barkley Lake Water District to the Public Service Commission for the Calendar Year Ended December 31, 2021, Annual Report of Barkley Lake Water District to the Public Service Commission for the Calendar Year Ended December 31, 2022, and 2023 Annual Report.*

IT IS THEREFORE ORDERED that:

- Barkley Lake District is granted a CPCN for Divisions A-H of the Pipe Replacement Project.
- 2. Barkley Lake District shall immediately notify the Commission upon knowledge of any material changes to the project, including, but not limited to, increase in costs and any significant delays in construction.
- 3. Any material deviation from the construction approved by this Order shall be undertaken only with the prior approval of the Commission.
- 4. Barkley Lake District shall file with the Commission documentation of the total costs of the projects, including the cost of construction and all other capitalized costs, (e.g. engineering, legal, administrative, etc.) within 60 days of the date the construction authorized under this CPCN is substantially completed. Construction costs shall be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for water utilities prescribed by the Commission.
- 5. Barkley Lake District shall file a copy of the as-built drawings and a certified statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the substantial completion of the construction certificated herein.
- 6. Barkley Lake District is authorized to issue the evidence of debt in a principal amount not to exceed \$3,678,453 subject to the conditions discussed herein.
- 7. The proceeds from the issuance of the evidence of debt authorized shall be used only for the lawful purposes set out in the application.

- 8. Barkley Lake District shall only execute the KIA loan documents to the extent their terms and conditions are consistent with the loan described in its application, except as otherwise authorized herein.
- 9. Barkley Lake District shall file the loan documents in this matter within ten days of executing them.
- 10. Barkley Lake Notice shall file notice of the start of construction within 30 days of such action.
- 11. Barkley Lake District shall file notice of 50 percent completion within 30 days of such action.
- 12. Any documents filed in the future pursuant to ordering paragraphs 4, 5 9, 10 and 11 shall reference this case number and shall be retained in the post-case correspondence file.
- 13. The Executive Director is delegated authority to grant reasonable extensions of time for filing any documents required by this Order upon Barkley Lake District's showing of good cause for such extension.
- 14. Barkley Lake District shall file an application for a general rate adjustment pursuant to 807 KAR 5:001, Section 16, or an application for an alternative rate adjustment pursuant to 807 KAR 5:076 no later than October 31, 2026, to ensure its revenue is sufficient to support adequate and reliable service.
 - 15. This case is closed and removed from the Commission's docket.

Nothing contained herein shall be deemed a warranty or finding of value of securities or financing authorized herein on the part of the Commonwealth of Kentucky or any agency thereof.

PUBLIC SERVICE COMMISSION

Chairman

Commissioner

Commissioner

ENTERED

OCT 22 2024

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KENTUCKY PUBLIC SERVICE COMMISSION

ATTEST:

Executive Director

*John Herring Barkley Lake Water District 1420 Canton Road P. O. Box 308 Cadiz, KY 42211

*Barkley Lake Water District 1420 Canton Road P. O. Box 308 Cadiz, KY 42211

*Honorable Damon R Talley Attorney at Law STOLL KEENON OGDEN PLLC 300 West Vine Street Suite 2100 Lexington, KENTUCKY 40507-1801

*Scott Bridges Chairman Barkley Lake Water District 1420 Canton Road P. O. Box 308 Cadiz, KY 42211

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