

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF BEECH GROVE)	CASE NO.
WATER SYSTEM, INC. FOR A RATE)	2022-00054
ADJUSTMENT PURSUANT TO 807 KAR 5:076)	

NOTICE OF FILING OF COMMISSION STAFF'S REPORT

Notice is hereby given that, in accordance with the Commission's Order of April 7, 2022, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's July 19, 2022 Order, Beech Grove Water System, Inc. (Beech Grove Water) is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report. The Commission directs Beech Grove Water to the Commission's July 22, 2021 Order in Case No. 2020-00085¹ regarding filings with the Commission.



Linda C. Bridwell, PE
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATED JUL 19 2022

cc: Parties of Record

¹ Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

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COMMISSION STAFF'S REPORT ON
BEECH GROVE WATER SYSTEM, INC.

Beech Grove Water System, Inc. (Beech Grove Water) is a water utility organized pursuant to KRS Chapter 273 that owns and operates a water distribution system through which it provides retail water service to approximately 575 residential customers and 10 commercial customers that reside in McLean and Daviess counties, Kentucky.¹ On March 14, 2022, Beech Grove Water filed an application with the Commission requesting to adjust its water service rates pursuant to 807 KAR 5:076. The application was filed pursuant to the Commission's Order in Case No. 2021-00349.² The Commission's March 29, 2022 Order incorporated the record of Case No. 2021-00349 into this case so the Commission could complete its investigation into whether Beech Grove Water violated the Commission's June 9, 2020 Order in Case No. 2020-00156.³ Beech Grove Water's

¹ *Annual Report of Beech Grove Water to the Public Service Commission for the Calendar Year Ended December 31, 2020* (2020 Annual Report) at 12 and 49.

² Case No. 2021-00349, *Electronic Alleged Failure of Beech Grove Water System, Inc. and its officers, Nathan Ward, Chad McMahon, Greg Cheatham, Greg Dant, and its manager, Sheila Murphy, to Comply with a Commission Order, KRS 278.990* (Ky. PSC Mar. 29, 2022).

³ Case No. 2020-00156, *Electronic Purchased Water Adjustment Filing of Beech Grove Water System, Inc.* (Ky. PSC June 9, 2020).

last base rate increase was Case No. 2010-00309.⁴ To ensure the orderly review of the application, the Commission established a procedural schedule by Order dated April 7, 2022. Beech Grove Water responded to two discovery requests from Commission Staff.

WATER LOSS

The Commission notes that in its 2020 Annual Report, Beech Grove Water reported a water loss of 29.3827 percent.⁵ Commission regulation 807 KAR 5:066(6)(3) states that for ratemaking purposes a utility's water loss shall not exceed 15 percent of total water produced and purchased, excluding water consumed by a utility in its own operations. At a 29.3827 percent water loss, the annual cost of water loss in excess of 15.00 percent is \$44,327 and the total annual cost of water loss to Beech Grove Water is \$90,556.⁶

⁴ Case No. 2010-00309, *Application of Beech Grove Water System, Inc. for an Adjustment of Water Rates* (Ky. PSC Oct 13, 2010).

⁵ 2020 Annual Report at 57.

⁶

	Water	Power	Total
Pro Forma Purchases	\$ 302,818	\$ 5,378	\$ 308,196
Excess Water Loss Percentage (net of Other Water Used)	14.3827%	14.3827%	
Water Loss In Excess of Allowed Amount	\$ 43,553	\$ 774	\$ 44,327

	Water	Power	Total
Pro Forma Purchases	\$ 302,818	\$ 5,378	\$ 308,196
Excess Water Loss Percentage (net of Other Water Used)	29.3827%	29.3827%	
Water Loss In Excess of Allowed Amount	\$ 88,976	\$ 1,580	\$ 90,556

DISCUSSION

To comply with the requirements of 807 KAR 5:076, Section 9,⁷ Beech Grove Water used the calendar year ended December 31, 2020, as the basis for its application. Using its pro forma test-year operations, Beech Grove Water determined that normalized revenues exceed required revenues by \$5,263, or 1.2 percent, and that a rate increase is not needed as shown in the table below:

	<u>Beech Grove Water</u>
Pro Forma Operating Expenses	\$ 422,019
Plus: Average Annual Principal and Interest Payments	11,588
Additional Working Capital	<u>2,318</u>
Overall Revenue Requirement	435,925
Less: Other Operating Revenue	(3,079)
Interest Income	<u>(720)</u>
Revenue Required from Rates	432,126
Less: Pro Forma Present Rate Service Revenues	<u>(437,389)</u>
Required Revenue Increase	<u>\$ (5,263)</u>
Percentage Increase	<u>-1.20%</u>

Beech Grove Water did not request to increase its retail rates or bulk loading station rate. However, Beech Grove Water requested to implement a water loss reduction surcharge of \$6.24 per customer per month.⁸

⁷ The reasonableness of the proposed rates shall be determined using a 12-month historical test period, adjusted for known and measurable changes, that coincides with the reporting period of the applicant's annual report for the immediate past year.

⁸ Application, Attachment 2, Reasons for Application.

To determine the reasonableness of Beech Grove Water's request, Commission Staff performed a limited financial review of Beech Grove Water's test-year operations. The scope of Commission Staff's review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable⁹ changes to test-year operations were identified and adjustments made when their effects were deemed material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

Commission Staff's findings are summarized in this report. Ariel Miller and Jeff Abshire reviewed the calculation of Beech Grove Water's Overall Revenue Requirement. Eddie Beavers reviewed Beech Grove Water's reported revenues and rate design.

SUMMARY OF FINDINGS

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Operating Ratio Method, as generally accepted by the Commission, Commission Staff found that Beech Grove Water's required revenue from rates is \$462,244 to meet the Overall Revenue Requirement of \$469,031 and that a \$24,853 revenue increase, or 5.68 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

⁹ Commission regulation 807 KAR 5:076, Section 9 sets the standard for the determination of the reasonableness of proposed rates and states, in pertinent part, that the test period shall be "adjusted for known and measurable changes." See also Case No. 2001-00211, *Application of Hardin County Water District No. 1 for (1) Issuance of Certificate of Public Convenience and Necessity; (2) Authorization to Borrow Funds and to Issue its Evidence of Indebtedness Therefor; (3) Authority to Adjust Rates; and (4) Approval to Revise and Adjust Tariff* (Ky. PSC Mar. 1, 2002); Case No. 2002-00105, *Application of Northern Kentucky Water District for (A) an Adjustment of Rates; (B) a Certificate of Public Convenience and Necessity for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds* (Ky. PSC June 25, 2003); Case No. 2017-00417, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works* (Ky. PSC July 12, 2018).

2. Monthly Water Service Rates. Beech Grove Water has not proposed to increase its monthly retail and bulk water service rates. Beech Grove Water has not performed a cost of service study (COSS). Beech Grove Water stated that it did not complete a COSS at this time as there have been no material changes in the water system.¹⁰

Beech Grove Water has not proposed to increase their general water service rates but did request to be allowed to establish a monthly water loss reduction surcharge per customer of \$6.24.

The Commission has previously found that the allocation of a revenue increase evenly across the board to a utility's rate design is appropriate when there has been no evidence entered into the record demonstrating that this method is unreasonable and in the absence of a COSS. Finding no such evidence in this case, Commission Staff has followed the method previously accepted by the Commission and has allocated the \$24,553 revenue increase evenly across the board to Beech Grove Water's monthly retail and bulk water service rates.

The rates set forth in Appendix A to this report are based upon the revenue requirement, as calculated by Commission Staff, and will produce sufficient revenues from water sales to recover the \$461,944 Revenue Required from Rates, an approximate 5.61 percent increase. The impact of the base rate increase with the addition of the surcharge recommended by Commission Staff will increase a typical residential

¹⁰ Beech Grove Water's Responses to Commission Staff's First Request for Information (Staff's First Request) (filed May 11, 2022), Item 5.

customer's monthly water bill from \$33.86 to \$42.03, an increase of \$8.17, or approximately 24.13 percent.¹¹

3. Nonrecurring Charges. Following the Commission's recent decisions,¹² Commission Staff has reviewed Beech Grove Water's nonrecurring charges. The Commission found that as district personnel are currently paid during normal business hours, estimated labor costs previously included in determining the amount of Nonrecurring Charges should be eliminated from the charges. Commission Staff has reviewed the most recent cost justification information for their nonrecurring charges and their tap on fee for the 5/8- x 3/4- Inch Meter.¹³ Such adjustments result in the following revised nonrecurring charges:

Nonrecurring Charges

Meter Resetting Charge	\$ 9.00
Meter Resetting Charge After Hours	\$ 40.00
Meter Test Request Charge	\$ 9.00
Meter Test Request Charge After Hours	\$ 40.00
Reconnection Charge	\$ 9.00
Reconnection Charge After Hours	\$ 40.00
Termination Charge	\$ 9.00
Termination Charge After Hours	\$ 40.00
Turn On Charge	\$ 9.00
Turn On Charge After Hours	\$ 40.00
Tap On Fee, 5/8- x 3/4-Inch Meter	\$950.00

¹¹ The typical residential customer uses approximately 4,000 gallons per month.

¹² Case No. 2020-00141, *Electronic Application of Hyden-Leslie County Water District for an Alternative Rate Adjustment* (Ky. PSC Nov. 6, 2020) and Case No. 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 3, 2020), Case No. 2020-00196, *Electronic Application of West Daviess County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 30, 2020), and Case No. 2020-00195 *Electronic Application of Southeast Daviess County Water District for an Alternative Rate Adjustment*, (Ky. PSC Dec. 30, 2020).

¹³ Beech Grove Water's Responses to Staff's First Request (filed May 11, 2022), Item 9.

Beech Grove Water reported 36¹⁴ occurrences of the Termination Charge in their response to Commission Staff’s First Request for Information. However, Beech Grove Water’s 2020 general ledger included the collection of 30 Termination Charges and as a result, only \$1,200 in revenue was recorded for the test period.¹⁵ Commission Staff used 36 occurrences Beech Grove Water billed in 2020 to calculate the pro forma revenue reflected in adjustment (B) below. The adjustment to the Nonrecurring Charges results in a decrease to pro forma Other Operating Revenue and an increase to the total revenue requirement of \$876 as shown below.

	Num.	Current Rate	Total Collected	Revised Rate	Adj	Pro Forma
Termination Charge	36	\$40.00	\$1,200	\$9.00	(\$876)	\$324
Total Miscellaneous Service Revenues			\$1,200		(\$876)	\$324

4. Request for Surcharge. In its application, Beech Grove Water requested to implement a water loss reduction surcharge of \$6.24 per customer per month.¹⁶ Beech Grove Water explained in its customer notice that it was requesting the surcharge not to exceed a period of 48 months.¹⁷ Beech Grove Water did not include any calculations or explain how it determined the reasonableness of its requested surcharge. Beech Grove Water explained that it needed the surcharge to enable it to reduce water losses to an acceptable level and to enhance its financial capacity so it can continue to operate its system in compliance with the federal Safe Drinking Water Act, as amended in 1996, and

¹⁴ Beech Grove Water’s Responses to Staff’s First Request (filed May 11, 2022), Item 8.

¹⁵ Beech Grover Water’s Responses to Staff’s First Request (filed May 11, 2022), Item 1a, “1a_2020_GL.xlsx.”

¹⁶ Application, Attachment 2, Reasons for Application.

¹⁷ Application, Attachment 1, Customer Notice.

KRS Chapter 151.¹⁸ No formal plan or explanation was given by Beech Grove Water that indicated any specific future use of the surcharge funds. Commission Staff recalculated the monthly per customer impact of the water loss adjustment described in Adjustment (I) below and believes the \$6.24 surcharge proposed by Beech Grove Water is a materially accurate representation of the per customer impact on the actual annual cost of water loss above 15 percent.¹⁹ The use of a surcharge is consistent with prior Commission action in cases involving water utilities with excessive unaccounted-for water loss in excess of 30 percent.²⁰ Further, the Commission has ordered surcharges even when a utility has not specifically requested a surcharge,²¹ and recently, the Commission has allowed water utilities with reported water loss above the 15 percent threshold to assess water loss reduction surcharges.²² Recognizing prior Commission precedent to allow the use of surcharges to assist utilities in obtaining the proper funding needed to combat water loss, Commission Staff recommends the Commission approve Beech Grove Water's request and authorize the surcharge for a temporary period of 48 months, with a

¹⁸ Application, Attachment 2, Reasons for Application.

¹⁹ Water Loss Adjustment (I) \$44,654 / Number of Customers 586 / 12 Months = Monthly Customer Impact \$6.25.

²⁰ See Case No. 96-126, *An Investigation into the Operations and Management of Mountain Water District* (Ky. PSC Aug. 11, 1997); Case No. 2011-00217, *Application of Cannonsburg Water District for (1) Approval of Emergency Rate Relief and (2) Approval of the Increase in Nonrecurring Charges*, (Ky. PSC June 4, 2012); Case No. 2018-00017, *Application of Martin County Water District for an Alternative Rate Adjustment* (Ky. PSC Nov. 5, 2018); Case No. 2018-00429, *Application of Graves County Water District for an Alternative Rate Adjustment* (Ky. PSC Sept. 30, 2019); and Case No. 2019-00119, *Electronic Application of Estill County Water District No. 1 for a Surcharge to Finance Water Loss Control Efforts* (Ky. PSC Mar. 24, 2010); Case No. 2020-00141, *Electronic Application of Hyden-Leslie County Water District for an Alternative Rate Adjustment* (Ky. PSC Nov. 6, 2020) Order at 11-13.

²¹ Case No. 2020-00311, *Electronic Application of Cawood Water District for an Alternative Rate Adjustment* (Ky. PSC Apr. 8, 2021) Order at 3.

²² See Case No. 2021-00094, *Electronic Application of Garrison-Quincy-Ky-O-Heights Water District for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC Nov. 24, 2021).

review of the necessity to continue the surcharge before the temporary period expires. Further, Commission Staff recommends the Commission require Beech Grove Water to develop a long-term plan to address its aging infrastructure and combat water loss within six months of the final order in this proceeding.

PRO FORMA OPERATING STATEMENT

Beech Grove Water's Pro Forma Operating Statement for the test year ended December 31, 2020, as determined by Commission Staff, appears below.

	<i>Test Year</i>	<i>Adjustment</i>	<i>(Ref.)</i>	<i>Pro Forma</i>
Operating Revenues				
Sales of Water	\$ 344,018	\$ 93,373	(A)	\$ 437,391
Other Water Revenues	3,078	(876)	(B)	
	<u> </u>	<u>4,811</u>	(C)	<u>7,013</u>
Total Operating Revenues	<u>347,096</u>	<u>97,308</u>		<u>444,404</u>
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	80,909	(2,183)	(D)	
		(5,566)	(D)	
		(454)	(D)	
		52	(E)	
		3,370	(F)	
		(3,325)	(G)	72,803
Employee Pensions and Benefits		2,183	(D)	
		101	(F)	2,284
Purchased Water	215,049	87,769	(H)	
		(43,553)	(I)	259,265
Purchased Power for Pumping	5,378	(773)	(I)	4,605
Materials and Supplies	31,972	(5,546)	(J)	
		(3,325)	(G)	23,101
Contractual Services	11,621	(4,075)	(J)	7,546
Transportation Expense	5,501			5,501
Insurance	5,407			5,407
Miscellaneous Expense	<u>8,761</u>	<u>454</u>	(D)	<u>9,215</u>
Total Operation and Maintenance Expenses	364,598	25,129		389,727
Taxes Other Than Income		5,566	(D)	
		258	(F)	5,824
Depreciation	37,739	(21,812)	(K)	
		1,269	(L)	17,196
Total Operating Expenses	<u>402,337</u>	<u>10,410</u>		<u>412,747</u>
Net Operating Income	(55,241)	86,898		31,657
Interest Income	<u>720</u>			<u>720</u>
Income Available to Service Debt	<u>\$ (54,521)</u>	<u>\$ 86,898</u>		<u>\$ 32,377</u>

(A) Billing Analysis. Beech Grove Water proposed to increase its test-year revenues from water sales of \$344,018 by \$93,372 to reflect the Purchased Water Adjustment increase in rates made during the test year.²³ Beech Grove Water's adjustment meets the ratemaking criteria of being known and measurable and accepts the adjustment in Pro Forma operations.

(B) Nonrecurring Charges. As shown above, the adjustments to the nonrecurring charges result in a decrease to Miscellaneous Service Revenues of \$876.

(C) Late Payment Penalties. Beech Grove Water provided information in their application that was a product of their late payment penalties and nonrecurring charges during the test year and labeled them Forfeited Discounts and Miscellaneous Service Revenues; Other Revenues totaling detailing \$3,079.²⁴ Recently, due to the irregularity caused by the Covid Crisis and the moratorium on charging late payments the Commission has been calculated a pro forma adjustment utilizing three-year average of the late penalties assessed during 2017, 2018, and 2019. The three-year average in this instance is \$6,690.²⁵ Beech Grove Water provided the total late payment penalties paid during the test year totaling \$1,879.²⁶ The average of \$6,090 less late payment penalties collected during the test year results in an increase to test year late payment penalties of \$4,811.

²³ Case No. 2022-00047, *Electronic Purchased Water Adjustment Filing of Beech Grove Water System, Inc.* (Ky. PSC Feb. 25, 2022).

²⁴ Application, Attachment 4.

²⁵ Beech Grove Water's Response to Staff's First Request (filed May 11, 2022), Item 1j.

²⁶ Beech Grove Water's Response to Staff's First Request (filed May 11, 2022), Item 1j.

(D) Salaries and Wages – Reclassification Adjustments. In its application, Beech Grove Water proposed to make several reclassification adjustments to remove pension contributions,²⁷ employer payroll taxes,²⁸ and Unemployment Compensation Insurance²⁹ from Salaries and Wages and include them in the proper expense categories on its pro forma income statement. Commission Staff examined Beech Grove Water’s 2020 general ledger³⁰ and determined the proposed adjustments are proper to reflect the actual salaries and wages expense experienced in the test period.³¹ Therefore, Commission Staff included the proposed reclassification adjustments in pro forma operations.

(E) Salaries and Wages – Correction to Wages. In its application, Beech Grove Water proposed to increase salaries and wages \$52 to correct the amounts included in the 2020 annual report.³² Commission Staff examined the wages reported in the annual report and agrees that the adjustment is reasonable and necessary to report the actual salaries that should have been paid to its two employees. Therefore, Commission Staff increased pro forma Salaries and Wages \$52.

(F) Salaries and Wages – Wage Adjustment. On April 12, 2022, Beech Grove Water’s Board approved an increase of \$0.81 per hour for its two full-time employees who

²⁷ Application, Attachment 4, References, Adjustment B.

²⁸ Application, Attachment 4, References, Adjustment C.

²⁹ Application, Attachment 4, References, Adjustment D.

³⁰ Beech Grove Water’s Response to Staff’s First Request (filed May 11, 2022), Item 1a, “1a_2020_GL.xlsx.”

³¹ Commission Staff notes that the proposed reclassification adjustments have no impact on the overall revenue requirement.

³² Application, Attachment 4, References, Adjustment E.

are each paid a salary based on 2,080 hours worked per year.³³ Commission Staff used this information to calculate pro forma Salaries and Wages expense as \$76,128 as shown in the calculation below:

Current Employee Wage Rate	\$	18.30
Times: Two Current Employees		2
Times: Annual Hours Compensated		<u>2,080</u>
Pro Forma Salaries and Wages	\$	<u>76,128</u>

As discussed in adjustments (D) and (E), Beech Grove Water reclassified other payroll items and corrected the level of salaries included in the annual report. Factoring in for these adjustments, an adjustment of \$3,370 is necessary to normalize pro forma wages to the current level experienced by Beech Grove Water.³⁴

Beech Grove Water contributes three percent of employee wages to a 401(k) plan. No other fringe benefits are provided. Based on the increase to pro forma Salaries and Wages, Commission Staff calculated an additional \$101³⁵ increase to the employer contribution to Beech Grove Water’s 401(k) plan, and additional payroll taxes of \$258.³⁶ Therefore, Commission Staff increased pro forma expenses \$3,370, \$101, and \$258 to reflect the above items.

³³ Beech Grove Water’s Response to Staff’s First Request (filed May 11 2022), Item 1f, 2022 Board Minutes.

³⁴ $\$80,909 - \$2,183 - \$5,566 - \$454 + \$52 + \$3,370 = \$76,128$

³⁵ $\$3,370 \times 3\% = \101

³⁶ $\$3,370 \times 7.65\% = \258

(G) Capitalization of Cost of Customer Taps. During the test year, Beech Grove Water installed six 5/8-inch and one 1-inch new customer taps.³⁷ Beech Grove Water does not capitalize the costs incurred to perform new meter installations, nor does it keep a record of these costs.³⁸ Commission Staff is concerned that if Beech Grove Water does not keep sufficient documentation to calculate the expenses to install a customer tap, it is unlikely that Beech Grove Water is able to properly bill customers for meter sizes larger than the standard meter tap for which the fee is set. Commission Staff recommends the Commission require, in the Order in this proceeding, that Beech Grove Water retain sufficient information in its utility records to properly calculate the costs required to install its meter taps. In the absence of sufficient information in the record to properly calculate the expenses required to install its test year meter taps, Commission Staff calculated the estimated cost to install seven taps based on its revised tap fee for a standard 5/8- x 3/4-inch meter, and reduced Salaries and Wages expense and Materials and Supplies expense equally for a total reduction of \$6,650 as shown in the calculation below.

Revised Tap Fee	\$ 950
Times: Number of Taps Installed in 2020	<u>7</u>
Total Projected Cost to Install Customer Taps	6,650
Times: 50 Percent	<u>50%</u>
Reduction to Labor, Materials and Supplies Expense	<u><u>\$ 3,325</u></u>

³⁷ Beech Grove Water's Responses to Staff's First Request (filed May 11, 2022), Item 6.

³⁸ Beech Grove Water's Response to Staff's First Request (filed May 11, 2022), Item 6a.

In addition to the reduction in expense, Commission Staff capitalized its estimate for the calendar year 2020 meter installations in its adjustment to Depreciation Expense described in adjustment (M) below.

(H) Purchased Water. Beech Grove Water purchases water from Henderson Water and Daviess County Water District. Beech Grove Water proposed an adjustment to increase purchased water expense by \$85,433³⁹ from \$215,049 for its test year to reflect current purchased water rates approved through the Commission’s tariff filing system in TFS 2022-00024 and through the Commission’s June 2, 2021 Order in Case No. 2021-00196.⁴⁰ Commission Staff reviewed the 2020 invoices posted to the general ledger for purchased water cost and calculated an increase of \$87,769 to \$302,818 as shown below.

	Henderson Water	Daviess County Water District	Total
<i>General Ledger - Year Ended December 31, 2020</i>			
Dollars	\$ 209,376.88	\$ 5,672.26	\$ 215,049.14
Gallons	77,466,021	1,558,000	79,024,021
Effective Date	03/01/2022	06/02/2021	
Current Purchase Rate	\$ 3.8117	\$ 4.8400	
Pro Forma Cost	<u>\$ 295,277.23</u>	<u>\$ 7,540.72</u>	<u>\$ 302,817.95</u>
Purchase Cost Adjustment			<u>\$ 87,768.81</u>

Therefore, Commission Staff increased purchased water expense \$87,769, consistent with the general ledger.

³⁹ Application, Attachment 4, References, Adjustment F.

⁴⁰ TFS 2022-00024, Henderson Water Tariff Filing; Case No. 2021-000196, *Electronic Purchased Water Adjustment Filing of Daviess County Water District* (Ky. PSC June 2, 2021).

(I) Water Loss. In its application, Beech Grove Water proposed to reduce Purchased Water and Purchased Power Expense of \$43,218 and \$773, respectively, to account for the Association’s unaccounted for water loss in excess of 15 percent, 14.3827 percent pursuant to 807 KAR 5:066(6)(3).⁴¹ Commission Staff agrees that Beech Grove Water properly applied the regulation but recommends Purchased Water Expense be reduced by \$43,553, which further accounts for the increased purchased water cost discussed in adjustment (H), as shown below.

Pro Forma Purchased Water	\$ 302,818
Disallowed Water Loss Percentage	<u>14.3827%</u>
Disallowed Purchased Water	<u><u>\$ 43,553</u></u>

Therefore, Staff reduced pro forma Purchased Water and Purchased Power by \$43,553 and \$773, respectively.

(J) Capital Expenditures. Commission Staff reviewed Beech Grove Water’s 2020 general ledger and identified the purchase of a dump trailer and a water line locator that totaled \$5,546 that should have been capitalized and depreciated.⁴² In addition, Commission Staff identified two rentals of excavation equipment for line extensions totaling \$4,075 included in Contractual Services that should have been capitalized and depreciated.⁴³ Therefore, Commission Staff reduced Materials and Supplies and

⁴¹ Application, Attachment 4, References, Adjustment G.

⁴² Beech Grove Water’s Responses to Staff’s First Request (filed May 11, 2022), Item 1a, “1a_2020_GL.xlsx.”

⁴³ Beech Grove Water’s Responses to Staff’s First Request (filed May 11, 2022), Item 1a, “1a_2020_GL.xlsx.”

Contractual Services by \$5,546 and \$4,075, respectively, and included depreciation on these capital items as discussed in adjustment (M) below.

(K) Depreciation Expense. In its application, Beech Grove Water reported a test-year Depreciation expense of \$37,739. To evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the report published in 1979 by the National Association of Regulatory Utility Commissioners (NARUC) titled Depreciation Practices for Small Water Utilities (NARUC Study).⁴⁴ When no evidence exists to support a specific life that is outside the NARUC ranges, the Commission has historically used the midpoint of the ranges included in the NARUC Study to depreciate utility plant.

In its application, Beech Grove Water proposed to decrease Depreciation Expense \$21,812 to adjust for asset lives that fall outside of the ranged recommended in the NARUC Study. Commission Staff agrees with Beech Grove Water’s proposed adjustments and decreased pro forma Depreciation Expense \$21,812 accordingly.

(L) Depreciation on Capitalized Expenses. Commission Staff identified capital items described in adjustment (J) above which are summarized in the table below. Commission Staff calculated depreciation expense related to these items totaling \$1,269 and increased Depreciation Expense accordingly.

Asset	Cost	Staff Life	Adjusted Depreciation
Dump Trailer Reclassified to Capital posted 02/17/2020	4,800	7.00	686
Line Locator Reclassified to Capital posted 09/30/2020	746	10.00	75
Trencher rental for water main extension Reclassified to Capital posted 07/16/20	3,200	62.50	51
Trencher for Water Main Extension posted 11/19/20	875	62.50	14
7 Taps at \$3,500 (50-50 Material, Labor)	6,650	15	443
Total			<u>\$ 1,269</u>

⁴⁴ Application, ARF-SAO.pdf.

OVERALL REVENUE REQUIREMENT AND REQUIRED REVENUE INCREASE

In its application, Beech Grove Water calculated its overall revenue requirement and required revenue increase using a Debt Service Coverage (DSC) method that has been historically used by the Commission to calculate the Overall Revenue Requirement of water districts and water associations. This method allows for recovery of (1) cash-related pro forma operating expenses; (2) recovery of depreciation expense, a non-cash item, to provide working capital;⁴⁵ (3) the average annual principal and interest payments on all long-term debts; and (4) working capital that is in addition to depreciation expense. In this instance, Commission Staff disagrees with the methodology used by Beech Grove Water to calculate its revenue requirement and required increase. Historically, the Commission has used the operating ratio methodology⁴⁶ when there is no basis for a rate of return determination, the cost of the utility has fully or largely been funded through contributions, or there is little or no outstanding long-term debt. In this instance, Beech Grove Water's only existing indebtedness is a ten year note payable to the National Rural Water Association with an original principal balance of \$100,000. Commission Staff is of the opinion that an operating ratio of 88 percent is reasonable in this instance and will

⁴⁵ The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds for renewing and replacing assets. See *Public Serv. Comm'n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky. 1986). Although a water district's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district's general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. See Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

⁴⁶ Operating Ratio is defined as the ratio of expenses, including depreciation and taxes, to gross revenues. It is illustrated by the following equation:

$$\text{Operating Ratio} = \frac{\text{Operating Expenses} + \text{Depreciation} + \text{Taxes}}{\text{Gross Revenues}}$$

allow Beech Grove Water sufficient revenues to cover its reasonable operating expenses and provide for reasonable equity growth. Commission Staff's calculation of the revenue requirement using this methodology is shown below.

	Commission Staff
Pro Forma Operating Expenses	\$ 412,747
Divide by: 88 Percent Operating Ratio	<u>88%</u>
Overall Revenue Requirement	469,031
Add: Average Interest Expense	946
Less: Other Operating Revenue	(7,013)
Interest Income	<u>(720)</u>
Revenue Required from Rates	462,244
Less: Pro Forma Present Rate Service Revenues	<u>(437,391)</u>
Required Revenue Increase	<u>\$ 24,853</u>
Percentage Increase	<u>5.68%</u>

APPENDIX

APPENDIX TO COMMISSION STAFF'S REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2022-00054 DATED JUL 19 2022

Monthly Water Rates

5/8- x 3/4-Inch Meter

First	2,000 Gallons	\$ 21.25	Minimum Bill
Next	98,000 Gallons	\$ 0.00727	Per Gallon
Over	100,000 Gallons	\$ 0.00631	Per Gallon
Bulk Loading Station		\$ 0.00687	Per Gallon
Water Loss Reduction Surcharge*		\$6.24	Per Customer

*To be collected over 48 months or until approximately \$177,308 has been collected.

Nonrecurring Charges

Meter Resetting Charge	\$ 9.00
Meter Resetting Charge After Hours	\$ 40.00
Meter Test Request Charge	\$ 9.00
Meter Test Request Charge After Hours	\$ 40.00
Reconnection Charge	\$ 9.00
Reconnection Charge After Hours	\$ 40.00
Termination Charge	\$ 9.00
Termination Charge After Hours	\$ 40.00
Turn On Charge	\$ 9.00
Turn On Charge After Hours	\$ 40.00
Tap On Fee, 5/8- x 3/4-Inch Meter	\$950.00

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