

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF BRACKEN COUNTY	)	
WATER DISTRICT FOR (1) A CERTIFICATE OF	)	
PUBLIC CONVENIENCE AND NECESSITY TO	)	CASE NO.
CONSTRUCT; (2) FINANCE; AND (3) AUTHORITY	)	2002-00395
TO ADJUST RATES FOR A WATER MAIN	)	
IMPROVEMENTS PROJECT	)	

ORDER

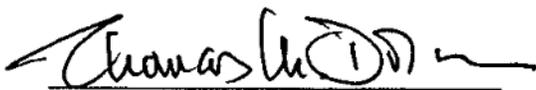
On November 26, 2002, Bracken County Water District ( Bracken ) filed its application for Commission approval of proposed water rates. Commission Staff, having performed a limited financial review of Bracken s operations, has prepared the attached Staff Report containing Staff s findings and recommendations regarding the proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 10 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall have no more than 10 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for a hearing or informal conference. If no request for a hearing or informal conference is received, this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 9<sup>th</sup> day of May, 2003.

By the Commission

ATTEST:



Executive Director

STAFF REPORT  
ON  
BRACKEN COUNTY WATER DISTRICT  
CASE NO. 2002-00395

On October 31, 2002, Bracken County Water District ( Bracken ) filed an application seeking to increase its rates pursuant to 807 KAR 5:001, Section 10. The Case was considered filed on November 26, 2002 when all filing deficiencies were cured.

Bracken selected the twelve months ended December 31, 2000 as its test year. Bracken determined its pro forma revenue requirements to be \$753,600. In part, the revenue requirement was calculated by dividing test year expenses by test year number of customers and multiplying the result by the projected number of customers after the proposed construction is completed.

Bracken s approach is not conventional and does not meet the known and measurable criteria for adjusting test year expenses pursuant to 807 KAR 5:001, Section 10. Staff was not able to ascertain from Bracken s application its: 1) stated test year revenues, 2) normalized revenues from current rates or 3) the increase in normalized revenues that would result from the proposed rates. The application did state that the proposed rates would result in an increase of 12 percent on an average customer s bill.

To review Bracken s current rates Staff selected the 12 months ended December 31, 2001 as its test year. Adjustments were made to test year operations that were known and measurable.

The scope of Staff s review was limited to obtaining information as to whether the test period operating revenues and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

This report summarizes Staff s review and recommendations. Scott Lawless is responsible for the revenue requirement determination while Eddie Beavers determined pro forma revenues and developed the cost of service study.

Staff developed a test year adjusted operating statement and explanation of adjustments for Bracken as shown in Attachment A. Attachment B details Staff s calculation of revenues required from rates based on the adjusted operating statement and long-term financing of Bracken. The rates developed by Staff to produce the required revenue were determined in the cost of service study shown in Attachment C.

During its review Staff developed a billing analysis to test the reasonableness of reported test year revenues and to formulate a tool to determine whether the rates calculated in the cost of service study would produce the appropriate level of revenues. Using this billing analysis Staff determined that Bracken s requested rates would produce \$629,905 in annual operating revenues. An increase of \$84,839 over normalized revenues as determined by Staff of \$545,066. This amount is \$155,589 less than the revenue required from rates as calculated by Staff of \$785,494 but does allow Bracken to meet its minimum cash needs, refer to Attachment B. Staff recommends the Commission approve the rates shown in Attachment D of this report. These rates will generate revenues equal to those requested by Bracken and were determined using

Staff's cost of service study as shown in Attachment C with adjustments eliminating depreciation and a portion of debt coverage from revenue requirements.

Bracken may choose to amend its application and request rates that will produce revenues up to but not exceeding the \$785,494 as calculated by Staff. If Bracken decides to amend its application, it should so state in its response to this report. Bracken would be required to notice its customers of the revised rate change as required by 807 KAR 5:011 Section 8.

Signatures

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Prepared by: Jack Scott Lawless, CPA  
Public Utility Financial Analyst  
Water and Sewer Revenue  
Requirements Branch  
Division of Financial Analysis

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Prepared by: Eddie Beavers  
Public Utility Rate Analyst  
Communications, Water and  
Sewer Rate Design Branch  
Division of Financial Analysis

ATTACHMENT A  
STAFF REPORT CASE NO. 2002-00395  
STAFF S ADJUSTED OPERATING STATEMENT  
AND EXPLANATION OF ADJUSTMENTS

	Test Year	Adjustments	Ref.	Pro forma
Operating Revenue				
Water Sales	600,122	(12,491)	A	
		2,074	B	
		(44,639)	C	545,066
Surcharge Revenue from Division I	109,542			109,542
Other Operating Revenue	20,461			20,461
<b>Total Operating Revenue</b>	<b>730,125</b>	<b>(55,056)</b>		<b>675,069</b>
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	117,187	8,555	D	125,742
Salaries and Wages - Officers	7,200			7,200
Purchased Water	290,624	(55,017)	E	
		27,008	F	262,615
Purchased Power	19,031			19,031
Chemicals	89			89
Materials and Supplies	69,427	(4,320)	G	65,107
Contractual Services - Accounting	2,800			2,800
Contractual Services - Other	8,800	(4,500)	H	4,300
Rental of Bldg./Real Property	7,200			7,200
Transportation Expense	17,331			17,331
Insurance Other	29,759	11,742	I	41,501
Bad Debt Expense	2,556			2,556
Miscellaneous Expense	21,084			21,084
Total Operation and Maintenance Expenses	593,088	(16,532)		576,556
Depreciation and Amortization Expense	108,478	20,886	J	129,364
Taxes Other Than Income	10,869	563	D	11,432
<b>Total Operating Expenses</b>	<b>712,435</b>	<b>4,916</b>		<b>717,351</b>
Net Operating Income	17,690	(59,972)		(42,282)
Plus: Interest Income	12,149			12,149
Income Available to Service Debt	29,839	(59,972)		(30,133)

(A) Water Sales. Bracken reported in their 2001 Annual Report operating revenue from rates of 600,122. This amount was decreased by a net calculation of \$12,491 from

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two purchased water adjustments during the test year and one purchased water adjustment increase that became effective on February 27, 2003.

(B) Water Sales. Bracken s application estimated that due to their line improvements an additional six new customers will be added to the system, these customers have been included in the normalized billing analysis resulting in an increase of \$2,074 in revenue from rates. This adjustment results in total normalized sales of 136,897,950 gallons.

(C) Water Sales. Included in reported water sales for the test year was \$44,639 collected through a \$.33 per thousand surcharge. The surcharge is no longer collected and the test year revenues have been eliminated to determine pro forma operations. See item E for further discussion of the surcharge.

(D) Salaries and Wages Employees and Taxes Other Than Income. Since the end of the test year each employee of Bracken received an increase in their hourly pay rate between 6 and 10 percent. The average pay increase weighted to total test year salary paid to each employee is 7.3 percent. Staff recommends that test year operating expenses be increased to reflect the new wage rates as follows:

	Salaries	Payroll Taxes
Test year expense	\$117,187	\$7,712
Times 7.3 percent	<u>7.3%</u>	<u>7.3%</u>
Increase	<u>\$8,555</u>	<u>\$563</u>

(E) Purchased Water. Bracken purchases wholesale water from the city of Augusta. By contract Augusta is entitled to adjust the rate charged to Bracken annually based on

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its yearend independent annual audit report. In previous years Augusta had not changed the rate charged to Bracken which resulted in Bracken being undercharged. Bracken agreed to pay a surcharge of \$.33 per 1,000 gallons to Augusta until such time as all undercharges had been paid. Bracken paid the city of Augusta \$55,017 during the test year as a result of the surcharge. In March 2002 Augusta, having collected all previous undercharges, ceased assessing the surcharge. Test year expenses have been decreased by \$55,017 as the expense will no longer be incurred

Bracken passed the same \$.33 surcharge through to its customers. For Bracken to have collected surcharge revenue equal to the monthly assessment of Augusta a gross up factor would have been required to account for the difference in gallons purchased and sold by Bracken. As this was not done, Bracken continued charging its customers the \$.33 surcharge until June 2002 when all amounts paid to Augusta had been recovered.

(F) Purchased Water. In addition to a monthly flat fee of \$4,407.38, Bracken currently pays Augusta a consumption rate of \$1.28 per thousand gallons. During the test year the rate was \$1.12 per thousand gallons. This results in an increase in test year expenses that warrants adjustment.

Staff calculated its adjustment by applying Augusta s current wholesale rate of \$1.28 to Bracken s normalized water purchases of 164,560,584 gallons. Normalized purchases were calculated by dividing normalized sales of 136,897,950 gallons, as referenced in item (B) above, by the test year gallons sold / purchased percentage of

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83.19.<sup>1</sup> It is important to note that this percentage accounts not only for water lost but also water used by Bracken for maintenance of its system. The following adjustment was calculated.

Normalized gallons to be purchased	164,560,584.00
Current rate of Augusta per 1,000	<u>1.28</u>
Pro forma	210,637.55
Less: Test year	<u>(183,630.00)</u>
Increase	<u>27,007.55</u>

(G) Materials and Supplies. During the test year Bracken expended \$5,400 to paint the interior and exterior of the Lenoxburg Tank. This routine maintenance is performed every five years. The appropriate rate treatment is to amortize the cost over a five-year period. Test year expenses have been reduced by \$4,320 (\$5,400 total cost / 5 years = \$1,080 annual recovery - \$5,400 expense in test year = \$(4,320) adjustment).

(H) Contractual Services Other. During the test year Bracken paid its engineer \$7,500 on a \$15,000 contract for the development of a long and short-term plan and a water distribution system computer model. This fee is nonrecurring and should therefore be amortized. Staff recommends that a 5-year amortization period be utilized. A five-year period affords the utility a reasonable recovery period while not being over burdensome on its ratepayers. Staff has reduced test year expenses by \$4,500

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<sup>1</sup> Test year gallons sold	136,397,910.00
Divided by: Test year gallons purchased	<u>163,955,600.00</u>
Gallons sold/purchased percentage	<u>83.19%</u>

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(\$15,000 contract / 5 years = \$3,000 annual recovery - \$7,500 test year amount = \$(4,500) adjustment) to reflect the amortization of this cost.

(I) Insurance Other. During the test year Bracken reported \$17,462 in health insurance expense. On March 19, 2003 Bracken s Board of Commissioners gave final approval to continue the test year health insurance plan at an annual expense of \$29,204 (\$2,433.70 monthly premium x 12 months). Staff recommends that test year expenses be increased by \$11,742 (\$29,204 - \$17,462)

(J) Depreciation. As part of its application Bracken requested approval to construct \$928,000 in facility improvements that include the construction of a new storage facility, new water mains and the replacement of certain existing mains. By Interim Order dated December 3, 2002 the Commission approved the proposed construction and the project s financing. Depreciation on the project should be included in pro forma operations.

Depreciable costs of the proposed project total \$923,000 (\$928,000 total cost - \$5,000 cost of land). To calculate the depreciable basis of the proposed mains and storage facility, administrative and design costs were allocated based on the proportionate direct costs of each improvement. The adjustment to test year expenses was calculated as follows:

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	Direct Costs	Percentage	Allocation of Administrative and Design	Total	Divide by Depreciable Life	Depreciation Expense
Cost of Tank	392,923	52.56%	92,246	485,169	40	12,129
Cost of Mains	354,585	47.44%	83,246	437,831	50	8,757
Total	747,508	100.00%	175,492	923,000		20,886

Six miles of the new 8-inch main included in this project will replace existing main that was placed into service in 1963. Having had a 40-year useful life assigned to all mains included on Bracken s depreciation schedule, test year depreciation expense includes depreciation taken on the mains to be replaced. Adjustment should be made to eliminate this expense; however, given the limited information provided in Bracken s depreciation schedule, Staff was not able to identify the expense. Nor was Staff able to form a basis for estimating the main s costs. Once Bracken has completed the main replacement project, the original cost of the replaced main should be determined and removed from Bracken s books and records along with all attributable accumulated depreciation.

ATTACHMENT B  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Bracken was formed through the merger of Bracken County Water District No. 1 ( Bracken 1 ) and Western Bracken County Water District ( Western Bracken ) pursuant to Commission Order dated May 11, 1995 in Case No. 1995-00068.<sup>2</sup> At the time of merger Bracken 1 had outstanding a 1993 Kentucky Infrastructure Authority ( KIA ) loan and a 1995 lease agreement with First National Bank of Brooksville ( First National ). Western Bracken had outstanding a General Electric Capital ( GE ) loan.

The Order in Case No. 1995-00068 required the merged district to maintain separate accounting procedures as necessary to ensure that all bonded obligations were retired as specified in KRS 74.363. Thus, two divisions were formed. Division I represented the area once served by Bracken 1 while Division II was that of Western Bracken.

Bracken filed its first general rate application in Case No. 1996-00192.<sup>3</sup> The Final Order dated March 5, 1997 consolidated the general rates of the two divisions but set separate surcharges to retire the debts outstanding at the time of merger. The surcharges were established as follows:

Division I	
Retail Customers	Flat Monthly Surcharge per Customer \$6.57
City of Brooksville	Monthly Surcharge per thousand gallons \$.46
Division II	
Retail Customers	Flat Monthly Surcharge per Customer \$3.45

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<sup>2</sup> Case No. 1995-00068, The Application of Bracken County Water District No. 1 and Western Bracken Water District for Approval of the Merger of Bracken County Water District No. 1 and Western Bracken Water District

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CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Bracken's next general rate application was filed in Case No. 2000-00201<sup>4</sup>

wherein the surcharges were adjusted as follows:

Division I	
Retail Customers	Flat Monthly Surcharge per Customer \$6.44
City of Brooksville	Monthly Surcharge per thousand gallons \$.47

Division II	
Retail Customers	Flat Monthly Surcharge per Customer \$2.98

In this case Bracken proposes to continue charging the Division I surcharge as approved in Case No. 2000-00201 but eliminate from its tariff the Division II surcharge as the GE loan has been fully repaid.

The surcharge currently in place for Division I will provide revenues adequate to pay annual interest and principal payments. During the test year Bracken collected \$109,542 through the Division I surcharge while paying \$75,996 for principal and interest on the related debts. Staff recommends that the surcharge remain in effect until such time as the related debts are retired in full. Staff reminds Bracken that collection of the surcharge is to cease immediately upon collection of funds adequate to fully retire the debts.

Bracken, on behalf of Division II customers, paid the remaining balance of the GE loan in December 2000. Bracken ceased collection of the surcharge in November 2000. Staff recommends that the Commission allow Bracken to remove the Division II surcharge from its tariff.

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<sup>3</sup> Case No. 1996-00192, Adjustment of Rates of the Bracken County Water District.

<sup>4</sup> Case No. 2000-00201, An Adjustment of Rates of the Bracken County Water District.

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The Order in Case No. 1996-00192 that originated the surcharges required all surcharge revenue to be deposited in an escrow account separate from all other cash accounts. It further required Bracken to file along with its Annual Reports to the Commission, an annual summary containing the following information: separate monthly surcharge billings and collections; separate monthly bank statements for the interest bearing surcharge accounts; and loan payments from the account. It is apparent that Bracken has established separate bank accounts to administer the surcharges but Staff could find no evidence that the proper reporting has been submitted to the Commission along with Bracken s Annual Reports.

Staff recommends that Bracken be required to submit to the Commission the required annual summaries for each calendar year end since the inception of the surcharges up through the date of Bracken s most recently filed Annual Report. Bracken should provide all future summaries along with its Annual Reports as originally ordered. Staff further recommends that, if after a scheduled debt payment is made on either of the surcharged debts there remains a cash balance in the escrow account in excess of the annual principal and interest payment due the following year, Bracken use the excess funds for early retirement of principal unless Bracken can prove financial hardship will result or penalty would be levied by the funding agent.

A portion of Division I s surcharge is used to retire the KIA debt that was secured to refund a 1989 Farmer s Home Administration debt. Staff has found no evidence that this Commission granted Bracken the authority to issue the KIA debt. However,

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considering the Commission has included a provision for its recovery in Bracken s two previous rate cases, Staff does not recommend adjustment at this time.

Bracken currently has outstanding a note owed to the Buffalo Trace Area Development District ( Buffalo ) that was assumed in the fall of 2000. The original amount of the note was \$75,000. The proceeds were used to install a telemetry system. This note is repaid from the general funds of Bracken. Staff found no evidence to indicate that Bracken had sought or received authority from this Commission to assume the Buffalo debt. KRS 278.300 clearly states that no utility shall issue any securities or evidences of indebtedness, or assume any obligation or liability in respect to the securities or evidences of indebtedness of any other person until it has been authorized so to do by order of the commission.

Staff will not recommend adjustment in this case for Bracken s violation of KRS 278.300. However, Staff advises Bracken that any future violation may result in an adjustment of rates and/or action brought by this Commission against Bracken and its representatives as provided in KRS 278.990.

In this case Bracken has requested and received authority to issue additional debt in the amount of \$928,000 from the Kentucky Infrastructure Authority. This loan will be used to fund the main and storage facility improvement project previously approved in this case by Order dated December 3, 2002. The loan is to be repaid from the general funds of Bracken.

The 1995 First National Bank lease agreement requires Bracken to establish rates that will produce a 120 percent coverage of all existing and proposed annual debt

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CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

payments. Staff used this method to determine Bracken s revenue requirement. The principal and interest payments of the surcharged debt have been separated from the general revenue requirements.

Staff calculated Bracken s revenue required from general rates as follows:

Pro forma Operating Expenses	717,351
Existing Debt Principal and Interest	
Surcharged Debt:	
Kentucky Infrastructure Authority, 1993	37,871
First National Bank of Brooksville	38,125
Unsurcharged: Buffalo Trace Area Development	9,112
KIA Debt Approved in this Case, Principal and Interest	<u>62,182</u>
Total Prinicipal and Interest Payements	147,290
20 Percent Debt Coverage for all Payments	<u>29,458</u>
Total Revenue Requirement	894,100
Less: Surcharged Debt Payments	(75,996)
Other Operating Revenue	(20,461)
Interest Income	<u>(12,149)</u>
Income Required from Rates for Service	785,494
Less: Normalized Revenue from Rates for Service	<u>(545,066)</u>
Required Increase	<u><u>240,428</u></u>
Revenue Required from Rates as determined by Staff	785,494
Less: Depreciation Expense Included in Staff's Revenue Requirement	(129,364)
Debt Coverage included in Staff's Revenue Requirement	<u>(29,458)</u>
Minimum Cash Needed to Operate	626,672
Compared to Revenue generated by rates proposed by Bracken	<u>629,905</u>
Excess Over Minimum Cash Needed to Operate	<u><u>3,233</u></u>

ATTACHMENT C  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Bracken County Water District  
Case No. 2002-00395

ATTACHMENT C

Billing Analysis

**Billing Analysis Normalized**

Billing Analysis BCWD Proposed Rates

Billing Analysis Cost of Service Rates

Cost of Service Study

**Total Water Sold**

Jointly Used Miles

Wholesale Allocation Factors

**Allocation of Plant Value**

Allocation of Depreciation

Allocation of Wholesale O/M Expenses

Allocation of Retail O/M Expenses

Allocation of Cost of Service

Calculation of Water Rates

Cost of Service Rates

Comparison of Rates

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Bracken County Water District

Staff Billing Analysis

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CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

BILLING ANALYSIS FOR: BRACKEN COUNTY WATER DISTRICT  
TEST PERIOD FROM JANUARY THROUGH DECEMBER 2001  
USAGE TABLE NORMALIZED WITH CURRENT RATES

CLASS:			FIRST	OVER
USAGE	BILLS	GALLONS	2,000	2,000
FIRST 2,000	5,840	5,477,600	5,477,600	
OVER 2,000	14,859	102,618,550	29,718,000	72,900,550
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TOTAL	20,699	108,096,150	35,195,600	72,900,550

REVENUE TABLE  
REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	20,699	35,195,600	\$11.24	\$232,657
OVER	2,000		72,900,550	3.55	258,797
Double	56 Customers	672		11.24	7,553
Hook-ups					
Wholesale			27,467,900	3.03	83,228
Bulk Sales			1,333,900	5.60	7,470
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TOTAL		21,371	136,897,950		\$589,705

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BILLING ANALYSIS FOR: BRACKEN COUNTY WATER DISTRICT  
TEST PERIOD FROM JANUARY THROUGH DECEMBER 2001  
USAGE TABLE NORMALIZED WITH BCWD PROPOSED RATES

CLASS: USAGE	BILLS	GALLONS	FIRST 2,000	OVER 2,000
FIRST 2,000	5,840	5,477,600	5,477,600	
OVER 2,000	14,859	102,618,550	29,718,000	72,900,550
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TOTAL	20,699	108,096,150	35,195,600	72,900,550

REVENUE TABLE  
REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	20,699	35,195,600	\$11.90	\$246,318
OVER	2,000		72,900,550	3.81	277,751
Double Hook-ups	56 Additional Customers	672		11.90	7,997
Wholesale			27,467,900	3.29	90,369
Bulk Sales			1,333,900	5.6	7,470
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	TOTAL	21,371	136,897,950		\$629,905

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BILLING ANALYSIS FOR: BRACKEN COUNTY WATER DISTRICT  
TEST PERIOD FROM JANUARY THROUGH DECEMBER 2001  
USAGE TABLE NORMALIZED WITH COST OF SERVICE STUDY RATES

CLASS: USAGE	BILLS	GALLONS	FIRST 2,000	OVER 2,000
FIRST 2,000	5,840	5,477,600	5,477,600	
OVER 2,000	14,859	102,618,550	29,718,000	72,900,550
<hr/>				
TOTAL	20,699	108,096,150	35,195,600	72,900,550

REVENUE TABLE  
REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	20,699	35,195,600	\$14.33	\$296,617
OVER	2,000		72,900,550	5.65	411,888
Double Hook-Ups	56 Additional Customers	672		14.33	9,630
Wholesale			27,467,900	2.31	63,451
Bulk Sales			1,333,900	5.60	7,470
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TOTAL		21,371	136,897,950		\$789,055

ATTACHMENT C  
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Bracken County Water District

Staff Cost of Service Study

ATTACHMENT C  
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TOTAL WATER SOLD		
<b>Bracken County Water District</b>		
	GALLONS	Percent
Line Loss <sup>1</sup>	18,594,700	11.43%
Sales to Retail Customers <sup>2</sup>	108,858,100	
Sales to Wholesale Customers <sup>2</sup>	27,467,900	
Plant Use <sup>1</sup>	7,740,300	4.76%
Total Water Produced and Purchased <sup>1</sup>	162,661,000	
Total Water Sold <sup>2</sup>	136,326,000	

Source: 2001 PSC Annual Report<sup>1</sup>  
 Staff Billing Analysis<sup>2</sup>

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<b>Jointly Used Mains</b>					
<b>Bracken County Water District</b>					
				Jointly used	
Main Size	Feet	Total miles of line	Inch Miles	Miles of line	Inch Miles
12	10560	2	24		
10	19536	3.7	37		
8	77088	14.6	116.8	0.75	6
6	174768	33.1	198.6	1	6
4	417120	79	316		
3	157344	29.8	89.4		
2.5	7920	1.5	3.75		
2	44880	8.5	17		
	909216	172.2	802.55	1.75	12
Percentage of jointly used line - inch miles					0.0150

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<b>WHOLESALE ALLOCATION FACTORS</b>		
<b>Bracken County Water District</b>		
		FACTOR
Line Loss Percentage		0.1143
Plant Use Percentage		0.0476
Allowable Line Loss & Plant Use	$0.1143+0.0476$	0.1619
Production Multiplier	$1/1-0.1619$	1.1932
Inch Mile Ratio	$12/802.55$	0.0150
Wholesale Share of Line Loss	$0.0150*0.1143$	0.0017
Joint Share Line Loss/Plant Use	$0.0017+0.0476$	0.0493
Wholesale Production Multiplier	$1/1-0.0493$	1.0519
Production Allocation Factor	$27,467,900/136,326,000*$ $(1.0519/1.1932)$	0.1776
Pipeline Transmission Factor	$27,467,900/136,326,000*$ $0.0150$	0.0030
Use Factor	$27,467,900/136,326,000$	0.2015

ATTACHMENT C  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Allocation of Plant Value							
Bracken County Water District							
	<b>Total</b>	<b>Allocation Factor1</b>	<b>Wholesale</b>	<b>Retail</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Organization	\$1,122	0.0030	\$3	\$1,119		\$1,119	
Land & Land Rights	9,126	0.0030	27	9,099		9,099	
Structures and Improvements	12,359	0.1776	2,195	10,164		10,164	
Collecting & Impounding Res.	36,900	0.1776	6,553	30,347		30,347	
Lakes, Rivers & Other Intakes	110,873	0.1776	19,691	91,182		91,182	
Generation Equipment	281,559	0.1776	50,005	231,554		231,554	
Pumping Equipment	39,060	0.0030	117	38,943		38,943	
Distribution Reservoirs & Standpipes	30,535	0.0030	92	30,443		30,443	
Transmission & Distribution Mains	2,934,638	0.0030	8,804	2,925,834		2,925,834	
Meters & Meter Installations	220,018						\$220,018
Other Plant & Misc Equipment	7,725	0.0030	23	7,702		7,702	
<b>Subtotal</b>	<b>\$3,683,915</b>		<b>\$87,510</b>	<b>\$3,596,405</b>		<b>\$3,376,387</b>	<b>\$220,018</b>
Wholesale Allocation Percentages	100%		2.4%	97.6%			
Retail Allocation Percentages						93.9%	6.1%
Office Furniture & Equipment	\$52,285	0.0030	\$157	\$52,128		\$49,096	\$3,189
Transportation Equipment	7,725	0.0030	23	7,702		7,254	471
Tools, Shop & Garage Equipment	417	0.0030	1	416		392	25
Communication Equipment	88,267	0.0030	265	88,002		82,883	5,384
Subtotal	\$148,694		\$446	\$148,248		\$139,625	\$9,069
<b>Total</b>	<b>\$3,832,609</b>		<b>\$87,956</b>	<b>\$3,744,653</b>		<b>\$3,516,012</b>	<b>\$229,087</b>

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 CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Wholesale Allocation Percentages	100%		2.4%	97.6%			
Retail Allocation Percentages	100%					93.9%	6.1%
Source: 2001 PSC Annual Report							
1Allocation Factor used to determine Wholesale Customer Share of Plant Value.							

ATTACHMENT C  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Allocation of Depreciation							
Bracken County Water District							
	Total	Allocation Factors <sup>1</sup>	WHOLE SALE	RETAIL	Commodity	Demand	Customer
Organization	\$508	0.0030	\$2	\$506		\$506	
Land & Land Rights	4,921	0.0030	15	4,906		4,906	
Structures & Improvements	7901	0.1776	1,403	6,498		6,498	
Wells & Springs	66,845	0.1776	11,872	54,973		54,973	
Collecting & Impounding	33,225	0.1776	5,901	27,324		27,324	
Power Generating Equipment	171,468	0.0030	514	170,954		170,954	
Water Treatment Equipment	2,941	0.1776	522	2,419		2,419	
Dist. Reservoirs & Standpipes	8,940	0.0030	27	8,913		8,913	
Trasmission & Distribution Mains	1,277,082	0.0030	3,831	1,273,251		1,273,251	
Other Plant	4,858	0.0030	15	4,843		4,843	
Meters	118,453			118,453			\$118,453
Subtotal	\$1,697,142		\$24,102	\$1,673,040		\$1,554,587	\$118,453
Wholesale Allocation Percentages	100%		1.4%	98.6%			
Retail Allocation Percentages	100%					92.9%	7.1%
Office Furniture & Equipment	\$19,973	0.0030	\$60	\$19,913		\$18,499	\$1,414
Transportation Equipment	2,839	0.0030	9	2,830		2,629	201
Tools, Shop & Garage Equip	417	0.0030	1	416		386	30
Power Operated Equip	5,803	0.0030	17	5,786		5,375	411
Subtotal	\$29,032		\$87	\$28,945		\$26,889	\$2,056
Total	\$1,726,174		\$24,189	\$1,701,985		\$1,581,476	\$120,509

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 CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Wholesale Allocation Percentages	100%		1.4%	98.6%			
Retail Allocation Percentages	100%					92.9%	7.1%
Source: 2001 PSC Annual Report							
1Allocation Factor used to determine Wholesale Customer Share of Depreciation.							

ATTACHMENT C  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Allocation of Operation & Maintenance Expense for Wholesale Customer				
Bracken County Water District				
	Total	Allocation Factor	Wholesale	Retail
Salaries:				
Meter Reading/Collection	\$32,474			\$32,474
Trans/Dist.	85,150	0.0030	\$255	84,895
Purchased Water	262,615	0.2015	52,917	209,698
Purchased Power	19,031	0.2015	3,835	15,196
Chemicals	89	0.2015	18	71
Contract Services	4,300			4,300
Bad Debt Expense	2,556			2,556
Materials and Supplies	65,107	0.0030	195	64,912
Transportation	17,331	0.0030	52	17,279
Insurance				
Health Insurance				
Meter Reading/Collection	7,710			7,710
Trans/Dist.	19,567	0.0030	59	19,508
Life Insurance				
Meter Reading/Collection	118			118
Trans/Dist.	297	0.0030	1	296
Workers Comp				
Meter Reading/Collection	711			711
Trans/Dist.	1,805	0.0030	5	1,800
Misc. Expense	5,528	0.0030	17	5,511
Salaries & Wages-Admin	8,118	0.0030	24	8,094
Salaries & Wages-Officers	7,200	0.0030	22	7,178
Insurance - Property	9,159	0.0030	27	9,132
Contract Services - Accounting	2,800	0.0030	8	2,792
Misc. Expense	15,556	0.0030	47	15,509
Rental of Bldg/Real Property	7,200	0.0030	22	7,178
Insurance - Other		0.0030		
Health	1,927	0.0030	6	1,921
Workers Comp	178	0.0030	1	177
Life	29	0.0030	0	29
Payroll Taxes	11,432	0.0030	34	11,398
Total Operating Expenses	\$587,988		\$57,545	\$530,443
Depreciation1	129,364	0.0140	1,811	127,553
Debt Service2	176,748		4,065	172,683
LESS:Other Operating Revenue	(20,461)			(20,461)
Surcharged Debt	(75,996)			(75,996)

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CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Payments <sup>3</sup>				
Interest Income	(12,149)			(12,149)
Bulk Sales	(7,470)			(7,470)
Total Revenue Required from Rates	\$778,024		\$63,421	\$714,603
1Wholesale Depreciation based on the Wholesale Allocation Percentage shown on depreciation allocation sheet.				
2Wholesale Debt Service based on percentage shown on plant value allocation sheet.				
3Allocation Factor used to determine Wholesale Customer Share of O&M Expenses.				
Whole Sale Rate = Wholesale Revenue Required/Sales to Wholesale Customers.				\$2.31

ATTACHMENT C  
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CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Allocation of Operation & Maintenance Expense for Retail Customers				
Bracken County Water District				
	Total	Commodity	Demand	Customer
Salaries:				
Meter Reading/Collection	\$32,474			\$32,474
Trans/Dist.	84,895		\$84,895	
Purchased Water	209,698	209,698		
Purchased Power	15,196	15,196		
Chemicals	71	71		
Bad Debt Expense	2,556			2,556
Materials and Supplies	64,912		64,912	
Insurance				
Health Insurance				
Meter Reading/Collection	7,710			7,710
Trans/Dist.	19,508		19,508	
Life Insurance				
Meter Reading/Collection	118			118
Trans/Dist.	296		296	
Workers Comp				
Meter Reading/Collection	711			711
Trans/Dist.	1,800		1,800	
Misc. Expense	5,511		5,511	
Taxes other than Income				
Meter Reading/Collection	3,009			3,009
Trans/Dist.	7,637		7,637	
<b>SUBTOTAL</b>	<b>456,102</b>	<b>224,965</b>	<b>184,559</b>	<b>46,578</b>
Less Commodity	224,965			
<b>TOTAL</b>	<b>\$231,137</b>	<b>\$224,965</b>	<b>\$184,559</b>	<b>\$46,578</b>
<b>PERCENTAGE</b>	<b>100%</b>		<b>79.8%</b>	<b>20.2%</b>
Salaries & Wages-Admin	\$8,094		\$6,459	\$1,635
Salaries & Wages-Officers	7,178		5,728	1,450
Insurance - Property	9,132		7,287	1,845
Contract Services - Accounting	2,792		2,228	564
Contract Services - Other	4,300		3,431	869
Transportation	17,279		13,789	3,490
Misc. Expense	15,509		12,376	3,133
Rental of Bldg/Real Property	7,178		5,728	1,450
Insurance - Other				
Health	1,921		1,533	388

ATTACHMENT C  
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CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Workers Comp	177		141	36
Life	29		23	6
Taxes other than Income				
Administrative Personnel	752		600	152
Subtotal	74,341		59,323	15,018
Total Operating Expenses	\$530,443	\$224,965	\$243,882	\$61,596

ATTACHMENT C  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Allocation of Cost of Service For Retail Customers				
Bracken County Water District				
	<b>Total</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Operation & Maintenance	\$530,443	\$224,965	\$243,882	\$61,596
Debt Service <sup>1</sup>	172,683		162,149	10,534
Depreciation <sup>2</sup>	127,553		118,497	9,056
General Water Service Cost	\$830,679	\$224,965	\$524,528	\$81,186
Less:				
Other Operating Revenue	(\$20,461)			(\$20,461)
Surcharged Debt Service <sup>1</sup>	(75,996)		(71,360)	(4,636)
Interest Income	(12,149)			(12,149)
Bulk Sales	(7,470)	(7,470)		
<b>Revenue Required from Rates for Retail Customers</b>	<b>\$714,603</b>	<b>\$217,495</b>	<b>\$453,168</b>	<b>\$43,940</b>
NOTES:				
<sup>1</sup> Debt Service has been allocated on the Retail Allocation Percentage of Plant Value from plant value allocation sheet.				
<sup>2</sup> Depreciation has been allocated on the Retail Allocation Percentage of Depreciation from depreciation allocation sheet.				

ATTACHMENT C  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Calculation of Water Rates			
Bracken County Water District			
	<b>Total</b>	<b>First 2,000 gallons</b>	<b>Over 2,000 gallons</b>
Actual Water Sales:			
Thousand Gallons	107,596,110	35,051,600	72,544,510
Percent	100%	32.6%	67.4%
Weighted Sales for Demand:		1.5	1
Thousand Gallons	125,121,910	52,577,400	72,544,510
Percent	100%	42.0%	58.0%
Allocation of Volumetric Costs:			
Commodity	\$217,495	\$70,903	\$146,592
Demand	453,168	190,331	262,837
Customer	43,940	43,940	
<b>Total</b>	<b>\$714,603</b>	<b>\$305,174</b>	<b>\$409,429</b>
Number of Bills	20,627		
Double Hook-Up Customers	672		
	21,299		
<b>Cost of Service Rates<sup>1</sup></b>		<b>\$14.33</b>	<b>\$5.65</b>
<sup>1</sup> \$0.01 added to volumetric rate to establish rates that generate the required revenue requirement.			

ATTACHMENT C  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Verification of Cost of Service Rates				
Bracken County Water District				
	<b>Bills</b>	<b>Gallons</b>	<b>Rate</b>	<b>Revenue</b>
First 2,000 gallons	20,627	35,051,600	\$14.33	\$295,585
Over 2,000 gallons		72,544,510	5.65	409,876
Double Hook-up Customers	672		14.33	9,630
Wholesale Rate		27,467,900	2.31	63,451
Total Revenue from Rates				\$778,542
Other Income:				
Bulk Sales Rate		1,333,900	5.60	\$7,470
Other Operating Revenue				20,461
Surcharged Debt Payments				75,996
Interest Income				12,149
<b>Total Operating Revenue</b>	<b>20,627</b>	<b>136,397,910</b>		<b>\$894,618</b>

ATTACHMENT C  
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 CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Cost of Service Monthly Water Rates		
Bracken County Water District		
First 2,000 gallons	\$14.33	Minimum bill
Over 2,000 gallons	5.65	per 1,000 gallons
Double Hook-up Customers	14.33	per customer
Wholesale Rate	2.31	per 1,000 gallons

ATTACHMENT C  
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CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Comparison of Usage Rates				
Bracken County Water District				
Gallon Usage	Current Rates	Cost of Service Rates	Increase	Percentage
2,000	\$11.24	\$14.33	\$3.09	27.5%
3,000	14.79	19.98	5.19	35.1%
4,000	18.34	25.63	7.29	39.7%
5,000	21.89	31.28	9.39	42.9%
6,000	25.44	36.93	11.49	45.2%
7,000	28.99	42.58	13.59	46.9%
8,000	32.54	48.23	15.69	48.2%
9,000	36.09	53.88	17.79	49.3%
10,000	39.64	59.53	19.89	50.2%
15,000	57.39	87.78	30.39	53.0%
20,000	75.14	116.03	40.89	54.4%
25,000	92.89	144.28	51.39	55.3%
30,000	110.64	172.53	61.89	55.9%
35,000	128.39	200.78	72.39	56.4%
40,000	146.14	229.03	82.89	56.7%
50,000	181.64	285.53	103.89	57.2%
75,000	270.39	426.78	156.39	57.8%
100,000	359.14	568.03	208.89	58.2%
150,000	536.64	850.53	313.89	58.5%
200,000	714.14	1,133.03	418.89	58.7%
250,000	891.64	1,415.53	523.89	58.8%
300,000	1,069.14	1,698.03	628.89	58.8%
350,000	1,246.64	1,980.53	733.89	58.9%
Comparison of Rates				
Block Usage	Current Rates	Cost of Service Rates		
First 2,000 gallons	\$11.24	\$14.33		
Over 2,000 gallons	3.55	5.65		
Wholesale Rate	3.03	\$2.31		
Effect on Customer Average Bill - 5,000 Gallons Usage				
Current Rates	Cost of Service Rates	Amount Increase	% Increase	
<b>\$21.89</b>	<b>\$31.28</b>	<b>\$9.39</b>	<b>42.90%</b>	

ATTACHMENT D  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Bracken County Water District  
Case No. 2002-00395

ATTACHMENT D

Billing Analysis

**Billing Analysis Normalized**

Billing Analysis BCWD Proposed Rates

Billing Analysis Cost of Service Rates

Cost of Service Study

**Total Water Sold**

Jointly Used Miles

Wholesale Allocation Factors

**Allocation of Plant Value**

Allocation of Depreciation

Allocation of Wholesale O/M Expenses

Allocation of Retail O/M Expenses

Allocation of Cost of Service

Calculation of Water Rates

Cost of Service Rates

Comparison of Rates

ATTACHMENT D  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Bracken County Water District  
Staff Billing Analysis

ATTACHMENT D  
 STAFF REPORT CASE NO. 2002-00395  
 CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

BILLING ANALYSIS FOR: BRACKEN COUNTY WATER DISTRICT  
 TEST PERIOD FROM JANUARY THROUGH DECEMBER 2001  
 USAGE TABLE NORMALIZED WITH CURRENT RATES

CLASS:			FIRST	OVER
USAGE	BILLS	GALLONS	2,000	2,000
FIRST 2,000	5,840	5,477,600	5,477,600	
OVER 2,000	14,859	102,618,550	29,718,000	72,900,550
<hr/>				
TOTAL	20,699	108,096,150	35,195,600	72,900,550

REVENUE TABLE  
 REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	20,699	35,195,600	\$11.24	\$232,657
OVER	2,000		72,900,550	3.55	258,797
Double	56 Customers	672		11.24	7,553
Hook-ups					
Wholesale			27,467,900	3.03	83,228
Bulk Sales			1,333,900	5.60	7,470
<hr/>					
TOTAL		21,371	136,897,950		\$589,705

ATTACHMENT D  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

BILLING ANALYSIS FOR: BRACKEN COUNTY WATER DISTRICT  
TEST PERIOD FROM JANUARY THROUGH DECEMBER 2001  
USAGE TABLE NORMALIZED WITH BCWD PROPOSED RATES

CLASS: USAGE	BILLS	GALLONS	FIRST 2,000	OVER 2,000
FIRST 2,000	5,840	5,477,600	5,477,600	
OVER 2,000	14,859	102,618,550	29,718,000	72,900,550
<hr/>				
TOTAL	20,699	108,096,150	35,195,600	72,900,550

REVENUE TABLE  
REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	20,699	35,195,600	\$11.90	\$246,318
OVER	2,000		72,900,550	3.81	277,751
Double Hook-ups	56 Additional Customers	672		11.90	7,997
Wholesale Bulk Sales			27,467,900	3.29	90,369
			1,333,900	5.6	7,470
<hr/>					
	TOTAL	21,371	136,897,950		\$629,905

ATTACHMENT D  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

BILLING ANALYSIS FOR: BRACKEN COUNTY WATER DISTRICT  
TEST PERIOD FROM JANUARY THROUGH DECEMBER 2001  
USAGE TABLE NORMALIZED WITH REQUESTED REVENUE REQUIREMENT  
FOR ATTACHMENT D - COST OF SERVICE STUDY RATES

CLASS:				FIRST	OVER
USAGE		BILLS	GALLONS	2,000	2,000
FIRST	2,000	5,840	5,477,600	5,477,600	
OVER	2,000	14,859	102,618,550	29,718,000	72,900,550
TOTAL		20,699	108,096,150	35,195,600	72,900,550

REVENUE TABLE  
REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	20,699	35,195,600	\$11.18	\$231,415
OVER	2,000		72,900,550	4.56	332,427
Double	56 Additional	672		11.18	7,513
Hook-Ups	Customers				
Wholesale			27,467,900	2.23	61,253
Bulk Sales			1,333,900	5.60	7,470
TOTAL		21,371	136,897,950		\$640,078

ATTACHMENT D  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Bracken County Water District

Staff Cost of Service Study

ATTACHMENT D  
 STAFF REPORT CASE NO. 2002-00395  
 CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

TOTAL WATER SOLD		
<b>Bracken County Water District</b>		
	GALLONS	Percent
Line Loss <sup>1</sup>	18,594,700	11.43%
Sales to Retail Customers <sup>2</sup>	108,858,100	
Sales to Wholesale Customers <sup>2</sup>	27,467,900	
Plant Use <sup>1</sup>	7,740,300	4.76%
Total Water Produced and Purchased <sup>1</sup>	162,661,000	
Total Water Sold <sup>2</sup>	136,326,000	

Source: 2001 PSC Annual Report<sup>1</sup>  
 Staff Billing Analysis<sup>2</sup>

ATTACHMENT D  
STAFF REPORT CASE NO. 2002-00395  
CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Jointly Used Mains					
Bracken County Water District					
				Jointly used	
Main Size	Feet	Total miles of line	Inch Miles	Miles of line	Inch Miles
12	10560	2	24		
10	19536	3.7	37		
8	77088	14.6	116.8	0.75	6
6	174768	33.1	198.6	1	6
4	417120	79	316		
3	157344	29.8	89.4		
2.5	7920	1.5	3.75		
2	44880	8.5	17		
	909216	172.2	802.55	1.75	12
Percentage of jointly used line - inch miles					0.0150

ATTACHMENT D  
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CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

<b>WHOLESALE ALLOCATION FACTORS</b>		
<b>Bracken County Water District</b>		
		FACTOR
Line Loss Percentage		0.1143
Plant Use Percentage		0.0476
Allowable Line Loss & Plant Use	$0.1143+0.0476$	0.1619
Production Multiplier	$1/1-0.1619$	1.1932
Inch Mile Ratio	$12/802.55$	0.0150
Wholesale Share of Line Loss	$0.0150*0.1143$	0.0017
Joint Share Line Loss/Plant Use	$0.0017+0.0476$	0.0493
Wholesale Production Multiplier	$1/1-0.0493$	1.0519
Production Allocation Factor	$27,467,900/136,326,000*$ $(1.0519/1.1932)$	0.1776
Pipeline Transmission Factor	$27,467,900/136,326,000*$ $0.0150$	0.0030
Use Factor	$27,467,900/136,326,000$	0.2015

ATTACHMENT D  
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CALCULATION OF STAFF S RECOMMENDED REVENUE REQUIREMENT

Allocation of Plant Value							
Bracken County Water District - Attachment D							
Requested Revenue							
	Total	Allocation Factor1	Wholesale	Retail	Commodity	Demand	Customer
Organization	\$1,122	0.0030	\$3	\$1,119		\$1,119	
Land & Land Rights	9,126	0.0030	27	9,099		9,099	
Structures and Improvements	12,359	0.1776	2,195	10,164		10,164	
Collecting & Impounding Res.	36,900	0.1776	6,553	30,347		30,347	
Lakes, Rivers & Other Intakes	110,873	0.1776	19,691	91,182		91,182	
Generation Equipment	281,559	0.1776	50,005	231,554		231,554	
Pumping Equipment	39,060	0.0030	117	38,943		38,943	
Distribution Reservoirs & Standpipes	30,535	0.0030	92	30,443		30,443	
Trasmission & Distribution Mains	2,934,638	0.0030	8,804	2,925,834		2,925,834	
Meters & Meter Installations	220,018						\$220,018
Other Plant & Misc Equipment	7,725	0.0030	23	7,702		7,702	
Subtotal	\$3,683,915		\$87,510	\$3,596,405		\$3,376,387	\$220,018
Wholesale Allocation Percentages	100%		2.4%	97.6%			
Retail Allocation Percentages						93.9%	6.1%
Office Furniture & Equipment	\$52,285	0.0030	\$157	\$52,128		\$49,096	\$3,189
Transportation Equipment	7,725	0.0030	23	7,702		7,254	471
Tools, Shop & Garage Equipment	417	0.0030	1	416		392	25
Communication Equipment	88,267	0.0030	265	88,002		82,883	5,384
Subtotal	\$148,694		\$446	\$148,248		\$139,625	\$9,069

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Total	\$3,832,609		\$87,956	\$3,744,653		\$3,516,012	\$229,087
Wholesale Allocation Percentages	100%		2.4%	97.6%			
Retail Allocation Percentages	100%					93.9%	6.1%
Source: 2001 PSC Annual Report							
†Allocation Factor used to determine Wholesale Customer Share of Plant Value.							

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Allocation of Depreciation							
Bracken County Water District - Attachment D							
Requested Revenue							
	Total	Allocation Factors <sup>1</sup>	Whole sale	Retail	Commodity	Demand	Customer
Organization	\$508	0.0030	\$2	\$506		\$506	
Land & Land Rights	4,921	0.0030	15	4,906		4,906	
Structures & Improvements	7901	0.1776	1,403	6,498		6,498	
Wells & Springs	66,845	0.1776	11,872	54,973		54,973	
Collecting & Impounding	33,225	0.1776	5,901	27,324		27,324	
Power Generating Equipment	171,468	0.0030	514	170,954		170,954	
Water Treatment Equipment	2,941	0.1776	522	2,419		2,419	
Dist. Reservoirs & Standpipes	8,940	0.0030	27	8,913		8,913	
Trasmission & Distribution Mains	1,277,082	0.0030	3,831	1,273,251		1,273,251	
Other Plant	4,858	0.0030	15	4,843		4,843	
Meters	118,453			118,453			\$118,453
Subtotal	\$1,697,142		\$24,102	\$1,673,040		\$1,554,587	\$118,453
Wholesale Allocation Percentages	100%		1.4%	98.6%			
Retail Allocation Percentages	100%					92.9%	7.1%
Office Furniture & Equipment	\$19,973	0.0030	\$60	\$19,913		\$18,499	\$1,414
Transportation Equipment	2,839	0.0030	9	2,830		2,629	201
Tools, Shop & Garage Equip	417	0.0030	1	416		386	30
Power Operated Equip	5,803	0.0030	17	5,786		5,375	411
Subtotal	\$29,032		\$87	\$28,945		\$26,889	\$2,056
Total	\$1,726,174		\$24,189	\$1,701,985		\$1,581,476	\$120,509
Wholesale Allocation Percentages	100%		1.4%	98.6%			

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Retail Allocation Percentages	100%					92.9%	7.1%
Source: 2001 PSC Annual Report							
1Allocation Factor used to determine Wholesale Customer Share of Depreciation.							

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Allocation of Operation & Maintenance Expense for Wholesale Customer				
Bracken County Water District - Attachment D				
Requested Revenue				
	Total	Allocation Factor	Wholesale	Retail
Salaries:				
Meter Reading/Collection	\$32,474			\$32,474
Trans/Dist.	85,150	0.0030	\$255	84,895
Purchased Water	262,615	0.2015	52,917	209,698
Purchased Power	19,031	0.2015	3,835	15,196
Chemicals	89	0.2015	18	71
Contract Services	4,300			4,300
Bad Debt Expense	2,556			2,556
Materials and Supplies	65,107	0.0030	195	64,912
Transportation	17,331	0.0030	52	17,279
Insurance				
Health Insurance				
Meter Reading/Collection	7,710			7,710
Trans/Dist.	19,567	0.0030	59	19,508
Life Insurance				
Meter Reading/Collection	118			118
Trans/Dist.	297	0.0030	1	296
Workers Comp				
Meter Reading/Collection	711			711
Trans/Dist.	1,805	0.0030	5	1,800
Misc. Expense	5,528	0.0030	17	5,511
Salaries & Wages-Admin	8,118	0.0030	24	8,094
Salaries & Wages-Officers	7,200	0.0030	22	7,178
Insurance - Property	9,159	0.0030	27	9,132
Contract Services - Accounting	2,800	0.0030	8	2,792
Misc. Expense	15,556	0.0030	47	15,509
Rental of Bldg/Real Property	7,200	0.0030	22	7,178
Insurance - Other		0.0030		
Health	1,927	0.0030	6	1,921
Workers Comp	178	0.0030	1	177
Life	29	0.0030	0	29
Payroll Taxes	11,432	0.0030	34	11,398
Total Operating Expenses	\$587,988		\$57,545	\$530,443
Depreciation <sup>1</sup>	0	0.0140	0	0
Debt Service <sup>2</sup>	157,993		3,634	154,359
LESS:Other Operating Revenue	(20,461)			(20,461)

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Surcharged Debt Payments <sup>3</sup>	(75,996)			(75,996)
Interest Income	(12,149)			(12,149)
Bulk Sales	(7,470)			(7,470)
Total Revenue Required from Rates	\$629,905		\$61,179	\$568,726
1Wholesale Depreciation based on the Wholesale Allocation Percentage shown on depreciation allocation sheet.				
2Wholesale Debt Service based on percentage shown on plant value allocation sheet.				
3Allocation Factor used to determine Wholesale Customer Share of O&M Expenses.				
<b>Whole Sale Rate = Wholesale Revenue Required/Sales to Wholesale Customers.</b>				<b>\$2.23</b>

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Allocation of Operation & Maintenance Expense for Retail Customers				
Bracken County Water District - Attachment D				
Requested Revenue				
	Total	Commodity	Demand	Customer
Salaries:				
Meter Reading/Collection	\$32,474			\$32,474
Trans/Dist.	84,895		\$84,895	
Purchased Water	209,698	209,698		
Purchased Power	15,196	15,196		
Chemicals	71	71		
Bad Debt Expense	2,556			2,556
Materials and Supplies	64,912		64,912	
Insurance				
Health Insurance				
Meter Reading/Collection	7,710			7,710
Trans/Dist.	19,508		19,508	
Life Insurance				
Meter Reading/Collection	118			118
Trans/Dist.	296		296	
Workers Comp				
Meter Reading/Collection	711			711
Trans/Dist.	1,800		1,800	
Misc. Expense	5,511		5,511	
Taxes other than Income				
Meter Reading/Collection	3,009			3,009
Trans/Dist.	7,637		7,637	
SUBTOTAL	456,102	224,965	184,559	46,578
Less Commodity	224,965			
TOTAL	\$231,137	\$224,965	\$184,559	\$46,578
PERCENTAGE	100%		79.8%	20.2%
Salaries & Wages-Admin	\$8,094		\$6,459	\$1,635
Salaries & Wages-Officers	7,178		5,728	1,450
Insurance - Property	9,132		7,287	1,845
Contract Services - Accounting	2,792		2,228	564
Contract Services - Other	4,300		3,431	869
Transportation	17,279		13,789	3,490
Misc. Expense	15,509		12,376	3,133
Rental of Bldg/Real Property	7,178		5,728	1,450
Insurance - Other				
Health	1,921		1,533	388

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Workers Comp	177		141	36
Life	29		23	6
Taxes other than Income				
Administrative Personnel	752		600	152
Subtotal	74,341		59,323	15,018
Total Operating Expenses	\$530,443	\$224,965	\$243,882	\$61,596

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Allocation of Cost of Service for Retail Customers				
Bracken County Water District - Attachment D				
Requested Revenue				
	<b>Total</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Operation & Maintenance	\$530,443	\$224,965	\$243,882	\$61,596
Debt Service <sup>1</sup>	154,359		144,943	9,416
Depreciation <sup>2</sup>	0		0	0
General Water Service Cost	\$684,802	\$224,965	\$388,825	\$71,012
Less:				
Other Operating Revenue	(\$20,461)			(\$20,461)
Surcharged Debt Service <sup>1</sup>	(75,996)		(71,360)	(4,636)
Interest Income	(12,149)			(12,149)
Bulk Sales	(7,470)	(7,470)		
<b>Revenue Required from Rates for Retail Customers</b>	<b>\$568,726</b>	<b>\$217,495</b>	<b>\$317,465</b>	<b>\$33,766</b>
NOTES:				
1Debt Service has been allocated on the Retail Allocation Percentage of Plant Value from plant value allocation sheet.				
2Depreciation has been allocated on the Retail Allocation Percentage of Depreciation from depreciation allocation sheet.				

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Verification of Cost of Service Rates				
Bracken County Water District - Attachment D				
Requested Revenue				
	Bills	Gallons	Rate	Revenue
First 2,000 gallons	20,627	35,051,600	\$11.18	\$230,610
Over 2,000 gallons		72,544,510	4.56	330,803
Double Hook-up Customers	672		11.18	7,513
Wholesale Rate		27,467,900	2.23	61,253
Total Revenue from Rates				\$630,179
Other Income:				
Bulk Sales Rate		1,333,900	5.60	\$7,470
Other Operating Revenue				20,461
Surcharged Debt Payments				75,996
Interest Income				12,149
<b>Total Operating Revenue</b>	<b>20,627</b>	<b>136,397,910</b>		<b>\$746,255</b>

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Cost of Service Monthly Water Rates		
Bracken County Water District - Attachment D		
Requested Revenue		
First 2,000 gallons	\$11.18	Minimum bill
Over 2,000 gallons	4.56	per 1,000 gallons
Double Hook-up Customers	11.18	per customer
Wholesale Rate	2.23	per 1,000 gallons

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Bracken County Water District - Attachment D				
Comparison of Rates				
Requested Revenue				
Gallon Usage	Current Rates	Cost of Service Rates	Increase	Percentage
2,000	\$11.24	\$11.18	-\$0.06	-0.5%
3,000	14.79	15.74	0.95	6.4%
4,000	18.34	20.30	1.96	10.7%
5,000	21.89	24.86	2.97	13.6%
6,000	25.44	29.42	3.98	15.6%
7,000	28.99	33.98	4.99	17.2%
8,000	32.54	38.54	6.00	18.4%
9,000	36.09	43.10	7.01	19.4%
10,000	39.64	47.66	8.02	20.2%
15,000	57.39	70.46	13.07	22.8%
20,000	75.14	93.26	18.12	24.1%
25,000	92.89	116.06	23.17	24.9%
30,000	110.64	138.86	28.22	25.5%
35,000	128.39	161.66	33.27	25.9%
40,000	146.14	184.46	38.32	26.2%
50,000	181.64	230.06	48.42	26.7%
75,000	270.39	344.06	73.67	27.2%
100,000	359.14	458.06	98.92	27.5%
150,000	536.64	686.06	149.42	27.8%
200,000	714.14	914.06	199.92	28.0%
250,000	891.64	1,142.06	250.42	28.1%
300,000	1,069.14	1,370.06	300.92	28.1%
350,000	1,246.64	1,598.06	351.42	28.2%
Comparison of Rates				
Block Usage	Current Rates	Cost of Service Rates		
First 2,000 gallons	\$11.24	\$11.18		
Over 2,000 gallons	3.55	4.56		
Effect on Customer Average Bill - 5,000 Gallons Usage				
Current Rates	Cost of Service Rates	Amount Increase	% Increase	
<b>\$21.89</b>	<b>\$24.86</b>	<b>\$2.97</b>	<b>13.60%</b>	