

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF BULLOCK PEN	)	
WATER DISTRICT REQUESTING: (1) A	)	
CERTIFICATE OF PUBLIC	)	
CONVENIENCE AND NECESSITY	)	
AUTHORIZING CONSTRUCTION OF	)	
MAJOR ADDITIONS AND	)	CASE NO.
IMPROVEMENTS TO ITS WATER	)	2003-00164
SYSTEM; (2) SEEKING APPROVAL OF	)	
REVISED WATER SERVICE RATES AND	)	
CHARGES; (3) SEEKING APPROVAL OF	)	
FINANCING PURSUANT TO KRS	)	
278.020 AND KRS 278.300	)	

O R D E R

On June 5, 2003, Bullock Pen Water District ( Bullock Pen ) submitted an application requesting Commission approval of a Certificate of Public Convenience and Necessity to construct major additions and improvements to its system, approval of its proposed financing of the construction, and approval of its proposed water rates. Bullock Pen s application was deficient in numerous Commission filing requirements, and Commission Staff assisted Bullock Pen in curing those deficiencies. On July 15, 2003, Bullock Pen submitted its Second Supplemental Application and Response to PSC Deficiency Notice Filing, at which time the case was considered filed. By Order dated August 13, 2003, the Commission approved Bullock Pen s request for a Certificate of Public Convenience and Necessity to construct the additions and improvements, as well as its proposed financing.

Bullock Pen s application was based upon an historic test period. However, Bullock Pen proposed numerous adjustments based upon its projection of revenues and

expenses for the calendar year 2004. Because of the difficulties presented by this proposal, Commission Staff chose to perform a limited financial review of Bullock Pen s operations, and 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 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 12<sup>th</sup> day of November, 2003.

By the Commission

ATTEST:

  
Executive Director

STAFF REPORT  
ON  
BULLOCK PEN WATER DISTRICT  
CASE NO. 2003-00164

Commission Staff ( Staff ) has performed a limited financial review of Bullock Pen s test year operations for the calendar year ending December 31, 2002. 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.

Bullock Pen s application was based upon an historic test period. However, Bullock Pen s application at Exhibit Q proposed numerous adjustments based upon its projection of revenues and expenses for the calendar year 2004. During Staff s field review, Bullock Pen was made aware of normal Commission practices relative to pro forma adjustments for rate-making purposes. Specifically, Bullock Pen was made aware that adjustments to historical test period operations should be based upon known and measurable changes, and that inflationary adjustments of the type submitted by Bullock Pen in its Exhibit Q are normally disallowed for rate-making purposes. Based upon these discussions with Commission Staff, Bullock Pen on August 27, 2003 forwarded to Staff numerous revisions to Exhibit Q. Bullock Pen s revised pro forma statement is included herein as Attachment A.

Bullock Pen s application projected pro forma revenues of \$2,797,157, pro forma operating expenses of \$2,198,225, and income available for debt service of \$598,931.

Bullock Pen's revisions submitted on August 27, 2003 projected pro forma revenues of \$2,598,169, pro forma operating expenses of \$2,036,669, and income available for debt service of \$561,500. Staff has used Bullock Pen's revisions submitted on August 27 as the starting point for Staff's recommended operations as shown in Attachment B.

Bullock Pen's application and its revisions of August 27 included pro forma depreciation expense and debt service coverage on numerous construction projects. These projects include not only the construction approved within this case, but also projects known as Phase 7 and Phase 10 which have yet to be finalized or approved by this Commission. Therefore, Staff recommends that the revenues, expenses, and debt service associated with the Phase 7 and Phase 10 projects be excluded from pro forma operations in determining the revenue increase needed by Bullock Pen.

Gary Forman is responsible for all revenue adjustments and the calculation of the proposed rates. Jack Kaninberg is responsible for the determination of the revenue requirement. Based on Staff's recommended pro forma operations as shown in Attachment B, Staff recommends that Bullock Pen's requested increase of \$715,830 be denied, and that a revenue increase of \$673,189 should be granted. This increase will allow Bullock Pen sufficient funds to meet its operating expenses and its debt service requirements, and it would increase the average bill for 5,000 gallons of usage from \$27.20 to \$36.73, an increase of 35 percent. Therefore, Staff is of the opinion that the rates as shown in Attachment C of this report are reasonable and should be approved by this Commission.

Signatures

/s/

Prepared by: Jack Kaninberg  
Financial Analyst, Water and Sewer  
Revenue Requirements Branch  
Division of Financial Analysis

/s/

Prepared by: Gary Forman  
Municipal Rate Specialist  
Division of Financial Analysis

See document named 200300164\_11122003apx.pdf for Appendix A

**ATTACHMENT B**  
**BULLOCK PEN S REVISED PRO FORMA, WITH ADJUSTMENTS BY STAFF**

Account	2002 Requested Proforma	Recommended Adjustments	Notes	Recommended Adjusted
Water Sales	\$2,486,764	(\$685,843)	(a)	\$1,800,921
Late Charges	\$58,315	(\$18,326)	(b)	\$39,989
Interest Income	\$19,212	0		\$19,212
Misc. Service Revenues	\$33,878	(\$2,200)	(c)	\$31,678
<b>Tot. Operating Revenues</b>	<b>\$2,598,169</b>	<b>(\$706,369)</b>		<b>\$1,891,800</b>
Depreciation	\$385,584	(\$22,198)	(d)	\$363,386
Amortization	\$1,633	0		\$1,633
Utility Regulatory Assessment	\$4,898	0		\$4,898
Payroll Taxes	\$38,302	0		\$38,302
Other Taxes and Licenses	\$113	0		\$113
Employee Salaries and Wages	\$491,875	0		\$491,875
Commissioner Salaries	\$8,799	0		\$8,799
Employee Pensions Contrib.	\$34,298	0		\$34,298
Employee Group Insurance	\$138,011	(\$75,827)	(e)	\$62,184
Purchased Water	\$556,192	(\$37,502)	(f)	\$518,690
Purchased Power	\$44,750	0		\$44,750
Chemicals	\$47,125	0		\$47,125
Materials and Supplies	\$74,243	0		\$74,243
Contractual Services-Eng.	\$9,800	0	(g)	\$9,800
Contractual Services-Acct.	\$38,004	0	(g)	\$38,004
Contractual Services-Legal	\$11,358	0	(g)	\$11,358
Contractual Services-Mgmt. Fees	\$3,663	0	(g)	\$3,663
Contractual Services-Other	\$48,152	0	(g)	\$48,152
Rental of Building/Property	\$5,025	0		\$5,025
Rental of Equipment	\$9,705	0		\$9,705
Transportation Expense	\$18,635	0		\$18,635
Insurance	\$45,846	0	(h)	\$45,846
Advertising Expense	\$337	0		\$337
Rate Case Expense	\$6,000	0	(i)	\$6,000
Bad Debt Expense	\$11,439	0	(j)	\$11,439
Miscellaneous Expense	\$2,882	(\$638)	(k)	\$2,224
<b>Total Operating Expenses</b>	<b>\$2,036,669</b>	<b>(\$136,165)</b>		<b>\$1,900,504</b>
Income Available for Debt Service	\$561,500	(\$570,204)		(\$8,704)

Operating Expenses	\$2,036,669	(\$136,165)		\$1,900,504
Debt Service Coverage	\$685,773	(\$21,288)	(l)	\$664,485
Revenue Requirement	\$2,722,442	(\$157,453)		\$2,564,989
Less: Operating Revenues	(\$1,815,796)	\$56,792	(m)	(\$1,872,588)
Less Interest Income	(\$19,212)	0		(\$19,212)
<b>Increase Justified</b>	<b>\$887,434</b>	<b>(\$214,245)</b>		<b>\$673,189</b>
<b>Increase Recommended</b>	<b>\$665,147</b>	<b>\$8,042</b>		<b>\$673,189</b>

## Staff s Recommendations - Explanatory Notes

- (a.) Water Sales Revenue Commission Staff s billing analysis determined that Bullock Pen s present water rates should produce normalized water sales revenue of \$1,800,921 based upon sales to 5,545 customers.
- (b.) Late Charges Commission Staff determined that the 2002 level of forfeited discounts in the amount of \$39,989 should be included in pro forma operations.
- (c.) Miscellaneous Service Revenues Commission Staff determined that Miscellaneous Service Revenues should be adjusted by \$2,200 to exclude tap-on fees from Account 471.
- (d.) Depreciation Commission Staff determined that Bullock Pen s pro forma Depreciation Expense of \$385,584 as revised in its August 27 pro forma statement should be adjusted to exclude depreciation expense of \$22,198 associated with the Phase 7 and Phase 10 projects.
- (e.) Employee Group Insurance Commission Staff determined that a \$75,827 adjustment should be made to Bullock Pen s pro forma group health insurance expense to allow only the cost of single, not family, health insurance coverage.
- (f.) Purchased Water Commission Staff determined that Purchased Water Expense should be adjusted based upon normalized sales of 332,830,488 gallons. This adjustment assumes that all new sales of 9,488,038 gallons are met by increased purchases from Northern Kentucky WSD, which is currently Bullock Pen s cheapest wholesale supplier. Adding new purchases of 9,488,038 gallons to test-year purchases of 196,128,372 gallons yields total purchases of 205,616,410 gallons, and total purchases from NKWSD of 103,277,850 gallons (9,488,038 new gallons + 93,789,812 gallons purchased in 2002). Assuming that the test year proportions for purchases from the cities of Walton and Williamstown remain the same for normalized purchases, pro forma purchased water expense is calculated as follows:

Wholesale Supplier	Purchases Test year 2002	Test yr. %	% of subtotal	Normalized	Normalized Purchases
Williamstown	46,867,456	23.9%	45.8%	22.8%	46,871,060
Walton	55,471,104	28.3%	54.2%	27.0%	55,467,500
Subtotal		52.2%	100%	49.8%	102,338,560
NKWSD	93,789,812	47.8%		50.2%	103,277,850
Total	196,128,372	100%		100%	205,616,410

Adjusted Purch. Water Expense	Rate per Th.	Normalized	Pro Forma Amount
Williamstown	\$2.46	46,871,060	\$115,303
Walton	\$2.99	55,467,500	\$165,848
NKWSD	\$2.30	103,277,850	\$237,539
Total		205,616,410	<b>\$518,690</b>

- (g.) Contractual Services During Staff s field review, Bullock Pen was asked whether Contractual Services expenses were unusually high during 2002 because of the major construction projects during the year. Specifically, Staff reviewed Contractual Service expenses for 1999, 2000, and 2001 and found that 2002 Contractual Services Expenses tended to be notably higher than in previous years, as follows:



Category	1999	2000	2001	2002	4-year Avg.
Contr. Serv. Engineering	\$9,770	\$6,264	\$9,186	\$10,944	\$9,041
Contr. Serv. Acctg.	\$36,372	\$37,366	\$31,836	\$46,540	\$38,029
Contr. Serv. Legal	\$10,973	\$8,598	\$11,124	\$14,735	\$11,358
Contr. Serv. Mgmt.	\$4,515	\$3,492	\$3,034	\$3,610	\$3,663
Contr. Serv. Other	36,571	\$35,022	\$43,828	\$48,512	\$40,983
<b>Total</b>	<b>\$98,201</b>	<b>\$90,742</b>	<b>\$99,008</b>	<b>\$124,341</b>	<b>\$103,074</b>

In response, Bullock Pen provided revised pro forma expense levels for Contractual Services Expenses, and Staff recommends accepting those levels (as shown in the revised pro forma of August 27) for ratemaking purposes.

- (h.) Insurance Expense Staff recommends that Bullock Pen s pro forma Insurance Expense be accepted, based upon documentation of increased insurance expenses provided by the District.
- (i.) Rate Case Expense Staff recommends that Bullock Pen s proposal to amortize estimated rate case expenses of \$30,000 over five years be accepted.
- (j.) Bad Debt Expense Staff recommends that Bullock Pen s adjustment to increase pro forma Bad Debt Expense be accepted.
- (k.) Miscellaneous Expense Miscellaneous Expense was adjusted by \$638 to remove the following items for ratemaking purposes:

Date		To
1/10/02	\$12.00	Peggy Thornberry
2/19/02	\$32.99	Swan Floral & Gift Shop
4/5/02	\$12.00	Thornberry Bakery
4/22/02	\$111.00	Ivy Leaf Florist
5/1/02	\$15.00	Peggy Thornberry
6/25/02	\$37.99	Swan Floral & Gift Shop
7/9/02	\$15.00	Peggy Thornberry - July Birthday Cake
7/12/02	\$32.00	Ivy Leaf Florist
8/20/02	\$15.00	Peggy Thornberry August Birthday Cake
8/23/02	\$35.00	Walton Florist
9/11/02	\$15.00	Peggy Thornberry Sept. Birthday Cake
9/23/02	\$29.00	Ivy Leaf Florist
10/14/02	\$25.00	Peggy Thornberry October Birthday Cake
10/31/02	\$33.00	Ivy Leaf Florist
12/19/02	\$190.00	City of Crittenden Christmas Lights
12/20/02	\$27.99	Swan Florist
<b>Total</b>	<b>\$637.97</b>	

(l.) Debt Service Coverage Debt Service Coverage was calculated as follows:

Proforma Debt Service	Application Test Period	Application - Projected	Bullock Pen s Revisions 8/27/03	Staff-Recommended Adjustments
Revenue Bonds				
Interest	\$88,281	\$166,156	\$167,809	\$17,310*
Principal	\$39,000	\$101,888	\$155,620	(\$38,598)**
Notes Payable				
Interest	\$49,616	\$91,840	\$82,971	
Principal	\$53,378	\$121,027	\$120,132	
Capitalized Leases				
Interest	\$94,075	\$91,449	\$95,241	OK
Principal	\$109,528	\$64,000	\$64,000	OK
<b>Total Debt Service</b>	<b>\$433,878</b>	<b>\$636,360</b>	<b>\$685,773</b>	
<b>Total Interest</b>	<b>\$231,972</b>	<b>\$349,445</b>	<b>\$346,021</b>	
<b>Total Principal</b>	<b>\$201,906</b>	<b>\$286,915</b>	<b>\$339,752</b>	
				<b>Recap</b>
			<b>Bullock Pen s Revised Proposed Debt Service</b>	<b>\$685,773</b>
			<b>Staff s Recommended Adjustments</b>	<b>\$17,310*</b> <b>(\$38,598)**</b>
			<b>Recommended Debt Service Coverage</b>	<b>\$664,485</b>

Notes:

\* Bullock Pen s Revised Schedule of August 27, 2003 shows Projected Debt Service related to U.S. Government Revenue Bonds of \$86,550, but a debt service coverage of 1.0 rather than 1.2 was used. If a 1.2 debt service coverage is used, as is the Commission s standard practice, then the amount is \$103,860, an adjustment of \$17,310.

\*\* Staff recommends that Debt Service of \$38,598 (\$11,398 principal and \$27,200 interest) related to Phase 7 and 10 should be taken out.

(m.) Total Operating Revenues - Bullock Pen s information submitted in its Second Supplemental Deficiency Filing of July 15, 2003 at Exhibit EE indicated that Total Normalized Revenue From Rates was \$1,741,929. Adding Late Charges of \$39,989 and Miscellaneous Service Revenues of \$33,878 results in Total Operating Revenues of \$1,815,796 before any rate increase.

## Attachment C

### Cost of Service and Rate Design Discussion

#### Billing Analysis:

In Exhibit EE Bullock Pen provided an analysis of customer bills for the test period. The billing analysis reflected \$1,741,930 in revenues from present rates including Bulk Loading Station Revenue of \$35,576 for the test period. Bullock Pen reported total test period revenues from sales of \$1,738,275 in its Financial Statements included in the 2002 Annual Report to the Commission. Staff considers the difference between the billing analysis revenue of \$1,741,930 and the reported test period revenue of \$1,738,275 immaterial and will accept the usage data contained in Bullock Pen's billing analysis for purposes of establishing the cost of service and rate design in this case.

#### Year End Customer Adjustment:

During the test period Bullock Pen experienced substantial growth in customers. Staff has adjusted the test year billing units to reflect a year-end customer adjustment in order to annualize sales for the customers added during the test period. This results in adjusting sales as if the year-end number of customers had been on the system the entire test year. Page 14 contains a billing analysis by customer class which includes the additional sales for the year end customer adjustment in the 5/8 X 3/4 Inch customer class.

The year end customer sales adjustment was determined by multiplying the average monthly usage per customer in the 5/8 X 3/4 Inch meter class of 4,729 gallons by 6 months and applying the result to the 212 customers added during the test year.

Only six months of usage was included in consideration of the fact that the customers were added throughout the year and it is assumed that the average number of customers was the number of customers on the system after 6 months of the test year. This results in 6,015,288 gallons in additional normalized sales that are included in the billing analysis. The adjusted sales were used as the basis for the rates recommended by Staff in this study.

Cost of Service Study:

Proposed Rates: The total cost of providing service as allocated on Attachment C, pages 7 and 8 shows that the required revenue from retail rates, exclusive of the Bulk Loading Station revenue, is \$2,397,147 annually. Using the test year sales from the adjusted billing analysis, staff determined the rates that would be required to produce the revenue required from retail rates as shown on Attachment C, page 9. A verification of the revenue produced by the rates, assuming all customers were on the same rate schedule, is included on page 10. Bullock Pen has 4 customer classes in addition to sales to Bulk Loading Stations. Bullock Pen's rate design provides for a larger minimum bill for the meter sizes greater than the 5/8 X 3/4 Inch meter and the minimum usage increases with the larger sized meters as well. The minimum bill for each rate class is based on the rates that are established for the 5/8 X 3/4 Inch customer class.

When the rates determined on page 9 are applied to the 4 customer classes, the revenues would be \$13,756 greater than the revenue requirements from rates. Consequently, staff has adjusted the minimum bill for the 5/8 X 3/4 Inch customer class to \$18.28 as can be seen on page 11, which includes the rates proposed by Staff for all

customer classes. When the staff proposed rates are applied to each customer class in the same manner that the existing rate design is applied, the resulting revenues produced from sales is \$2,446,213 as can be seen on page 13.

If the rates proposed by Bullock Pen are applied to the adjusted billing analysis, the resulting revenues would be \$2,450,358 which is \$4,145 greater than the amount produced by the staff recommended rates.

Allocation of Costs: In order to determine the appropriate rates, staff conducted a study of the projected costs of Bullock Pen. The study assigns costs to the various rate steps by allocating costs into Commodity, Demand, and Customer costs categories. This allocation of cost spreads costs to customers in a fair and equitable manner by identifying the costs that are related to the cost of producing water, costs related to the fixed assets required to meet the peak demands placed on the system, and costs that are directly related to servicing the customer accounts. Some of these costs are allocated based on the breakdowns in the expense matrix provided by Bullock Pen in their 2002 Annual Report to the Commission. Other costs are allocated based on the percentage of costs that are directly allocated. Page 9 contains a summary of the allocated costs and other revenue items and provides the basis for the rates that are determined on page 9. Page 10 contains a verification of the revenues that are determined by applying the rates on page 10 to the billing units from the billing analysis.

Surcharged Debt Service Revenue: In March 2002, the Commission approved a \$15 monthly surcharge for Bullock Pen to recover a portion of the cost of the investment to serve certain new customers. The surcharge is designed to recover the principle and interest payments on the loan funds acquired by Bullock Pen to construct the lines,

customer meters and facilities needed in order for these customers to obtain service. The only customers charged the surcharge are those that receive the benefit of the new facilities. The Commission required Bullock Pen to submit quarterly reports of the number of customers that are billed the surcharge and the amount of revenues generated by the surcharge. The surcharge is to remain in effect until the total amount collected equals the total debt service payments associated with the new facilities. The surcharge was based on the addition of 145 new customers although the facilities constructed would serve even more additional customers. In accordance with the uniform system of accounts for water utilities, the surcharge revenues are treated as contributions of capital and are not included in the income statement on the annual report. Consequently, there is a source of revenues that is available to cover a portion of Bullock Pen's Debt Service requirements that is not included in the income for the test year. Staff believes it is appropriate to impute this revenue so customers will not pay for the debt service through base rates as well as the surcharge.

For the month of June 2003, Bullock Pen collected approximately \$2,850 which would equate to in excess of the 145 customers, at the rate of \$15 per customer bill. The report did not include the number of surcharges billed for the month of June, but under the circumstances in this case it is reasonable to use the 145 customers as the basis to impute annual revenues from the surcharge. Staff has made an adjustment to increase test year revenue in the amount of \$26,100 by applying the \$15 surcharge to the 145 customers for 12 months.

Other Revenues: During the test period Bullock Pen received revenues from sources other than the actual water sales. Bullock Pen has miscellaneous charges for

bad checks, late payment charges, customer disconnect and reconnect charges and other miscellaneous service revenues. Bullock Pen also had interest income of \$19,212 during the test year. Details of the Other Revenues are contained on page 8. There was no proposed adjustment to other revenues, so staff proposes to leave these revenues at the test year level with the exception of the Other Operating Revenues which staff reduced by \$2,200 to exclude receipts of customer contributions that were improperly classified.

Rate Design:

The rates derived from the cost of service study result in significant differences in the amount of increase that various customer classes will experience. As can be seen on page 12, Comparison of Rates, the customers whose usage is within the minimum quantity of 2,000 gallons will experience a 48 percent increase whereas the customers that use 10,000 gallons per month will realize a 33% increase. Also, customers using 30,000 gallons or more per month will experience increases ranging from 40 to 52 percent. The rates proposed by staff are supported by the cost of service study and are the best measure of the actual cost of providing service to the customers within each class.

Bullock Pen distributed its proposed increase equally to all rates within each class so that its proposed rates produce an across the board increase of 38 percent. Thus, while the rates proposed by Bullock Pen do not reflect the cost of service as established in this staff report, they do maintain the same rate structure that was approved for Bullock Pen in its last rate case.

Allocation of Plant Value				
Bullock Pen Water District				
12 Months Ending December 31, 2002				
	<b>Total</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Land & Land Rights	\$160,858		\$160,858	
Structures and Improvements	1,460,874		1,460,874	
Pumping Equipment	79,016		79,016	
Water Treatment Equipment	71,359		71,359	
Distribution Reservoirs & Standpipes	1,044,031		1,044,031	
Transmission & Distribution Mains	8,286,976		8,286,976	
Meters & Meter Installations	2,031,386			\$2,031,386
Hydrants	410,302			410,302
Subtotal	\$13,544,802		\$11,103,114	\$2,441,688
<b>Retail Allocation Percentages</b>	100%		82.0%	18.0%
Office Furniture & Equipment	\$69,544		\$57,026	\$12,518
Transportation Equipment	180,614		148,103	32,511
Tools, Shop & Garage Equipment	51,034		41,848	9,186
Laboratory Equipment	3,564		2,922	642
Other Plant & Misc Equipment	225,844		185,192	40,652
Subtotal	\$530,600		\$435,091	\$95,509
<b>Total</b>	<b>\$14,075,402</b>		<b>\$11,538,205</b>	<b>\$2,537,197</b>
<b>Retail Allocation Percentages</b>	<b>100%</b>		<b>82.0%</b>	<b>18.0%</b>
Source: Bullock Pen Water District 2002 Annual Report to Kentucky PSC				



Allocation of Depreciation				
Bullock Pen Water District				
12 Months Ending December 31, 2002				
	<b>Total</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Structures & Improvements	\$566,668		\$566,668	
Pumping Equipment	36,662		36,662	
Water Treatment Equipment	53,683		53,683	
Distribution Reservoirs & Standpipes	277,449		277,449	
Transmission & Distribution Mains	1,728,323		1,728,323	
Meters and Meter Installations	288,618			\$288,618
Hydrants	37,798			37,798
Other Plant and Misc. Equipment	111,804		111,804	
Subtotal	\$3,101,005		\$2,774,589	\$326,416
Retail Allocation Percentages	100%		89.5%	10.5%
Office Furniture & Equipment	\$57,026		\$51,038	\$5,988
Transportation Equipment	147,083		131,639	15,444
Tools, Shop & Garage Equipment	44,916		40,200	4,716
Other Tangible Plant	3,564		3,190	374
Subtotal	\$252,589		\$226,067	\$26,522
<b>Total</b>	<b>\$3,353,594</b>		<b>\$3,000,656</b>	<b>\$352,938</b>
<b>Retail Allocation Percentages</b>	<b>100%</b>		<b>89.5%</b>	<b>10.5%</b>

Allocation of Operation & Maintenance Expense (1)				
Bullock Pen Water District				
Staff Recommended Adjusted Test Period				
	<b>Total</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Salaries:				
Source of Supply/Treatment	\$98,227		\$98,227	
Meter Reading/Collection	170,730			\$170,730
Transmission/Distribution	146,136		146,136	
Purchased Water	518,690	\$518,690		
Purchased Power	44,750	41,126	1,812	1,812
Chemicals	47,125	47,125		
Contract Services Other	39,240		33,027	6,213
Bad Debt Expense	11,439			11,439
Transportation	15,304		11,435	3,869
Materials and Supplies	66,066		45,126	20,940
Health Insurance:				
Source of Supply/Treatment	11,946		11,946	
Meter Reading/Collection	20,170			20,170
Transmission/Distribution	19,656		19,656	
Employee Pension Contributions:				
Source of Supply/Treatment	6,849		6,849	
Meter Reading/Collection	10,190			10,190
Transmission/Distribution	11,905		11,905	
Payroll Taxes:				
Source of Supply/Treatment	10,023		10,023	

Meter Reading/Collection	14,913			14,913
Transmission/Distribution	17,422		17,422	
Misc. Expense	2,224		2,224	
<b>SUBTOTAL (2)</b>	<b>\$1,283,005</b>	<b>\$606,941</b>	<b>\$415,788</b>	<b>\$260,276</b>
Less Commodity	\$606,941			
TOTAL	\$676,064		\$415,788	\$260,276
<b>PERCENTAGE</b>	<b>100%</b>		<b>61.5%</b>	<b>38.5%</b>
Materials and Supplies	\$8,177		\$5,029	\$3,148
Salaries & Wages-Admin	76,782		47,221	29,561
Salaries & Wages-Officers	8,799		5,411	3,388
Employee Pensions & Benefits	5,354		3,293	2,061
Contract Services Engineering	9,800		6,027	3,773
Contract Services Accounting	38,004		23,372	14,632
Contract Services Legal	11,358		6,985	4,373
Contract Services Management Fee	3,663		2,253	1,410
Contract Services Other	8,912		5,481	3,431
Rate Case Expense	6,000		3,690	2,310
Transportation	3,331		2,049	1,282
Miscellaneous Expense	337		207	130
Rental of Building/Real Property	5,025		3,090	1,935
Rental of Equipment	9,705		5,969	3,736
Insurance Other	33,956		20,883	13,073
Health	10,412		6,403	4,009
Payroll Taxes	7,835		4,819	3,016
Amortization of Rate Case Expense	1,633		1,004	629
Taxes Other Than Income Taxes	5,011		3,082	1,929
<b>Total Operating Expenses</b>	<b>\$1,537,099</b>	<b>\$606,941</b>	<b>\$572,056</b>	<b>\$358,102</b>
Depreciation	\$363,386		\$325,230	\$38,156
Debt Service	664,485		544,878	119,607
LESS: Other Operating Revenue	(71,667)			(71,667)
Surcharged Debt Payments (3)	(26,100)		(21,402)	(4,698)
Interest Income	(19,212)			(19,212)
Unmetered Sales	(2,207)		(2,207)	
Bulk Loading Station Sales (4)	(48,637)		(48,637)	
Revenue Required from Retail Customers	<b>\$2,397,147</b>	<b>\$606,941</b>	<b>\$1,369,918</b>	<b>\$420,288</b>

**Footnotes to Allocation of Operation & Maintenance Expense Schedule:**

(1) Source: Staff's Adjusted Operating Statement (Attachment B) and Bullock Pen Water District's 2002 Annual Report to Kentucky PSC

(2) Direct allocations are based on functional classifications per Bullock Pen's 2002 Annual Report and Staff's recommendations.

(3) Surcharged Debt Payments are based on 145 customers at \$15.00 per month.

(4) Bulk Loading Station Sales have been increased to reflect the proposed rate of \$5.85 per 1,000 gallons. The adjustment to reduce bulk sales volumes, proposed by Bullock Pen has not been included since it is speculative and not sufficiently known and measurable.

Allocation of Cost of Service For Retail Customers				
Bullock Pen Water District				
12 Months Ending December 31, 2002				
	Total	Commodity	Demand	Customer
Operation & Maintenance	\$1,537,099	\$606,941	\$572,056	\$358,102
Debt Service (1)	664,485		544,878	119,607
Depreciation (2)	363,386		325,230	38,156
General Water Service Cost	\$2,564,970	\$606,941	\$1,442,164	\$515,865
Less:				
Unmetered Sales	\$(2,207)		\$(2,207)	
Other Operating Revenue	(71,667)			\$(71,667)
Surcharged Debt Service Revenue(3)	(26,100)		(21,402)	(4,698)
Interest Income	(19,212)			(19,212)
Bulk Loading Station Sales (4)	(48,637)		(48,637)	
<b>Revenue Required from Rates for Retail Customers</b>	<b>\$2,397,147</b>	<b>\$606,941</b>	<b>\$1,369,918</b>	<b>\$420,288</b>

NOTES:

(1) Debt Service is allocated using the Retail Allocation Percentage of Plant Value from the Plant Value Allocation sheet 1.

(2) Depreciation is allocated using the Retail Allocation Percentage of Depreciation from the Depreciation Allocation sheet 2.

(3) Surcharged Debt Service Revenue is projected based on 145 customers at \$15.00 per month for 12 months.

(4) Bulk sales revenues have been increased by \$13,394 to reflect the rate of \$5.85 per 1,000 gallons proposed by Bullock Pen W.D. The adjustment to reduce the gallons sold by 1.5% has not been accepted due to not being known and measurable.

Calculation of Water Rates						
Bullock Pen Water District						
12 Months Ending December 31, 2002						
	Total	First 2,000 gallons	Next 3,000 gallons	Next 5,000 gallons	Next 10,000 gallons	Over 20,000 gallons
Actual Water Sales:						
Thousand Gallons	324,516,488	119,938,200	112,060,288	52,942,000	20,481,000	19,095,000
Percent	100%	37.0%	34.5%	16.3%	6.3%	5.9%
Weighted Sales for Demand:		2	1.75	1.5	1.25	1
Thousand Gallons	560,091,154	239,876,400	196,105,504	79,413,000	25,601,250	19,095,000
Percent	100%	42.8%	35.0%	14.2%	4.6%	3.4%
Allocation of Volumetric Costs:						
Commodity	\$606,941	\$224,568	\$209,395	\$98,931	\$38,237	\$35,810
Demand	1,369,918	586,325	479,471	194,528	63,016	46,577
Customer	420,288	420,288				
Total	\$2,397,147	\$1,231,181	\$688,866	\$293,459	\$101,253	\$82,387
Number of Bills	66,635					
<b>Cost of Service Rates (1)</b>		<b>\$18.48</b>	<b>\$6.15</b>	<b>\$5.54</b>	<b>\$4.93</b>	<b>\$4.31</b>

(1) Cost of Service rate for 10 to 20,000 gallons was decreased by 1 cent to produce the proper level of revenue.

Verification of Cost of Service Rates				
Bullock Pen Water District				
12 Months Ending December 31, 2003				
	<b>Bills</b>	<b>Gallons</b>	<b>Rate</b>	<b>Revenue</b>
First 2,000 gallons	66,635	119,938,200	\$18.48	\$1,231,415
Next 3,000 gallons		112,060,288	\$6.15	689,171
Next 5,000 gallons		52,942,000	\$5.54	293,299
Next 10,000 gallons		20,481,000	\$4.93	100,971
Over 20,000 gallons		19,095,000	\$4.31	82,299
Bulk Loading Station Sales		8,314,000	\$5.85	48,637
Total Revenue from Rates				\$2,445,792
Other Income:				
Unmetered Sales				\$2,207
Other Operating Revenue				\$71,667
Surcharged Debt Payments (1)				\$26,100
Interest Income				\$19,212
<b>Total Operating Revenue</b>	<b>66,635</b>	<b>332,830,488</b>		<b>\$2,564,978</b>

(1) Revenue is based on 145 customers at \$15.00 per month surcharge.

Staff Recommended Monthly Water Rates			
Bullock Pen Water District			
		<b>Staff</b>	
		<b>Recommended</b>	
		<b>Rates (1)</b>	
<b>5/8 X 3/4 Inch Connection</b>			
First 2,000 gallons		\$18.28	Mimimum Bill
Next 3,000 gallons		\$6.15	per 1,000 gallons
Next 5,000 gallons		\$5.54	per 1,000 gallons
Next 10,000 gallons		\$4.93	per 1,000 gallons
Over 20,000 gallons		\$4.31	per 1,000 gallons
<b>1 Inch Connection</b>			
First 5,000 gallons		\$36.73	Mimimum Bill
Next 5,000 gallons		\$5.54	per 1,000 gallons
Next 10,000 gallons		\$4.93	per 1,000 gallons
Over 20,000 gallons		\$4.31	per 1,000 gallons
<b>1 1/2 Inch Connection</b>			
First 10,000 gallons		\$64.43	Mimimum Bill
Next 10,000 gallons		\$4.93	per 1,000 gallons
Over 20,000 gallons		\$4.31	per 1,000 gallons
<b>2 Inch Connection</b>			
First 20,000 gallons		\$113.73	Mimimum Bill
Over 20,000 gallons		\$4.31	per 1,000 gallons
<b>Bulk Loading Stations</b>			
		\$5.85	per 1,000 gallons
(1) Staff adjusted the 5/8 X 3/4 Inch Connection Minimum Bill to \$18.28 in order to produce the recommended revenue requirement after applying the minimum bill to the other rate schedules. The resulting revenues produced by the above rates is \$2,448,212.			

Bullock Pen Water District				
Comparison of Rates				
Gallons Usage	Current Rates	Cost of Service Rates	Increase	Percentage
2,000	\$12.35	\$18.28	\$5.93	48.0%
3,000	17.30	24.43	7.13	41.2%
4,000	22.25	30.58	8.33	37.4%
5,000	27.20	36.73	9.53	35.0%
6,000	31.45	42.27	10.82	34.4%
7,000	35.70	47.81	12.11	33.9%
8,000	39.95	53.35	13.40	33.5%
9,000	44.20	58.89	14.69	33.2%
10,000	48.45	64.43	15.98	33.0%
15,000	66.20	89.08	22.88	34.6%
20,000	83.95	113.73	29.78	35.5%
25,000	97.95	135.28	37.33	38.1%
30,000	111.95	156.83	44.88	40.1%
35,000	125.95	178.38	52.43	41.6%
40,000	139.95	199.93	59.98	42.9%
50,000	167.95	243.03	75.08	44.7%
75,000	237.95	350.78	112.83	47.4%
100,000	307.95	458.53	150.58	48.9%
150,000	447.95	674.03	226.08	50.5%
200,000	587.95	889.53	301.58	51.3%
250,000	727.95	1,105.03	377.08	51.8%
300,000	867.95	1,320.53	452.58	52.1%
350,000	1,007.95	1,536.03	528.08	52.4%

Comparison of Rates		
Block Usage	Current Rates	Cost of Service Rates
First 2,000 gallons	\$12.35	\$18.28
Next 3,000 gallons	\$4.95	\$6.15
Next 5,000 gallons	\$4.25	\$5.54
Next 10,000 gallons	\$3.55	\$4.93
Over 20,000 gallons	\$2.80	\$4.31
Bulk Loading Stations	\$4.25	\$5.85

Effect on Customer Average Bill - 5,000 Gallons Usage			
Current Rates	Cost of Service Rates	Amount Increase	% Increase
\$27.20	\$36.73	\$9.53	35.00%

Bullock Pen Water District				
Combined Usage for All Meter Sizes				
Revenue by Rate Increment				
			Proposed	
	Bills	Gallons	Rates	Revenue
<b>5/8 X 3/4 Inch</b>				
First 2,000 gallons	65,849	118,596,200	\$18.28	\$1,203,720
Next 3,000 gallons		110,444,288	\$6.15	679,232
Next 5,000 gallons		50,962,000	\$5.54	282,329
Next 10,000 gallons		17,846,000	\$4.93	87,981
Over 20,000 gallons		13,559,000	\$4.31	58,439
Total	65,849	311,407,488		\$2,311,702
<b>One Inch</b>				
First 5,000 gallons	454	1,596,000	\$36.73	\$16,675
Next 5,000 gallons		862,000	\$5.54	4,775
Next 10,000 gallons		909,000	\$4.93	4,481
Over 20,000 gallons		1,938,000	\$4.31	8,353
Total	454	5,305,000		\$34,285
<b>1 1/2 Inch</b>				
First 10,000 gallons	68	393,000	\$64.43	\$4,381
Next 10,000 gallons		340,000	\$4.93	1,676
Over 20,000 gallons		906,000	\$4.31	3,905
Total	68	1,639,000		\$9,962
<b>2 Inch</b>				
First 20,000 gallons	264	3,473,000	\$113.73	\$30,025
Over 20,000 gallons		2,692,000	\$4.31	11,603
Total	264	6,165,000		\$41,627
Total All Rate Sch.	66,635	324,516,488		\$2,397,576
Bulk Loading Station		8,314,000	\$5.85	\$48,637
Total Sales Revenues		332,830,488		\$2,446,213
Notes:				
Gallons are taken from the billing analysis in Bullock Pen Exhibit EE except that sales in the 5/8 by 3/4 Inch meter size have been adjusted to include bills and gallons related to the year end customer adjustment as follows:				
First 2,000 gallons minimum bill $116,052,200 + 2,544,000 = 118,596,200$				
Next 3,000 gallons $106,973,000 + 3,471,288 = 110,444,288$				

Bullock Pen Water District - Attachment C										
Analysis of Customer Usage Including Year End Customer Adjustment										
<b>CLASS:</b>	<b>5/8 X 3/4 Inch</b>									
	USAGE	BILLS	GALLONS	FIRST	NEXT	NEXT	NEXT	OVER	TOTAL	
FIRST	2,000	19,999	26,896,200	26,896,200					26,896,200	
NEXT	3,000	27,939	112,589,288	55,878,000	56,711,288				112,589,288	
NEXT	5,000	14,142	102,827,000	28,284,000	42,426,000	32,117,000			102,827,000	
NEXT	10,000	3,054	41,236,000	6,108,000	9,162,000	15,270,000	10,696,000		41,236,000	
OVER	20,000	715	27,859,000	1,430,000	2,145,000	3,575,000	7,150,000	13,559,000	27,859,000	
TOTAL		65,849	305,392,200	118,596,200	110,444,288	50,962,000	17,846,000	13,559,000	311,407,488	
<b>CLASS:</b>	<b>1 Inch</b>									
	USAGE	BILLS	GALLONS	FIRST	NEXT	NEXT	OVER		TOTAL	
FIRST	5,000	239	521,000	521,000					521,000	
NEXT	5,000	86	647,000	430,000	217,000				647,000	
NEXT	10,000	64	899,000	320,000	320,000	259,000			899,000	
OVER	20,000	65	3,238,000	325,000	325,000	650,000	1,938,000		3,238,000	
TOTAL		454	5,305,000	1,596,000	862,000	909,000	1,938,000		5,305,000	
<b>CLASS:</b>	<b>1 1/2 Inch</b>									
	USAGE	BILLS	GALLONS	FIRST	NEXT	OVER			TOTAL	
FIRST	10,000	34	53,000	53,000					53,000	
NEXT	10,000	0	0	0	0				0	
OVER	20,000	34	1,586,000	340,000	340,000	906,000			1,586,000	
TOTAL		68	1,639,000	393,000	340,000	906,000			1,639,000	
<b>CLASS:</b>	<b>2 Inch</b>									
	USAGE	BILLS	GALLONS	FIRST	OVER				TOTAL	
FIRST	20,000	166	1,513,000	1,513,000					1,513,000	
OVER	20,000	98	4,652,000	1,960,000	2,692,000				4,652,000	
TOTAL		264	6,165,000	3,473,000	2,692,000				6,165,000	
TOTAL SALES		66,635	318,501,200	124,058,200	114,338,288	52,777,000	19,784,000	13,559,000	324,516,488	