

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF BULLOCK PEN WATER )  
DISTRICT, OF GRANT, BOONE, PENDLETON, )  
AND GALLATIN COUNTIES, KENTUCKY, FOR ) CASE NO. 9720  
APPROVAL OF CONSTRUCTION, FINANCING, )  
AND INCREASED WATER RATES )

O R D E R

IT IS ORDERED that Bullock Pen Water District ("Bullock Pen") shall file an original and seven copies of the following information with the Commission with a copy to all parties of record no later than February 13, 1987. If the information cannot be provided by this date, Bullock Pen should submit a motion for an extension of time stating the reason a delay is necessary and include a date by which it will be furnished. Such motion will be considered by the Commission. Bullock Pen shall furnish with each response the name of the witness who will be available at the public hearing for responding to questions concerning each item of information requested.

1. The computer hydraulic analyses filed in this case for both the existing and proposed water distribution system indicates that the potential exists for the system to experience low pressure (less than 30 psig) at Nodes 7, 10 and 11. Pressures of this magnitude are in violation of PSC regulation 807 KAR 5:066, Section 6 (1). Provide details of any preventive measures or

additional construction Bullock Pen intends to perform to protect against this type of occurrence. Details should be documented by hydraulic analyses and field measurements.

2. The computer hydraulic analyses filed in this case for both the existing and proposed water distribution system depict the Crittenden pump station "operating out of range." This would indicate that this pump is unable to satisfy the system's hydraulic conditions as input. Operation at or near the right end of a pump's characteristics curve is generally inefficient and may lead to "cavitation" or other operating problems. State whether this type operation presently occurs, if this type operation is expected to occur after construction, and if it is expected, state what preventive measures or additional construction Bullock Ben intends to perform to protect against this type of occurrence.

3. In response to the Commission's November 24, 1986, Information Request, a flow test of the Crittenden pump station was mentioned. Bullock Pen's response stated that the test was not considered conclusive and that it was felt that the pump actually operates above the pump curve developed from the test. State whether any additional testing was done to further clarify this matter. If no additional testing was done, state why not. If additional testing was done provide the results.

4. In response to the Commission's November 24, 1986, Information Request, the inability to consistently refill the Verona water storage tank was mentioned. A pressure recording chart which monitored pressure at the base of the Verona water storage tank was also filed. This chart indicates pressure above

what would be expected if this tank was full. This would indicate that the pressure recording device was in error, the elevation of the monitoring location is not correct or the tank was full and isolated from the system (i.e. by an altitude valve) and the high service pump was in operation. Provide clarification concerning this matter. This should include under what conditions the pressure recording was made (i.e., tank on line, tank isolated, high service pump on, high service pump off, etc.)

5. In response to the Commission's November 24, 1986, Information Request, information concerning the proposed renovation and expansion of Bullock Pen's water treatment plant was filed. However, information concerning Bullock Pen's peak day usage, Bullock Pen's projected annual peak day demands, how the demands were forecasted and when 1 million gallons per day (GPD) would be needed was not filed, as requested. In addition, information concerning the documented problems with water quality which occur when more than 300,000 GPD are produced was not filed as requested. Provide this information. The information which was filed stated that "It is desirable to operate the treatment plant for 8 hours per day." Provide the design and cost information which supports the conclusion that operation of the water treatment plant for 8 hours a day is cost-effective.

6. How many gallons of water were sold to the City of Dry Ridge during the test year?

7. Why is no increase proposed for the City of Dry Ridge?

8. Please provide cost justification for the proposed increase in each connection charge. Cost justification forms are attached to this information request for your convenience.

9. Please provide cost justification, using the attached forms, for the following proposed increases:

5/8 x 3/4-inch installation fee	\$ 65
1, 1 1/2, 2-inch installation fee	100
Reconnection	40

Done at Frankfort, Kentucky, this 28th day of January, 1987.

PUBLIC SERVICE COMMISSION

  
For the Commission

ATTEST:

\_\_\_\_\_  
Executive Director

Special Charge Cost Schedule

Type of Special Charge: \_\_\_\_\_

1. Field Expense

A. Materials (Itemize)

\_\_\_\_\_ \$ \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. Labor (Time and Wage)

\_\_\_\_\_

Subtotal Field Expense \_\_\_\_\_

2. Clerical and Office Expense

A. Supplies

\$ \_\_\_\_\_

B. Labor

\_\_\_\_\_

Subtotal Clerical and Office Expense \_\_\_\_\_

3. Miscellaneous Expense

A. Transportation

\$ \_\_\_\_\_

B. Other (Itemize)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subtotal Miscellaneous Expense \_\_\_\_\_

Total Expense \_\_\_\_\_

# Special Charge Cost Schedule

Type of Special Charge: \_\_\_\_\_

## 1. Field Expense

### A. Materials (Itemize)

_____	\$ _____
_____	_____
_____	_____

### B. Labor (Time and Wage)

_____	_____
-------	-------

Subtotal Field Expense \_\_\_\_\_

## 2. Clerical and Office Expense

### A. Supplies

_____	\$ _____
-------	----------

### B. Labor

_____	_____
-------	-------

Subtotal Clerical and Office Expense \_\_\_\_\_

## 3. Miscellaneous Expense

### A. Transportation

_____	\$ _____
-------	----------

### B. Other (Itemize)

_____	_____
_____	_____
_____	_____

Subtotal Miscellaneous Expense \_\_\_\_\_

Total Expense \_\_\_\_\_

Special Charge Cost Schedule

Type of Special Charge: \_\_\_\_\_

1. Field Expense

A. Materials (Itemize)

\_\_\_\_\_ \$ \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. Labor (Time and Wage)

\_\_\_\_\_

Subtotal Field Expense \_\_\_\_\_

2. Clerical and Office Expense

A. Supplies

\$ \_\_\_\_\_

B. Labor

\_\_\_\_\_

Subtotal Clerical and Office Expense \_\_\_\_\_

3. Miscellaneous Expense

A. Transportation

\$ \_\_\_\_\_

B. Other (Itemize)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subtotal Miscellaneous Expense \_\_\_\_\_

Total Expense \_\_\_\_\_

Special Charge Cost Schedule

Type of Special Charge: \_\_\_\_\_

1. Field Expense

A. Materials (Itemize)

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

B. Labor (Time and Wage)

\_\_\_\_\_

Subtotal Field Expense

\_\_\_\_\_

2. Clerical and Office Expense

A. Supplies

\$ \_\_\_\_\_

B. Labor

\_\_\_\_\_

Subtotal Clerical and Office Expense

\_\_\_\_\_

3. Miscellaneous Expense

A. Transportation

\$ \_\_\_\_\_

B. Other (Itemize)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Subtotal Miscellaneous Expense

\_\_\_\_\_

Total Expense

\_\_\_\_\_



Special Charge Cost Schedule

Type of Special Charge: \_\_\_\_\_

1. Field Expense

A. Materials (Itemize)

\_\_\_\_\_ \$ \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. Labor (Time and Wage)

\_\_\_\_\_  
Subtotal Field Expense \_\_\_\_\_

2. Clerical and Office Expense

A. Supplies

\$ \_\_\_\_\_

B. Labor

\_\_\_\_\_

Subtotal Clerical and Office Expense \_\_\_\_\_

3. Miscellaneous Expense

A. Transportation

\$ \_\_\_\_\_

B. Other (Itemize)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subtotal Miscellaneous Expense \_\_\_\_\_

Total Expense \_\_\_\_\_

COMMONWEALTH OF KENTUCKY  
 PUBLIC SERVICE COMMISSION  
 P.O. BOX 615  
 FRANKFORT, KENTUCKY 40602

Average Metered Service Connection Expense

Name of Utility: \_\_\_\_\_ Address: \_\_\_\_\_  
 \_\_\_\_\_

The following is an itemization of expenses for providing a metered service connection.

A. Meter Size

5/8-Inch  3/4-Inch  1-Inch  1 1/2-Inch  2-Inch

Other (specify) \_\_\_\_\_

B. Materials Expense

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Water Meter	_____	\$ _____	\$ _____
2. Meter Yoke	_____	_____	_____
3. Corporation Stop	_____	_____	_____
4. Meter Box and Top	_____	_____	_____
5. Miscellaneous Fittings	_____	_____	_____
(Itemize)	_____	_____	_____
6. Subtotal (Add column 3)			

\$

C. Service Pipe Expense

Type of Service Pipe: \_\_\_\_\_ Size of Service Pipe \_\_\_\_\_

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Short Side Service	_____ L.F.S	_____ L.F.	_____
2. Long Side Service	_____ L.F.	_____ L.F.	_____
3. Subtotal (Add column 3 and divide by 2)			<input type="text" value="\$"/>

D. Installation Expense

Labor

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			<input type="text" value="\$"/>

Equipment

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			<input type="text" value="\$"/>

Miscellaneous

	<u>Total</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Inspection	_____	_____	_____
2. Site Clean-Up	_____	_____	_____
3. Other (Itemize)	_____	_____	_____
4. Subtotal (Add column 3)			<input type="text" value="\$"/>

E. Overhead Expense

1. Installation expense (\$ \_\_\_\_\_) x  
overhead rate ( \_\_\_\_\_ %)

\$

F. Administrative Expense

1. Office expense for establishing a new account  
and billing record.

\$

G. Expense Summary

1. Total of items B-F

\$

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Average Metered Service Connection Expense

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Other (specify) \_\_\_\_\_

B. Materials Expense

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Water Meter	_____	\$ _____	\$ _____
2. Meter Yoke	_____	_____	_____
3. Corporation Stop	_____	_____	_____
4. Meter Box and Top	_____	_____	_____
5. Miscellaneous Fittings	_____	_____	_____
(Itemize)	_____	_____	_____
6. Subtotal (Add column 3)			

\$

C. Service Pipe Expense

Type of Service Pipe: \_\_\_\_\_ Size of Service Pipe \_\_\_\_\_

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Short Side Service	_____ L.F.S.	_____ L.F.	_____
2. Long Side Service	_____ L.F.	_____ L.F.	_____
3. Subtotal (Add column 3 and divide by 2)			\$ <span style="border: 1px solid black; display: inline-block; width: 60px; height: 15px; vertical-align: middle;"></span>

D. Installation Expense

Labor

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			\$ <span style="border: 1px solid black; display: inline-block; width: 60px; height: 15px; vertical-align: middle;"></span>

Equipment

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			\$ <span style="border: 1px solid black; display: inline-block; width: 60px; height: 15px; vertical-align: middle;"></span>

Miscellaneous

	<u>Total</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Inspection	_____	_____	_____
2. Site Clean-Up	_____	_____	_____
3. Other (Itemize)	_____	_____	_____
4. Subtotal (Add column 3)			\$ <span style="border: 1px solid black; display: inline-block; width: 60px; height: 15px; vertical-align: middle;"></span>

E. Overhead Expense

1. Installation expense (\$ \_\_\_\_\_) x  
overhead rate ( \_\_\_\_\_ %)

\$

F. Administrative Expense

1. Office expense for establishing a new account  
and billing record.

\$

G. Expense Summary

1. Total of items B-F

\$

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Other (specify) \_\_\_\_\_

B. Materials Expense

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Water Meter	_____	\$ _____	\$ _____
2. Meter Yoke	_____	_____	_____
3. Corporation Stop	_____	_____	_____
4. Meter Box and Top	_____	_____	_____
5. Miscellaneous Fittings	_____	_____	_____
(Itemize)	_____	_____	_____
6. Subtotal (Add column 3)			\$ <input style="width: 100px; height: 20px;" type="text"/>



C. Service Pipe Expense

Type of Service Pipe: \_\_\_\_\_ Size of Service Pipe \_\_\_\_\_

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Short Side Service	_____ L.F.S _____	L.F. _____	_____
2. Long Side Service	_____ L.F. _____	L.F. _____	_____
3. Subtotal (Add column 3 and divide by 2)			\$ <span style="border: 1px solid black; display: inline-block; width: 80px; height: 15px; vertical-align: middle;"></span>

D. Installation Expense

Labor

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			\$ <span style="border: 1px solid black; display: inline-block; width: 80px; height: 15px; vertical-align: middle;"></span>

Equipment

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			\$ <span style="border: 1px solid black; display: inline-block; width: 80px; height: 15px; vertical-align: middle;"></span>

Miscellaneous

	<u>Total</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Inspection	_____	_____	_____
2. Site Clean-Up	_____	_____	_____
3. Other (Itemize)	_____	_____	_____
4. Subtotal (Add column 3)			\$ <span style="border: 1px solid black; display: inline-block; width: 80px; height: 15px; vertical-align: middle;"></span>

E. Overhead Expense

1. Installation expense (\$ \_\_\_\_\_) x  
overhead rate ( \_\_\_\_\_ %)

\$

F. Administrative Expense

1. Office expense for establishing a new account  
and billing record.

\$

G. Expense Summary

1. Total of items B-F

\$

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Other (specify) \_\_\_\_\_

B. Materials Expense

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Water Meter	_____	\$ _____	\$ _____
2. Meter Yoke	_____	_____	_____
3. Corporation Stop	_____	_____	_____
4. Meter Box and Top	_____	_____	_____
5. Miscellaneous Fittings	_____	_____	_____
(Itemize)	_____	_____	_____
6. Subtotal (Add column 3)			\$ <span style="border: 1px solid black; display: inline-block; width: 80px; height: 20px; vertical-align: middle;"></span>

**C. Service Pipe Expense**

Type of Service Pipe: \_\_\_\_\_ Size of Service Pipe \_\_\_\_\_

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Short Side Service	_____ L.F.S.	_____ L.F.	_____
2. Long Side Service	_____ L.F.	_____ L.F.	_____
3. Subtotal (Add column 3 and divide by 2)			\$ <span style="border: 1px solid black; display: inline-block; width: 80px; height: 20px; vertical-align: middle;"></span>

**D. Installation Expense**

**Labor**

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			\$ <span style="border: 1px solid black; display: inline-block; width: 80px; height: 20px; vertical-align: middle;"></span>

**Equipment**

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			\$ <span style="border: 1px solid black; display: inline-block; width: 80px; height: 20px; vertical-align: middle;"></span>

**Miscellaneous**

	<u>Total</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Inspection	_____	_____	_____
2. Site Clean-Up	_____	_____	_____
3. Other (Itemize)	_____	_____	_____
4. Subtotal (Add column 3)			\$ <span style="border: 1px solid black; display: inline-block; width: 80px; height: 20px; vertical-align: middle;"></span>

E. Overhead Expense

1. Installation expense (\$ \_\_\_\_\_) x  
overhead rate (\_\_\_\_%)

\$

F. Administrative Expense

1. Office expense for establishing a new account  
and billing record.

\$

G. Expense Summary

1. Total of items B-F

\$

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Average Metered Service Connection Expense

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A. Meter Size

5/8-Inch  3/4-Inch  1-Inch  1 1/2-Inch  2-Inch

Other (specify) \_\_\_\_\_

B. Materials Expense

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Water Meter	_____	\$ _____	\$ _____
2. Meter Yoke	_____	_____	_____
3. Corporation Stop	_____	_____	_____
4. Meter Box and Top	_____	_____	_____
5. Miscellaneous Fittings	_____	_____	_____
(Itemize)	_____	_____	_____
6. Subtotal (Add column 3)			

\$

C. Service Pipe Expense

Type of Service Pipe: \_\_\_\_\_ Size of Service Pipe \_\_\_\_\_

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Short Side Service	_____ L.F. \$ _____	L.F. _____	_____
2. Long Side Service	_____ L.F. _____	L.F. _____	_____
3. Subtotal (Add column 3 and divide by 2)			<input type="text" value="\$"/>

D. Installation Expense

Labor

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			<input type="text" value="\$"/>

Equipment

	<u>Total Hours</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Short Side Service	_____	\$ _____	\$ _____
2. Long Side Service	_____	_____	_____
3. Subtotal (Add column 3 and divide by 2)			<input type="text" value="\$"/>

Miscellaneous

	<u>Total</u>	<u>Rate Per Hour</u>	<u>Total Cost</u>
1. Inspection	_____	_____	_____
2. Site Clean-Up	_____	_____	_____
3. Other (Itemize)	_____	_____	_____
4. Subtotal (Add column 3)			<input type="text" value="\$"/>

E. Overhead Expense

1. Installation expense (\$ \_\_\_\_\_) x  
overhead rate ( \_\_\_\_\_ %) / \$

F. Administrative Expense

1. Office expense for establishing a new account  
and billing record. / \$

G. Expense Summary

1. Total of items B-F / \$