

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF U.S. 60 WATER	)	
DISTRICT OF SHELBY AND FRANKLIN	)	
COUNTIES, KENTUCKY, FOR (1) A	)	
CERTIFICATE OF PUBLIC CONVENIENCE	)	
AND NECESSITY; (2) APPROVAL OF	)	
THE PROPOSED PLAN OF FINANCING	)	CASE NO. 9149
OF SAID PROJECT; AND (3) APPROVAL	)	
OF THE INCREASED WATER RATES	)	
PROPOSED TO BE CHARGED BY THE	)	
DISTRICT TO CUSTOMERS OF THE	)	
DISTRICT	)	

O R D E R

The U.S. 60 Water District ("U.S. 60") filed an application on September 28, 1984, for approval of adjustments to its water service rates, authorization to construct a \$359,000 waterworks project, and approval of its financing for the proposed project. The project financing includes \$9,000 from applicants for service in the proposed project area and a loan of \$350,000 from the Farmers Home Administration ("FmHA") at 9 1/8 percent annual interest. U.S. 60 will issue waterworks revenue bonds as security for the loans. The repayment period for the loans will be 40 years.

The proposed construction will provide service to about 39 applicants for service. Plans and specifications for this construction as prepared by Warner A. Broughman, III and Associates of Lexington, Kentucky, ("Engineer") have been approved by the Division of Water of the Natural Resources and Environmental Protection Cabinet.

A hearing was held in the offices of the Public Service Commission, Frankfort, Kentucky, on May 2, 1985. There were no intervenors, and no protests were entered.

U.S. 60 requested a rate which would produce an annual increase of \$42,678. In this Order, the Commission has allowed a rate which will produce an annual increase of \$34,177.

#### TEST PERIOD

U.S. 60 proposed and the Commission has accepted the 12-month period ending June 31, 1984, as the test period in this matter.

#### REVENUES AND EXPENSES

U.S. 60 incurred a net operating income of \$35,944 for the test period. U.S. 60 proposed numerous adjustments to revenues and expenses in order to reflect more current operating conditions. The Commission has accepted U.S. 60's pro forma revenues and expenses with the following exceptions:

#### Operating Revenue

U.S. 60 proposed pro forma operating revenue from metered water sales of \$123,725 including proposed new customers. U.S. 60 was permitted to increase the rates it could charge in Case No. 8044-1.<sup>1</sup> Therefore, the Commission has increased test period operating revenue from metered water sales by \$12,872, which results in an adjusted test period level of \$136,597.

---

<sup>1</sup> Purchased Water Adjustment of U.S. 60 Water District, dated September 7, 1984, and amended on October 25, 1984.

U.S. 60 proposed a pro forma adjustment of \$7,700 to test period operating revenue from metered water sales to recognize the new customers that were to be added on to the system due to the pending construction project. U.S. 60 calculated its proposed adjustment by using an estimated 30 new customers, an average per customer monthly usage of 4,000 gallons and the rates that U.S. 60 proposed in this present case. At the hearing Mr. Warner A. Broughman, consulting engineer on this construction project, stated that 39 new customers are now expected<sup>2</sup> and that the average per customer monthly usage would be 4,613 gallons.<sup>3</sup> Thus the Commission has recalculated this adjustment by using the information supplied by Mr. Broughman at the hearing and the increased rates that were granted in Case No. 8044-1. The Commission arrived at an adjustment of \$8,288, an increase of \$588 over U.S. 60's proposed adjustment. Therefore, adjusted test period operating revenue from metered water sales has been increased by \$588 for an adjusted level of \$137,185.

#### Purchased Water

U.S. 60 proposed a pro forma water expense of \$45,000 which reflected the increased rates from its supplier, the City of Frankfort, Kentucky. Further U.S. 60 proposed to reduce its test period operating revenue for non-recurring water sales to the North Shelby Water Company, but failed to include a similar adjustment to its test period purchased water expense. In

---

<sup>2</sup> Transcript of Evidence ("T.E."), May 2, 1985, page 10.

<sup>3</sup> T.E., page 13.

addition U.S. 60 did not include in its proposed adjustment the increased water purchases that would arise from the new customers that were expected to be added to the system due to the pending construction project. The Commission is of the opinion that the test period water purchases should be adjusted to reflect the elimination of non-recurring water sales and the increased water that will be required for new customers. Therefore, U.S. 60's proposed purchased water expense has been reduced by \$2,819 which results in an adjusted level of \$42,181.<sup>4</sup>

Electricity Expense

U.S. 60 proposed a pro forma electricity expense of \$9,000 based on historic data. In response to item number 5 of the initial Commission request dated October 29, 1984, U.S. 60 explained that this adjustment was calculated by using an escalation factor of 25 percent and that actual data showed that the electric expense had increased 35 percent per year since 1978. It has been the Commission's practice to allow only known and measurable pro forma adjustments for rate-making purposes. Many variables may have attributed to this trend, but none of these

---

4	Test Period Actual Gallons Purchased	55,069,048	gallons
	Non-recurring Water Sales	< 4,830,000 >	gallons
	Additional Customers	2,487,767	gallons
	Test Period Adjusted Gallons Purchased	<u>52,726,815</u>	gallons
	Water Costs: \$0.80 per 1,000 gallons	\$ 0.0008	
	Adjusted Test Period Cost	<u>\$ 42,181</u>	

Additional Customers = [39 (New Customers) x 4,613 (Average Monthly Customer Usage) x 12] ÷ [1 - 13.22% (Line Loss)] = 2,487,767 gallons.

variables are readily identifiable and certainly not known or measurable. Thus, the Commission has disallowed this adjustment for rate-making purposes.

At the hearing U.S. 60 was asked to calculate the additional electricity that would be necessary for the new customers that would be added on to the system.<sup>5</sup> U.S. 60 provided this in the information that was supplied to the Commission on May 13, 1985. U.S. 60 calculated that the average cost of electricity was \$0.17 per 1,000 gallons based on the approximate gallons of water pumped during the test period. In its calculation, U.S. 60 used the average cost of electricity on an estimated 32 customers and an average monthly usage of 4,000 gallons to arrive at an adjustment of \$261. The Commission recalculated this adjustment using the provided average cost of electricity, 39 new customers and an average monthly usage of 4,613 gallons to arrive at its adjustment of \$367. The Commission is of the opinion that test period electricity expense should be adjusted to reflect the additional amount of electricity that will be required due to the expected new customers from the pending construction project. Therefore, U.S. 60's proposed level of electricity expense has been reduced by \$1,397 which results in an adjusted level of \$7,603. U.S. 60 was unable to specifically identify any increases in the price of electricity during the test period.

---

<sup>5</sup> T.E., page 86.

### Remaining Pro Forma Adjustment

U.S. 60 proposed the following pro forma adjustments to test period expenses: an adjustment of \$184 to Transmission and Distribution Expense, an adjustment of \$5 to Customer Accounts Expense and an adjustment of \$477 to Administrative Expense. These three pro forma adjustments increased test period operating expenses by a combined amount of \$666. In response to item number 5 of the initial Commission request, U.S. 60 explained that these were nominal adjustments of less than 1 percent to the test period results. The Commission is of the opinion that this is not adequate justification for these proposed adjustments and further, they do not meet the criteria of being known or measurable. Therefore, the Commission has reduced U.S. 60's proposed operating expenses by \$666.

### Depreciation Expense

U.S. 60 proposed to increase its test period depreciation expense of \$12,510 by \$8,750 to allow for depreciation on the proposed construction. It has been the practice of the Commission in previous decisions to compute depreciation expense for rate-making purposes on the basis of original cost of the plant in service less contributions in aid of construction, as a utility should not be allowed recovery of that portion of the plant which has been provided at zero cost.

U.S. 60's test-period depreciation expense of \$12,510 reflects depreciation on the total existing plant using a

composite rate of approximately 2.7 percent.<sup>6</sup> The balance sheet filed by U.S. 60 shows contributions in aid of construction at the end of the test period to be \$94,937. This amount is approximately 20.6 percent of the total cost of the existing utility plant in service. In determining the pro forma depreciation expense, the Commission has utilized the depreciation rate applied by U.S. 60 and has excluded depreciation associated with contributed property. The adjusted depreciation expense for the existing plant is \$9,880,<sup>7</sup> a reduction of \$2,630 from test-period actual depreciation expense. Therefore, U.S. 60's proposed depreciation expense of \$21,260 has been reduced by \$2,630 to arrive at the adjusted level of \$18,630.

Maintenance of Structures

U.S. 60 incurred maintenance of structures expense of \$572 for the test period. The Commission has reviewed the analysis of this account that was supplied by U.S. 60 in its response to item number 2a of the initial Commission request and found that \$450 of this expense was for the scraping, cleaning, and painting of the building and pipes at the water tank. In response to item number 1 of the second Commission request dated November 29, 1984, U.S. 60 stated that it expected this was the first time such

---

<sup>6</sup> \$12,510 ÷ \$460,872 = 2.7%

<sup>7</sup>

Total Existing Plant	\$460,872
Less: Contributions in Aid of Construction	94,937
Non-Contributed Existing Plant	<u>\$365,935</u>
Times: Composite Rate for Existing Plant	<u>2.7%</u>
Depreciation on Existing Plant Allowed for Rate-Making Purposes	\$ 9,880

maintenance had been performed in over 20 years and that it estimated it should be performed in the future every 3 years. At the hearing Mr. Joe Sutherland, a C.P.A and accountant for U.S. 60, stated that the scraping, cleaning and painting of the building and pipes at the water tank should be a normal yearly operating expense and that it should not be amortized.<sup>8</sup> The Commission is of the opinion the 3-year cycle is reasonable and that the expense should be amortized over 3 years. Therefore, the maintenance of structures expense has been reduced by \$450 and amortization expense increased by \$150 for a net reduction in test period operating expense of \$300.

Maintenance of Pumping Equipment

U.S. 60 incurred maintenance of pumping equipment expense of \$1,293 during the test period. The Commission has determined, after reviewing the analysis of this expense provided in response to item number 1b of the initial request, that several of the items of expense should have more properly been capitalized since they were non-recurring in nature and/or would benefit not only the current period, but future periods. The following is a listing of these expenses:

<u>Item</u>	<u>Date</u>	<u>Amount</u>
Moved electric pole and installed new pump and switch at pumping station on Knob Road.	June 1984	\$374
Replaced sump pump at pumping station.	Nov. 1983	\$101
Installed new hydropneumatic tank on Knob Road.	Oct. 1983	\$194

<sup>8</sup> T.E., page 64.



The Commission is of the opinion that these items totaling \$669 should have been capitalized and depreciated.<sup>9</sup> Mr. Sutherland concurred at the hearing that it would be proper to capitalize the aforementioned expenses.<sup>10</sup> Therefore, maintenance of pumping equipment expense has been reduced by \$669 and depreciation increased by \$53 for a net reduction in operating expense of \$616.

Maintenance of Services and Meters

U.S. 60 incurred maintenance of services and meters of \$9,594 during the test period. Upon reviewing the analysis of this expense provided to item number 2d of the initial request it was noted that during January and February of 1984 U.S. 60 had to repair 49 frozen meters at a total cost of \$3,461. At the hearing Mr. Billy H. Allen, Manager of U.S. 60, stated that this was not a normal yearly occurrence and that it was mainly due to the extremely cold weather, poorly installed meters and customers removing the meter covers.<sup>11</sup> It is the Commission's opinion that, since this is not a normal yearly level for this expense, it would be more appropriate to amortize the expenses over 3 years.

In addition, the Commission has determined that several of the expenses should have more properly been capitalized as they would benefit not only the current period, but future periods.

---

<sup>9</sup> Electric pole, pump and switch, sump pump 10 years  
New small storage tank 30 years

<sup>10</sup> T.E., pages 66,67.

<sup>11</sup> T.E., pages 54-56.

The following is a listing of those expenses:

<u>Item</u>	<u>Date</u>	<u>Amount</u>
Six new Rockwell meters	Nov. 1983	\$370
One Master meter	July 1983	\$1,480

At the hearing Mr. Sutherland stated that the installation of a master meter would not be a normal yearly occurrence.<sup>12</sup> The Commission is of the opinion that these items totaling \$1,850 should have been capitalized and depreciated over 10 years. Therefore maintenance expense has been reduced by \$5,311, amortization increased by \$1,154 and depreciation increased by \$185 for a net reduction in test period operating expenses of \$3,972.

#### Legal and Accounting

U.S. 60 incurred legal and accounting expense of \$5,107 during the test period. In response to item number 3 of the initial request U.S. 60 provided a breakdown of the legal and accounting expense which revealed that the \$324 cost of filing U.S. 60's prior purchased water adjustment, Case No. 8044-1, was included in the \$5,107. At the hearing Mr. Sutherland stated that the cost of Case No. 8044-1 should be amortized over a 3-year period.<sup>13</sup> Therefore, legal and accounting expense has been reduced by \$324 and amortization increased by \$108 for a net reduction in test period expenses of \$216.

---

<sup>12</sup> T.E., page 67.

<sup>13</sup> T.E., page 71.

## Insurance

U.S. 60 incurred a test period level of insurance expense of \$677. After reviewing the monthly breakdown of test period operating revenues and expenses provided by U.S. 60, it was noted that a payment of \$443 was made during January 1984 and in its response to item number 7 of the initial request, it was learned that this payment was for a policy that was for the period December 1983 through December 1984. At the hearing Ms. Judy Van Meter, Secretary and Bookkeeper for U.S. 60, stated that the expense is prepaid insurance, that half of the payment was for the 6 months that are outside of the test period and should be removed from test period operating expenses.<sup>14</sup> It was also noted that a similar prepayment of the insurance expense was made earlier and amortized over the first 6 months of the test period. The Commission agrees with Ms. Van Meter and has therefore reduced the insurance expense by \$221 to arrive at an adjusted test period level of \$456.

Therefore, U.S. 60's test period operations have been adjusted as follows:

	U.S. 60's Proposed <u>Adjusted</u>	Commission <u>Adjustments</u>	Commission <u>Adjusted</u>
Operating Revenue:			
Metered Water Sales	\$123,725	\$13,460	\$137,185
Forfeited Discounts	5,640	-0-	5,640
Total Operating Revenue	<u>\$129,365</u>	<u>\$13,460</u>	<u>\$142,825</u>
Operating Expenses	\$126,860	<12,837>	114,023
Operating Income	<u>\$ 2,505</u>	<u>\$26,297</u>	<u>\$ 28,802</u>

---

<sup>14</sup> T.E., page 75.

### REVENUE REQUIREMENTS

U.S. 60's annual debt service based on debt outstanding during the test period and debt proposed in this proceeding is \$55,197.<sup>15</sup> U.S. 60's adjusted net operating income of \$28,802 plus interest income from operations of \$3,257 provides a debt service coverage ("DSC") of 0.58X. The Commission is of the opinion that this coverage is unfair, unjust and unreasonable. To achieve a DSC of 1.2X, which the Commission is of the opinion is the fair, just and reasonable coverage necessary for U.S. 60 to pay its operating expenses and to meet the requirements of its lenders, U.S. 60 would require a net operating income of \$66,236. Accordingly, the Commission has determined that additional revenue of \$34,177 is necessary to provide the 1.2X DSC which will ensure the financial stability of U.S. 60.

### TAP FEES

U.S. 60's present tap fee for a 5/8 inch x 3/4 inch connection is \$300, and the tap fee for a 1 inch connection is \$375. U.S. 60 proposed to increase its tap fees to \$400 and \$450, respectively, and filed cost data justifying the increased costs. The Commission is of the opinion that the proposed tap fees are reasonable and should be approved.

15

	<u>Amount</u>	<u>Amortization Factor</u>	<u>Debt Service</u>
Existing Bond	\$360,000	0.06127	\$22,057
Proposed Bond	\$350,000	0.094685	33,140
Total Debt Service			<u>\$55,197</u>

### FINDINGS AND ORDERS

The Commission, after consideration of the application and evidence of record and being advised, is of the opinion and finds that:

1. Public convenience and necessity require that the construction proposed in the application and record be performed and that a certificate of public convenience and necessity be granted.

2. The proposed project for the U.S. 60 water system includes a 150,000-gallon water storage tank, 39 service connections, about 4.6 miles of 8-, 6-, and 4-inch water main and miscellaneous appurtenances.

3. The low bids received for the proposed construction totaled \$195,254, which will require about \$359,000 in project funding after allowances are made for fees, contingencies, and other indirect costs, and additional construction being considered as a result of receiving bids under the final estimates.

4. Any deviations from the construction herein approved which could adversely affect service to any customer should be subject to the prior approval of this Commission.

5. U.S. 60 should obtain approval from the Commission prior to performing any additional construction not expressly certificated by this Order.

6. U.S. 60 should file with the Commission duly verified documentation which shows the total costs of construction including all capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is sub-

stantially completed. The construction costs should be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for Water Utilities prescribed by this Commission.

7. U.S. 60's contract with its Engineer should require the provision of full-time resident inspection under the general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering. The supervision and inspection should insure that the construction work is done in accordance with the contract plans and specifications and in conformance with the best practices of the construction trades involved in the project.

8. U.S. 60 should require the Engineer to furnish a copy of the record plans and a signed statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the date of substantial completion of this construction.

9. A 5/8-inch x 3/4-inch meter should be the standard customer service meter for all new customers and should be installed at all points of service unless the customer provides sufficient justification for the installation of a larger meter.

10. U.S. 60 should file with the Commission a copy of all contractual agreements for the provision of services or the purchase of services which are subject to the approval of this Commission.

11. The risks to be borne by U.S. 60 during the initial operating years of its water utility improvements require the

establishment of a financial reserve against these risks. U.S. 60 should, therefore, set aside \$9,000 of its applicant contributions as an "Initial Operations and Maintenance Reserve Fund" in accordance with the FmHA letter of conditions for this project. This fund should be utilized to supplement the cost of utility operations and maintenance during the first 5 years of operations after completion of the construction project.

12. The proposed borrowing of \$350,000 is for lawful objects within the corporate purposes of U.S. 60, is necessary and appropriate for and consistent with the proper performance of services to the public by U.S. 60, and will not impair its ability to perform these services.

13. The financing secured by U.S. 60 for this project will be needed to pay for the work herein approved. U.S. 60's financing plan should, therefore, be approved.

14. The rates proposed by U.S. 60 will produce revenues in excess of the revenues found reasonable herein and should be denied upon application of KRS 278.030.

15. The rates and charges in Appendix A are the fair, just and reasonable rates to be charged by U.S. 60 in that they should produce gross revenues from U.S. 60's operations of \$180,259.

16. The tap fees proposed by U.S. 60 are reasonable and should be approved.

IT IS THEREFORE ORDERED that U.S. 60 be and it hereby is granted a certificate of public convenience and necessity to proceed with the waterworks construction projects described by the plans and specifications of record herein approved.

IT IS FURTHER ORDERED that U.S. 60 shall comply with Findings 4 through 11 and 13 herein as if each of these findings were also ordered.

IT IS FURTHER ORDERED that the rates proposed by U.S. 60 be and they hereby are denied.

IT IS FURTHER ORDERED that the rates and charges in Appendix A be and they hereby are approved as the fair, just and reasonable rates and charges to be charged by U.S. 60 for service rendered on and after the date of this Order.

IT IS FURTHER ORDERED that the tap fees proposed by U.S. 60 and in Appendix A be and they hereby are approved.


Nothing contained herein shall be deemed a warranty of the Commonwealth of Kentucky, or any agency thereof, of the financing herein authorized.

Done at Frankfort, Kentucky, this 23rd day of July, 1985.

PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

  
Commissioner

ATTEST:

\_\_\_\_\_  
Secretary



APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 9149 DATED 7/23/85

The following rates and charges are prescribed for the customers in the area served by U.S. 60 Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

RATES: Monthly

First 1,000 gallons	\$ 8.75 Minimum Bill
Next 2,000 gallons	4.15 per 1,000 gallons
Next 2,000 gallons	3.20 per 1,000 gallons
Over 5,000 gallons	2.75 per 1,000 gallons

TAP FEES

5/8 Inch x 3/4 Inch	\$ 400
1 Inch	450