COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ADJUSTMENT OF GAS AND ELECTRIC RATES OF THE UNION LIGHT, HEAT AND POWER COMPANY	)	CASE NO. 90-041

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O R D E R

On April 2, 1990, Union Light, Heat and Power Company ("ULH&P") filed an application with the Commission requesting authority to increase its electric and gas rates for service rendered on and after May 2, 1990. The proposed rates would increase annual electric revenues by $9,102,438, an increase of 6.9 percent, and annual gas revenues by $7,489,887, an increase of 12.6 percent. These increases represent an annual increase in total operating revenues of $16,592,325, or 8.7 percent, based on normalized test-year sales. This Order grants an increase in annual gas and electric revenues of $12,245,979, or 6.6 percent.

The Commission suspended the proposed rate increase until October 2, 1990 in order to conduct public hearings and investigations into the reasonableness of the proposed rates. A hearing was scheduled for August 22, 1990 for the purpose of cross-examination of the witnesses of ULH&P and the intervenors. ULH&P was directed to give notice to its consumers of the proposed rates and the scheduled hearing pursuant to 807 KAR 5:011, Section 8.

The Commission granted motions to intervene filed by the Attorney General by and through his Utility and Rate Intervention

Division ("AG"), the Kentucky Industrial Utility Customers ("KIUC"), and the Office of Kentucky Legal Services Programs on behalf of Brenda Freeman ("KLS"). A public hearing was held in the Commission's offices in Frankfort, Kentucky, on August 22-24 and 27, 1990 with all parties of record represented. Simultaneous briefs were filed on September 17, 1990 and simultaneous reply briefs were filed on September 21, 1990. All information requested during the hearing has been submitted.

COMMENTARY

ULH&P operates as a public utility providing gas and electric service in Boone, Campbell, Gallatin, Grant, Kenton, and Pendleton counties. Within those counties, ULH&P distributes and sells natural gas to approximately 64,343 customers and distributes and sells electricity to approximately 102,403 customers. ULH&P is a subsidiary of Cincinnati Gas and Electric Company ("CG&E"), from which it purchases wholesale electricity for distribution to its retail customers. ULH&P obtains its wholesale gas supply from a variety of suppliers.

TEST PERIOD

ULH&P proposed and the Commission has accepted the 12-month period ending December 31, 1989 as the test period for determining the reasonableness of the proposed rates. In utilizing the historic test period the Commission has given full consideration to appropriate known and measurable changes.

NET ORIGINAL COST RATE BASE

Post Test Period Plant Additions

In its April 2, 1990 filing, ULH&P proposed a total jurisdictional net original cost rate base of $147,115,035. Included in this amount was $8,683,591 in post test-period plant additions, representing ULH&P's estimate of net plant in service additions for the period January 1 through June 30, 1990. ULH&P proposed this treatment to bring the rate base more current with respect to the time when the rates will become effective.[1] On August 2, 1990, ULH&P filed a revision to the jurisdictional net original cost rate base which reflected actual net post test-period plant additions. The revised total jurisdictional net original cost rate base was $145,650,690. The actual net additions to utility plant in service for the period January 1 through June 30, 1990 totaled $7,678,000. ULH&P stated that since it included post test-period plant additions in its jurisdictional rate base, it did not include any amounts for Construction Work in Progress ("CWIP").

The AG opposed including the estimated plant additions through June 30, 1990, and recommended that these amounts be removed from rate base. The AG stated that it would be improper to include post test-period plant additions without also including the impact of additional revenues and expenses and the effect on the capital structure.[2] The Commission agrees. In Case No.

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1 Brief of ULH&P, page 9.

2 DeWard Direct Testimony, pages 11 and 12.

10481,[3] the Commission put all utilities under its jurisdiction on notice that, when using a historical test period, adjustments for post test-period additions to plant in service should not be requested unless all revenues, expenses, rate base, and capital items have been updated to the same period as the plant additions.[4] ULH&P has not provided these updates for its revenues and expenses, and during the hearing provided an update on its capitalization solely for informational purposes.[5] ULH&P has not provided the Commission with sufficient reasons to deviate from its position stated in Case No. 10481. Therefore, the Commission will not include in ULH&P's jurisdictional rate base either estimated or actual amounts representing post test-period plant additions.

ULH&P's stated reason for not including CWIP in its rate base calculations was because it had proposed including the post test-period plant additions.[6] Because of the rejection of the proposed post test-period plant addition, the Commission believes it is appropriate to include CWIP in ULH&P's rate base. This approach is in keeping with the Commission's practice of establishing the value of investment in utility property, properly matched with

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3 Case No. 10481, Notice of Adjustment of the Rates of Kentucky-American Water Company Effective on February 2, 1989, final Order dated August 22, 1989.

4 Ibid., page 5.

5 Transcript of Evidence ("T.E."), Vol. I, August 22, 1990, pages 49 and 50.

6 T.E., Vol. II, August 23, 1990, page 113.

invested capital, at a specific point in time. ULH&P would not provide the test-year end balances for CWIP, though twice requested to do so.[7] As a consequence, the Commission has included in the determination of the jurisdictional net original cost rate base $1,512,011 in electric CWIP and $862,725 in gas CWIP, as reported in ULH&P's 1989 Annual Reports, which are on file. Common utility plant CWIP of $323,651 has been allocated to the electric and gas departments on the same basis as common utility plant.

Accumulated Depreciation

In the original application, in conjunction with the proposed post test-period plant adjustment, ULH&P proposed to increase accumulated depreciation by a total of $2,296,768. This figure was revised to $1,818,000 in the filing of August 2, 1990.

The AG opposed the adjustment to accumulated depreciation on the same grounds as the post test-period plant additions, although he did recommend that the accumulated depreciation should be adjusted to reflect the normalization of depreciation expense on utility plant as of test-year end in keeping with a long-standing Commission practice.[8]

ULH&P's proposed adjustment to accumulated depreciation reflecting the post test-period additions should not be included in the rate base calculations. Any accumulated depreciation

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7 Item 36 of the May 11, 1990 Order and Item 2 of the June 7, 1990 Order.

8 DeWard Direct Testimony, page 12.

reflected in the rate base should go hand-in-hand with the utility's plant in service. Therefore, the Commission rejects ULH&P's proposed adjustment to accumulated depreciation to reflect the proposed post test-period plant additions. It is appropriate to reflect adjustments to test year depreciation expense in the accumulated depreciation used in the determination of rate base, explained elsewhere in this Order.

Materials and Supplies - Propane Inventories

The AG proposed to reduce the propane inventory included in rate base by $2,433,116.[9] ULH&P had proposed to include $2,473,676, which reflected the 13-month average of the actual balances recorded for propane inventories. The AG's proposal would reduce the amount included in rate base to a level representing ULH&P's projected usage for the next two years at the current inventory price.[10]

The Commission cannot adopt the adjustment proposed by the AG. The AG has not provided any analysis which examines the propane usage of ULH&P, the propane levels needed to maintain the storage facility, or the impact the propane inventory has on the determination of the contract demand for gas. The AG has based the proposed adjustment on the projected usage for the next two years rather than using a historic test-period approach which the Commission feels is more appropriate.

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9 DeWard Direct Testimony, page 14.

10 Ibid., page 14.

However, the Commission is concerned that ULH&P has included the propane inventory for both CG&E and ULH&P in its rate base calculations.[11] ULH&P's rate base should only include those items which relate to ULH&P. ULH&P claimed that CG&E's apportionment of the propane inventory was 64 percent.[12] Thus, ULH&P's share of the propane inventory would be 36 percent, since only these two companies share the inventory. This 36 percent share represents the amount that should be included in ULH&P's rate base. Using the propane inventory information given in response to Item 24a of the AG's first data request, the Commission has calculated a 13-month average valuation for 36 percent of the reported propane inventory. This calculation results in a reduction to materials and supplies of $1,583,150, leaving a balance of $890,526 in materials and supplies for propane inventory.

The Commission is further concerned about the volumes of propane maintained in ULH&P's inventory. After applying the 36 percent apportionment share to the total propane inventory, ULH&P's 13-month average volume of propane was approximately 2,500,000 gallons. In the test year, ULH&P used approximately 234,000 gallons of propane.[13] This minimal usage level during the test year raises questions relating to the necessary and appropriate level that should be maintained. Therefore, the

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11 T.E., Vol. III, August 24, 1990, pages 28 and 29.

12 Ibid., page 29.

13 Ibid., page 27.

Commission places ULH&P on notice that in its next general rate case, the propane inventories will be closely scrutinized. ULH&P will be expected to provide analyses of propane usage, storage levels, and impact on contract demand.

Gas Stored Underground

ULH&P included $604,116 as gas stored underground in its rate base calculations. This amount represented the 13-month average balance of ULH&P's estimated natural gas storage balance.[14] The estimated balance was based on a global settlement agreement with Columbia Gas Transmission Corporation ("Columbia Transmission"). Prior to that settlement, ULH&P did not have underground gas storage facilities. During the test year, no amounts were recorded on ULH&P's balance sheet for underground storage, except in the month of December when an entry for $1,453,200[15] was made.

The AG proposed an adjustment reducing the gas stored underground by $23,329,[16] which reflected a 12-month average balance instead of the proposed 13-month approach. The AG stated that the inclusion of both the December 1989 and December 1990 balances artificially inflated the average,[17] noting that the Commission has used the 12-month average balance approach in other cases.

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14 Gas Application Workpapers, WPB-5.1g.

15 Ibid., WPB-8.1pp.

16 Exhibit TCD-1, Schedule 8.

17 DeWard Direct Testimony, page 14.

ULH&P included an item in its rate base calculations based on projections, at variance with the historic test-period approach. ULH&P claims that the November and December 1989 natural gas storage quantity balances were 726,600 dekatherms. Given the balance recorded in ULH&P's accounts in December 1989, the average cost per dekatherm would be $2.00.[18] ULH&P used a computed cost rate of $1.2167 per dekatherm in its estimates. ULH&P has provided no historical data on which to analyze the accuracy of its estimated withdrawals and injections.

ULH&P did not adequately explain why the Commission should incorporate an estimated value while at the same time using a historical test period. Absent evidence necessary for the Commission to evaluate the reasonableness of the estimated natural gas storage balances, the Commission will not include any amount in its determination of jurisdictional net original cost rate base for gas stored underground.

Prepayments

ULH&P proposed to include in its rate base $141,175 for the PSC Assessment[19] and $7,076 for auto license taxes as prepayments. ULH&P argues that while these taxes are based on present time valuations, they apply to future obligations and, therefore, are

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18 $1,453,200 / 726,600 dekatherms.

19 Referred to throughout application as "KYPSC Maintenance Tax."

prepaid.[20] As prepayments, ULH&P believes that these taxes represent an item of working capital includable in rate base on which ULH&P is entitled to earn a return.[21]

The Commission does not agree. The PSC Assessment and the auto license taxes represent liabilities which are paid for a specific, present time obligation. The rationale employed by ULH&P could be just as easily applied to other of its obligations, such as property taxes and income taxes. Nor is ULH&P entitled to earn a return on taxes it has paid. These taxes are included in the operating expenses of ULH&P and are recovered from ratepayers through rates. ULH&P would enjoy a double benefit if it were also allowed to earn a return on these taxes. The Commission has excluded the PSC Assessment and the auto license taxes from the prepayments included in the rate base.

Cash Working Capital Allowance

ULH&P proposed to include in rate base $3,944,989 as a cash working capital allowance. ULH&P determined the allowance using the 45 day or 1/8 formula methodology, which this Commission has traditionally used in rate cases, and one we adopt for this case.

The AG has proposed a complete elimination of this adjustment because the formula method "always produces a working capital allowance but does not produce an amount which truly represents a working capital requirement."[22] The AG further states that ULH&P

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20 T.E., Vol. III, August 24, 1990, page 22.

21 Ibid., page 26.

22 DeWard Direct Testimony, page 13.

has not justified its need for a cash working capital requirement. However, when the AG was requested to provide the Commission with his determination of the cash working capital requirement for ULH&P, he chose only to respond that the Company has the burden of proof to justify its request for rate relief.[23]

The Commission finds that ULH&P has met its burden of proof for the inclusion of a cash working capital allowance by using the methodology normally employed by the Commission. ULH&P has properly calculated the cash working capital allowance using the 1/8 formula method. The Commission has reviewed the decisions of other state regulatory agencies, and finds that there is no single required method used in determining the cash working capital component of rate base. More often than not, the cash working capital allowed in rate base is effected by the particular exigencies of the rate case.

Deferred Income Taxes

ULH&P deducted $17,826,558 in deferred income taxes in the calculation of its rate base. This amount reflected the projected balances for the deferred income taxes as of June 30, 1990. This projection attempted to match in time the deferred income taxes to the post test-period plant addition. However, ULH&P did not include deferred income taxes for CWIP, capitalized interest, and Allowance for Funds Used During Construction ("AFUDC").[24]

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23 Response to Commission's Order dated July 18, 1990, Item 2c.

24 Electric and Gas Applications, Schedule B-6.

The AG proposed to remove from the rate base calculation all accumulated deferred income tax debits, Account No. 190, and the deferred income taxes related to unbilled revenues.[25] The AG also proposed to use the test-year end actual balances for the deferred income taxes rather than the projected balances. The AG's position for excluding certain deferred income taxes was based on the fact that ratepayers have not yet benefited from the tax versus book treatment of these items.[26]

As discussed previously in this Order, the Commission has not accepted the post test-period plant addition adjustment. Thus, it is not appropriate to include the projected balances of the deferred income taxes in the rate base. We also do not believe it is appropriate to exclude the deferred income taxes relating to CWIP, capitalized interest, or AFUDC. Concerning the AG's proposal to exclude certain deferred income taxes from rate base, the Commission notes that ratepayers have benefited from deferred income tax debits since at the time the debits were recorded, book income tax expense was lower than the actual income tax liability. Ratepayers benefit from deferred income tax credits as the tax timing differences which produced the credits reverse. The Commission will include in the determination of ULH&P's

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25 Exhibit TCD-1, Schedule 9.

26 DeWard Direct Testimony, page 15.

jurisdictional net original cost rate base the test-year end actual balances of the deferred income taxes which were included by ULH&P in its application, with the addition of deferred income taxes relating to CWIP, capitalized interest, and AFUDC.

Based upon the previous findings, the Commission has determined the jurisdictional net original cost rate base for ULH&P at December 31, 1989 to be as follows:

	Electric	Gas	Total
Total Utility Plant	$133,867,915	$95,002,906	$228,870,821
Add:			
Materials and Supplies - Distribution	80,888	0	80,888
Gas Enricher Liquids - Propane	0	890,526	890,526
Other	17,656	11,614	29,270
Total Materials and Supplies	98,544	902,140	1,000,684
Gas Stored Underground	0	0	0
Prepayments	225,157	469,659	694,816
Cash Working Capital Allowance	2,130,014	1,729,929	3,859,943
Subtotal	2,453,715	3,101,728	5,555,443
Deduct:			
Reserve for Accumulated Depreciation	44,799,552	29,469,126	74,268,678
Customer Advances for Construction	0	1,536,540	1,536,540
Accumulated Deferred Income Taxes	11,658,686	5,104,569	16,763,255
Investment Tax Credits	122,061	155,583	277,644
Subtotal	56,580,299	36,265,818	92,846,117
Total Jurisdictional Net Original Cost Rate Base	$79,741,331	$61,838,816	$141,580,147

CAPITAL

ULH&P proposed a total capitalization of $132,179,537.[27] ULH&P filed several computations of its capitalization, but this amount was indicated by ULH&P to be the appropriate level for rate-making purposes.[28] The proposed capitalization included the average daily balance of short-term borrowings for the test year and the total of all investment tax credits as of the test-year end.[29]

The AG proposed a total capitalization of $125,826,171.[30] The difference between the AG's proposal and ULH&P's was that the AG did not include any investment tax credits in his total.

The Commission has determined that ULH&P's total capitalization should be $140,564,565 based on amounts reported on ULH&P's combined balance sheet as of the test-year end.[31] The Commission has included the jurisdictional test-year end Job Development Investment Tax Credits ("JDIC") by allocating to each component of capital an amount based on the ratio of each capital component to total capital excluding JDIC. ULH&P had included all investment tax credits as JDIC, without reflecting the electric

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27 Mosley Direct Testimony, Exhibit JRM, page 1 of 7.

28 T.E., Vol. I, August 22, 1990, page 102.

29 Electric and Gas Applications, Schedule B-6.

30 Weaver Direct Testimony, Statement 15.

31 Response to Commission's Order dated March 30, 1990, Item 7, page 3 of 3.

jurisdictional allocation of the credits, and had not allocated the amounts to the components of capital. The Commission has traditionally followed the practice of allocating JDIC to the capital components. This treatment is entirely consistent with the requirements of the Internal Revenue Service that JDIC receive the same overall return allowed on the components of capitalization.

REVENUE AND EXPENSES

For the test period, ULH&P had actual jurisdictional net operating income of $7,274,515. ULH&P had originally proposed several pro forma adjustments to revenues and expenses to reflect more current and anticipated operating conditions which resulted in an adjusted jurisdictional net operating income of $7,002,601.[32] On August 2, 1990, ULH&P filed revisions to certain expense items relating to the actual utility plant in service additions made for the period January 1, 1990 through June 30, 1990. The proposed adjustments are generally proper and acceptable for rate-making purposes with the following modifications.

Revenue Normalization - Electric

ULH&P proposed normalized electric operating revenues of $131,725,623 based on the rates in effect at the end of the test year. In normalizing its electric revenues, ULH&P annualized its sales based on year-end customers and increased the related late payment charges. ULH&P also eliminated unbilled revenues and a

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[32] Electric and Gas Applications, Schedule C-1.

nonrecurring credit that had been included in the test year to correct a prior billing discrepancy.

The AG proposed an adjustment of $327,944 to reconcile fuel revenue and fuel expense for the test year. The AG indicated that the adjustment could be made as an increase to revenue or as a decrease to expense and that he chose the latter approach. The AG maintained that an adjustment of this type was necessary in order to establish a proper level of base rates.[33]

ULH&P stated that because its fuel adjustment clause ("FAC") included an over- and under-recovery mechanism a reconciling adjustment was not appropriate as part of a general rate case. ULH&P argued that no adjustment was needed to match fuel revenue and fuel cost for the test year.

The Commission finds ULH&P's proposed adjustments to be reasonable for determining normalized revenues. The Commission also finds that a fuel synchronization adjustment is necessary in order to eliminate, for rate-making purposes, the effect of the difference between FAC revenues and FAC purchased power expense. ULH&P's FAC, with its over- and under-recovery mechanism, is fully recovering, meaning that over time all FAC costs will be recovered. With the two month billing lag that is built into the FAC an exact match of FAC revenues and expenses during any reporting period is not expected. However, as the FAC is fully recovering, it is inappropriate to reflect the over- or

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33 Deward Direct Testimony, pages 21-22.

under-recovery of a given test period in the determination of a utility's revenue requirements for the purpose of setting base rates. The Commission finds that the adjustment should be reflected in fuel revenues, rather than fuel expense given that once the expense is incurred it is the calculation of FAC revenues that results in the mismatch. Therefore, ULH&P's normalized electric revenues have been increased by $327,944 to remove the test-year under-recovery of FAC expenses for rate-making purposes.

Revenue Normalization - Gas

ULH&P proposed normalized gas operating revenues of $58,566,418 based on the rates in effect at the time the application was filed. In normalizing its gas revenues, ULH&P annualized its sales to reflect normal weather conditions and year-end customers and also increased the related late payment charges. ULH&P eliminated unbilled revenues and adjusted gas cost revenues based on its wholesale gas cost in effect at the end of the test year.

The AG proposed three adjustments totalling $645,022 to increase revenues for transportation services provided to Columbia Transmission for gas ultimately delivered to CG&E.[34] These adjustments were based on (1) a comparison of allocation ratios and revenue levels reflected in the test year with allocation ratios and revenue levels experienced in prior years, and (2) imputing a higher rate of return than the FERC-approved return component recovered through the billings to Columbia Transmission.

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[34] Ibid., pages 15-19.

The AG maintained that the allocation ratios and revenues in the test year were not representative of a normal period and that it was inappropriate to require ratepayers to pay a higher rate of return than the FERC-approved return billed to Columbia Transmission.

ULH&P argued that the test year was representative of current operating conditions and that no adjustments were necessary. ULH&P maintained that the AG's adjustments reflected an arbitrary comparison of reporting periods without attempting to determine the reasons for the differences.

The Commission finds that the AG's adjustments are not adequately supported and should not be included for rate-making purposes. It is not sufficient to merely make the point that the test year differed from prior years without ascertaining the reasons for the differences. Furthermore, the AG presented no analysis or explanation that the years prior to the test year are more representative of current conditions than is the test year. Likewise, the AG offered no support for imputing revenues based on a higher return requirement than the FERC-approved return.

ULH&P's normalized gas operating revenues of $58,566,418 included gas cost revenues of $36,715,206 and non-gas cost revenues of $21,851,212 based on the rates in effect at the end of the test year. While not an issue in this case, gas cost revenues are a major component of ULH&P's gas operating revenues. ULH&P's normalized revenues have been decreased by $5,249,729 to reflect gas cost revenues of $31,465,477 based on ULH&P's latest gas cost adjustment effective September 1, 1990.[35] ULH&P's purchased gas expense has been decreased by a like amount to reflect the current cost of gas. With this modification, the Commission finds ULH&P's adjustments to be reasonable for determining normalized revenues.

Purchased Power Expense

The AG proposed adjustments totalling $1,016,990 to reduce purchased power expense.[36] One component of this amount is the $327,944 FAC synchronization adjustment which was addressed as part of electric revenue normalization. The remainder of $689,046 was related to the cold weather experienced during December 1989 which the AG claims distorted the test year and should be adjusted for rate-making purposes.

ULH&P argued that no adjustment was necessary as a result of the weather during one month of the test year. ULH&P maintained that any adjustment to base rate purchased power expense was inappropriate.

In determining the merits of the AG's adjustment, the Commission has considered the reasonableness of the test year and whether that test year is representative of normal conditions. The AG's adjustment consists of a comparison of December 1989 and December 1988 sales and purchases. The AG made no evaluation of

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35 Case No. 9029-X, Purchased Gas Adjustment Filing of Union Light, Heat and Power Company, Order dated August 31, 1990.

36 Brief of the AG, page 7.

December 1988 for use as a benchmark for comparing December 1989,[37] nor did he offer evidence to show that ULH&P's purchased power volumes, sales volumes, and line loss for the test year as a whole were not reasonable or representative of normal conditions.[38]

The Commission's review reveals no distortion of the test year due to the colder-than-normal conditions experienced in the test year's final month. The sales, purchases, and line loss included in the test year are representative of normal operations for which no adjustment is required.

Gas Line Inspection Fees and Expenses

During the test year, ULH&P recorded the fees and expenses associated with gas line inspections in Accounts 415 and 416. These accounts record the revenues and expenses received for merchandising, jobbing, and contract work, and are classified as "below the line" items on the income statement. ULH&P used five subaccounts to record the fees and expenses.[39] ULH&P recorded fees totaling $111,530 and related expenses of $99,077.[40] ULH&P

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37 T.E., Volume III, August 24, 1990, page 214.

38 Ibid., page 213.

39 Response to Hearing Data Request, Enclosure 1.

40 Response to the Commission's Order dated June 7, 1990, as modified by a Hearing on June 25, 1990, Item 14.

indicated that these inspections were required by Commission regulations.[41]

The Commission does not agree with the accounting treatment used by ULH&P for these inspections. Since the inspections are required by Commission regulations, the inspections represent activity that is properly classified as utility operations. By recording these items below the line, ULH&P has classified the inspections as non-utility operations. For rate-making purposes, the Commission has reclassified the gas inspection fees as other operating revenues and the gas inspection expenses as distribution expenses. ULH&P should reflect this reclassification in its accounting records for any future inspection fees and expenses. If ULH&P desires to continue charging fees for these inspections, it will have to file the appropriate tariff sheets.

Uncollectible Accounts

As in past cases, ULH&P included in its requested revenue increase a commensurate increase in its provision for uncollectible accounts based upon its test-year provision for uncollectibles viewed as a percentage of total revenues. The test-year provision for uncollectibles, as a percentage of total revenues, equaled .92 percent.[42] The Commission accepts ULH&P's methodology of adjusting uncollectible accounts, but will apply

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41 T.E., Vol. II, August 23, 1990, page 129.

42 Electric and Gas Application Workpapers, WPC-12a.

the test year rate to the revenues as adjusted in this Order. The Commission will determine ULH&P's revenue requirement using .92 percent to reflect the increase in uncollectible accounts expense associated with the revenue increase granted herein.

Charitable Contributions

As it has in its two previous cases, ULH&P proposed an adjustment to increase operating expenses by $108,918 to reflect the expense for charitable contributions made during the test year. While ULH&P realizes that the Commission has not recognized this adjustment in past decisions, it believes this item to be a necessary business expense which is a response to the needs and desires of the community.[43] However, ULH&P did not present any substantive evidence that these donations benefit its customers. The AG opposed the proposed adjustment, citing past Commission practice to deny such expenses. The Commission has consistently denied the inclusion of donations as an operating expense for rate-making purposes and finds that ULH&P has presented no evidence in this proceeding to cause a departure from this policy.

Advertising Expenses

ULH&P proposed an adjustment to reduce operating expenses by $43,749[44] to reflect the elimination of institutional advertising as required by 807 KAR 5:016. The charges eliminated represented charges to Account No. 930.1, General Advertising Expenses.

43 Danemayer Direct Testimony, page 11.

44 Electric and Gas Applications, Schedule C-3.14.

While making the adjustment in compliance with the regulation, ULH&P claimed that these expenses are necessary, recoverable business expenses, and should not be eliminated.[45]

The AG proposed to remove from expenses, in addition to ULH&P's adjustment, all advertising expenses included in Account No. 912, Demonstration and Selling Expenses, and Account No. 913, Advertising Expenses.

The Commission agrees. On two separate occasions, ULH&P was instructed to provide a schedule of the expenses recorded in Account Nos. 912 and 913, detailing the nature of the expense and including examples of the type of advertising involved.[46] ULH&P provided no schedules of the expenses. The Uniform System of Accounts ("USoA") descriptions for both Account Nos. 912 and 913 state that the charges to be recorded in these accounts are for advertising designed to promote or retain the use of utility service. 807 KAR 5:016 not only prohibits the inclusion of institutional advertising expenses for rate-making purposes, but also prohibits promotional advertising. The Commission has reduced operating expenses by $280,804 to eliminate these advertising expenses.

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45 Danemayer Direct Testimony, page 13.

46 Item 47 of the Commission's Order dated May 11, 1990 and Item 5 of the Commission's Order dated June 7, 1990.

While the Commission notes that some of the examples of advertising provided by ULH&P did deal with conservation, ULH&P did not provide the requested information which would allow the determination of an allowable expense for rate-making purposes. The burden of proof rests with the utility to show that the advertising expenses are allowable under 807 KAR 5:016. The Commission also notes that the USoA requires that conservation advertising be recorded in Account No. 909, Informational and Instructional Advertising Expenses.

Health Care Costs

ULH&P proposed to increase operating expenses $186,899 to reflect changes in its employee health care costs effective January 1, 1990. The adjustment was determined at the consolidated company level and the appropriate portion of the increased cost allocated to ULH&P.[47] ULH&P also provided a monthly reconciliation of the total consolidated medical expenses for the test year and the first three months of 1990.[48] The data on the monthly reconciliation showed that the increase in health care costs first appeared in the December 1989 costs. While certain costs presented in the application's workpapers could be traced to information provided in the monthly reconciliations, others could not.

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47 Electric and Gas Application Workpapers, WPC-3.15a.

48 Response to Hearing Data Request, Enclosure 2.

The Commission believes it is appropriate to annualize the December 1989 costs reported for ULH&P, and subtract the test year actual costs from this amount to determine the adjustment. The December 1989 costs recorded in Account No. 926.60 were $180,463.[49] The annualization of this cost minus the test year actual costs results in an increase to operating expenses of $188,383.

Rate Case Expenses

ULH&P proposed to adjust operating expenses by $75,000 to reflect its costs of this rate case proceeding. This amount represented the total expenses estimated by ULH&P for the rate case. The AG proposed that this amount be amortized over a 3 year period. The amortization of rate case expenses over a 3 year period has been used frequently by this Commission. It would not be reasonable for ULH&P to recover the costs of this rate case every year that the rates established herein are in effect. The Commission believes it is appropriate in this case to amortize the costs over a 3 year period. The Commission has included $25,000 in operating expenses for rate case expenses.

Injuries and Damages

ULH&P proposed a net adjustment of $179,123 to reduce its expenses for injuries and damages to reflect the 10-year average expense exclusive of extraordinary occurrences. The adjustment was calculated using the Consumer Price Index-Urban ("CPI-U") to

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49 Ibid., page 4 of 5.

adjust the recorded dollar amounts to 1989. Such an adjustment is consistent with the Commission's decisions in previous ULH&P rate cases. However, in determining the adjustment, the CPI-U used for 1989 reflected only the first 11 months of 1989. ULH&P agreed that it was more appropriate to use the 1989 CPI-U that reflected the entire 12 months of the year.[50] The Commission has recalculated the adjustment using the appropriate CPI-U for 1989, and has determined that operating expenses be decreased $177,820.

Storm Damages

ULH&P proposed an adjustment of $246,602 to reduce its expenses for storm damages to reflect the 10-year average expense. The adjustment was calculated using the same methodology as had been used in the adjustment for injuries and damages. Because the Commission believes it is more appropriate to use the CPI-U for 1989, we have recalculated the proposed adjustment, decreasing operating expenses by $246,344.

Executive Salaries

ULH&P provided an analysis which showed that $312,529 in executive officer salaries were allocated to it during the test year.[51] The analysis also showed that the test year allocation represented an increase over the previous year of 28.4 percent.

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50 T.E., Vol. II, August 23, 1990, page 178.

51 Response to the Commission's Order dated March 30, 1990, Item 39, page 2 of 3.

ULH&P provided the allocation factors for 1988 and 1989.[52] ULH&P was extensively questioned concerning the increase in executive officer salaries and the impact of CG&E's Key Employee Annual Incentive Plan on those salaries.[53]

The Commission is concerned about the increases being allocated to ULH&P for executive officer salaries. The analysis supplied by ULH&P showed that there were increases in the two previous calendar years of 22 and 17.8 percent.[54] The Commission reviewed the allocation factors supplied by ULH&P and found that the changes in the factors between 1988 and 1989 have little impact on the dollar increases reported in those years. The wage increases authorized for ULH&P's union and professional workers in the test year and the proposed test year adjustment reflect increases ranging from 3 to 5 percent.[55]

The Commission believes that there has not been adequate justification provided to allow the full increase experienced in the test year to be included for rate-making purposes. A better approach would provide an analysis which supports the level of

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52 Response to the Commission's Order dated May 11, 1990, Item 68, and the Response to the Commission's Order dated June 7, 1990, Item 11.

53 T.E., Vol. II, August 23, 1990, pages 118 through 126.

54 Response to the Commission's Order dated March 30, 1990, Item 39, page 2 of 3.

55 T.E., Vol. II, August 23, 1990, pages 125 and 126.

executive officer salaries. The Commission has calculated an adjustment, using the total 1988 salary figures before allocation for each of the CG&E executive officers and a 10 percent increase over the 1988 levels. The 1988 salary for the Vice President - Electric Operations was annualized in this calculation. The resulting salary figures have been allocated to ULH&P using the 1989 allocation factors. The use of a 10 percent increase in salaries is based upon the higher end of the range of salary increases for ULH&P's employees, 5 percent, plus an additional 5 percent for an incentive plan. This calculation decreases operating expenses by $35,582.

Employee-Related Expenses

The AG proposed to exclude $38,245 of employee-related expenses incurred for employee picnics, an employee recreation center, an employee appreciation day at Kings Island, and time management seminars. ULH&P contends that the expenses foster responsive decision-making by its employees, which enhance its ability to serve its customers, and are necessary and proper operating expenses which the Commission should allow it to reflect in rates.[56]

Expenses for employee picnics, recreation centers, and appreciation day activities should not be included for rate-making purposes. While these expenses may benefit employer/employee relations, the customers should not bear these costs. The Commission has excluded $30,540 of these expenses for rate-making

[56] Brief of ULH&P, page 14.

purposes. Concerning the time management seminars, such expenditures are intended to result in improved operating efficiencies and are properly included as a rate-making expense. No adjustment has been made for these expenses.

Office Renovation Expenses

In the test year, ULH&P reported $52,143 in office renovation expenses as miscellaneous general expenses. The expenses were related to office furnishings and related costs which had not been capitalized by ULH&P. ULH&P did not know if these costs would be recurring.[57] These costs would appear to be more appropriately capitalized. This results in a reduction of operating expenses of $52,143.

Depreciation Expense

ULH&P proposed to increase depreciation expenses by $866,678. The adjustment reflected the normalization of depreciation expense on utility plant in service at test year end and the estimated plant additions for the period January 1, 1990 through June 30, 1990. The AG proposed to exclude the depreciation normalization which reflected the post test-period plant additions. The AG further proposed to reduce the test year normalized expense by $185,000 to reflect the over-depreciation of an item of electric plant due to the normalization of the expense.[58] The Commission agrees.

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57 T.E., Vol. II, August 23, 1990, pages 189 and 190.

58 DeWard Direct Testimony, page 27.

As previously discussed in this Order, the Commission has rejected the inclusion of the post test-period plant additions in the rate base determination. Likewise, these additions can not be included in the normalization of the depreciation expense. The Commission has reviewed the utility plant and accumulated depreciation information supplied by ULH&P and finds that the normalization of the depreciation would result in the over-depreciation of the electric plant. The Commission has included $475,678 to the depreciation expenses of ULH&P. This adjustment has been included in the accumulated depreciation used to determine the jurisdictional net original cost rate base.

PSC Assessment

ULH&P included in its requested revenue increase a commensurate increase in the expense for the PSC Assessment, based upon the assessment rate in effect during the test year. The Commission believes it is more appropriate in calculating the assessment to use the current assessment rate. Using the regular methodology in calculating assessable revenues, the Commission has normalized the assessment based on the normalized revenues as adjusted in this Order. The Commission will include the PSC assessment rate in determination of ULH&P's revenue requirement.

Property Taxes

ULH&P proposed to increase property taxes $172,349 to reflect the estimated post test-period plant additions. As discussed earlier, the Commission has rejected the inclusion of the post test-period plant additions. However, the Commission will allow for the normalization of ULH&P's property taxes exclusive of the post test-period plant additions. In determining the normalization, the Commission has limited the propane inventory used in the calculations to the previously discussed jurisdictional amount of 36 percent. Therefore, the Commission has increased ULH&P's property taxes $113,159. The methodology used by ULH&P is not the preferred approach. The Commission prefers to use the methodologies employed by the Kentucky Revenue Cabinet in the determination of property tax adjustments.

FICA Taxes

ULH&P proposed to increase its expense for FICA by $11,331. The proposed adjustment reflected the changes in the applicable base wage and the FICA rate effective January 1, 1990, as applied to the test year actual wages. While the Commission will accept the adjustment as proposed by ULH&P, the Commission is concerned with the approach ULH&P has used in determining the adjustment. ULH&P has proposed wage and salary adjustments to normalize the test year wages and to reflect the changes in wages granted in the first four months of 1990. However, the adjustment to FICA has been based on test year end actual information. The Commission believes that the wage adjustment and the payroll tax adjustments reflecting different periods could result in flawed results. In future rate cases, adjustments to wages and salaries and payroll taxes should reflect the same time periods.

Interest Synchronization

ULH&P proposed to adjust its interest expenses used in computing state and federal income taxes. ULH&P's approach was to apply the weighted cost of long-term debt to its rate base, which included the post test-period plant additions. The test year actual interest expense was deducted from this amount to arrive at the adjustment to interest expense for the computation of income taxes. The AG used the same approach, but used his adjusted amounts for rate base and weighted cost of debt.

Historically, for rate-making purposes, the Commission has imputed interest expense on the portion of JDIC assigned to the debt components of the capital structure and treated the interest as a deduction in computing the income tax expense allowed in the cost of service. The revenue requirements in this proceeding are being determined from the capitalization rather than the rate base; therefore, the Commission believes its previous practice is more appropriate in determining the interest synchronization. This was the same approach used by the Commission in ULH&P's last general rate cases. Therefore, the Commission has applied the applicable cost rates to the JDIC allocated to the debt components of the capital structure. ULH&P's interest expense applicable to Kentucky jurisdictional operations during the test year was $4,810,059. Using the adjusted capital structure allowed herein, the Commission has computed an interest adjustment of $1,890,661 which results in a reduction to income taxes of $745,771.

Accumulated Deferred Income Taxes

ULH&P proposed to eliminate the state and federal deferred income taxes for capitalized interest and AFUDC. While ULH&P did not explain the reason for this adjustment, it appears the adjustment was made because ULH&P has not made any adjustment to AFUDC and did not include CWIP in its rate base, proposing the post test-period plant addition instead. As has been discussed earlier, the Commission has rejected the inclusion of the post test-year plant addition, has included CWIP in the rate base, and in making an adjustment to AFUDC, infra makes unnecessary the proposed elimination.

Overtime Pay

The AG proposed to reduce the overtime pay by $611,401 to reflect the average overtime pay for 1987 and 1988.[59] The AG averaged the total overtime pay reported for 1987 and 1988 and subtracted the average from the 1989 reported overtime pay. The AG contends that ULH&P has not explained why the expense incurred in the test year increased over the previous years and, thus, an adjustment is necessary. ULH&P explained that the AG had based his adjustment on the labor costs of ULH&P and not the actual expenses. ULH&P indicated that the overtime pay figures for 1989 reflected the impacts of storm damage experienced in October 1989 and ULH&P's assistance to Duke Power in the aftermath of Hurricane Hugo. ULH&P had proposed to adjust storm damages to eliminate the effects of the October 1989 storms while the transactions with Duke Power were booked as receivables, not expenses.[60]

Though the Commission does not adopt this proposed adjustment, it can understand the AG's concern. But, overtime pay is a function of the hours worked and the overtime pay rate, and

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59 DeWard Direct Testimony, page 24.

60 T.E., Volume II, August 23, 1990, pages 95-100.

the AG has provided no analysis of these factors to support his proposed adjustment.

However, the Commission does agree that this situation merits continued review by the Commission. The overtime and regular work hours provided in ULH&P's application[61] show that regular work hours have been dropping since 1985 while overtime hours have been increasing. In ULH&P's next general rate case, it will be expected to provide a thorough analysis of its staffing level.

Rental Expenses

The AG proposed to decrease ULH&P's rental expenses $578,199, which reflected a 5 percent increase over the rental expenses reported in 1988.[62] The AG claims that without adequate justification of the increased charges experienced in the test year, it was appropriate to reduce the rental expenses.

The Commission is not persuaded by the AG's arguments and will accept the test year level of rental expenses for rate-making purposes. The Commission cannot adopt the assumptions made by the AG. The AG has provided neither any studies or analysis which establish that the level of expenses incurred in 1988 are a reasonable level of expense,[63] nor any justification for the assumptions used in his proposed rental expense adjustments.

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61 Electric and Gas Applications, Schedule C-11.1.

62 DeWard Direct Testimony, page 26.

63 Response to Commission's Order dated July 18, 1990, Item 7b.

Allocation Factors

ULH&P extensively uses allocation factors in preparing its financial information. Allocations are made on jurisdictional basis, between parent (CG&E) and subsidiary (ULH&P), and between electric and gas operations. ULH&P has used the allocation factors in effect during the test year. However, the allocation factors for 1990 were released for use on January 17, 1990,[64] two and a half months prior to ULH&P's filing of this rate case.

With some misgivings, the allocation factors for the test year have been used in processing this case, but the Commission will expect ULH&P to use the most current allocation factors in its next general rate case.

AFUDC

During the test year, ULH&P reported the capitalization of $229,370[65] as AFUDC. ULH&P indicated that 89 percent of its electric CWIP and 95 percent of its gas CWIP was eligible for AFUDC treatment.[66]

ULH&P did not include CWIP in its rate base calculations, and did not make a corresponding AFUDC offset adjustment. The Commission does not accept this proposed methodology and made an AFUDC offset adjustment consistent with previous ULH&P cases. Based on the determined reasonable overall rate of return, the

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64 Response to the Commission's Order dated May 11, 1990, Item 33a, page 1 of 14.

65 1989 Annual Report, page 117-B, line 59.

66 Response to the Commission's Order dated March 30, 1990, Item 11d.

Commission has increased ULH&P's net operating income by $47,694 to reflect pro forma AFUDC of $277,064[67] for rate-making purposes.

State and Federal Income Taxes

ULH&P did not include in its application an adjustment to recognize the increase in the corporate state income tax rate resulting from House Bill 940 passed by the Kentucky General Assembly in its 1990 Regular Session. Subsequently, at the Commission's request, ULH&P filed revisions to its application reflecting the new corporate rate. The Commission has incorporated these revisions into its determination of the operating expenses of ULH&P. For the purposes of determining income tax expense, we have recognized the increase in the state corporate tax rate from 7.25 percent to 8.25 percent and determined the new composite State and Federal corporate tax rate to be 39.445 percent.[68] The impact on the net operating income of all adjustments made to ULH&P's operating statement, proposed, modified, and accepted by the Commission, reflect these new tax rates.

The Commission, after consideration of all pro forma adjustments and applicable income tax effects, has determined ULH&P's adjusted net operating income to be as follows:

67 $2,462,793 times 11.25% = $277,064.

68 Response to the Commission's Order dated May 11, 1990, Item 31.

	Electric	Gas	Total
Operating Revenues	$132,053,567	$53,428,219	$185,481,786
Operating Expenses	127,028,884	50,019,728	177,048,612
AFUDC Offset	21,273	26,421	47,694
Net Operating Income	$ 5,045,956	$ 3,434,912	$ 8,480,868

RATE OF RETURN

Capital Structure

In its prefiled testimony, ULH&P proposed a capital structure consisting of 40.75 percent long-term debt, 4.24 percent short-term debt, and 55.01 percent common equity.[69] ULH&P proposed to adjust its capital structure through June 30, 1990, primarily to reflect a $15 million bond issue in May 1990. ULH&P's capital structure at June 30, 1990 would be 44.8 percent long-term debt, 5.30 percent short-term debt, and 49.9 percent common equity.[70] As no objection was made to this update of the capital structure to reflect the effects of the new bond issue, we have adjusted capital structure to reflect the current levels of capitalization from the different sources.

ULH&P's long-term debt component was based on the carrying value of the debt.[71] The AG proposed to base long-term debt on the face value.[72] The AG's position was that his method reflected

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69 Calculated from ULH&P Exhibit JRM, pages 1-2, filed April 16, 1990.

70 Calculated from ULH&P Revised Schedules D-1, D-2, and D-3, filed August 22, 1990.

71 ULH&P Exhibit JRM, page 2, filed April 16, 1990.

72 Weaver Direct Testimony, Exhibit Statement 15.

the true liability of the company,[73] while ULH&P claims the AG's methodology understates the level of common equity.

We find ULH&P's use of the carrying value of debt more appropriate. The carrying value reflects the unamortized debt discounts, premiums, and expenses at the date of calculation. This adjusted value more closely matches the current booked costs to ULH&P as opposed to the ultimate liability, and it is the booked costs that the Commission believes are appropriate to use in setting rates.

The cost of capital should be based on ULH&P's June 30, 1990 proposed capital structure of 44.8 percent long-term debt, 5.30 percent short-term debt, and 49.9 percent common equity.

Cost of Debt

ULH&P proposed cost of long-term debt of 9.33 percent[74] and cost of short-term debt of 9.8 percent.[75] ULH&P presented evidence of the May 1990 bond issue with adjusted capital costs as of June 30, 1990. The cost of long-term debt at June 30, 1990 as calculated by ULH&P is 9.36 percent,[76] and the cost of short-term debt is 10.825 percent.[77]

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73 Ibid., page 29.

74 Calculated from ULH&P Exhibit JRM, page 2, filed April 16, 1990.

75 Ibid.

76 Revised Schedule D-3, filed August 22, 1990.

77 Revised Schedule D-2, filed August 22, 1990.

Prior to the introduction of evidence on the new bond issue, the AG proposed the cost of long-term debt of 9.29 percent and 9.80 percent cost of short-term debt. Consistent with his recommendation on the debt component of capital structure, the AG calculated the cost of long-term debt using average yield[78] and yield to maturity.[79] Consistent with ULH&P's determination of the debt component of capital structure, its debt cost was calculated using current interest expense less current amortization of debt discounts, premiums, and expenses.[80]

As ULH&P's calculation of long-term debt cost more closely matches booked costs, we find the cost of long-term debt to be 9.36 percent, and the cost of short-term debt to be 10.825 percent.

Return on Equity

ULH&P proposed 14 to 15 percent[81] return on equity. The AG proposed 12.75 to 13.0 percent[82] return on equity.

To determine the return on equity, ULH&P used a discounted cash flow ("DCF") analysis and an equity risk premium analysis.

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78 Weaver Direct Testimony, Statement 14, page 2.

79 Ibid., page 3.

80 ULH&P Exhibit JRM, page 2, filed April 16, 1990.

81 Mosley Direct Testimony, page 19.

82 Weaver Direct Testimony, page 27.

In its determination of DCF, ULH&P used a computer sorting program, later identified to be a cluster analysis, to select companies of comparable risk to ULH&P. Using the computer software clustering program, ULH&P input data on 89 electric and combination electric and gas utilities, including ULH&P, for the period 1980 - 1989 on seven statistical measures which, in ULH&P's opinion, reflected the business and financial risk of the companies.[83] These measures were:

1. variation in operating revenues
2. average common equity ratio
3. average coverage ratio
4. variation in net profit
5. average return on equity
6. average allowance for funds used during construction to net profit ratio
7. average cash flow to capital spending ratio.

From this input, the computer program sorted the data on the companies and developed clusters or groups of companies with similar measures. ULH&P was grouped with 12 other companies.[84] In its analysis, ULH&P then used data from those 12 companies to determine an average dividend yield and an average dividend growth on which to base its DCF.

In its analysis of DCF on the composite group of companies, ULH&P calculated the dividend yield, by using the composite

83 Mosley Direct Testimony, page 11.

84 Ibid., Exhibit JRM, page 4.

group's average quarterly current dividend of $.4975 compounded at its proposed return on equity and then again inflated this product by the estimated growth rate.[85] Moreover, in its analysis of the dividend yield, ULH&P imputed flotation costs of 4 percent.[86]

To derive its growth rate for the composite group of companies, ULH&P used the average of the Value Line estimated growth in dividends of 4.5 percent and the historical 5-year growth in dividends of 7.4 percent to derive a growth rate of 6.0 percent.[87] Overall, ULH&P's DCF analysis of the composite group of companies produced a return on equity of 14 percent.

In its equity risk premium analysis, ULH&P determined that the historical equity debt risk premium was 5.1 percent based on a study by R. G. Ibbotson Associates of the historical equity and corporate bond returns from 1926 - 1986.[88] ULH&P then added the 5.1 percent risk premium to the current bond yield of 10 percent for triple B quality debt to arrive at a return on equity from its equity risk premium analysis of 15 percent.

To perform a DCF analysis, the AG selected six companies it considered to be of comparable risk to ULH&P. The AG selected these companies on the basis of capital structure ratios, gas and

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85 Ibid., page 6.

86 Ibid.

87 Ibid.

88 Ibid., page 18.

electric revenue mix, and total assets.[89] The AG further compared ULH&P's cash flow and coverage ratios with those of the six companies.[90] The AG also chose companies that had similar market risk as calculated by the firms' beta coefficients, and had similar bond and stock ratings.[91] It was also disclosed that the AG eliminated from his selection process companies in the far western part of the United States and companies with nuclear generation.[92]

After the selection of the six companies, the AG calculated his estimated growth using an average of the six companies' 1980-1989 growth in earnings per share, dividends, book value per share and the growth in the earnings retention ratio multiplied by the return on equity.[93] Each of these measures was equally weighted for an average estimated growth of 4.75 percent to 5.05 percent.[94] The AG based his dividend yield on the average of the six companies' market prices and dividends for the 12-month period from June 1989 through May 1990 and the 6-month period from January 1990 through June 1990.[95] The DCF the AG calculated,

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89 Ibid., page 5.

90 Ibid, page 11-14.

91 Ibid., page 5.

92 T.E., Volume IV, August 27, 1990, pages 39 and 41.

93 Weaver Direct Testimony, page 24.

94 Ibid., page 26.

95 Ibid., page 26.

based on data from the six companies, was 12.09 to 12.72.[96] However, through the use of several measures of risk, the AG concluded that ULH&P was riskier than the six companies in his comparison, and to compensate for the additional risk, he added 30 to 40 basis points[97] to his unadjusted figures to arrive at his recommended range of returns on equity of 12.5 percent to 13 percent.[98]

The AG sharply criticized ULH&P's use of the cluster analysis. It is clear that ULH&P had little knowledge of the workings of the sorting program. ULH&P admitted as much,[99] but maintained that the companies grouped were of comparable risk to ULH&P and that lack of knowledge of the workings of the cluster analysis was irrelevant.[100]

The Commission neither endorses ULH&P's uninformed use of the cluster program nor finds the measures of risk ULH&P used to sort the companies appropriate. ULH&P failed to substantiate the existence of a difference between a measure of risk and a determinant of risk.[101] Investors consider numerous factors in their investment decisions. To define one set of factors as measures of risk and another set of factors as determinants, but

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96 Ibid., page 27.

97 Ibid., page 28.

98 Ibid., page 27.

99 T.E., Volume I, August 22, 1990, page 77.

100 Ibid.

101 Ibid., pages 140 - 146.

not measures of risk, is inappropriate and fails to produce companies of comparable risk. Moreover, many of the measures of risk used by ULH&P are interrelated and could easily produce bias in the sorting program. The composite data on companies of comparable risk produced by ULH&P's cluster program is not reliable.

ULH&P also erred in calculating the dividend yield component in its DCF analysis by adjusting the quarterly dividend model. The method proposed by ULH&P takes into account the time value of money. This method is not appropriate to determine the dividend yield because investors would be doubly compensated due to their ability to reinvest dividends in interest bearing accounts.

ULH&P's flotation cost adjustment in its DCF analysis was unsupported. ULH&P's equity capital comes from many sources, not just common stock issues from its parent.[102] ULH&P made no attempt to quantify the funds from its parent's stock offerings, nor did it provide a good measure of the actual costs of issuance incurred by its parent company.

The Commission has for a number of years considered the equity risk premium analysis to be unreliable because it is subject to significant fluctuation due to the volatility of the bond and stock markets. As ULH&P did not provide any persuasive reasons to substantiate the reliability of this methodology, the results of ULH&P's equity risk premium cannot be utilized.

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102 Weaver Direct Testimony, page 28.

On the other hand, the AG's DCF analysis was well supported though, as the AG conceded, the six companies used in the DCF analysis were actually less risky than ULH&P. To adjust for this, the AG added 30 to 40 basis points to compensate ULH&P's investors for the additional risk but provided no support for this risk premium level. A difference in risk between ULH&P and the six companies used in the AG's analysis would exceed 30 to 40 basis points.

ULH&P challenged the AG's analysis because general economic conditions and ULH&P's financial ratios had recently changed, but the AG made no adjustments to reflect the effect of these changes on its recommended return. Specifically, ULH&P cited the fact that the AG acknowledged the increased level of debt in ULH&P's capital structure as a result of the May 1990 debt issue but failed to make a corresponding change to return on equity to compensate for this increased financial risk. Moreover, the AG acknowledged that economic conditions had recently worsened but no adjustment for any increased risk was made. The record shows that over the past few months the stock market has declined and there is now a greater prospect for a higher rate of inflation.[103]

The Commission agrees that ULH&P's degree of financial risk did increase slightly as a result of the May 1990 debt issue and has factored this additional degree of risk in its determination. We cannot, however, speculate on the fate of the economy and the stock market. There may indeed be higher inflation, and possibly

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[103] T.E., Volume IV, August 27, 1990, page 64-65.

a recession, but how these two opposing factors will impact ULH&P's stock prices, dividend policy, and growth cannot be determined.

Considering the additional financial risk resulting from the May 1990 debt issue, and ULH&P's greater overall risk than the six companies used in the AG's DCF analysis, the Commission finds that 50 to 75 basis points added to the AG's unadjusted returns will be sufficient to compensate ULH&P's equity investor.

The Commission, having considered all of the evidence, including current economic conditions, finds that the cost of common equity is within a range of 12.75 to 13.25 percent. Within this range, an ROE of 13 percent will best allow ULH&P to attract capital at a reasonable cost, maintain its financial integrity to ensure continued service, provide for necessary expansion to meet future requirements, and result in the most reasonable cost to ratepayers.

Rate of Return Summary

Applying the rates of 9.36 percent for long-term debt, 10.825 percent for short-term debt, and 13.0 percent for common equity to the capital structure produces an overall cost of capital of 11.25 percent, which we find to be fair, just, and reasonable. This cost of capital produces a rate of return on ULH&P's net investment rate base of 11.17 percent which the Commission finds is fair, just, and reasonable.

REVENUE REQUIREMENTS

The Commission has determined that ULH&P needs additional annual operating income of $7,338,275 to produce a rate of return of 13.00 percent on common equity based on the adjusted historical test year. After the provision for state and federal taxes, PSC assessment, and increased uncollectibles, there is an overall revenue deficiency of $12,245,979 which is the amount of additional revenue granted. The net operating income necessary to allow ULH&P the opportunity to pay its operating expenses and fixed costs and have a reasonable amount for equity growth is $15,819,143. A breakdown between electric and gas operations of the required operating income and the increase in revenue allowed herein is as follows.

	Electric	Gas	Total
Net Operating Income Found Reasonable	$8,909,720	$6,909,423	$15,819,143
Adjusted Net Operating Income	5,045,956	3,434,912	8,480,868
Net Operating Income Deficiency	3,863,764	3,474,511	7,338,275
Gross Up Revenue Factor for Taxes, PSC Assessment, and Uncollectibles	1.66878	1.66878	1.66878
Additional Revenue Required	6,447,779	5,798,200	12,245,979

The additional revenue granted will provide a rate of return on the jurisdictional net original cost rate base of 11.17 percent and an overall return on total capitalization of 11.25 percent.

The rates and charges in Appendix A are designed to produce gross operating revenues, based on the adjusted test year, of $197,727,765. These operating revenues include $138,501,346 in electric revenues and $59,226,419 in gas revenues. The gas operating revenues reflect the most recent gas cost adjustment approved in Case No. 9029-X.

PRICING AND TARIFF ISSUES

Gas Cost-of-Service Study

ULH&P presented a fully allocated embedded gas cost-of-service study for the year ending December 31, 1989.[104] The cost-of-service study apportions ULH&P's expenses and investments dedicated to providing gas services to the following classes of gas customers: GS-Residential, GS-Commercial, GS-Industrial, GS-Other, and Transportation/Off-Peak. The gas cost-of-service study is ultimately used to determine class revenue responsibility.

The procedures utilized by ULH&P to assign costs to the rate classes follow general principles established by the American Gas Association in its book entitled "Gas Rate Fundamentals" and are consistent with those used by ULH&P in previous rate proceedings.[105] Demand, commodity, and customer allocation factors are developed by summarizing ULH&P's revenue budget reporting system and from actual data supplied by various departments within ULH&P.[106]

ULH&P's gas cost-of-service study presents the following class rates of return at proposed rates: 10.65 percent for GS-Residential, 13.05 percent for GS-Commercial, 15.62 percent for GS-Industrial, 12.08 percent for GS-Other, and 17.3 percent for

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104 Van Curen Direct Testimony, pages 5-15 and Exhibit PVC-GCOS.

105 Ibid., page 7.

106 Ibid., pages 7-8.

Transportation/Off-Peak. Overall system rate of return is shown to be 11.69 percent.[107]

Among the intervenors, the AG and KIUC are critical of certain elements of ULH&P's gas cost-of-service study. The AG claims that two allocation procedures used in ULH&P's gas cost-of-service study unnecessarily penalize residential customers. First, the AG criticizes ULH&P's use of an administrative and general allocation factor to allocate general, intangible and common plant claiming this procedure overcharges residential customers. Second, the AG contends that ULH&P's allocation of customer services, information, and sales expenses based on a weighted customer allocation factor inappropriately assigns a majority of the costs included in FERC accounts 907, 908, and 909 to residential customers.[108]

ULH&P allocates general, intangible, and common plant to rate classes on the basis of an administrative and general allocation factor. This factor is derived first by separating labor costs into production, gas supply, distribution, and customer account components. Each of these four components is then allocated to rate classes using previously determined allocation factors. The summation of these distinct rate class allocations determines the administrative and general allocation factor claimed to be inappropriate by the AG.[109] The AG claims that this allocation

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107 Exhibit PVC-GCOS, Schedule 1, page 1.

108 Osterberg Direct Testimony, pages 3-9.

109 Ibid., pages 3-5.

factor is not appropriate for general, intangible, and common plant, charitable contributions, and rate case expenses as these costs are only slightly related to the number of hours worked.[110] As an alternative, the AG has chosen to use an allocation factor based on total production and distribution costs included in ULH&P's gas cost-of-service study because "it is easier to allocate production and distribution plant to customer classes than it is to allocate general, intangible and common plant."[111]

Regarding the allocation of customer services, information, and sales expenses, the AG contends that a customer allocation factor, such as that used by ULH&P, assigns excessive costs to the residential class since the majority of customers are residential customers.[112] The AG explains that few of the costs associated with FERC accounts 907, 908, and 909 directly relate to the number of residential customers. As an alternative, the AG proposes to directly assign those costs which are identified with particular customer classes. The percentage of directly assignable costs allocated to each class would then form a factor to be used to allocate all remaining costs in FERC accounts 907, 908, and 909.[113] ULH&P claims that the AG's proposed allocation

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110 Ibid., page 5.

111 Ibid.

112 Ibid., page 8.

113 Ibid., page 9.

methodology is incorrect since it did not consider all costs in account 908 which are associated with serving residential customers.[114]

The Commission finds that the AG has failed to demonstrate that ULH&P's allocation methodologies are unreasonable and in need of modification. The AG has proposed modifications to limited portions of ULH&P's cost-of-service study without determining the total effect these alternative methodologies would have on the revenue responsibility of all customer classes. Without a complete alternative cost-of-service study that incorporates these alternative methodologies, the Commission is unable to determine the reasonableness of those methodologies. For these reasons, the Commission declines to adopt the allocation modifications to ULH&P's gas cost-of-service study as proposed by the AG.

The AG also presented testimony asserting that ULH&P's gas cost-of-service study failed to reflect the varying risks associated with serving different classes of customers. The AG claims that this class risk differential results in "stable and assured" residential customers being overcharged when compared with the "volatile industrial load".[115] The Commission agrees with the proposition that varying degrees of risk may be associated with providing utility services to customer classes. Contrary to the AG's claim, however, ULH&P's gas cost-of-service

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[114] T.E., Volume III, August 24, 1990, page 47.

[115] Osterberg Direct Testimony, page 12.

study does reflect this risk differential as shown by the varying class rates of return in ULH&P's study.[116] According to this study, residential customers generate a rate of return of 10.65 percent, compared to a rate of return of 17.3 percent for the more risky interruptible transportation customers. The Commission finds that ULH&P's gas cost-of-service study sufficiently reflects and accounts for the varying degrees of risk associated with serving different customer classes.

KIUC claims that ULH&P's cost-of-service study overstates the assignment of costs to transportation customers in two ways. First, ULH&P's use of peak month usage data for the allocation of some demand-related costs instead of peak day or design day demands penalizes interruptible customers. Second, ULH&P's study fails to utilize a customer component in the allocation of distribution main costs to customer classes which adversely affects interruptible customers.[117]

KIUC asserts that a gas utility must size its demand-related facilities to accommodate anticipated peak day demand. KIUC further states that ULH&P's cost-of-service study, which utilizes peak month usage to allocate these demand-related costs, does not reflect cost causation due to the fact that the average demand experienced by the utility during its peak month will be below that experienced during the peak day and is consequently

116 Van Curen Direct Testimony, Exhibit PVC-GCOS, Schedule 1, page 1.

117 Eisdorfer Direct Testimony, page 6.

unreflective of the demand that ULH&P must employ for the sizing of its demand-related facilities.[118] KIUC recommends that ULH&P develop peak day or design day load data and then utilize that peak day data in its next rate case for the allocation of demand-related costs to customer classes. The Commission concurs that the development of peak day load data is important. However, the use of such data as the sole basis for the development of allocation factors is not appropriate. The Commission's position on allocations based solely on peak day demand levels is unequivocal. The Commission has found that cost-of-service methodologies that place all the emphasis on maximum design day may result in an inappropriate shift of costs to the residential customer class.[119] Therefore, the Commission rejects KIUC's recommendation that ULH&P utilize a peak day allocator for demand-related costs in its next rate case.

ULH&P uses an allocation factor based on peak month demand ratios as a surrogate for an average and excess methodology.[120] The Commission is concerned by ULH&P's use of allocation factors based on peak month demand ratios for two reasons. First, ULH&P has used peak month demand as a surrogate for an allocation based on an average and excess calculation without demonstrating the

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118 Ibid.

119 Administrative Case No. 297, An Investigation of the Impact of Federal Policy on Natural Gas to Kentucky Consumers and Suppliers, Order dated May 29, 1987, page 47.

120 Van Curen Direct Testimony, page 8.

reasonableness of either of these methodologies. ULH&P claims that both methods consider average use of capacity as well as responsibility for capacity required to meet the maximum system load.[121] The Commission acknowledges that, to some degree, peak month demand ratios consider average demand levels. For this reason, ULH&P's gas cost-of-service methodology is deemed to be acceptable. However, the Commission cannot ascertain the extent to which average use is accounted for by peak month demand ratios without a complete comparison to peak or design day demand ratios and other allocation methodologies.

Second, ULH&P has shown an inability to provide or determine class peak day or design day usage levels.[122] Such information is essential for the proper planning, operation, and maintenance of ULH&P's transmission and distribution systems. KIUC contends that ULH&P is the only utility of which they are aware that uses peak month Mcf data to allocate demand costs to customer classes and that other gas utilities have developed load data reflective of either the peak day or design day conditions.[123] The Commission finds that ULH&P should take immediate steps to develop the capability to determine class peak day or design day usage levels.

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121 Ibid.

122 Response to Item 49 of AG's Request for Information, Supplemental Information to First Set, and Response to Item 23 of KIUC's Request for Information, Second Set.

123 T.E., Volume I, August 22, 1990, pages 24-25.

In Administrative Case No. 297 the Commission directed gas utilities to avoid allocation factors which are based solely on design day demands.[124] The Commission did not intend for its directive to cause gas utilities to completely eschew the use of peak day or design day ratios in combined allocation factors in which average demand levels were also considered. The peak and average allocation methodology is one example of such a combined allocation factor.[125] The Commission recognizes that there may be some demand-related costs and cost components for which combined allocation factors may be appropriate. ULH&P is encouraged to use combined allocation factors, such as the peak and average method, in future cost-of-service studies as alternatives to or in conjunction with its present peak month allocation methodology.

KIUC also claims that investment in distribution mains is governed by the need to extend them geographically to attach all customers to the system.[126] As noted by KIUC, the Commission has recognized this principle for other gas utilities in Kentucky by approving cost-of-service studies which determine a customer component for distribution mains. The Commission has even endorsed the zero-intercept methodology as an appropriate way to determine the customer-related component. ULH&P chose to deviate

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[124] Administrative Case No. 297, Order dated May 29, 1987, page 47.

[125] The Commission approved the use of a peak and average allocation factor for some demand-related costs in Case No. 90-013, Rate Adjustment of Western Kentucky Gas Company, Order dated September 13, 1990, page 49.

[126] Eisdorfer Direct Testimony, page 7.

from the American Gas Association's recommended cost-of-service principles which recognize that distribution mains have both customer and demand-related components.[127] ULH&P reasoned that this deviation is reasonably gleaned from the Commission's directive in Administrative Case No. 297, "[T]he Commission acknowledges that there is not a single acceptable method to prepare such a [cost-of-service] study. Each LDC [local distribution company] is encouraged to find a method that it finds appropriate."[128]

The Commission acknowledges the myriad cost-of-service classification and allocation procedures available to utilities and intervenors and reiterates its intention not to prescribe specific methodologies. However, as directed in recent Orders,[129] the Commission desires the submission of alternative and multiple methodology cost-of-service studies. The information obtained from such alternative studies will be beneficial to the Commission in its consideration and development of reasonable revenue allocations and rate design.

ULH&P's gas cost-of-service study is the only complete study presented in this case and sufficiently determines class revenue

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127 T.E., Volume III, August 24, 1990, page 74.

128 Administrative Case No. 297, Order dated May 29, 1987, page 47.

129 Case No. 90-013, Order dated September 13, 1990, page 50, and Case No. 10201, An Adjustment of Rates of Columbia Gas of Kentucky, Inc., Order dated October 21, 1988, page 54.

responsibility. Therefore, ULH&P's gas cost-of-service study is approved as a basis for rate design.

Electric Cost-of-Service Study

ULH&P filed an embedded fully allocated electric cost-of-service study for the year ending December 31, 1989.[130] The study allocated expenses and investment dedicated to providing electric service to the following rate classes: Residential, Distribution, Transmission/Time of Day, Lighting, and Other. ULH&P followed the guidelines published in the NARUC "Electric Utility Cost Allocation Manual" to develop KW, KWH, and customer allocation factors.

None of the intervenors in this case have challenged ULH&P's electric cost-of-service study. The allocation of electric expenses and investments follow methodologies and procedures approved in previous proceedings and accepted by the NARUC. Therefore, ULH&P's electric cost-of-service study is approved as a basis for rate design.

Revenue Allocation

Based on the results of its electric cost-of-service study, ULH&P proposed to allocate an increase to the residential class of 8.4 percent, or 1.2 times the overall requested electric increase of 7 percent. The remaining rate classes were allocated increases ranging from 5.8 percent for the distribution service (commercial and industrial) classes to 4.3 percent for the street and outdoor

130 Van Curen Direct Testimony, pages 17-22 and Exhibit PVC-ECOS.

lighting classes. ULH&P's allocation proposal was offered as a means of gradually moving toward rates that better reflected its cost of service.

For gas revenues, ULH&P proposed to allocate an increase to the residential class of 14.7 percent compared to the overall requested increase of 12.8 percent. An increase of 10.0 percent was allocated to the general service (commercial and small industrial) rate class while no increase was allocated to the interruptible transportation class. As in electric, ULH&P's allocation reflected a gradual move toward cost-of-service based rates.

There was no opposition to ULH&P's proposed allocation of the electric increase. On gas, KIUC argued for a decrease in revenue responsibility for the interruptible transportation class while the AG argued for a revenue increase to the transportation class. This issue is further addressed in the section on flexible transportation rates. The AG opposed the proposed increase for the residential class.

ULH&P's allocation proposals, including the allocation of a larger increase to the residential class, are consistent with its cost-of-service analyses and the concepts of gradualism and rate continuity. The allocation proposals are equitable for all customer classes and have been reflected in the rate design approved herein.

Rate Design

ULH&P's electric rate design followed its revenue allocation with the residential class receiving somewhat larger increases than the other classes. The major change in ULH&P's rate design was in its street lighting rates with a change from rates consisting solely of energy charges to rates which include energy charges and fixed charges for lights and poles.

There was no opposition to ULH&P's proposed electric rate design and the Commission finds it to be reasonable in developing the rates approved herein. The electric rates approved result in the following increases: residential - 5.9 percent; distribution - 4.0 percent; and street and outdoor lighting - 3.2 percent.

ULH&P's gas rate design reflected three changes for residential and general service customers: (1) establishing a separate residential rate schedule with an increase in the residential customer charge from $4.50 to $7.00; (2) establishing for the remaining general service customers a two-tiered customer charge consisting of a $7.00 charge at monthly usage of 100 or less Mcf and a $40.00 charge at usage of more than 100 Mcf; and (3) a three-step declining block general service rate structure with blocks of 100 Mcf, 400 Mcf, and all sales above 500 Mcf. ULH&P claimed these changes were supported by the results of its cost-of-service study.[131]

The AG maintained these changes are not justified and that the general service rate schedule should remain as it is with

131 Ginn Direct Testimony, pages 6-7.

separate residential and non-residential customer charges and a flat Mcf charge.[132]

The differences in usage levels and rate of return contributions between the residential customers and the remaining general service customers are significant enough to warrant the establishment of a separate residential rate classification. The Commission recognizes the $12.63 level of customer costs ULH&P has calculated and the proposed residential customer charge of $7.00; however, adhering to the concepts of gradualism and rate continuity, the Commission will increase the customer charge by a percentage approximately equal to the 32 percent increase in residential base rate revenues that has been granted. The resulting residential customer charge is $5.95.

For the general service class, the Commission will not accept the proposed customer charges based on usage levels. If ULH&P seeks to have different customer charges for the general service class, these should be based on customer classifications, commercial, industrial, etc., rather than usage. The Commission notes that the customer charge approved for the residential class is approximately 40 percent of the customer cost calculated by ULH&P. The overall customer cost calculated by ULH&P for non-residential general service customers is $30.69. Applying an approximate 40 percent ratio to this amount produces a $12.00 customer charge for all general service customers which is a more reasonable move toward cost-based rates.

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[132] Osterberg Direct Testimony, pages 25-26.

ULH&P's evidence is insufficient to support the proposed declining block rate structure. If cost-of-service differences between commercial, industrial, and public authority customers necessitate different commodity rates, ULH&P should propose that the general service rate structure be disaggregated by customer class. Accordingly, the general service rate schedule approved consists of a single customer charge and a single commodity charge. The gas rates approved herein result in the following increases: residential - 11.4 percent; general service - 7.8 percent; and interruptible transportation - 0 percent.

Flexible Transportation Rates

ULH&P presently offers interruptible transportation at a fixed rate of 70 cents per Mcf with the ability to flex its rate downward to retain load. The flexing of the fixed rate is allowed only when an affidavit by a customer states that, absent a lower rate, it will use an alternative source of fuel.

ULH&P has proposed to change its interruptible transportation tariff to (1) implement a monthly administrative charge of $250.00, (2) eliminate its fixed rate and make the rates entirely flexible, and (3) eliminate the customer affidavit as a prerequisite for flexing the rate. In effect, ULH&P requested that the Commission deregulate this aspect of its operations and allow competition to determine the prices for interruptible transportation services.[133] ULH&P indicated that the current tariff with only the flex-down provision was too restrictive and generally guaranteed that revenue recovery would fall short of the fixed rate of 70 cents. ULH&P imputed transportation revenues at the 70 cents level and stated that it would assume the risk of not achieving the fixed rate revenue level if the Commission approved its proposed flexible rates.[134]

KIUC argued that ULH&P's proposal was contrary to the Commission's Order in Administrative Case No. 297 that "A fixed rate shall be stated for each type of transportation service."[135] KIUC opined that some interruptible customers desire a fixed rate for transportation to forecast costs with greater certainty than is possible with flexible rates.[136] KIUC supported a fixed transportation rate of 40.55 cents per Mcf based on its cost analysis.

The AG recommended that the rate for interruptible transportation be increased to 77.4 cents per Mcf. The AG pointed out that this type of increase would be comparable to the increases for other classes and that all of ULH&P's transportation transactions during the last half of the test year were at a price

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133 Response to Item 13(e) of Commission Order issued June 7, 1990.

134 Ginn Direct Testimony, pages 18-19.

135 Eisdorfer Direct Testimony, page 2.

136 Ibid., page 3.

of at least 77.4 cents.[137] The Commission notes that the additional 7.4 cents was for recovery of take-or-pay charges.

The Commission is not persuaded that ULH&P's market of interruptible transportation customers has evolved to the point where competition can be entirely substituted for regulation as a means of establishing prices. Further, even KIUC argued against an entirely flexible rate which appears to suggest the continued need for regulatory price setting. The Commission will require that ULH&P retain the existing fixed rate of 70 cents per Mcf for interruptible transportation and the tariff requirement of a customer affidavit as a prerequisite for a flexed rate. In recognition of the competitive nature of this market, ULH&P needs to flex its rate upward when market conditions allow to a rate not to exceed the general service rates established herein.

Given that customers will request a flex rate only when it lowers their rate, the tariff will require that once a customer seeks a flexible rate, it will remain a flex rate customer for a period of one year. This is similar to the procedure in effect for transportation customers of Columbia Gas of Kentucky.[138] This type of procedure will permit ULH&P to flex its rate down for the purpose of retaining load and, by requiring the customer to remain a flex customer for an extended period of time, will provide ULH&P the opportunity to flex its rate up to take advantage of favorable market conditions.

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137 Osterberg Direct Testimony, page 27.

138 T.E., Volume I, August 22, 1990, pages 22-23.

The fixed rate will remain unchanged. The non-captive status of interruptible customers results in increased risks for ULH&P. Such risk creates the need for higher rates of return from these customers. Based on the existing class rates of return and given the modification to ULH&P's flexible rate, no compelling need exists to either increase or decrease the fixed rate.

Retaining a fixed rate subject to regulatory approval while allowing ULH&P the ability to flex rates up or down should reflect the competitive nature of the transportation market while recognizing that there are varying degrees of competition for different customers. ULH&P will have the ability to move its rate up or down as the market permits with continuing regulatory review through the filing of its monthly transportation reports and review of its customer affidavit process in future rate cases.

<u>Standby Service</u>

ULH&P proposed a standby service tariff which would be available only to human needs and public welfare customers. The proposed tariff did not include a rate for standby service but stated that the customer's bill would be based on the specific terms and arrangements to be included in a written agreement between the customer and ULH&P.

KIUC maintained that ULH&P's proposal was contrary to the Commission's Order in Administrative Case No. 297 which directed that "for those customers who use the transportation service, each Class A LDC shall also offer a standby service at a separately identified rate."[139] KIUC argued that the Commission did not indicate that standby service should be limited to certain transportation customers.

ULH&P stated that it was concerned that interruptible transportation customers with the ability to use alternative fuels might cause it and its firm customers to bear the costs of firm supply contracts entered into to provide those interruptible customers with standby protection.[140] ULH&P also indicated that it intended to contract with individual pipelines on behalf of specific customers to provide for those customers' specific needs and flow through the pipeline's charges to the customers.[141]

The Commission does not favor restricting the availability of standby service to human need and public welfare customers nor does it share ULH&P's concerns about the potential risks associated with offering standby service to interruptible customers. ULH&P's position regarding standby service and the perceived need to contract for additional firm supplies differs from the Commission's approach to standby service and the standby provisions approved for other Kentucky LDCs. Standby service can be offered by an LDC and provided to interruptible customers without contracting for additional firm supplies. To the extent that customers are interruptible, they can be interrupted whether they are taking standby sales volumes or transportation volumes.

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139 Eisdorfer Direct Testimony, page 10.

140 T.E., Volume III, pages 102-104.

141 Ibid., pages 108-111.

Standby service can be provided based on design day demand and can be priced and assigned a tariffed rate calculated from ULH&P's pipeline demand charges and its total throughput, including transportation volumes. In this manner, a customer will be able to pay an additional volumetric charge, above the fixed transportation charge, on the volumes for which it wants standby protection. This additional charge, the system's average demand cost per Mcf of throughput, will enable the customer to receive standby sales service for that volume in the event its own gas supply is curtailed. Based on the total demand costs of $8,442,268 included in ULH&P's latest gas cost adjustment[142] and the annualized test year throughput of 13,334,693 Mcf, the standby rate approved is 63.31 cents per Mcf.

Agency Service

ULH&P presently offers agency service to its transportation customers at a transportation rate of 70 cents per Mcf plus an agency fee of 5 cents per Mcf. The present tariff language requires that gas purchased by ULH&P acting as agent on behalf of its customers shall be priced to assure that the lowest purchased cost of gas will be used for system supply customers.

ULH&P proposed to eliminate the 5 cents agency fee and offer an entirely flexible transportation rate. ULH&P also proposed to modify the tariff provision to state that the price for gas supplies purchased on behalf of customers will not be detrimental

[142] Case No. 9029-X, Purchased Gas Adjustment Filing of The Union Light, Heat and Power Company, Order dated August 31, 1990.

to system supply customers. ULH&P's proposal reflects its current purchasing practice of assigning its highest price spot market purchases to agency customers except for situations in which system supply customers require additional purchases during colder than normal weather or for other unusual circumstances.

The 5 cents agency fee should not be eliminated. Regardless of the separation by ULH&P of its gas supplies, the agency fee is intended, in part, as a charge for the service ULH&P provides in procuring these supplies for its customers. Transportation customers receiving this service should be charged a higher rate than transportation customers which procure their own gas supplies. ULH&P's tariff language should be changed to reflect the separation of its gas supplies. Once purchases have been arranged with the lowest cost purchases assigned to system supply, if additional higher cost purchases are required specifically to serve system supply customers, it is entirely fair and equitable to assign these additional higher cost purchases to the customers for which they were purchased.

Electric Tariffs - Fuel Cost

ULH&P proposed to change its electric tariffs to separate its base fuel cost of 1.9091 cents per Kwh from the other components of its base energy rate.[143] ULH&P intends to extend this separation to customers' bills and that the fuel charge shown on

[143] Rottinghaus Direct Testimony, page 15.

the customers' bill be the sum total of its base fuel cost and its fuel adjustment charge.[144] It is ULH&P's belief that these changes will make its tariffs and customers' bills more easily understood and more comparable with CG&E's tariffs and customers' bills. ULH&P also opined that the change would make tariff revisions due to fuel cost changes easier to implement.

KIUC favored the changes proposed by ULH&P as a means of simplifying the tariffs. KIUC also indicated its preference for the proposal to show total fuel costs on customers' bills.

The Commission will permit a modification to ULH&P's tariffs to separately identify the fuel cost component of its energy charges, but the energy charge, as set out in the tariffs, should be one total charge including fuel as well as non-fuel components. As ULH&P indicated, the primary reason for the proposal was to provide a clearer comparison of energy rates on ULH&P and CG&E tariffs.[145] The change in customers' bills was a secondary consideration.[146] For billing purposes, ULH&P has significant flexibility in the structure of its bills and the amount of included information. Given that 807 KAR 5:056 establishes the calculation of a fuel adjustment factor which is to be shown as an adjustment to customers' bills, ULH&P may modify its bills so long as the fuel adjustment is a separately identified component of

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[144] Response to Item 12(a) of Commission Order issued June 7, 1990.

[145] T.E., Volume III, August 24, 1990, pages 129-130.

[146] Ibid.

those bills. The modified tariff provisions are shown in the Appendix.

Tariff Changes

Earlier, the Commission addressed a number of specific tariff changes proposed by ULH&P. For those changes, the Commission has developed specific tariff language which is included in the Appendix. ULH&P also proposed several tariff revisions, additions, and deletions which were not challenged by any party. Although these changes are not specifically addressed, the Commission finds they should be approved as proposed by ULH&P. Due to their voluminous nature, these tariffs have not been included in the Appendix.

Energy Assurance Program

KLS proposed that ULH&P be required to implement an energy assurance program ("EAP") as a means of assisting low-income customers in paying their bills and, in turn, improving ULH&P's collection from these customers. KLS maintains that the typical collection procedures used by ULH&P do not result in the most cost-effective means of collection from low-income customers with a resulting adverse impact on the remaining customers.

KLS's proposal would create, within the residential class, a sub-group consisting of low-income households. Any household eligible for the Low-Income Home Energy Assistance Program would be in this sub-group. Rather than pay their actual bills, these households would make fixed payments on their current bill equal to 6 percent of their monthly income for heating bills and 3 percent for non-heating bills. In addition to this fixed payment on its current bill, each household would also pay $3 monthly toward its pre-program arrears. These arrearage payments would continue for 36 months and would produce a total of $108; any arrears over $108 would be written off by ULH&P. In addition to these payment provisions, the EAP would direct education and energy conservation programs toward these customers.

KLS estimated a cost of $56,000 for ULH&P to implement the EAP without consideration for the increased revenues it contends will be produced.[147] KLS indicated that the provisions of the EAP comply with KRS 278.160 and 278.170 which prohibit a utility from giving a customer any unreasonable rate preference or advantage and from charging or receiving any less compensation that what is prescribed in its filed rate schedules.[148]

The Commission has concerns about several aspects of KLS's proposal including (1) the extent to which the EAP puts a utility in the position of administering a social program, (2) the estimated costs and savings of the program, (3) the appropriateness of imposing such a program on a company without a detailed company-specific analysis, (4) whether any program of this type should be implemented for an individual company as opposed to a statewide program; and (5) most importantly, that the program would not comply with Kentucky statutes. Under the EAP,

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147 Colton Direct Testimony, page 50.

148 Responses to Items 2 and 3 of Commission Order dated July 18, 1990.

to the extent that the customer's fixed monthly payments are less than the payments due at the tariffed rates, ULH&P would be charging less than the amount prescribed in its filed rate schedules and the customer would be receiving service at a lower compensation. By paying less than the tariffed rate, these customers would receive an unreasonable preference. This is particularly so in those instances where the fixed payment would be less than ULH&P's variable cost of service. For these reasons, the Commission finds that the EAP cannot be adopted.

Late Payment Charges

Both KLS and the AG argued that ULH&P's five percent late payment penalty should be substantially modified or eliminated. KLS maintained that the charge is unjust, unreasonable and discriminatory.[149] KLS opined that a late payment charge could possibly serve to compensate a utility for costs associated with delinquent payments or as an incentive for customers to make prompt payment but that ULH&P's charge had no relation to either of these functions.[150] The AG argued that if a late payment charge were allowed it should be based on ULH&P's cost of capital.[151]

ULH&P maintained that KLS and the AG had presented no credible evidence warranting modification or elimination of its

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149 Colton Direct Testimony, page 63.

150 Ibid., pages 63-64.

151 Osterberg Direct Testimony, pages 22-23.

current late payment charge. ULH&P claimed that the research cited by KLS and the AG as support for eliminating the late payment charge was outdated, incomplete, and speculative, and that elimination of the late payment charge would have a detrimental impact on those customers that pay their bills in a timely manner.

ULH&P's late payment fee was established at 5 percent in 1977. Hence, it is not a recently approved charge nor is ULH&P proposing to increase it in this rate proceeding. KLS and the AG have failed to meet their burden of proof to show the unreasonableness of ULH&P's late payment charge. KLS has not demonstrated that the charge which is a fixed percentage applicable to all late-paying customers is discriminatory. Neither of the intervenors has shown that the late payment charge was intended solely to be a cost-recovery mechanism based on either an interest rate or ULH&P's cost of capital. The late payment charge is a collection mechanism which encourages prompt, timely payment by customers. The intervenors have failed to show that this charge does not serve as an incentive for timely payment. Neither KLS nor the AG performed any analysis of ULH&P's late payment charge and its impact on customers' payments.

As a collection mechanism, the late payment charge should be large enough to encourage customers to promptly pay their bills. As such, a 5 percent level is reasonable. The incurrence of a late payment charge is dependent upon each customer's individual payment practices. As an incentive, and given its customer-specific nature, the amount of the charge is driven by more than merely costs. Again, as in 1977, the Commission finds ULH&P's 5 percent penalty to be reasonable.

MANAGEMENT AUDIT

During the course of this proceeding, ULH&P responded to several questions relating to the recommendations included in its recent management audit and ULH&P's February 1, 1990 Status Report regarding its progress in implementing the audit recommendations. A comprehensive management and operations audit, performed by Schumaker & Company of Ann Arbor, Michigan, was completed in August 1989 and included 135 recommendation for improvement. If all the recommendations for improvement in operations are implemented, the audit estimates that ULH&P will experience gross savings of $3.4 million. As part of the Commission's monitoring process, ULH&P is required to file progress reports every six months for the first two years after the issuance of the audit report and annually thereafter. ULH&P's first progress report, the February, 1, 1990 status report, was filed with the Commission's Management Audit Branch on March 2, 1990.

Although each individual recommendation has not been reviewed in detail in this proceeding, the Commission is of the opinion that the savings estimated by Schumaker & Company are significant and that ULH&P and its consumers can benefit from the proper implementation of the audit's recommendations. ULH&P claimed that 59 recommendations had been implemented[152] but admitted that the Commission had not been provided sufficient information to verify

[152] Marshall Direct Testimony, page 32.

that the recommendations had been implemented.[153] ULH&P later acknowledged that none of the recommendations have been closed.[154]

ULH&P characterizes the implementation as a long-term project,[155] and while the implementation of management audit recommendations is routinely monitored by the Commission's Management Audit Branch through the review of status or progress reports, the Commission finds it appropriate to also review these activities in formal rate case proceedings. The Commission expects the utility to provide sufficient documentation to substantiate that a reasonable level of effort is being expended to implement those recommendations which are beneficial to the utility and its customers.

The Commission is not convinced that ULH&P has made this reasonable effort. This position is supported by the fact that ULH&P indicated that certain recommendations had been implemented and that no further action was contemplated, but failed to discuss its implementation activities, provide substantiating documentation or provide appropriate quantitative or qualitative cost/benefit analyses.[156]

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153 T.E., Volume III, August 24, 1990, page 162.

154 Brief of ULH&P, page 28.

155 Ibid.

156 Status Report of the Management Audit Action Plans, dated February 1, 1990.

ULH&P apparently has no consistent method for either implementing these recommendations, or monitoring and reporting its implementation activities. ULH&P indicated that in different departments responsibility may have been delegated to various organization levels.[157]

ULH&P questions the savings to be achieved from implementation of the audit recommendations claiming that Schumaker & Company has not provided to ULH&P or the Commission sufficient documentation to establish any measurable level of cost savings.[158] However, ULH&P presented no evidence to support such an assertion. In fact, in the Executive Summary of the management audit, Schumaker & Company clearly states that costs and benefits have been estimated, that the quantification is subject to some judgment, and that refinement of the estimates would require additional effort.[159] Moreover, Schumaker & Company further states that the benefits may be smaller or larger than estimated, but that the benefits are significant and should command immediate attention from CGE/ULH&P management.[160]

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[157] T.E., Volume III, August 24, 1990, pages 157-158.

[158] Brief of ULH&P, page 29.

[159] Management and Operations Review of ULH&P, Chapter I, Executive Summary, page 2.

[160] Ibid.

The Commission strongly encourages ULH&P to review its implementation program and reconsider its monitoring and reporting activities. In addition, ULH&P is advised that in all future progress reports filed with the Commission and when requested in formal proceedings, sufficient information should be provided to document implementation activities and to support the reasonableness of those activities, in light of the management audit recommendations. The Commission considers the Schumaker & Company management audit report to constitute substantial evidence regarding potential cost saving measures available to ULH&P. Therefore, ULH&P's failure to implement the recommendations and to satisfactorily report on implementation, or alternately, ULH&P's failure to perform specific, detailed analysis to show why the recommendations should not be implemented, will leave the Commission with no alternative but to examine whether the estimated savings incorporated in the management audit should be considered as possible adjustments in future rate proceedings.

SUMMARY

After consideration of all matters of record, the evidence, and being otherwise sufficiently advised, the Commission finds that:

1. The rates in the Appendix, attached hereto and incorporated herein, are the fair, just, and reasonable rates for ULH&P to charge its customers for service rendered on and after the date of this Order.

2. The rates proposed by ULH&P would produce revenue in excess of that found reasonable herein and should be denied.

3. The rate of return granted herein is fair, just, and reasonable, and will provide for the financial obligations of ULH&P with a reasonable amount remaining for equity growth.

4. The tariff changes proposed by ULH&P, as modified in the Appendix, are reasonable and should be approved.

IT IS THEREFORE ORDERED that:

1. The rates in the Appendix be and they hereby are approved for service rendered by ULH&P on and after the date of this Order.

2. The rates proposed by ULH&P are hereby denied.

3. The tariff changes authorized herein and the tariffs set forth in the Appendix are hereby approved.

4. Within 30 days from the date of this Order, ULH&P shall file with the Commission revised tariff sheets setting out the rates and tariff provisions approved herein.

Done at Frankfort, Kentucky, this 2nd day of October, 1990.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 90-041 DATED October 2, 1990.

The following rates and charges are prescribed for the customers in the area served by The Union Light, Heat and Power Company. 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. The gas rates included herein reflect all gas cost adjustments through Case No. 9029-X.

GAS SERVICE RATES

RATE RS
RESIDENTIAL SERVICE

Customer Charge Per Month: $5.95

	Base Rate		Gas Cost Adjustment		Total Rate	
Commodity Charge For All CCF Consumed	18.45¢	Plus	28.71¢	Equals	47.16¢	Per CCF

RATE GS
GENERAL SERVICE

Customer Charge Per Month: $12.00

	Base Rate		Gas Cost Adjustment		Total Rate	
Commodity Charge For All CCF Consumed	16.64¢	Plus	28.71¢	Equals	45.35¢	Per CCF

RATE FT
FIRM TRANSPORTATION SERVICE

Administrative Charge Per Month $250.00

Commodity Charge Per CCF:

Company will deliver the arranged-for gas, less shrinkage which is equal to the Company's system average unaccounted for percentage, in accordance with the charges and provisions of the customer's applicable general service rate exclusive of the gas cost recovery charge.

RATE IT
INTERRUPTIBLE TRANSPORTATION SERVICE

Administrative Charge Per Month	$250.00

Commodity Charge Per CCF:

Company will deliver the arranged-for gas, less shrinkage which is equal to the Company's system average unaccounted for percentage, at a rate of $0.70 per Mcf except as specified in the "Alternative Fuels" provision;

Plus, a take-or-pay recovery charge as set forth on Sheet No. 71 Rider T-O-P, as competitive conditions allow;

Plus, if purchased by Company, an agency fee of $0.05 per Mcf and a gas cost based on that supply purchased on customer's behalf which will not be detrimental to sales service customers.

The Company will supplement the customer's gas supply on a best efforts basis for gas delivered through customer's meter in excess of customer's daily and/or monthly transported volumes including prior months transportation imbalances and standby service volumes if applicable. The cost of this supplemental gas supply will not be detrimental to the Company's sales service customers. In the event customer fails to interrupt transportation deliveries at Company's request, or Company is unable to provide supplemental supplies for customer, any excess deliveries through customer's meter will be considered unauthorized deliveries.

Minimum: The monthly customer charge contained in Sheet No. 31, Rate GS, and in addition thereto during the seven consecutive billing periods beginning in April, the 10,000 CCF minimum. If customer fails to take delivery of 10,000 CCF per month during the months of April through October, customer will be charged, in addition to the charges for the delivered volumes, an amount equal to the difference between 10,000 CCF and the delivered volumes billed at Rate GS.

ALTERNATIVE FUELS

The Company may charge a rate lower than that specified in the "Net Monthly Bill" provision to meet competition from alternative fuels without prior Commission approval. The decision to charge a lower rate will be made on a case-by-case basis, supported by a statement in the customer's current affidavit that absent such lower rate, customer would utilize an alternative fuel source.

The Company may also charge a rate higher than that specified in the "Net Monthly Bill" provision if such rate remains competitive with the price of energy from customer's alternative fuel source. The rate shall not exceed the rate set forth on Sheet No. 31, Rate GS, General Service.

Once a customer receives a flexible transportation rate, as described in the preceding paragraphs, the customer must continue to pay the flexible rate as determined by the Company for a period of 12 months. At the end of 12 months, the customer may, upon written notification to the Company, apply for a flexible rate for another 12 months. Absent such notification, customer's rate will convert to the fixed rate established herein.

GAS COST CREDIT

A gas cost credit (GCC) based upon a rate of $.05 per Mcf, shall be calculated monthly based on the agency volumes purchased by Company on customer's behalf and credited to the Company's booked cost of gas. The GCC shall be included in the determination of the gas cost adjustment rate provision set forth on Sheet No. 70 of this tariff.

RATE SS
STANDBY SERVICE

APPLICABILITY

Available to any transportation customer requiring standby service where Company has adequate peak day and annual contractual arrangements. If contractual arrangements are inadequate to accommodate customer, Company shall decline to initiate such service until adequate arrangements can be completed.

NET MONTHLY BILL

The net monthly bill is determined as follows. For the volume specified in the written agreement, the customer shall pay an additional charge of 6.331 cents per CCF which is the Company's average pipeline demand cost based on total throughput. This charge is subject to change with the Company's quarterly GCA filing. This amount is due and payable, except at such time as the standby volumes are required by the customer. In that instance, customer shall be billed for standby volumes at the Company's current gas cost recovery charge plus the applicable transportation rate from either Rate FT or Rate IT.

LATE PAYMENT CHARGE

Payment of the total amount due must be received in the Company's office by the due date shown on the bill. When not so paid, an additional amount equal to five percent (5%) of the unpaid balance is due and payable.

TERMS AND CONDITIONS

The customer shall enter into a written agreement with the Company. Such agreement shall set forth specific arrangements concerning the volumes to be reserved for customer and any other circumstances relating to the individual customer's standby needs.

The primary term of the contract shall be a minimum of one (1) year with a renewal or termination date of October 31 of each year. After completion of the primary term, such contract shall continue unless cancelled by either party upon thirty (30) days written notice preceding October 31 of each year.

SERVICE REGULATIONS

The supplying of, and billing for, service and all conditions applying thereto are subject to the jurisdiction of the Kentucky Public Service Commission and to the Company's rules and regulations currently in effect, as filed with the Kentucky Public Service Commission, as provided by law.

ELECTRIC SERVICE RATES

RATE RS
RESIDENTIAL SERVICE

Customer Charge	$3.40 Per Month
Energy Charge	
Summer Rate	
All Kilowatt-Hours	6.0470¢ Per KWH
Winter Rate	
First 1,000 Kilowatt-Hours	6.0470¢ Per KWH
Additional Kilowatt-Hours	4.4269¢ Per KWH

BASE FUEL COST

The energy charge includes a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE DS
SERVICE AT SECONDARY DISTRIBUTION VOLTAGE

NET MONTHLY BILL

Computed in accordance with the following charges provided, however, that the maximum monthly rate, excluding the customer charge and the electric fuel component charges, shall not exceed 17.3067 cents per kilowatt-hour.

Customer Charge	
Single Phase Service	\$5.00 Per Month
Three Phase Service	\$10.00 Per Month
Demand Charge:	
First 15 Kilowatts	\$0.00 Per KW
Additional Kilowatts	\$5.89 Per KW
Energy Charge	
First 6,000 KWH	6.2721¢ Per KWH
Next 300 KWH/KW	3.8399¢ Per KWH
Additional KWH	3.2156¢ Per KWH

For customers receiving service under the provisions of former Rate C, Optional Rate for Churches, as of June 25, 1981, the maximum monthly rate per kilowatt-hour shall not exceed 10.2837 cents per kilowatt-hour plus the applicable fuel adjustment charge.

BASE FUEL COST

The energy charge includes a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE DT
TIME-OF-DAY RATE FOR SERVICE AT DISTRIBUTION VOLTAGE

Customer Charge	
Single Phase Service	\$5.00 Per Month
Three Phase Service	\$10.00 Per Month
Primary Voltage Service	\$100.00 Per Month
Demand Charge	
Summer	
On Peak KW	\$8.69 Per KW
Off Peak KW	\$1.00 Per KW
Winter	
On Peak KW	\$7.22 Per KW
Off Peak KW	\$1.00 Per KW

Energy Charge
All KWH | 3.2308¢ Per KWH

BASE FUEL COST

The energy charge includes a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE EH
OPTIONAL RATE FOR ELECTRIC SPACE HEATING

Winter Period	
Customer Charge	
Single Phase Service	$5.00 Per Month
Three Phase Service	$10.00 Per Month
Primary Voltage Service	$100.00 Per Month
Demand Charge	
All KW	$0.00 Per KW
Energy Charge	
All KWH	4.6832¢ Per KWH

BASE FUEL COST

The energy charge includes a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE SP
SEASONAL SPORTS SERVICE

Customer Charge	$5.00 Per Month
Energy Charge	7.7398¢ Per KWH

BASE FUEL COST

The energy charge includes a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE GS-FL
OPTIONAL UNMETERED GENERAL SERVICE RATE FOR
SMALL FIXED LOADS

All Kilowatt-Hours	6.1843¢ Per KWH

BASE FUEL COST

The energy charge includes a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE DP
SERVICE AT PRIMARY DISTRIBUTION VOLTAGE

NET MONTHLY BILL

Computed in accordance with the following charges provided, however, that the maximum monthly rate, excluding the customer charge and the electric fuel component charges, shall not exceed 17.3067 cents per kilowatt-hour.

Customer Charge Primary Voltage Service (12.5 or 34.5 KV)	$100.00 Per Month
Demand Charge: All Kilowatts	$5.50 Per KW
Energy Charge	
First 300 KWH/KW	3.8673¢ Per KWH
Additional KWH	3.2156¢ Per KWH

BASE FUEL COST

The energy charge includes a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE TT
TIME-OF-DAY RATE FOR SERVICE AT TRANSMISSION VOLTAGE

Customer Charge	$500.00 Per Month
Demand Charge	
Summer	
On Peak KW	$5.68 Per KW
Off Peak KW	$1.00 Per KW
Winter	
On Peak KW	$4.65 Per KW
Off Peak KW	$1.00 Per KW
Energy Charge All KWH	3.2302¢ Per KWH

BASE FUEL COST

The energy charge includes a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE SL
STREET LIGHTING SERVICE

OVERHEAD DISTRIBUTION AREA

Standard Fixtures	Annual KWH	Rate/Unit
Mercury Vapor		
7,000 Lumens	790	$4.24
7,000 Lumens (Open Refractor)	874	$3.25
10,000 Lumens	1,127	$4.54
21,000 Lumens	1,768	$5.64
Sodium Vapor		
9,500 Lumens	487	$5.36
9,500 Lumens (Open Refractor)	487	$3.81
16,000 Lumens	782	$5.52
22,000 Lumens	1,023	$7.16
50,000 Lumens	1,959	$8.48

Decorative Fixtures

Sodium Vapor		
9,500 Lumens (Rectilinear)	487	$6.86
22,000 Lumens (Rectilinear)	1,023	$7.80
50,000 Lumens (Rectilinear)	1,959	$9.28
50,000 Lumens (Setback)	1,959	$15.40

Where a street lighting fixture served overhead is to be installed on another utility's pole on which the Company does not have a contact, an additional monthly pole charge will be applicable as stated on page 2 of this tariff.

Spans of Secondary Wiring

For each increment of 50 feet of secondary wiring beyond the first 150 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: $0.40.

UNDERGROUND DISTRIBUTION AREA

Standard Fixtures	Annual KWH	Rate/Unit
Mercury Vapor		
7,000 Lumens	874	$4.24
7,000 Lumens (Open Refractor)	874	$3.25
10,000 Lumens	1,215	$4.54
21,000 Lumens	1,914	$5.64
Sodium Vapor		
9,500 Lumens	487	$5.36
9,500 Lumens (Open Refractor)	487	$3.81
16,000 Lumens	782	$5.52
22,000 Lumens	1,023	$7.16
50,000 Lumens	1,959	$8.48

Decorative Fixtures

Mercury Vapor		
7,000 Lumens (Town & Country)	865	$4.44
7,000 Lumens (Holophane)	874	$5.92
7,000 Lumens (Gas Replica)	874	$15.41
7,000 Lumens (Aspen)	874	$9.23
Sodium Vapor		
9,500 Lumens (Town & Country)	487	$7.76
9,500 Lumens (Holophane)	532	$8.80
9,500 Lumens (Rectilinear)	487	$6.86
9,500 Lumens (Gas Replica)	532	$16.62
9,500 Lumens (Aspen)	532	$9.88
22,000 Lumens (Rectilinear)	1,023	$7.80
50,000 Lumens (Rectilinear)	1,959	$9.28
50,000 Lumens (Set Back)	1,959	$15.40

Spans of Secondary Wiring

For each increment of 25 feet of secondary wiring beyond the first 25 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: $0.60.

POLE CHARGES	Rate/Pole
Pole Description	
Wood	
30 Foot	$3.42
35 Foot	$3.44
40 Foot	$4.14
Aluminum	
28 Foot	$5.47
28 Foot (Heavy Duty)	$5.52
30 Foot (Anchor Base)	$10.90
Fiberglass	
17 Foot	$3.45
12 Foot (Decorative)	$10.20
30 Foot (Bronze)	$6.65
35 Foot (Bronze)	$6.80
Steel	
27 Foot (11 Gauge)	$8.97
27 Foot (3 Gauge)	$13.50

All kilowatt-hours shall be subject to a charge of 1.9091 cents per kilowatt-hour.

RATE TL
TRAFFIC LIGHTING SERVICE

NET MONTHLY BILL

Where the Company supplies energy only, all kilowatt-hours shall be billed at 2.82 cents per kilowatt-hour; or

Where the Company supplies energy and has agreed to provide limited maintenance for traffic signal equipment, all kilowatt-hours shall be billed at 4.45 cents per kilowatt-hour.

BASE FUEL COST

The energy charges include a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE OL
OUTDOOR LIGHTING SERVICE

	Rate/Unit
Lighting Served with Overhead Facilities (OH)	
9,500 Lumens High Pressure Sodium - Enclosed	$6.95
9,500 Lumens High Pressure Sodium - Open	$5.15
22,000 Lumens High Pressure Sodium - Enclosed	$8.09
50,000 Lumens High Pressure Sodium - Enclosed	$8.01
Lighting Served with Underground Facilities (URD)	
9,500 Lumens High Pressure Sodium - Enclosed	$6.95
9,500 Lumens High Pressure Sodium - Open	$5.15
9,500 Lumens High Pressure Sodium - TC 100 R	$7.88
22,000 Lumens High Pressure Sodium - Enclosed	$8.09
Floodlighting (FL)	
22,000 Lumens High Pressure Sodium	$7.91
50,000 Lumens High Pressure Sodium	$4.44

All kilowatt-hours shall be subject to a charge of 1.9091 cents per kilowatt-hour.

RATE NSU
STREET LIGHTING SERVICE
FOR NON-STANDARD UNITS

Company Owned

	Annual KWH	Rate/Unit
Boulevard Units Served Underground		
2,500 Lumens Incandescent - Series	616	$6.15
2,500 Lumens Incandescent - Multiple	786	$4.25
Holophane Decorative Fixture on 17 foot fiberglass pole served underground with direct buried cable		
10,000 Lumens Mercury Vapor	1,215	$11.04

The cable span charge of $.60 per each increment of 25 feet of secondary wiring shall be added to the Rate/Unit charge for each increment of secondary wiring beyond the first 25 feet from the pole base.

Street Light Units Served Overhead Distribution		
1,000 Lumens Incandescent	383	$1.13
2,500 Lumens Incandescent	786	$4.20
2,500 Lumens Mercury Vapor	453	$4.45
21,000 Lumens Mercury Vapor	1,914	$5.08
Customer Owned		
Steel Boulevard Units Served Underground with Limited Maintenance by Company		
2,500 Lumens Incandescent - Series	626	$3.19
2,500 Lumens Incandescent - Multiple	786	$4.07

All kilowatt-hours shall be subject to a charge of 1.9091 cents per kilowatt-hour.

RATE NSP
PRIVATE OUTDOOR LIGHTING FOR NON-STANDARD UNITS

Private Outdoor Lighting for Units Served Overhead:

	Annual KWH	Rate/Unit
7,000 Lumens Mecury, Open Refractor	865	$5.36
7,000 Lumens Mecury, Enclosed Refractor	790	$7.23
10,000 Lumens Mecury, Enclosed Refractor	1,127	$8.10
21,000 Lumens Mecury, Enclosed Refractor	1,768	$9.80
2,500 Lumens Mecury, Open Refractor	453	$5.26
2,500 Lumens Mecury, Enclosed Refractor	453	$7.51
Outdoor Lighting Units Served in Underground Residential Distribution Areas:		
7,000 Lumens Mecury, Mounted on a 17-foot Plastic Pole	865	$9.88
7,000 Lumens Mecury, Mounted on a 17-foot Laminated Wood Pole	865	$9.88
7,000 Lumens Mecury, Mounted on a 30-foot Wood Pole	865	$9.04
Flood Lighting Units Served in Overhead Distribution Areas:		
21,000 Lumens Mecury	1,914	$9.82
52,000 Lumens Mecury (35-Foot Wood Pole)	4,584	$14.55
52,000 Lumens Mecury (50-Foot Wood Pole)	4,584	$17.35
50,000 Lumens High Pressure Sodium	1,980	$12.12

All kilowatt-hours shall be subject to a charge of 1.9091 cents per kilowatt-hour.

RATE SC
STREET LIGHTING SERVICE - CUSTOMER OWNED

Fixture Description

Standard Fixtures	Annual KWH	Rate/Unit
Mercury Vapor		
7,000 Lumens	790	$1.98
10,000 Lumens	1,127	$2.32
21,000 Lumens	1,768	$2.86
Sodium Vapor		
9,500 Lumens	487	$3.11
16,000 Lumens	782	$3.25
22,000 Lumens	1,023	$3.30
50,000 Lumens	1,959	$3.35
Decorative Fixtures		
Mercury Vapor		
7,000 Lumens (Holophane)	874	$2.76
7,000 Lumens (Town & Country)	865	$2.72
7,000 Lumens (Gas Light Replica)	874	$2.76
7,000 Lumens (Aspen)	874	$2.76
Sodium Vapor		
9,500 Lumens (Town & Country)	487	$3.11
9,500 Lumens (Rectilinear)	487	$3.11
9,500 Lumens (Aspen)	532	$3.21
9,500 Lumens (Holophane)	532	$3.21
9,500 Lumens (Gas Light Replica)	532	$3.21

Pole Description	Rate/Pole
Wood	
30 Foot	$3.42
35 Foot	$3.44
40 Foot	$4.14

The rate for energy used for this type of street lighting will be 2.768 cents per kilowatt-hour.

BASE FUEL COST

The energy charge includes a base fuel cost of 1.9091 cents per kilowatt-hour.

RATE SE
STREET LIGHTING SERVICE-OVERHEAD EQUIVALENT

Fixture Description

Decorative Fixtures	Annual KWH	Rate/Unit
Mercury Vapor		
7,000 Lumens (Town & Country)	865	$4.24
7,000 Lumens (Holophane)	874	$4.24
7,000 Lumens (Gas Replica)	874	$4.24
7,000 Lumens (Aspen)	874	$4.24
Sodium Vapor		
9,500 Lumens (Town & Country)	487	$5.36
9,500 Lumens (Holophane)	532	$5.36
9,500 Lumens (Rectilinear)	487	$5.36
9,500 Lumens (Gas Replica)	532	$5.36
9,500 Lumens (Aspen)	532	$5.36
22,000 Lumens (Rectilinear)	1,023	$7.16
50,000 Lumens (Rectilinear)	1,959	$8.48
50,000 Lumens (Setback)	1,959	$8.48

Pole Description

The following poles are available for service under this tariff. The cost of the poles will be covered by the customer's contribution for the installation costs.

- Aluminum
  - 28 Foot (Includes 8' Mast Arm)
  - 30 Foot (Anchor Base)
- Fiberglass
  - 17 Foot
  - 12 Foot (Decorative)
  - 30 Foot (Bronze)
  - 35 Foot (Bronze)
- Steel
  - 27 Foot (11 Gauge)
  - 27 Foot (3 Gauge)

Spans of Secondary Wiring

For each increment of 25 feet of secondary wiring beyond the first 25 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: $0.60.

BASE FUEL COST

All kilowatt-hours shall be subject to a charge of 1.9091 cents per kilowatt-hour.