

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

PROPOSED ADJUSTMENT OF THE )  
WHOLESALE WATER SERVICE RATES OF ) CASE NO.  
THE FRANKFORT ELECTRIC AND WATER ) 96-595  
PLANT BOARD )

O R D E R

IT IS ORDERED that the Frankfort Electric and Water Plant Board ("Plant Board") within 14 days of this Order shall file the original and 12 copies of the following information with the Commission with a copy to all parties of record. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. Where information requested herein has been provided along with the original application, in the format requested herein, reference may be made to the specific location of that information in responding to this Order.

Refer to the Cost-of-Service Study. Provide a breakdown in the format shown in Exhibit A of this Order which includes the allocation code for each expense (as shown on the last column of Sheets 1 and 2) and an analysis of each allocation factor including the formula used and the resulting percentage allocated to each function (as shown on Sheets 2, 3, 4, and 5). Information must be provided in a manner that explains each allocation and allows the Commission to make any desired adjustments to the study.

Done at Frankfort, Kentucky, this 15th day of April, 1997.

PUBLIC SERVICE COMMISSION

B. J. Helton  
For the Commission

ATTEST:

Don Mills

Executive Director

1995 COST OF SERVICE STUDY  
ALLOCATION OF EXPENSES BY FUNCTION

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Witness: T. G. McGinnick

OPERATION & MAINTENANCE EXPENSES	DESCRIPTION	FUNCTIONAL ALLOCATION					CUSTOMER COSTS OPERATIONS BUSINESS	FIRE DIRECT ASSIGNMENT	ALLOCATION CODE
		BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR					
660	Operation Supervision & Engineering	252,282	107,871	19,633	26,314	75,238	15,702	7,524	037
6611	Storage Facilities - Expenses	51,487	6,835	0	35,448	0	0	9,199	032
6612	Storage Facilities - Labor	0	0	0	0	0	0	0	032
6621	T&D Lines - Expenses	31,080	16,593	0	14,487	0	0	0	005
6622	T&D Lines - Labor	63,109	33,692	0	29,417	0	0	0	005
6631	Meter Expenses-Remove and Reset-Exp	9,300	0	0	0	9,300	0	0	003
6632	Meter Expenses-Remove and Reset-Labor	235,900	0	0	0	235,900	0	0	003
6633	Meter Expenses-Misc Meter Exp	1,200	0	0	0	1,200	0	0	003
6634	Meter Expenses-Misc Meter Labor	116,397	0	0	0	116,397	0	0	003
6641	Customer Installation - Expenses	1,200	0	0	0	1,200	0	0	003
6642	Customer Installation - Labor	41,522	0	0	0	41,522	0	0	003
6651	Maps and Records - Expenses	25,192	13,449	0	11,743	0	0	0	005
66519	Maps and Records - Expenses Computer	0	0	0	0	0	0	0	005
6652	Maps and Records - Labor	108,899	58,138	0	50,761	0	0	0	005
6653	Misc Expenses	86,007	19,695	1,603	18,642	37,938	596	7,532	011
6654	Misc Labor	207,624	27,627	0	24,987	135,989	0	19,022	031
666	Rents	17,524	4,013	327	3,798	7,730	121	1,535	011
670	Maint Supervision & Engineering Ord	117,086	48,121	15,923	21,341	25,599	0	6,101	006
67001	Maint Supervision & Engineering Prg	49,008	20,142	6,665	8,933	10,715	0	2,554	006
6711	Maint Struct & Improvements-Materials Ord	7,207	3,848	0	3,359	0	0	0	005
67111	Maint Struct & Improvements-Materials Prg	0	0	0	0	0	0	0	005
6712	Maint Struct & Improvements-Labor Ord	2,664	1,422	0	1,242	0	0	0	005
67121	Maint Struct & Improvements-Labor Prg	0	0	0	0	0	0	0	005
6721	Maint Res & Standpipes - Materials Ord	21,120	2,804	0	14,541	0	0	3,773	032
67211	Maint Res & Standpipes - Materials Prg	0	0	0	0	0	0	0	032
67212	Amort Res & Standpipes	155,186	20,602	0	106,842	0	0	27,726	032
6722	Maint Res & Standpipes - Labor Ord	6,716	892	0	4,624	0	0	1,200	032
67221	Maint Res & Standpipes - Labor Prg	252	33	0	173	0	0	45	032
6731	Maint T&D Mains - Materials Ord	103,220	55,106	0	48,114	0	0	0	005
67311	Maint T&D Mains - Materials Prg	44,165	23,578	0	20,587	0	0	0	005
67312	Amort T&D Mains	0	0	0	0	0	0	0	018
6732	Maint T&D Mains - Labor Ord	91,309	48,747	0	42,562	0	0	0	005
67321	Maint T&D Mains - Labor Prg	79,773	42,588	0	37,185	0	0	0	005
6751	Maint Services - Materials Ord	40,360	0	0	0	40,360	0	0	003
67511	Maint Services - Materials Prg	24,858	0	0	0	24,858	0	0	003
6752	Maint Services - Labor Ord	94,307	0	0	0	94,307	0	0	003
67521	Maint Services - Labor Prg	28,050	0	0	0	28,050	0	0	003
6761	Maint Meter - Materials Ord	0	0	0	0	0	0	0	003
67611	Maint Meter - Materials Prg	7,200	0	0	0	7,200	0	0	003
6762	Maint Meter - Labor Ord	0	0	0	0	0	0	0	003
67621	Maint Meter - Labor Prg	14,246	0	0	0	14,246	0	0	003
6763	Maint Meter Installation - Materials Ord	39,300	0	0	0	39,300	0	0	003
67631	Maint Meter Installation - Materials Prg	1,100	0	0	0	1,100	0	0	003
6764	Maint Meter Installation - Labor Ord	96,560	0	0	0	96,560	0	0	003
67641	Maint Meter Installation - Labor Prg	0	0	0	0	0	0	0	003
6771	Maint Hydrants - Materials Ord	30,480	0	0	0	0	0	30,480	028
67711	Maint Hydrants - Materials Prg	4,266	0	0	0	0	0	4,266	028
6772	Maint Hydrants - Labor Ord	40,527	0	0	0	0	0	40,527	028
67721	Maint Hydrants - Labor Prg	45,929	0	0	0	0	0	45,929	028
6781	Maint Other T&D Plant - Materials Ord	17,400	3,984	324	3,771	7,675	121	1,524	011
67811	Maint Other T&D Plant - Materials Prg	0	0	0	0	0	0	0	011
6782	Maint Other T&D Plant - Labor Ord	0	0	0	0	0	0	0	031
67821	Maint Other T&D Plant - Labor Prg	0	0	0	0	0	0	0	031
	<b>Total T &amp; D Expenses</b>	<b>2,411,012</b>	<b>559,780</b>	<b>44,475</b>	<b>528,871</b>	<b>1,052,384</b>	<b>16,540</b>	<b>208,937</b>	
901	Supervision	280,972	0	0	0	0	280,972	0	017
9021	Meter Reading Expensesenses	46,048	0	0	0	0	46,048	0	017
90219	Meter Reading Mgt Program	6,000	0	0	0	0	6,000	0	017
9022	Meter Reading Labor	375,319	0	0	0	0	375,319	0	017
9031	Contracts and Orders - Expenses	359,298	0	0	0	0	359,298	0	017
9032	Contracts and Orders - Labor	244,018	0	0	0	0	244,018	0	017
9033	Collecting - Expenses	82,490	0	0	0	0	82,490	0	017
9034	Collecting - Salaries	78,456	0	0	0	0	78,456	0	017
90351	Billing & Accounting - Computers	149,622	0	0	0	0	149,622	0	017
90352	Billing & Accounting - Other Expenses	413,059	0	0	0	0	413,059	0	017
9036	Billing & Accounting Salaries	110,899	0	0	0	0	110,899	0	017
904	Uncollectible Accounts	100,800	0	0	0	0	100,800	0	017
9051	Misc Expenses	600	0	0	0	0	600	0	017
9052	Misc Salaries	0	0	0	0	0	0	0	017
9071	Cust Service and Information - Expenses	0	0	0	0	0	0	0	017
9072	Cust Service and Information - Salaries	0	0	0	0	0	0	0	017
9101	Sales Promotion - Expenses	0	0	0	0	0	0	0	017
	<b>Total Customer Service Expense</b>	<b>2,247,581</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,247,581</b>	<b>0</b>	

**1995 COST OF SERVICE STUDY  
ASSIGNMENT OF FUNCTIONAL COSTS  
TO CUSTOMER CLASSES**

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Witness: T. G. McKittrick

	TOTAL	BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR	CUSTOMER COSTS OPERATIONS	BUSINESS	FIRE DIRECT ASSIGNMENT	ALLOCATION CODE
PRO FORMA REVENUE	36,521,687	18,658,647	3,861,794	3,433,823	5,280,869	4,111,868	1,174,482	016
LESS:								
FIRE SERVICE	2,352,348	18,659	275,268	761,766	0	134,499	1,162,156	025,027,028
BILLING FOR OTHERS	259,200	0	0	0	0	259,200	0	017
RECONNECTION CHARG	138,000	0	0	0	138,000	0	0	003
AFUDC	292,504	153,462	43,185	38,567	46,260	0	11,027	007
OTHER-MISCELLANEOUS	40,402	20,641	4,272	3,799	5,842	4,549	1,299	016
SUB-TOTAL	33,439,032	18,465,885	3,539,069	2,629,691	5,090,767	3,713,620	0	
ALLOCATION TO CLASSES:								
RESIDENTIAL	18,614,796	8,332,529	1,771,354	1,368,100	3,893,731	3,249,081		
COMMERCIAL	9,626,628	6,340,042	1,201,238	717,574	972,015	395,759		
INDUSTRIAL	1,583,691	1,294,647	158,520	91,825	33,557	5,142		
OPA	3,137,214	2,155,303	325,420	412,351	181,856	62,284		
OWU	476,718	343,364	82,536	39,842	9,608	1,369		
OTHER	0	0	0	0	0	0		
TOTAL	33,439,048	18,465,885	3,539,068	2,629,692	5,090,767	3,713,636		
		019	021	022	023	024		
		020						

Factor 015

Factor 015 is a summary allocator for Rate Base. Rate Base elements are allocated by this Factor to the Base, Maximum Day, Maximum Hour, Customer Operations and Customer Business functions. This allocator is developed by allocating and summing the results of allocations of Rate Base for categories of rate base that can be allocated by other Factors. All directly allocable rate base elements are allocated using these factors. Factor 015 is the resultant and is used to allocate deferred taxes and deferred debits on Page 7 of Exhibit 36 (Rate Base). Also Factor 015 is used on Page 1 of Exhibit 36 (Revenue Requirement) to allocate income taxes and Utility Operating Income.

	Total	SUMMARY ALLOCATION OF RATE BASE ← FUNCTIONAL ALLOCATION →					FIRE SERVICE DIRECT
		BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR	CUSTOMER OPERATION	COSTS BUSINESS	
NET PLANT	156,724,074	83,765,914	24,030,724	21,517,289	21,487,150	0	5,922,952
ADVANCES	24,499,862	10,069,198	3,331,736	4,465,590	5,356,405	0	1,276,688
WORKING CA	5,498,801	2,779,761	755,743	616,399	828,151	332,032	186,682
TP RESERVE	173,283	90,913	25,584	22,847	27,405	0	6,533
	137,549,729	76,385,564	21,429,147	17,645,251	16,931,491	332,032	4,826,413
<b>Factor 015</b>	<b>100.00%</b>	<b>55.53%</b>	<b>15.58%</b>	<b>12.83%</b>	<b>12.31%</b>	<b>0.24%</b>	<b>3.51%</b>

Factor 016

Factor 016 is a summary allocator for Revenue Requirement. Revenue Requirements elements are allocated by this Factor to the Base, Maximum Day, Maximum Hour, Customer Operations and Customer Business functions. This allocator is developed by allocating and summing the results of allocations of Revenue Requirement for elements that can be allocated by other Factors. All directly allocable revenue requirement elements are allocated using other factors. Factor 016 is the resultant and is used to allocate miscellaneous taxes on Page 1 (Revenue Requirement).

District	Total	SUMMARY ALLOCATION OF REVENUE REQUIREMENT ← FUNCTIONAL ALLOCATION →					FIRE SERVICE DIRECT
		BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR	CUSTOMER OPERATION	COSTS BUSINESS	
SUB-TOTAL	36,455,244	18,624,701	3,854,768	3,427,576	5,271,262	4,104,387	1,172,345
<b>Factor 016</b>	<b>100.00%</b>	<b>51.09%</b>	<b>10.57%</b>	<b>9.40%</b>	<b>14.46%</b>	<b>11.26%</b>	<b>3.22%</b>

Factor 017

Factor 017 allocates Operation & Maintenance expenses 100 % to the Customer Business function. Operation & Maintenance expenses not related to volume of water used and associated with office functions related to rendering bills, collections and customer accounting are allocated to the Customer Business Function using this factor.

Factor 017 is 100 % to Customer Business.

Cost of Service Analysis  
Development of Allocation Factors

**EXHIBIT 36**

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Witness: T. G. McKittrick

Factor 008

Factor 008 is a summary allocator for Transmission & Distribution Depreciation Expense. T & D General Expenses are allocated by this Factor to the Base, Maximum Day, Maximum Hour, Customer and Fire Service functions. This allocator is developed by allocating and summing expense for all facilities that can be allocated by other Factors.

	Total	FUNCTIONAL ALLOCATION					FIRE SERVICE DIRECT
		BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR	CUSTOMER OPERATION	COSTS BUSINESS	
Total Plant	1,904,007	527,689	172,623	262,479	789,773	0	151,434
Factor 008	100.00%	27.72%	9.07%	13.79%	41.48%	0.00%	7.95%

Factor 009

Factor 009 is a summary allocator for Depreciation Expense. Depreciation expense elements for General Plant are allocated by this Factor to the Base, Maximum Day, Maximum Hour and Customer Operations functions. This allocator is developed by allocating and summing the results of allocations of expense for all facilities that can be allocated by other Factors. General Plant is then allocated using this overall Factor.

District	Total	FUNCTIONAL ALLOCATION					FIRE SERVICE DIRECT
		BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR	CUSTOMER OPERATION	COSTS BUSINESS	
Total Plant	3,401,982	1,777,646	403,955	266,118	800,721	0	153,533
Factor 009	100.00%	52.25%	11.87%	7.82%	23.54%	0.00%	4.51%

Factor 010

Factor 010 is a summary allocator for O & M Expense. Allocable O & M Labor expense elements are allocated by this Factor to the Base, Maximum Day, Maximum Hour, Customer Operations and Customer Business functions and Fire Service. This allocator is developed by allocating and summing the results of allocations of Labor expense for all categories of expense that can be allocated by other Factors. General Labor and General expenses related to labor are then allocated using this overall Factor.

District	Total	FUNCTIONAL ALLOCATION					FIRE SERVICE DIRECT
		BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR	CUSTOMER OPERATION	COSTS BUSINESS	
Total Plant	4,054,294	1,478,209	225,755	247,539	874,523	1,105,366	122,902
Factor 010	100.00%	36.46%	5.57%	6.11%	21.57%	27.26%	3.03%

Factor 011

Factor 011 is a summary allocator for T & D Expense. T & D expense elements are allocated by this Factor to the Base, Maximum Day, Maximum Hour, Customer Operations and Customer Business and Fire Service functions. This factor is developed by allocating and summing the results of allocations of categories of expense that can be allocated by other Factors. General T & D expenses are then allocated using this overall Factor.

District	Total	ALLOCATION OF GENERAL T & D EXPENSE ←-----FUNCTIONAL ALLOCATION----->					FIRE SERVICE DIRECT
		BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR	CUSTOMER OPERATION	COSTS BUSINESS	
Total Plant	2,264,889	518,639	42,221	490,917	999,041	15,702	198,346
Factor 011	100.00%	22.90%	1.86%	21.68%	44.11%	0.69%	8.76%

Factor 012

Factor 012 is a summary allocator for O & M Expense less Power & Chemicals. O & M expense elements are allocated by this Factor to the Base, Maximum Day, Maximum Hour, Customer Operations and Customer Business functions. This allocator is developed by allocating and summing the results of allocations of O & M expense for categories of expense that can be allocated by other Factors. Allocated Power and Chemical Expenses are deducted prior to calculating this factor. This Factor is then used to allocate Administrative and General expenses.

District	Total	ALLOCATION OF GENERAL O & M EXPENSE ←-----FUNCTIONAL ALLOCATION----->					FIRE SERVICE DIRECT
		BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR	CUSTOMER OPERATION	COSTS BUSINESS	
SUB-TOTAL	6,867,577	2,405,605	407,634	528,871	1,052,384	2,264,121	208,937
Factor 012	100.00%	35.03%	5.94%	7.70%	15.32%	32.97%	3.04%

Factor 013

Factor 013 is a summary allocator for O & M Expense. O & M expense elements are allocated by this Factor to the Base, Maximum Day, Maximum Hour, Customer Operations and Customer Business functions. This allocator is developed by allocating and summing the results of allocations of O & M expense for categories of expense that can be allocated by other Factors. Factor 013 is the resultant and is used to allocate cash working capital on Page 7 of Exhibit 36 (Rate Base).

District	Total	SUMMARY ALLOCATION OF O & M EXPENSE ←-----FUNCTIONAL ALLOCATION----->					FIRE SERVICE DIRECT
		BASE	EXTRA MAX. DAY	DEMAND MAX. HOUR	CUSTOMER OPERATION	COSTS BUSINESS	
TOTAL	15,403,241	7,174,150	774,760	955,596	2,145,298	3,962,009	391,388
Factor 013	100.00%	46.58%	5.03%	6.20%	13.93%	25.72%	2.54%