AQUA ILLINOIS, INC.
KANKAKEE WATER DIVISION
COST OF SERVICE AND TARIFF DESIGN STUDIES
2014

Introduction

The Kankakee Water Division of Aqua Illinois, Inc. ("Kankakee") is an Illinois public water utility company which provides water service to its customers in the City of Kankakee and surrounding areas. Kankakee supplies water to approximately 28200 metered customers, including approximately 26,100 residential customers.

These studies have been undertaken to determine the appropriate cost of supplying water to the various customer classes and then to design a tariff to charge the various customer classes based, in large part, on their cost of service. These studies are based on the operating and financial information that is presented in the exhibits to the Rate Increase Application for Kankakee.

Conclusion

The Tariff Design section below discusses the recommendations for tariff design that arise out of the Cost of Service Study and other considerations. Total revenues have been increased by 9.95% over revenues at current rates, including the Qualified Infrastructure Plant Surcharge ("QIPS"). Public Fire Charges have been set such that the total amount approximately equals the Cost of Service for this customer class as shown on Tables 7 and 10. To apportion the Public Fire Revenues among the various Municipalities and Fire Districts, what is commonly known as the "Two-Tier" method was used. This method allocates fire charges using both the number of fire hydrants and number of customer equivalents. Private Fire revenues are significantly under their Cost of Service which is the reason for increasing these rates by 15%, above the overall requested revenue increase. Customer Charges for the Metered Tariff were increased by 3.5% over the present rate, including QIPS. This increase is significantly below the overall increase and takes another step toward equalizing Customer Charges to the calculated

Cost of Service. Since a significant portion of the expenses of Kankakee, like all water utilities, are fixed, it is essential that a significant portion of the revenues come from fixed charges such as the Customer Charge. Consumption Charges were increased to produce the required revenue requirement. The second and third usage blocks were increased such that all three blocks are in the same ratios to each other as in the current tariff. The Large General Service rates were increased a little more than the percentage increase for the third block.

Description of Cost of Service Study

The Cost of Service Study utilizes the base-extra capacity methodology as set forth in AWWA's Water Rates Manual, M-1 Sixth Edition "M-1 Manual". The first seven tables are the actual Cost of Service Study calculations. All working papers and back-up material for each of the tables are attached to their respective table. Table 8 is a calculation of the allocation for the public fire protection customer class using the two tier method. The calculated revenues at present and proposed rates are the same as shown on Schedule E-5 and on Schedule C-1 in the Rate Filing except that the total calculated revenues at proposed rates are slightly less than requested. Table 9 is a comparison of the Tariffs for Kankakee at current and proposed rates. Table 10 is a summary of revenues at cost of service, current, and proposed rates.

Determination of Allocation Basis

Table 1 shows the determination of the allocation percentages to the base and extra capacity functions. The average day is based on a three year average (2011 through 2013) consumption. Likewise, maximum day and maximum hourly usage was based on the same three year average. The maximum day allocation basis is determined by the ratio of the average day to the maximum day period, and the maximum hour allocation basis is determined by the ratio of the average day to the maximum hour.

Allocation of Rate Base to Cost Functions

Table 2 describes the allocation for the various cost functions of the rate base components. Plant items are shown net of depreciation, contributions in aid of construction ("CIAC") and customer advances for construction ("CAC"). Attached to Table 2 is a schedule

(WP2a) which details the allocation of the utility plant to the various plant classifications, including the amounts of Depreciation Reserve, CAC and CIAC deducted from the original cost of the utility plant by account. Other investments include the other factors which make up the Company's rate base and are a net negative principally due to deferred taxes. Items principally designed to meet maximum daily demands are allocated to the base and extra capacity functions as determined by the maximum day ratio developed in Table 1. Those items principally designed to meet maximum hourly demands are allocated on the basis of the maximum hour ratio also developed in Table 1. While the M1 Manual permits, but does not require, items designed to meet maximum hour requirements to be allocated to base, maximum day and maximum hour, we believe that it is appropriate to allocate them fully based on the maximum hour ratio since that is indicative of the design function of these items. Those items which are strictly used for fire protection purposes (fire hydrants) have been allocated completely to direct fire protection. Meters and services have been allocated completely to the customer cost function. The items which are general in nature (including other investments) are allocated based on the average allocation of the other items.

Allocation of Operation and Maintenance Expenses to Cost Functions

Table 3 shows the allocation of the operation and maintenance expenses to the various cost functions. The method used is identical to the allocation of physical plant described above. The administrative and general expenses were allocated based on the average allocations of the other expense items. Attached to Table 3 is a schedule (WP 3a) detailing the allocation of Operation and Maintenance Expenses. The amortization of tank painting costs is included as an Operation and Maintenance Expense.

Summary of Allocations to Functional Cost Components

Table 4 shows the summary of allocations for the functional cost components. Operation and maintenance expenses were taken from Table 3. Income and property taxes were allocated based on the allocation of the rate base components developed in Table 2. Other taxes were allocated based on the operation and maintenance expense allocation developed on Table 3. A

schedule (WP 4a) attached to Table 4 details the breakdown of the Other Taxes. Utility Operating Income and Depreciation Expense were allocated based on the allocation of the rate base components developed on Table 2.

Determination of Estimated Units of Service by Customer Class

Table 5 shows the development of the estimated units of service. The portion of the total annual system delivery allocated to each customer class is developed on a schedule (WP 5c) attached to Table 5. The consumption by customer class is taken from Table 9 and the total system delivery is based on a three year average (2011 through 2013) calculated on WP1a. The total system delivery was then allocated to each customer class based on the metered consumption. The non-coincidental extra capacity factors for both the maximum day and maximum hour columns were estimated based largely on the Illinois Commerce Commission ("ICC") Staff cost of service study in the rate increase docket for Kankakee (Docket Number 06-0285). The customer equivalent units ("CEU") have been calculated on the schedule (WP5a) entitled "Calculation of Customer Equivalent Units" which has been attached to Table 5. This schedule shows a breakdown of the various meter sizes by customer class and a factor for calculating the CEU for each meter size. The factors for meter sizes larger than a 5/8" meter were determined using the AWWA ratios of meter capacity. Fire protection equivalent units ("FEQ's") were developed on the schedule (WP5b) entitled, "Calculation of Fire Protection Equivalent Units" which has also been attached to Table 5. The FEQ's have been allocated based on the area of the various line sizes with a fire hydrant assumed to have the same area as a 4 inch fire line due to the smaller valves and other restrictions in a fire hydrant.

Determination of Unit Costs of Service

Table 6 describes the determination of the unit costs of service. The total cost of service by category is shown in the left-hand column and then allocated on the same basis as summarized on Table 4. The units of service on the top line of the table were developed on Table 5. The unit costs of service are determined by dividing the total dollar amount by the units of service.

Distribution of Costs of Service to Customer Class

Table 7 shows the distribution of the cost of service to the customer classes. The unit costs of service were developed on Table 6. The units of service, as broken down by customer class, were determined on Table 5. The cost of service is determined by multiplying the unit cost of service by the units of service. The results, in the Total column, are the unadjusted costs of service broken down by customer class. The Small Main Adjustment column adjusts the Class Costs of Service by transferring some of the costs associated with small mains between the Customer Classes based on the level of consumption in the various classes. The Small Mains Adjustment has been detailed on Schedules WP7a and WP7b that are attached to Table 7. The Other Rev. Adjustment column allocates the $139,189 of Other Revenues to the Customer Classes based on Cost of Service adjusted by the Small Mains Adjustment. The Adjusted Total column shows the Class Costs of Service as adjusted for small mains and Other Revenues. The final column (Percent of Total) shows the relative percentage of revenues which should be derived from the various customer classes.

Tariff Design

Table 9 shows a comparison of the current tariff and the proposed tariff. It should be noted that the current tariff rates do not include the 5.0% QIPS that is currently in effect. If the QIPS were to be included in the current tariff rates, the actual increase in the Customer Charge being proposed for a customer with a 5/8 inch meter is 3.5%, considerably below the requested overall rate increase of 9.95%. Customer growth has been added to account for the average number of customers projected by Aqua Illinois to be served in 2015. Consumption, however, has been reduced by 2% to take into account the reduction in per unit consumption in Aqua Illinois and throughout the USA due to plumbing code changes, more efficient appliances and considerable conservation education of the public. More extensive comparisons are set forth on Schedule E-5 in Exhibit 5.0 in the filing. In addition, the effect on customers with various sized meters and consumption quantities are detailed on Schedule E-7. The proposed Tariff Design is shown on Table 9. While cost of service considerations are part of what goes into developing an

appropriate tariff design, other considerations are appropriately taken into consideration. In developing the proposed tariff design, the first step used was to set Public Fire Charges using the two tier method for allocation between the various fire districts as previously approved by the ICC. The total amount of public fire revenues is close to the cost of service for this customer class summarized on Table 7. Table 8 details the allocation of these costs utilizing the Two-Tier method.

The next step was to adjust Private Fire Charges so as to take another step to move this class closer to its Cost of Service. This class had its revenues increased by 15% after QIPS. Private Fire revenues are substantially lower than the cost of service for this customer class. A 15% increase has the effect of moving this class closer to cost of service without creating undue rate shock.

The metered rates were then adjusted. After taking into consideration the increase in Public and Private Fire Protection revenues, Metered Revenues required a 10.3% increase. Customer Charges are proposed to be increased by 3.5% above the current rates including QIPS. This less than average increase in the Customer Charges continues the trend to reduce the Customer Charge as a percentage of revenues to move toward the cost of service. It important that fixed charges, as a percent of total revenue, do not drop since a large portion of the expenses of water utilities, including Kankakee, are made up of fixed charges. It is essential that a significant portion of Kankakee's revenues be from fixed charges to assure the recovery of the fixed costs. Approximately 40% of the proposed revenues would come from fixed costs including Customer Charges, Public Fire Charges, Private Fire Charges and Other Revenues. Consumption Charges were then increased to produce the requested total revenue as set forth on Schedule C-1 of the rate filing. The three rate blocks were kept in their same proportion as current rates with the usage charge for the Large General Services customer increased slightly more than the other rate blocks on a percentage basis. As shown on Table 10, All customer classes except Private Fire Protection have revenues in relatively close proximity to their class cost of service. The Residential, Commercial and Private Fire customer classes all move closer

to cost of service with the proposed tariff design. The Public Fire customer class is set at cost of service. The Industrial and Large General Service customer classes remain virtually unchanged. The QIPS rate is set to 0% for the proposed rates. The rolling-in of QIPS to the tariff rates has the effect of producing seemingly higher percentage increases in the tariff rates than actually is occurring. This is because the effective tariffs for the tariff rates are 5% higher than the actual tariff rates due to QIPS.

A change is being proposed in the quantity of water in the first and second usage blocks. The amount of water in the first usage block is proposed to increase from 22,440 gallons to 30,000 gallons and the quantity of water in the second usage block is proposed to increase from 351,560 gallons to 420,000 gallons. The reason for this proposed change is to begin to move the rate blocks in the Kankakee and Consolidated Water Group tariffs closer together. It is proposed that at some time in the future, these rate blocks will be equalized as the rates approach fully consolidated water rates.

Finally, the Standby Charges and the Large Industrial Charges were all increased by the average overall increase of 9.95%. There are no customers in either of these two customer classes.

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
COST OF SERVICE STUDY
2014

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 1
ALLOCATION RATIOS

	RATIO	BASE	EXTRA CAPACITY MAXIMUM DAY	EXTRA CAPACITY MAXIMUM HOUR
AVERAGE DAY	11.74	69.28%		

MAXIMUM DAY	16.95		30.72%	
AVERAGE DAY	11.74	46.18%		

MAXIMUM HOUR	25.43			53.82%

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
SYSTEM DELIVERY INFORMATION

	System Delivery in Million Gallons					3 Year
	2009	2010	2011	2012	2013	Average
Jan	386.57	361.04	389.21	323.54	330.98	347.91
Feb	335.96	326.57	315.25	302.15	304.09	307.16
Mar	340.98	334.60	334.61	320.51	331.99	329.03
Apr	328.77	322.48	332.41	330.97	327.01	330.13
May	364.53	366.61	375.68	383.34	363.24	374.09
Jun	366.39	366.96	371.97	423.23	363.13	386.11
Jul	381.55	398.45	449.71	442.09	427.94	439.92
Aug	398.53	408.04	402.52	400.80	425.37	409.56
Sep	353.31	360.99	345.13	350.37	385.90	360.47
Oct	327.09	387.38	338.93	350.80	360.79	350.17
Nov	309.59	341.08	317.99	323.35	328.57	323.30
Dec	356.47	361.57	323.10	316.37	344.71	328.06
Total	4,249.72	4,335.77	4,296.53	4,267.50	4,293.74	4,285.92

	Peak Flows in Millions of Gallons per Day				
Max Day	15.63	17.03	17.44	16.38	16.95
Max Hour	23.44	25.55	26.16	24.57	25.43

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 2
ALLOCATION OF PLANT INVESTMENT

ITEM	TOTAL	BASE	EXTRA CAPACITY MAXIMUM DAY	EXTRA CAPACITY MAXIMUM HOUR	CUSTOMER	DIRECT FIRE PROTECTION
Source of Supply	1,485,864	1,029,345	456,519			
Water Treatment	8,650,530	5,992,726	2,657,804			
Pumping Plant	6,907,177	4,785,004	2,122,173			
Distribution Storage	6,916,487	3,194,302		3,722,185		
T&D Mains	52,618,298	24,301,173		28,317,125		
Services & Meters	19,606,836				19,606,836	
Hydrants	2,278,579					2,278,579
General Plant	5,787,349	2,310,064	307,783	1,883,156	1,152,420	133,927
Other Investments	(17,187,039)	(6,860,335)	(914,041)	(5,592,523)	(3,422,411)	(397,730)
TOTAL	87,064,081	34,752,278	4,630,239	28,329,944	17,336,845	2,014,775

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
ALLOCATION OF PROFORMA UTILITY PLANT

Acct. No.	Account	Ave. Future Test Year	Accumulated Depreciation	CIAC & CAC Net of Amortization	Adj. Plant
	SOURCE OF SUPPLY:				
303	Land & Land Rights	132,835	0		132,835
304	Structures & Imp.	191,529	11,980		179,549
306	Intakes	454,835	113,986		340,849
307	Wells & Springs	182,673	(370,767)		553,440
309	Supply Mains	292,474	13,283		279,191
	Subtotal	1,254,346	(231,518)	0	1,485,864
	WATER TREATMENT:				
303	Land & Land Rights	490,213	0		490,213
304	Structures & Imp.	6,080,640	2,505,991		3,574,649
320	Water Treatment Equip.	5,365,043	876,987		4,488,056
344	Laboratory Equip.	130,051	32,439		97,612
	Subtotal	12,065,947	3,415,417	0	8,650,530
	PUMPING PLANT:				
303	Land & Land Rights	63,467	0		63,467
304	Structures & Imp.	1,029,489	135,013		894,476
310	Power Gener. Equip.	3,078,633	680,277		2,398,356
311	Electric Pumping Equip.	4,239,284	688,406		3,550,878
	Subtotal	8,410,873	1,503,696	0	6,907,177
	STORAGE:				
303	Land & Land Rights	96,668	0		96,668
304	Structures & Imp.	0	0		0
330	Resrvoirs & Tanks	8,996,649	2,176,830	0	6,819,819
	Subtotal	9,093,317	2,176,830	0	6,916,487
	T&D MAINS				
303	Land & Land Rights	96,668	0		96,668
304	Structures & Imp.	178,199	170,211		7,988
331	T & D Mains	90,267,544	20,994,286	16,759,616	52,513,642
	Subtotal	90,542,411	21,164,497	16,759,616	52,618,298
	SERVICES & METERS:				
304	Structures & Imp.	178,199	170,211		7,988
333	Services	23,388,313	8,740,201	755,582	13,892,530
334	Meters	7,046,516	2,307,426		4,739,090
334	Meter Installations	1,482,889	556,333		926,556
339	Other Plant & Misc Equip.	40,486	(186)	0	40,672

	Subtotal	32,136,403	11,773,985	755,582	19,606,836
	HYDRANTS:				
335	Hydrants	6,038,326	2,068,078	1,691,669	2,278,579
	Subtotal	6,038,326	2,068,078	1,691,669	2,278,579

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
ALLOCATION OF PROFORMA UTILITY PLANT

Acct. No.	Account	Ave. Future Test Year	Accumulated Depreciation	CIAC & CAC Net of Amortization	Adj. Plant
	GENERAL PLANT:				
301	Organization	192,707	0		192,707
302	Franchises	15,477	0		15,477
303	Land & Land Rights	363,387	0		363,387
304	Structures & Imp.	1,006,446	597,284		409,162
340	Office Furn. & Equip	5,215,673	2,058,058		3,157,614
341	Transportation Equip	1,226,322	620,858		605,464
342	Stores Equip.	50,866	31,298		19,568
343	Tools & Work Equip.	816,192	267,922		548,270
345	Power Operated Equip.	265,244	130,445		134,799
346	Communication Equip.	737,299	393,716		343,583
347	Miscellaneous Equip.	52,142	26,808		25,334
	Other Adj. (Timing Etc.)	0	28,016		(28,016)
	Subtotal	9,941,755	4,154,406	0	5,787,349
	TOTAL PLANT	169,483,378	46,025,390	19,206,867	104,251,120

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 3
ALLOCATION OF OPERATION AND MAINTENANCE EXPENSES

ITEM	TOTAL	BASE	DAY	MAXIMUM HOUR	CUSTOMER	DIRECT FIRE PROTECTION
Source of Supply	13,472	9,333	4,139			
Pumping	50,770	35,171	15,599			
Treatment	2,243,332	1,554,087	689,245			
Mains	735,613	339,735		395,879		
Storage	505,504	233,461		272,043		
Hydrants	113,545					113,545
Services & Meters	338,651				338,651	
Customer Accounts	1,109,621				1,109,621	
Admin. & General	3,307,769	1,405,686	458,888	432,311	937,392	73,492
TOTAL	8,418,280	3,577,474	1,167,872	1,100,232	2,385,665	187,037

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
ALLOCATION OF OPERATION & MAINTENANCE EXPENSES (INCL TANK MAINT. AMORT)
FOR PROFORMA PERIOD

WP3a

Account	2015 Proj.	Average Future Test Year	Allocation Category
SOURCE OF SUPPLY EXPENSES			
Operation & Maintenance	13,472	13,472	Source of Supply
Subtotal	13,472	13,472	
POWER & PUMPING EXPENSES			
Operation & Maintenance	50,770	50,770	Pumping
Subtotal	50,770	50,770	
WATER TREATMENT EXPENSES			
Operation & Maintenance	2,243,332	2,243,332	Treatment
Subtotal	2,243,332	2,243,332	
TRANS. & DIST. EXPENSES			
Operation & Maintenance of Mains	152,677	152,677	Mains
Operation & Maintenance of Services & I	70,287	70,287	Services & Meters
Miscellaneous Operation & Maitenance C	1,341,866	1,341,866	T&D General
Operation & Maintenance of Storage Fac	104,918	104,918	Storage
Operation & Maintenance of Hydrants	23,566	23,566	Hydrants
Subtotal	1,693,314	1,693,314	
CUSTOMER ACCT. & COLLECT.			
Customer Billing & Acct.	1,109,621	1,109,621	Customer
Subtotal	1,109,621	1,109,621	
ADMIN., SAL. & GEN. EXP.			
Admin. and General Expenses	3,283,648	3,307,769	General
Subtotal	3,283,648	3,307,769	
Total Expenses	8,394,159	8,418,280	

	Amount	%	T & D General	Total
Storage	104,918	29.85%	400,587	505,504
Hydrants	23,566	6.71%	89,979	113,545
Mains	152,677	43.44%	582,937	735,613
Services & Meters	70,287	20.00%	268,364	338,651
Total T & D	351,448	100.00%	1,341,866	1,693,314

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 4
SUMMARY OF ALLOCATINS TO FUNCTIONAL COST COMPONENTS

ITEM	TOTAL	BASE	EXTRA CAPACITY MAXIMUM DAY	EXTRA CAPACITY MAXIMUM HOUR	CUSTOMER	DIRECT FIRE PROTECTION
Operation & Maintenance	8,418,280	3,577,474	1,167,872	1,100,232	2,385,665	187,037
Inc., Stock, & Property Tax	4,056,293	1,619,099	215,722	1,319,885	807,719	93,868
Other Taxes	182,121	77,395	25,266	23,802	51,611	4,046
Utility Operating Income	7,010,404	2,798,255	372,827	2,281,128	1,395,964	162,230
Depr. & Amort. Expense	4,334,730	1,730,240	230,529	1,410,486	863,164	100,311
TOTAL	24,001,827	9,802,463	2,012,215	6,135,534	5,504,122	547,493

AQUA ILLINOIS, INC. WP4a
KANKAKEE DIVISION
ALLOCATION OF TAXES OTHER THAN INCOME TAXES
FOR PROFORMA PERIOD

Other Taxes:	Total Tax	Income Stock & Prop. Tax	Other Taxes
Real Estate Taxes	320,198	320,198	
FUTA	1,948		1,948
FICA	168,331		168,331
SUTA	11,841		11,841
Franchise Tax	0	0	
Ill. Invest. Cap. Tax	605,104	605,104	
	1,107,423	925,302	182,121

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 5
ESTIMATED UNITS OF SERVICE

CUSTOMER CLASS	TOTAL ANNUAL WATER USE (MG)	AVERAGE DAY WATER USE (MGD)	MAXIMUM DAY CAP. FACT. (%)	MAXIMUM DAY TOTAL CAP. (MGD)	MAXIMUM DAY EXTRA CAP. (MGD)	MAXIMUM HOUR CAP. FACT. (%)	MAXIMUM HOUR TOTAL CAP. (MGD)	MAXIMUM HOUR EXTRA CAP. (MGD)	CUST. EQUIV. UNITS	FIRE PROT. EQUIV. UNITS
Residential	2,066	5.66	250	14.15	8.49	300	16.98	11.32	29,653	
Commercial	886	2.43	180	4.37	1.94	250	6.07	3.64	7,197	
Industrial	804	2.20	130	2.86	0.66	150	3.30	1.10	782	
Large General Service	493	1.35	110	1.49	0.14	120	1.62	0.27	158	
Private Fire Prot.	9	0.02		0.59	0.57		1.19	1.16		14,861
Public Fire Prot.	29	0.08		1.91	1.83		3.81	3.73	0	47,678
TOTAL	4,287	11.75		25.37	13.62		32.97	21.23	37,789	62,539

AQUA ILLINOIS, INC. WP5a
KANKAKEE DIVISION
CALCULATION OF CUSTOMER EQUIVALENT UNITS
FOR 2015

CUSTOMER CLASS AND METER SIZE	Units	Factor	CEQ's
Residential:			
5/8"	21,430	1.0	21,430
3/4"	3,920	1.5	5,880
1"	621	2.5	1,553
1-1/2"	61	5.0	305
2"	55	8.0	440
3"	3	15.0	45
Total Residential	26,090		29,653
Commercial:			
5/8"	933	1.0	933
3/4"	166	1.5	249
1"	389	2.5	973
1-1/2"	137	5.0	685
2"	364	8.0	2,912
3"	40	15.0	600
3" Turbine	6	15.0	90
4"	12	25.0	300
4"Turbine	3	25.0	75
6"	5	50.0	250
6" Turbine	1	50.0	50
8"	1	80.0	80
Total Commercial	2,057		7,197
Industrial:			
5/8"	7	1.0	7
3/4"	1	1.5	2
1"	4	2.5	10
1-1/2"	6	5.0	30
2"	16	8.0	128
3"	3	15.0	45
3" Turbine	2	15.0	30
4"	4	25.0	100
4" Turbine	2	25.0	50
6"	2	50.0	100
6" Turbine	1	50.0	50
8" Turbine	1	80.0	80
12" Turbine	1	150.0	150

Total Industrial	50		782
Large General Service:	1	158.0	158
TOTAL	28,198		37,789

AQUA ILLINOIS, INC. WP5b
KANKAKEE DIVISION
CALCULATION OF FIRE PROTECTION EQUIVALENT UNITS
FOR PROFORMA PERIOD

Type of Service	Number	Factor(1)	Equiv. Units
Public Fire Service:			
Public Hydrants	3793	12.57	47678
Total Public Fire	3793		47678
Private Fire Service:			
Private Hydrants	254	12.57	3193
< 3" Prv. Ser. Line	40	3.14	126
3" Prv. Service Line	0	7.07	0
4" Prv. Service Line	68	12.57	855
6" Prv. Service Line	145	28.27	4099
8" Prv. Service Line	90	50.27	4524
10" Prv. Service Line	9	78.54	707
12" Prv. Service Line	12	113.10	1357
16" Prv. Service Line	0	201.06	0
Sub-Total Private	618		14861
Total	4411		62539

(1) Based on Crossectional Area with 4" Effective Area being used for Fire Hydrates

AQUA ILLINOIS, INC. WP5c
KANKAKEE DIVISION
ALLOCATION OF AVERAGE SYSTEM DELIVERY

CUSTOMER CLASS	Consumption (1000 Gal.)	%	Pumpage (1,000,000 Gal.)
Residential	1,502,328	48.19%	2,066
Commercial	644,372	20.67%	886
Industrial	584,416	18.75%	804
Large Large General Service	358,840	11.51%	493
Total Fire Protection	27,311	0.88%	38
Total	3,117,266	100.00%	4,287

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 6
UNIT COSTS OF SERVICE

ITEM	TOTAL	BASE	EXTRA CAPACITY MAXIMUM DAY	EXTRA CAPACITY MAXIMUM HOUR	CUSTOMER	DIRECT FIRE PROTECTION
Units of Service		4,287	13.62	21.23	37,789	62,539
Operation & Maint.	8,418,280	3,577,474	1,167,872	1,100,232	2,385,665	187,037
Unit Cost of Service		$834.494	$85,720.952	$51,826.754	$63.132	$2.991
Income & Prop. Taxes	4,056,293	1,619,099	215,722	1,319,885	807,719	93,868
Unit Cost of Service		377.677	15,833.814	62,173.540	21.375	1.501
Other Taxes	182,121	77,395	25,266	23,802	51,611	4,046
Unit Cost of Service		18.053	1,854.482	1,121.217	1.366	0.065
Utility Operating Income	7,010,404	2,798,255	372,827	2,281,128	1,395,964	162,230
Unit Cost of Service		652.730	27,365.241	107,453.196	36.941	2.594
Depreciation Expense	4,334,730	1,730,240	230,529	1,410,486	863,164	100,311
Unit Cost of Service		403.602	16,920.700	66,441.340	22.842	1.604
TOTAL UNIT COST OF SERVICE		$2,286.555	$147,695.189	$289,016.048	$145.656	$8.754

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 7
DISTRIBUTION OF COSTS OF SERVICE TO CUSTOMER CLASS

CUSTOMER CLASS	BASE	EXTRA CAPACITY MAXIMUM DAY	EXTRA CAPACITY MAXIMUM HOUR	CUSTOMER	DIRECT FIRE PROTECTION	TOTAL	SMALL MAIN ADJUSTMENT	OTHER REV. ADJUSTMENT	ADJUSTED TOTAL	PERCENT OF TOTAL
Unit Cost of Service	2,287	147,695	289,016	146	9					
Residential	2,066	8.4904	11.3205	29,653	0					
Cost of Service	4,724,023	1,253,993	3,271,820	4,319,065	0	13,568,901	843,298	(83,578)	14,328,621	60.05%
Commercial	886	1.9419	3.6411	7,197	0					
Cost of Service	2,025,888	286,812	1,052,335	1,048,213	0	4,413,249	178,394	(26,627)	4,565,016	19.13%
Industrial	804	0.6608	1.1014	782	0					
Cost of Service	1,838,391	97,600	318,314	113,830	0	2,368,134	(544,403)	(10,576)	1,813,155	7.60%
Large General Service	493	0.1351	0.2701	158	0					
Cost of Service	1,127,272	19,949	78,074	23,014	0	1,248,308	(477,289)	(4,471)	766,548	3.21%
Private Fire Protection	9	0.5693	1.1634	0	14,861					
Cost of Service	20,647	84,086	336,235	0	130,097	571,065	0	(3,312)	567,753	2.38%
Public Fire Protection	29	1.8266	3.7325	0	47,678					
Cost of Service	66,242	269,776	1,078,756	0	417,396	1,832,170	0	(10,625)	1,821,545	7.63%
TOTAL COST OF SERVICE	$ 9,802,463	$ 2,012,215	$ 6,135,534	$ 5,504,122	$ 547,493	$24,001,827	$ 0	$ (139,189)	$23,862,638	100.00%

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
CALCULATION OF SMALL MAIN ADJUSTMENT

WP7a

Item	Base	Max Hour	Total
O&M Expenses:			
O&M Total	3,577,474	1,100,232	4,677,706
Direct Mains (Excl. T&D Gen. Alloc.)	70,512	82,165	152,677
% Mains of Total O&M	1.97%	7.47%	
% Small Mains	51.24%	51.24%	
Small Mains O&M Exp. For Mains	36,130	42,101	78,232
Admin. & General Exp.	1,405,686	432,311	1,837,997
Small Mains Adm. & Gen.	14,197	16,543	30,739
Total Small Mains Adj. O&M	50,327	58,644	108,971
Other Taxes	77,395	23,802	101,197
Total Small Mains Other Taxes	782	911	1,692
Plant InvestmentRelated Allocations:			
Plant Investment Less Other Inv.	41,612,613	33,922,466	75,535,079
Mains	24,301,173	28,317,125	52,618,298
% Mains of Total Plant Inv.	58.40%	83.48%	
Income, Stock and Property Taxes	1,619,099	1,319,885	2,938,984
Small Mains Inc., Stk. and Prop Tax.	484,491	564,556	1,049,047
Utility Operating Income	2,798,255	2,281,128	5,079,383
Small Mains UOI	837,335	975,711	1,813,046
Depreciation Expense	1,730,240	1,410,486	3,140,726
Small Mains Depreciation Expense	517,748	603,309	1,121,057
Total Small Mains to be Reallocated	1,890,682	2,203,131	4,093,813

	Residential	Commercial	Industrial	Lg. Gen. Ser.	Total
Percent of Total Consumption	50.24%	21.39%	16.71%	11.66%	100.00%
Reallocate based on Tot. Consumption	(2,056,836)	(875,811)	(683,877)	(477,289)	(4,093,813)
Percent of 1st & 2nd Blk Consumption	70.84%	25.75%	3.41%	0.00%	100.00%
Reallocate based on 1st & 2nd Blk.	2,900,134	1,054,205	139,474	0	4,093,813
Net Change due to small mains	843,298	178,394	(544,403)	(477,289)	0

AQUA ILLINOIS, INC. WP7b
KANKAKEE DIVISION
CALCULATION OF COST ESTIMATE FOR
MAINS 8 INCH AND SMALLER AND FOR
MAINS LARGER THAN 8 INCH
INCLUDING BREAKDOWN OF CIAC AND CAC

Size	Length (feet)	Inch Feet	Cost per Inch Foot	Cost Estimate
0.75	1,715	1,286	4.5719	$5,881
1.00	4,570	4,570	4.5719	20,894
1.25	527	659	4.5719	3,012
1.50	2,473	3,710	4.5719	16,960
2.00	92,770	185,540	4.5719	848,273
2.25	34,128	76,788	4.5719	351,068
2.50	8,311	20,778	4.5719	94,993
3.00	2,605	7,815	4.5719	35,730
4.00	92,154	368,616	4.5719	1,685,281
6.00	566,546	3,399,276	4.5719	15,541,204
8.00	755,970	6,047,760	4.5719	27,649,849
10.00	22,833	228,330	4.5719	1,043,906
12.00	494,623	5,935,476	4.5719	27,136,496
14.00	920	12,880	4.5719	58,886
16.00	103,311	1,652,976	4.5719	7,557,267
20.00	60,723	1,214,460	4.5719	5,552,409
24.00	41,643	583,002	4.5719	2,665,436
Total	2,285,822	19,743,921		$90,267,544

Total Cost of Mains	$90,267,544
Cost per Inch Foot	4.5719
Cost of Mains 8" and Smaller	$46,253,144
Cost of Mains Larger than 8"	44,014,400
Total Mains CIAC & CAC Net of Amortization	16,759,616
CIAC & CAC for Mains 8" and Smaller	8,587,638
CIAC & CAC for Mains Larger than 8"	8,171,979
Cost of Depreciation Reserve for Mains	20,994,286
Depr. Reserve for Mains 8" and Smaller	10,757,485
Depr. Reserve for Mains Larger than 8"	10,236,801
Total Net Cost of Mains	52,513,642
Net Cost of Mains 8" and Smaller	26,908,022
Net Cost of Mains Larger than 8"	25,605,620
Percent 8" & Smaller Mains vs. Total Mains	51.24%

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 8
CALCULATION OF PUBLIC FIRE PROTECTION SURCHARGE
USING TWO TIER METHOD

Hydrant Fire	$414,975
Non-Hydrant Fire	$1,406,569
Hyd. Cost per Hyd.	$109.41
Non-Hyd. Cost per Equiv. Bill:	$3.45

		Bills by Meter Size				Total Pub.	Equiv.	Monthly Rates				
	No. Hyds.	5/8"	3/4"	1"	1 1/2"	Fire Bills	Bills	5/8"	3/4"	1"	1 1/2"	Revenue
City of Kankakee	907	88,560	2,784	3,180	2,808	97,332	114,726	$4.31	$6.47	$10.78	$21.55	$494,499
Kankakee Twp.	29	1,800	204	12	96	2,112	2,616	$4.66	6.99	11.65	23.30	$12,191
Bradley	777	55,692	17,172	1,440	1,752	76,056	93,810	$4.35	6.53	10.88	21.75	$408,167
Bourbonnais Twp.	949	60,564	18,012	4,416	2,724	85,716	112,242	$4.37	6.56	10.93	21.85	$490,610
Limestone Twp.	258	7,272	3,168	804	48	11,292	14,274	$5.42	8.13	13.55	27.10	$77,365
Manteno	633	38,172	4,608	1,104	1,044	44,928	53,064	$4.75	7.13	11.88	23.75	$252,083
Momence F.P.D.	24	1,812	12	12	12	1,848	1,920	$4.81	7.22	12.03	24.05	$9,235
Grant Park F.P.D.	95	5,844	132	228	144	6,348	7,332	$4.86	7.29	12.15	24.30	$35,634
Aroma Park F.P.D.	121	6,816	636	72	48	7,572	8,190	$5.06	7.59	12.65	25.30	$41,441
Total	3,793	266,532	46,728	11,268	8,676	333,204	408,174					$1,821,225
							Wghtd Avg->	$4.46	$6.72	$11.20	$22.07	

Unadjusted Hydrant Fire Revenue	417,396	22.78%
Unadjusted Non-Hydrant Fire Revenue	1,414,774	77.22%
Total Unadjusted Public Fire	1,832,170	100.00%
Hydrant Fire Rev. Other Rev. Adj.	(2,421)	
Non-Hydrant Fire Rev. Other Rev. Adj.	(8,204)	
Total Public Fire Other Rev. Adj.	(10,625)	

5/8"	3/4"	1"	>1"

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 9
COMPARISON OF PRESENT AND PROPOSED RATES

	Current Rate		Proposed Rate	
	Pos.Disp.	Turbine	Pos.Disp.	Turbine
Customer Charges (Monthly):				
5/8" or 5/8" x 3/4"	$14.96		$16.20	
3/4"	19.31		24.30	
1"	29.78		40.50	
1-1/2"	63.73		81.00	
2"	99.74		129.60	
3"	198.31	230.17	243.00	243.00
4"	337.18	402.82	405.00	405.00
6"	665.81	830.12	810.00	810.00
8"	1,060.14	1,191.60	1,296.00	1,296.00
10"	1,914.52	1,914.52	1,863.00	1,863.00
12"	2,216.92		2,430.00	
Usage Charges:	Rate per 100 CF	Rate per 1000 Gal.	Rate per 100 CF	Rate per 1000 Gal.
First 30 CCF (22.44 KGal.) /40.11 CCF (30 KGal.)	4.0040	5.3529	4.6017	6.1520
Next 470 CCF (351.56 KGal.) / 601.6 CCF (450 KGal.)	2.7127	3.6266	3.1289	4.1830
Over 500 CCF (374 KGal.) / 641.71 CCF (480 KGal.)	1.8460	2.4679	2.1168	2.8300
Private Fire Service:	Mo. Rate		Mo. Rate	
Private Hydrant	21.39		25.83	
Service Line Charges:				
<3"	8.40		10.14	
3"	11.20		13.52	
4"	17.14		20.70	
6"	44.35		53.55	
8"	90.16		108.87	
10"	160.27		193.53	
12"	256.26		309.43	
16"	542.42		654.97	

Public Fire Charges (Monthly):

Present Rates:	5/8"	3/4"	1"	1-1/2" Up
City of Kankakee	3.84	5.76	9.60	19.20
Kankakee Twp.	4.96	7.44	12.40	24.80
Bradley	3.93	5.90	9.83	19.65
Bourbonnais Twp.	3.80	5.70	9.50	19.00
Limestone Twp.	5.38	8.07	13.45	26.90
Manteno	4.47	6.71	11.18	22.35
Momence F.P.D.	4.73	7.10	11.83	23.65
Grant Park F.P.D.	4.87	7.31	12.18	24.35
Aroma Park F.P.D.	5.15	7.73	12.88	25.75
Proposed Rates:	5/8"	3/4"	1"	1-1/2" Up
City of Kankakee	4.31	6.47	10.78	21.55
Kankakee Twp.	4.66	6.99	11.65	23.30

Bradley	4.35	6.53	10.88	21.75
Bourbonnais Twp.	4.37	6.56	10.93	21.85
Limestone Twp.	5.42	8.13	13.55	27.10
Manteno	4.75	7.13	11.88	23.75
Momence F.P.D.	4.81	7.22	12.03	24.05
Grant Park F.P.D.	4.86	7.29	12.15	24.30
Aroma Park F.P.D.	5.06	7.59	12.65	25.30

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 9
COMPARISON OF PRESENT AND PROPOSED RATES

Standby Water Service:	Current Rate	Proposed Rate
Demand Charge (1,000 Gals.)	$0.726	$0.838
Usage Charge (1,000 Gals.)	1.803	2.081
Excess to Contract (1,000 Gals.)	5.818	6.717
Penalty Charge (1,000 Gals.)	5.818	6.717
Large Industrial Rate:		
Monthly Customer Charge	19,511	22,525
Usage Charge < 4,200 GPM (1,000 gals.)	0.880	0.968
Usage Charge . 4,200 GPM (1,000 gals.)	1.460	1.605
Large General Service:		
Customer Charge	2,361.29	2,559.60
Usage Charge	1.4282	1.6540
Minimum Monthly Charge	39,753.01	45,864.63

Note: Present Rates Amounts do not include the current 5% QIPS which is included in Current Bills

AQUA ILLINOIS, INC.
KANKAKEE DIVISION
TABLE 10
SUMMARY OF REVENUES AT PRESENT AND PROPOSED RATES

Customer Class	Cost of Service Study Amount	Cost of Service Study Percent	Pro Forma Present Rates Amount	Pro Forma Present Rates Percent	Pro Forma Proposed Rates Amount	Pro Forma Proposed Rates Percent	Percent Increase
Metered Revenue:							
Residential	14,328,621	59.70%	13,664,205	62.59%	14,911,125	62.13%	9.13%
Commercial	4,565,016	19.02%	3,865,243	17.71%	4,436,262	18.48%	14.77%
Industrial	1,813,155	7.55%	1,544,528	7.08%	1,691,812	7.05%	9.54%
Large General Service	766,548	3.19%	568,762	2.61%	625,237	2.60%	9.93%
Total Metered	21,473,340	89.47%	19,642,738	89.98%	21,664,436	90.26%	10.29%
Private Fire Protection	567,753	2.37%	327,566	1.50%	376,704	1.57%	15.00%
Public Fire Protection	1,821,545	7.59%	1,729,180	7.92%	1,821,225	7.59%	5.32%
Other Service Revenues	139,189	0.58%	130,579	0.60%	139,189	0.58%	6.59%
Total Revenues	24,001,827	100.0%	21,830,063	100.0%	24,001,554	100.00%	9.95%