Public Service Commission of Wisconsin



Ellen Nowak, Chairperson Mike Huebsch, Commissioner Lon Roberts, Commissioner 610 North Whitney Way P.O. Box 7854 Madison, WI 53707-7854

July 26, 2017 – VIA E-MAIL

Ms. Peggy Steeno, Finance Director West Allis Municipal Water Utility 6300 W. McGeoch Avenue West Allis, WI 53219 E-Mail: <u>PSteeno@westalliswi.gov</u>

Re: Application of the City of West Allis, Milwaukee County, 6360-WR-109 Wisconsin, as a Water Public Utility, for Authority to Adjust Water Rates

Dear Ms. Steeno:

The Public Service Commission (Commission) staff has analyzed your application for a water rate increase. The application was received on January 30, 2017. A proposed staff exhibit has been prepared, a copy of which is enclosed. The exhibit contains schedules showing staff's proposed revenue requirement, cost-of-service analysis, and proposed rates.

We intend to submit our proposal at the public hearing, which will be scheduled at a later date.

The revenue requirement for the 2017 test year is comprised of the following:

Operation and Maintenance Expenses	\$ 5,928,409
Depreciation Expense	\$ 695,259
Property Tax Equivalent and Other Taxes	\$ 1,030,748
Return on Rate Base	\$ 1,102,037
Total	\$ 8,756,453

We have used a 5.00 percent rate of return on the estimated water utility net investment rate base for the 2017 test year, as recommended by our staff auditor. The proposed rates would increase annual revenues from water public utility service by an estimated \$622,486, of which \$535,712 would be from general service customers and \$86,774 would be from the public fire protection charge.

The increase in water utility revenues results because of a 34.57 percent increase in gross plant investment and a 11.93 percent increase in operating expenses since your last water rate case in 2011.

The rates authorized in your last rate case were adjusted for inflation through the Simplified Rate Case (SRC) process in 2014 and 2015.

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We have selected some customers for comparison of proposed and present rates (see Schedule 14 of the enclosed staff exhibit).

We are proposing a number of changes in Schedule 13 that are intended to simplify and update the tariff provisions. These include:

- Eliminating Schedule Fd-1, Public Fire Protection (direct charges) because Schedule F-1, Public Fire Protection, is now being used for all public fire protection charges.
- Revising Schedule Mpa-1, Public Service; Schedule Ug-1, General Water Service Unmetered; and Schedule BW-1, Bulk Water, to reference the volumetric charges in Schedule Mg-1 instead of establishing separate rates in these schedules. This change ensures that these rates will reflect future changes to Schedule Mg-1 through a Simplified Rate Case (SRC).
- Eliminating Schedule Mz-1, Building and Construction Water Service, because the revised Schedule Ug-1 now applies to these customers.
- Replacing Schedule Mgt-1, Seasonal, Emergency, or Temporary Service, with a new Schedule Sg-1, Seasonal Service.
- Per your request, we have established Schedule X-4, Water Utility Supplemental Customer Rules, to include the situation in which the utility would deny a Deferred Payment Agreement (DPA) to a residential tenant. Schedule X-4 will also include language regarding leak credits offered to water customers.

The depreciation expense included in the revenue requirement was computed using the water depreciation rates on the enclosed Schedule 15. When the Final Decision is issued in this docket, these rates will be certified for use by your utility effective January 1, 2017.

We are recommending to the Commission that your water utility's filed rules and regulations be updated in order to reflect the latest requirements in Wis. Admin. Code ch. PSC 185. A copy is enclosed.

The proposed staff exhibit is intended to give the Commission the staff's viewpoint and is not a final decision. The utility has the prerogative to present its own case. It may be advantageous to the utility to submit additional information which is believed to be pertinent to substantiate its position. Please note that the Commission will base its decision on the merits of the case.

If you have any questions, please contact me.

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Sincerely,

alex Hanc

Alex Hanna Public Utility Rate Analyst Public Service Commission of Wisconsin Division of Water, Telecommunications, and Consumer Affairs (608) 267–2336 | <u>Alex.Hanna@wisconsin.gov</u>

AJH:DL:01555144

Enclosures

cc: Karyn Rittenhouse, Customer Service Supervisor, City of West Allis DPW/Engineering - Water Division, E-Mail: <u>krittenhouse@westalliswi.gov</u>

Docket No. 6360-WR-109 Witness: Alex Hanna Exhibit No. _____

WEST ALLIS MUNICIPAL WATER UTILITY

Comparative Income Statement	<u>Schedule</u> 1
Net Investment Rate Base	2
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Division of Water, Telecommunications, and Consumer Affairs Public Service Commission of Wisconsin July 2017	

WEST ALLIS MUNICIPAL WATER UTILITY Docket 6360-WR-109

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COMPARATIVE INCOME STATEMENT

ACCT NO.	OPERATING REVENUES		2013	 2014	 2015	 2016	1	TEST YEAR 2017
460	Unmetered Sales to General Customers							
	Residential	\$	0	\$ 0	\$ 0	\$ 0	\$	0
	Multi-Family Residential		0	0	0	0		0
	Commercial		0	0	0	0		0
	Industrial		0	0	0	0		0
	Public Authority		0	0	0	0		0
	Irrigation		0	0	0	0		0
461	Metered Sales to General Customers							
	Residential		3,641,331	3,642,230	3,877,862	3,746,192		3,935,625
	Multi-Family Residential		0	663,957	641,597	652,286		761,846
	Commercial		1,723,362	1,065,360	1,186,979	1,100,000		1,213,668
	Industrial		204,158	218,371	245,762	223,986		239,849
	Public Authority		346,592	356,115	369,210	360,000		357,764
	Irrigation	-	0	0	0	0		0
	TOTAL GENERAL SALES	\$	5,915,443	\$ 5,946,033	\$ 6,321,410	\$ 6,082,464	\$	6,508,752
462	Private fire protection service	\$	68,516	\$ 67,896	\$ 68,509	\$ 69,607	\$	64,324
463	Public fire protection service		1,232,084	1,249,207	1,190,720	1,121,829		1,223,891
465	Other water sales		0	0	0	0		0
466	Sales for resale		0	0	0	0		0
467	Interdepartmental sales		0	0	0	0		0
470	Forfeited discounts		87,877	87,331	104,095	106,018		112,000
472	Rents from water property		136,446	130,849	150,980	170,000		115,000
473	Interdepartmental rents		0	0	0	0		0
	1		82,909	82,901	103,992	89,000		110.000

OPERATING EXPENSES

	SOURCE OF SUPPLY					
600	Operation labor	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
601	Operation labor and expenses	0	0	0	0	0
602	Purchased water	2,379,995	2,583,385	2,739,282	2,817,953	2,801,134
603	Miscellaneous expenses	0	0	0	0	0
604	Rents	0	0	0	0	0
610	Maintenance supervision and engineering	0	0	0	0	0
611	Maintenance of structures and improvements	0	0	0	0	0
612	Maint. of collecting and impounding reservoirs	0	0	0	0	0
613	Maintenance of lake, river, and other intakes	0	0	0	0	0
614	Maintenance of wells and springs	0	0	0	0	0
616	Maintenance of supply mains	0	0	0	0	0
617	Maintenance of misc. water source plant	0	0	0	0	0
	PUMPING EXPENSES					
620	Operation supervision and engineering	0	0	0	0	0
621	Fuel for power production	0	0	0	0	0
622	Power production labor and expenses	0	0	0	0	0
623	Fuel or power purchased for production	101,935	112,770	102,634	109,333	108,500
624	Pumping labor and expenses	24,041	23,543	22,560	25,072	25,000
625	Expenses transferredcredit	0	0	0	0	0
626	Miscellaneous expenses	4,133	6,798	2,440	2,939	4,000
627	Rents	0	0	0	0	0
630	Maintenance supervision and engineering	0	0	0	0	0
631	Maintenance of structures and improvements	0	0	0	0	0
632	Maintenance of power production equipment	0	0	0	0	0
633	Maintenance of pumping equipment	35,440	32,412	33,603	47,809	35,000

WEST ALLIS MUNICIPAL WATER UTILITY

Docket 6360-WR-109

COMPARATIVE INCOME STATEMENT (continued)

Schedule 1 Page 2 of 2

<u>CCT NO.</u>	OPERATING EXPENSES	2	013	_	2014		2015	_	2016]	TEST YEAR 2017
	WATER TREATMENT EXPENSES										
640	Operation supervision and engineering	\$	0	\$	0	\$	0	\$	0	\$	0
641	Chemicals	Ŧ	4,915	Ŧ	3,141	+	3,598	+	3,451	Ŧ	4,000
642	Operation labor and expenses		32,313		33,557		38,336		36.287		37,000
	· ·										
643	Miscellaneous expenses		0		0		0		0		0
644	Rents		0		0		0		0		0
650	Maintenance supervision and engineering		0		0		0		0		0
651	Maintenance of structures and improvements		0		0		0		0		0
652	Maintenance of water treatment equipment		0		0		0		0		0
	TRANS & DISTRIBUTION EXPENSES										
660	Operation supervision and engineering	\$ 1	15,481	\$	140,929	\$	133,155	\$	126,059	\$	130,000
661	Storage facilities expenses		0		0		0		0		82,000
662	Transmission and distribution expenses		0		0		0		0		0
663	Meter expenses		26,677		29,606		14,357		21,982		26,000
	•		1 A A A A A A A A A A A A A A A A A A A				· · · · · · · · · · · · · · · · · · ·				
664	Customer installations expenses		0		0		0		0		0
665	Miscellaneous expenses		04,273		82,593		67,317		59,588		63,500
666	Rents		95,241		185,539		71,257		74,000		97,000
670	Maintenance supervision and engineering		0		0		0		0		0
671	Maintenance of structures and improvements		0		0		14		0		0
672	Maintenance of distr.reservoirs and standpipes	1	96,304		217,458		221,527		191,680		130,675
673	Maintenance of transmission and distr. mains										
			87,791		712,590		487,739		466,564		630,700
675	Maintenance of services		11,707		181,794		214,263		185,064		225,000
676	Maintenance of meters		65,070		57,178		99,226		65,686		80,000
677	Maintenance of hydrants	1	46,629		111,221		123,925		109,387		120,000
678	Maintenance of miscellaneous plant		42,281		40,663		44,601		37,823		40,000
	CUSTOMER ACCOUNTS EXPENSES										
901	Supervision		6,040		5,982		6,322		6,500		6,000
902	Meter reading labor		24,134		18,354		18,814		16,856		18,000
903	Customer records and collection expenses		36,762		148,965		153,279		146,978		155,000
904	Uncollectible accounts	1	4,960		16,995		12,312		11,500		
			1 A A A A A A A A A A A A A A A A A A A								12,000
905 906	Miscellaneous customer accounts expenses Customer service and Information Expenses		0 0		0 0		0 0		0 0		0 0
	SALES EXPENSES										
910	Sales Expenses		0		0		0		0		0
	ADMIN. & GENERAL EXPENSES										
920	Administrative and general salaries		22,945		22,404		27,430		27,000		27,000
	e e										
921	Office supplies and expenses		28,261		21,578		28,088		25,161		25,000
922	Administrative expenses transferred credit		0		0		0		0		0
923	Outside services employed		42,521		84,389		59,846		61,215		42,400
924	Property insurance		21,492		21,000		22,718		23,000		21,000
925	Injuries and damages		0		456		0		0		0
926	Employee pensions and benefits	9	11,349		909,208		860,439		851,173		885,000
928	Regulatory commission expenses		0		0		0000,100		0		18,000
929	Duplicate charges credit		0		0		0		0		0
930	Miscellaneous general expenses		37,440		42,851		48,651		48,000		48,000
931	Rents		6,856		7,624		6,464		6,500		6,500
932	Maintenance of general plant		28,558		1,387		42,854		24,839		25,000
	TOTAL OPER. & MAINT. EXPENSES	\$ 5,7	45,544	\$	5,856,370	\$	5,707,051	\$	5,629,400	\$	5,928,409
403	DEPRECIATION EXPENSE	5	15,052		546,591		561,025		810,010		695,259
404-407	AMORTIZATION EXPENSE		0		0		0		0		0
408	TAXES AND TAX EQUIVALENT	8	88,681	_	878,052		944,120	_	991,125		1,030,748
	TOTAL OPERATING EXPENSES	\$ 71	49.277	\$	7,281,013	\$	7,212,196	\$	7.430.535	\$	7,654,416
	TO THE OF ENTITIES ENDED	φ ,,.	.,,	-							

Schedule 2

NET INVESTMENT RATE BASE

UTILITY FINANCED PLANT IN SERVICE	\$ 33,026,086
Less: ACCUMULATED PROVISION FOR DEPRECIATION	 10,339,751
NET PLANT IN SERVICE	\$ 22,686,335
Plus: MATERIALS AND SUPPLIES	337,500
Less: REGULATORY LIABILITY	 983,093
NET INVESTMENT RATE BASE	\$ 22,040,742
RATE OF RETURN ON RATE BASE	5.00%

ESTIMATED INCOME STATEMENT FOR THE 2017 TEST YEAR AND

REVENUE REQUIREMENT TO YIELD A 5.00% RETURN ON NET INVESTMENT RATE BASE

	 Present Rates	Increase	 After Rate Increase
TOTAL OPERATING REVENUES	\$ 8,133,967	\$622,486	\$ 8,756,453
OPERATING EXPENSES:			
OPERATION & MAINTENANCE EXPENSES	\$ 5,928,409		\$ 5,928,409
DEPRECIATION EXPENSE	695,259		695,259
AMORTIZATION EXPENSE	0		0
TAXES AND TAX EQUIVALENT	 1,030,748		 1,030,748
TOTAL OPERATING EXPENSES	\$ 7,654,416		\$ 7,654,416
NET OPERATING INCOME (LOSS)	\$ 479,551		\$ 1,102,037
RATE OF RETURN ON RATE BASE	2.18%		5.00%

UTILITY FINANCED PLANT IN SERVICE AND DEPRECIATION EXPENSE TEST YEAR 2017

		Balance	Major Additions Less	Normal		Balance	Test Year Rate Base	Deprec	iation
<u>ACCT NO.</u>	ACCOUNT DESCRIPTION	12/31/2016 (\$)	Retirements (\$)	Additions (\$)	Retirements (\$)	12/31/2017 (\$)	Balance (\$)	Rate (%)	Expense (\$)
	INTANGIBLE PLANT								
301	Organization	0	0	0	0	0	0	N/A	0
302	Franchises and consents	0	0	0	0	0	0	N/A	0
303	Miscellaneous intangible plant	0	0	0	0	0	0	N/A	0
	SOURCE OF SUPPLY								
310	Land and land rights	0	0	0	0	0	0	N/A	0
311	Structures and improvements	139,592	0	0	0	139,592	139,592	Fully Depr.	0
312	Collecting and impounding reservoirs	0	0	0	0	0	0	1.70%	0
313	Lake, river, and other intakes	0	0	0	0	0	0	1.70%	0
314	Wells and springs	0	0	0	0	0	0	2.90%	0
316	Supply mains	0	0	0	0	0	0	1.80%	0
317	Other water source plant	0	0	0	0	0	0	4.50%	0
	PUMPING PLANT								
320	Land and land rights	7,990	0	0	0	7,990	7,990	N/A	0
321	Structures and improvements	242,274	0	0	0	242,274	242,274	Fully Depr.	4,247
323	Other power production equipment	0	0	0	0	0	0	4.40%	0
325	Electric pumping equipment	776,623	0	0	0	776,623	776,623	4.40%	34,171
326	Diesel pumping equipment	0	0	0	0	0	0	4.40%	0
328	Other pumping equipment	0	0	0	0	0	0	4.40%	0
	WATER TREATMENT PLANT								
330	Land and land rights	0	0	0	0	0	0	N/A	0
331	Structures and improvements	0	0	0	0	0	0	3.20%	0
332	Sand or Other Media Filtration Equip	0	0	0	0	0	0	3.30%	0
333	Membrane Filtration Equipment	0	0	0	0	0	0	6.00%	0
334	Other Water Treatment Equipment	14,363	0	0	0	14,363	14,363	Fully Depr.	0

UTILITY FINANCED PLANT IN SERVICE AND DEPRECIATION EXPENSE TEST YEAR 2017

(continued)

		Balance	Major	Normal		Balance	TEST YEAR RATE BASE	DEDDE	CIATION
ACCT NO.	ACCOUNT DESCRIPTION	12/31/2016 (\$)	Additions (\$)	Additions (\$)	Retirements (\$)	12/31/2017 (\$)	BALANCE (\$)	RATE (%)	EXPENSE (\$)
TF	RANSMISSION & DISTRIBUTION PLA	NT							
340	Land and land rights	50,000	0	0	0	50,000	50,000	N/A	0
341	Structures and improvements	0	0	0	0	0	0	3.20%	0
342	Distribution reservoirs and standpipes	2,244,753	0	0	0	2,244,753	2,244,753	1.90%	42,650
343	Transmission and distribution mains	12,859,740	0	900,000	60,000	13,699,740	13,279,740	1.30%	172,637
345	Services	4,779,756	0	850,000	30,000	5,599,756	5,189,756	2.90%	150,503
346	Meters	3,013,235	0	722,751	150,000	3,585,986	3,299,611	5.50%	90,740
348	Hydrants	5,744,932	0	340,000	50,000	6,034,932	5,889,932	2.20%	129,579
349	Other transmission and distr. plant	0	0	0	0	0	0	5.00%	0
	GENERAL PLANT								
389	Land and land rights	0	0	0	0	0	0	N/A	0
390	Structures and improvements	114,862	0	0	0	114,862	114,862	2.90%	3,331
391	Office furniture and equipment	23,679	0	0	0	23,679	23,679	Fully Depr.	0
391	Office furniture & equip - Computers	406,687	0	0	0	406,687	406,687	Fully Depr.	0
392	Transportation equipment	736,306	0	155,000	83,600	807,706	772,006	UNIT	52,479
393	Stores equipment	0	0	0	0	0	0	5.80%	0
394	Tools, shop and garage equipment	68,711	0	0	0	68,711	68,711	Fully Depr.	0
395	Laboratory equipment	0	0	0	0	0	0	5.80%	0
396	Power operated equipment	223,983	0	0	0	223,983	223,983	UNIT	14,923
397	Communication equipment	241,821	0	0	0	241,821	241,821	Fully Depr.	0
397	SCADA equipment	0	0	0	0	0	0	9.20%	0
398	Miscellaneous equipment	39,703	0	0	0	39,703	39,703	Fully Depr.	0
	TOTAL UTILITY FINANCED PLANT IN SERVICE	31,729,010	0	2,967,751	373,600	34,323,161	33,026,086		695,259

WEST ALLIS MUNICIPAL WATER UTILITY

SYSTEM DEMAND RATIOS

MAXIMUM DAY SYSTEM DEMAND

TOTAL ANNUAL PUMPAGE	1,897,354,382	Gallons			
AVERAGE DAILY PUMPAGE	5,198,231	Gallons			
MAXIMUM DAY PUMPAGE	7,797,347	Gallons			
FIRE FLOW: GAL/MIN DURATION (HOURS) TOTAL FLOW	6,000 6 2,160,000	Gallons			
AVERAGE DAY PLUS FIRE FLOW	7,358,231	Gallons			
RATIO:	BASE =	5,198,231	- =	66.67%	
	MAX DAY =	100-BASE	=	33.33%	
MAXIMUM HOUR SYSTEM DEMAND					
AVERAGE HOUR ON MAX DAY	324,889	Gallons			
MAXIMUM HOUR PUMPAGE	487,334	Gallons			
AVERAGE HOUR PLUS ONE HOUR FIRE FLOW	576,593	Gallons			
RATIO:	BASE =	5,198,231	- =	37.56%	Use 37.56%
	MAX HOUR =	100-BASE	=	62.44%	Use 62.44%

ALLOCATION OF UTILITY FINANCED PLANT TO SERVICE COST FUNCTIONS

						EXT	RA-CAPAC	CITY					
										CUS	STOMER COS	STS	
		_	BASE	COSTS	MAX	X DAY		MAX HOUR	-				
<u>ACCT NO.</u>	ACCOUNT DESCRIPTION	TOTAL (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	Storage (\$)	Billing (\$)	Equivalent Meter (\$)	Equivalent Service (\$)	Fire Protection (\$)
	INTANGIBLE PLANT												
301	Organization	0	0	0	0	0	0	0	0	0	0	0	0
302	Franchises and consents	0	0		0		0		0	0	0	0	0
303	Miscellaneous intangible plant	0	0	0	0		0	0	0	0	0	0	0
	SOURCE OF SUPPLY												
310	Land and land rights	0	0		0								
311	Structures and improvements	139,592	93,061		46,531								
312	Collecting and impounding reservoirs	0	0		0								
313	Lake, river, and other intakes	0	0		0								
314	Wells and springs	0	0		0								
316	Supply mains	0	0		0								
317	Other water source plant	0	0		0								
	PUMPING PLANT												
320	Land and land rights	7,990	5,327		2,663								
321	Structures and improvements	242,274	161,516		80,758								
323	Other power production equipment	0	0		0								
325	Electric pumping equipment	776,623	517,749		258,874								
326	Diesel pumping equipment	0	0		0								
328	Other pumping equipment	0	0		0								
	WATER TREATMENT PLANT												
	Land and land rights	0	0		0								
331	Structures and improvements	0	0		0								
332	Sand or Other Media Filtration Equip	0	0		0								
	Membrane Filtration Equipment	0	0		0								
334	Other Water Treatment Equipment	14,363	9,575		4,788								

ALLOCATION OF UTILITY FINANCED PLANT TO SERVICE COST FUNCTIONS (continued)

						EXT	RA-CAPAC	CITY					
				ſ						CUS	TOMER CO	STS	_
		-	BASE	COSTS	МАУ	K DAY		MAX HOUR					
ACCT NO.	ACCOUNT DESCRIPTION	TOTAL (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	Storage (\$)	Billing (\$)	Equivalent Meter (\$)	Equivalent Service (\$)	Fire Protection (\$)
	TRANSMISSION & DISTRIBUTION PLANT												
340	Land and land rights	50,000	12,319	2,194	5,454	0	0	3,647	2,343	0	5,517	8,677	9,848
341	Structures and improvements	0	0	2,191	0,151	0	0		2,515	0	0	0	9,010
342	Distribution reservoirs and standpipes	2,244,753	843,225	0	0	0	0	0	1,401,528	Ŭ	0	0	0
343	Transmission mains	9,786,328	6,524,219		3,262,109				1,101,520				
343	Distribution mains	3,493,412	0,021,219	1,312,275	5,202,107			2,181,137					
345	Services	5,189,756		1,012,270				2,101,107				5,189,756	
346	Meters	3,299,611									3,299,611	0,107,700	
348	Hydrants	5,889,932									-,_,,,,		5,889,932
349	Other transmission and distr. plant	0	0	0	0	0	0	0	0	0	0	0	0
	GENERAL PLANT												
389	Land and land rights	0	0	0	0	0	0	0	0	0	0	0	0
390	Structures and improvements	114,862	30,130	4,849	13,507	0	0	8,060	5,179	0	12,193	19,178	21,765
391	Office furniture and equipment	23,679	6,211	1,000	2,784	0	0	1,662	1,068	0	2,514	3,954	4,487
391	Office furniture & equip - Computers	406,687	106,679	17,170	47,823	0	0	28,538	18,338	0	43,172	67,903	77,064
392	Transportation equipment	772,006	202,506	32,593	90,782	0	0	54,173	34,810	0	81,953	128,899	146,289
393	Stores equipment	0	0	0	0	0	0	0	0	0	0	0	0
394	Tools, shop and garage equipment	68,711	18,024	2,901	8,080	0	0	4,822	3,098	0	7,294	11,472	13,020
395	Laboratory equipment	0	0	0	0	0	0	0	0	0	0	0	0
396	Power operated equipment	223,983	58,753	9,456	26,339	0	0	15,717	10,099	0	23,777	37,398	42,443
397	Communication equipment	241,821	63,433	10,209	28,436	0	0	16,969	10,904	0	25,671	40,376	45,823
397	SCADA equipment	0	0	0	0	0	0	0	0	0	0	0	0
398	Miscellaneous equipment	39,703	10,415	1,676	4,669	0	0	2,786	1,790	0	4,215	6,629	7,523
	TOTAL	33,026,086	8,663,141	1,394,324	3,883,597	0	0	2,317,511	1,489,157	0	3,505,917	5,514,242	6,258,196

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ALLOCATION OF TOTAL PLANT TO SERVICE COST FUNCTIONS

			EXTRA-CAPACITY										
										CUS	TOMER COS	STS	
		-	BASE	COSTS	MAX	DAY		MAX HOUR					
<u>ACCT NO.</u>	ACCOUNT DESCRIPTION	TOTAL (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	Storage (\$)	Billing (\$)	Equivalent Meter (\$)	Equivalent Service (\$)	Fire Protection (\$)
	INTANGIBLE PLANT												
301	Organization	0	0	0	0	0	0	0	0	0	0	0	0
302	Franchises and consents	0	0	0	0		0	0	0	0	0	0	0
303	Miscellaneous intangible plant	0	0	0	0		0	0	0	0	0	0	0
	SOURCE OF SUPPLY												
310	Land and land rights	0	0		0								
311	Structures and improvements	139,592	93,061		46,531								
312	Collecting and impounding reservoirs	0	0		0								
312	Lake, river, and other intakes	0	0		0								
314	Wells and springs	0	0		0								
316	Supply mains	0	0		0								
317	Other water source plant	0	0		0								
	PUMPING PLANT												
320	Land and land rights	7,990	5,327		2,663								
321	Structures and improvements	242,274	161,516		80,758								
323	Other power production equipment	0	101,510		00,750								
325	Electric pumping equipment	776,623	517,749		258,874								
326	Diesel pumping equipment	0	0		0								
328	Other pumping equipment	0	0		0								
	WATER TREATMENT PLANT												
330	Land and land rights	0	0		0								
331	Structures and improvements	0	0		0								
332	Sand or Other Media Filtration Equip	0	0		0								
333	Membrane Filtration Equipment	0	0		0								
334	Other Water Treatment Equipment	14,363	9,575		4,788								
201	Equipment	1,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1,700								

ALLOCATION OF TOTAL PLANT TO SERVICE COST FUNCTIONS (continued)

				EXTRA-CAPACITY									
			BASE (COSTS	MAX	DAY		MAX HOUR	-	CUS	TOMER COS	STS	
ACCT NO.	ACCOUNT DESCRIPTION	TOTAL (\$)		Distribution (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	Storage (\$)	Billing (\$)	Equivalent Meter (\$)	Equivalent Service (\$)	Fire Protection (\$)
	TRANSMISSION & DISTRIBUTION PLANT												
340	Land and land rights	50,000	8.916	5,701	3,948	0	0	9,476	1.696	0	5,153	7,768	7,341
341	Structures and improvements	0	0,510	0	0	0	0	0	1,020	0	0	0	0
342	Distribution reservoirs and standpipes	2,244,753	843,225	Ū	0	Ū	0	0	1,401,528	0	0	0	0
343	Transmission mains	9,786,328	6,524,219		3,262,109				-,,				
343	Distribution mains	12,540,887	-,	4,710,893	-,,,-			7,829,994					
345	Services	6,418,256		.,,				.,,				6,418,256	
346	Meters	4,258,157									4,258,157		
348	Hydrants	6,065,993									, ,		6,065,993
349	Other transmission and distr. plant	0	0	0	0	0	0	0	0	0	0	0	0
	GENERAL PLANT												
389	Land and land rights	0	0	0	0	0	0	0	0	0	0	0	0
390	Structures and improvements	114,862	22,040	12,734	9,880	0	0	21,165	3,788	0	11,510	17,349	16,397
391	Office furniture and equipment	23,679	4,544	2,625	2,037	0	0	4,363	781	0	2,373	3,576	3,380
391	Office furniture & equip - Computers	406,687	78,035	45,086	34,983	0	0	74,937	13,413	0	40,753	61,426	58,055
392	Transportation equipment	772,006	148,133	85,585	66,407	0	0	142,251	25,462	0	77,360	116,604	110,204
393	Stores equipment	0	0	0	0	0	0	0	0	0	0	0	0
394	Tools, shop and garage equipment	68,711	13,184	7,617	5,910	0	0	12,661	2,266	0	6,885	10,378	9,809
395	Laboratory equipment	0	0	0	0	0	0	0	0	0	0	0	0
396	Power operated equipment	223,983	42,978	24,831	19,267	0	0	41,272	7,387	0	22,445	33,830	31,974
397	Communication equipment	241,821	46,401	26,808	20,801	0	0	44,558	7,976	0	24,232	36,525	34,520
397	SCADA equipment	0	0	0	0	0	0	0	0	0	0	0	0
398	Miscellaneous equipment	39,703	7,618	4,402	3,415	0	0	7,316	1,309	0	3,979	5,997	5,668
	TOTAL	44,436,668	8,526,521	4,926,282	3,822,371	0	0	8,187,993	1,465,608	0	4,452,846	6,711,708	6,343,339

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ALLOCATION OF DEPRECIATION EXPENSE TO SERVICE COST FUNCTIONS

			EXTRA-CAPACITY										
									CUS	TOMER CO	STS		
		_	BASE	COSTS	MAX	X DAY		MAX HOUR					
ACCT NO.	ACCOUNT DESCRIPTION	TOTAL (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	Storage (\$)	Billing (\$)	Equivalent Meter (\$)	Equivalent Service (\$)	Fire Protection (\$)
	INTANGIBLE PLANT												
301	Organization	0	0	0	0	0	0	0	0	0	0	0	0
302	Franchises and consents	0	0	0	0	0	0	0	0	0	0	0	0
303	Miscellaneous intangible plant	0	0	0	0	0	0	0	0	0	0	0	0
	SOURCE OF SUPPLY												
310	Land and land rights	0	0		0								
311	Structures and improvements	0	0		0								
312	Collecting and impounding reservoirs	0	0		0								
313	Lake, river, and other intakes	0	0		0								
314	Wells and springs	0	0		0								
316	Supply mains	0	0		0								
317	Other water source plant	0	0		0								
	PUMPING PLANT												
320	Land and land rights	0	0		0								
321	Structures and improvements	4,247	2,831		1,416								
323	Other power production equipment	0	0		0								
325	Electric pumping equipment	34,171	22,781		11,390								
326	Diesel pumping equipment	0	0		0								
328	Other pumping equipment	0	0		0								
	WATER TREATMENT PLANT												
330	Land and land rights	0	0		0								
331	Structures and improvements	0	0		0								
332	Sand or Other Media Filtration Equip	0	0		0								
333	Membrane Filtration Equipment	0	0		0								
334	Other Water Treatment Equipment	0	0		0								

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ALLOCATION OF DEPRECIATION EXPENSE TO SERVICE COST FUNCTIONS (continued)

			EXTRA-CAPACITY										
			DACE	COSTS	мат	K DAY		MAX HOUR	-	CUS	STOMER COS	STS	r
ACCT NO.	ACCOUNT DESCRIPTION	TOTAL (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	Storage (\$)	Billing (\$)	Equivalent Meter (\$)	Equivalent Service (\$)	Fire Protection (\$)
	TRANSMISSION & DISTRIBUTION PLANT												
340	Land and land rights	0	0	0	0	0	0	0	0	0	0	0	0
341	Structures and improvements	0	0	0	0	0	0		0	0	0	0	0
342	Distribution reservoirs and standpipes	42,650	16,021	0	0	0	0	0	26,629	0	0	0	0
343	Transmission mains	127,223	84,815		42,408				20,025				
343	Distribution mains	45,414	01,010	17,060	.2,100			28,355					
345	Services	150,503		11,000				20,000				150,503	
346	Meters	90,740									90,740	100,000	
348	Hydrants	129,579									, .,		129,579
349	Other transmission and distr. plant	0	0	0	0	0	0	0	0	0	0	0	0
	GENERAL PLANT												
389	Land and land rights	0	0	0	0	0	0	0	0	0	0	0	0
390	Structures and improvements	3,331	674	91	294	0	0	151	142	0	484	803	691
391	Office furniture and equipment	0	0	0	0	0	0	0	0	0	0	0	0
391	Office furniture & equip - Computers	0	0	0	0	0	0	0	0	0	0	0	0
392	Transportation equipment	52,479	10,625	1,434	4,640	0	0	2,383	2,238	0	7,625	12,647	10,888
393	Stores equipment	0	0	0	0	0	0	0	0	0	0	0	0
394	Tools, shop and garage equipment	0	0	0	0	0	0	0	0	0	0	0	0
395	Laboratory equipment	0	0	0	0	0	0	0	0	0	0	0	0
396	Power operated equipment	14,923	3,021	408	1,319	0	0	678	636	0	2,168	3,596	3,096
397	Communication equipment	0	0	0	0	0	0	0	0	0	0	0	0
397	SCADA equipment	0	0	0	0	0	0	0	0	0	0	0	0
398	Miscellaneous equipment	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	695,259	140,769	18,992	61,467	0	0	31,566	29,645	0	101,016	167,549	144,255

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ALLOCATION OF OPERATION AND MAINTENANCE EXPENSES TO SERVICE COST FUNCTIONS

				_		EXT		_					
										CU	STOMER COS	STS	
		F	BASE	COSTS	MA	X DAY		MAX HOUR		-			
<u>ACCT NO.</u>	ACCOUNT DESCRIPTION	TOTAL (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	System (\$)	Distribution (\$)	Storage (\$)	Billing (\$)	Equivalent Meter (\$)	Equivalent Service (\$)	Fire Protection (\$)
	SOURCE OF SUPPLY												
600	Operation labor	0	0		0								
601	Operation labor and expenses	0	0		0								
602	Purchased water	2,801,134	2,729,110										72,024
603	Miscellaneous expenses	0	0		0								, i i i i i i i i i i i i i i i i i i i
604	Rents	0	0		0								
610	Maintenance supervision and engineering	0	0		0								
611	Maintenance of structures and improvements	0	0		0								
612	Maint. of collecting and impounding reservoirs	0	0		0								
613	Maintenance of lake, river, and other intakes	0	0		0								
614	Maintenance of wells and springs	0	0		0								
616	Maintenance of supply mains	0	0		0								
617	Maintenance of misc. water source plant	0	0		0								
	PUMPING EXPENSES												
620	Operation supervision and engineering	0	0		0								
621	Fuel for power production	0	0		0								
622	Power production labor and expenses	0	0										
623	Fuel or power purchased for production	108,500	108,500										
624	Pumping labor and expenses	25,000	16,667		8,333								
625	Expenses transferredcredit	25,000	10,007		0,555								
626	Miscellaneous expenses	4,000	2,667		1,333								
627	Rents	4,000	2,007		1,555								
630	Maintenance supervision and engineering	0	0		0								
631	Maintenance of structures and improvements	0	0		0								
632	Maintenance of surdentes and improvements Maintenance of power production equipment	0	0		0								
633	Maintenance of pumping equipment	35,000	23,333		11,667								
	WATER TREATMENT EXPENSES												
640	Operation supervision and engineering	0	0		0								
641	Chemicals	4,000	4,000										
642	Operation labor and expenses	37,000	24,667		12,333								
643	Miscellaneous expenses	0	0		0								
644	Rents	0	0		0								
650	Maintenance supervision and engineering	0	0		0								
651	Maintenance of structures and improvements	0	0		0								
652	Maintenance of water treatment equipment	0	0		0								

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ALLOCATION OF OPERATION AND MAINTENANCE EXPENSES TO SERVICE COST FUNCTIONS (continued)

		EXTRA-CAPACITY										
									CUS	TOMER CO	STS	
CCT NO A COMMIT DESCRIPTION	TOTAL	System	COSTS Distribution	System	DAY Distribution	System	MAX HOUR Distribution	Storage	Billing	Meter	Equivalent Service	Fire Protectio
CCT NO. ACCOUNT DESCRIPTION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
TRANSMISSION & DISTRIBUTION EXPENS	ES											
660 Operation supervision and engineering	130,000	19,341	17,418	5,659	0	0	28,950	13,336	0	10,646	22,598	12,05
661 Storage facilities expenses	82,000	30,803	· · · · · ·	<i>.</i>			·	51,197		í.	í.	,
662 Transmission lines expenses	0	0		0								
662 Distribution lines expenses	0		0				0					
663 Meter expenses	26,000									26,000		
664 Customer installations expenses	0										0	
665 Miscellaneous expenses	63,500	9,447	8,508	2,764	0	0	14,141	6,514	0	5,200	11,038	5,8
666 Rents	97,000	14,432	12,996	4,222	0	0	21,601	9,951	0	7,944	16,861	8,9
670 Maintenance supervision and engineering	0	0	0	0	0	0	0	0	0	0	0	
671 Maintenance of structures and improvements	0	0	0	0	0	0	0	0	0	0	0	
672 Maintenance of distr.reservoirs and standpipes	130,675	49,087						81,588				
673 Maintenance of transmission mains	169,029	112,686		56,343								
673 Maintenance of distribution mains	461,671		173,423				288,248					
675 Maintenance of services	225,000										225,000	
676 Maintenance of meters	80,000									80,000		
677 Maintenance of hydrants	120,000											120,0
678 Maintenance of miscellaneous plant	40,000	5,951	5,359	1,741	0	0	8,908	4,103	0	3,276	6,953	3,7
CUSTOMER ACCOUNTS EXPENSES												
901 Supervision	6,000								6,000			
902 Meter reading labor	18,000								18,000			
903 Customer records and collection expenses	155,000								155,000			
904 Uncollectible accounts	12,000								12,000			
905 Miscellaneous customer accounts expenses	0								0			
906 Customer service and Information Expenses	0								0			
SALES EXPENSES												
910 Sales Expenses	0								0			
ADMINISTRATIVE & GENERAL EXPENSE	s											
920 Administrative and general salaries	27,000	4,630	3,261	1,564	0	0	5,421	2,497	1,145	1,993	4,231	2,2
921 Office supplies and expenses	25,000	4,287	3,020	1,448	ů 0	0	5,019	2,312	1,060	1,846	3,918	2,0
922 Administrative expenses transferred credit	20,000	0	0	0	ů 0	0	0	2,012	0	1,010	0,010	2,0
923 Outside services employed	42,400	7,271	5,122	2,456	0	0	8,513	3,922	1,797	3,130	6,645	3,5
924 Property insurance	21,000	4,029	2,328	1,806	0	0	3,870	693	0	2,104	3,172	2,9
925 Injuries and damages	0	0	0	0	0	0	0	0	0	0	0	
926 Employee pensions and benefits	885,000	151,773	106,903	51,263	0	0	177,684	81,852	37,516	65,341	138,696	73,9
928 Regulatory commission expenses	18,000	3,087	2,174	1,043	0	0	3,614	1,665	763	1,329	2,821	1,5
929 Duplicate charges credit	0	0	0	0	0	0	0	0	0	0	0	, in the second s
930 Miscellaneous general expenses	48,000	8,232	5,798	2,780	0	0	9,637	4,439	2,035	3,544	7,523	4,0
931 Rents	6,500	1,115	785	377	0	0	1,305	601	276	480	1,019	5
932 Maintenance of general plant	25,000	4,287	3,020	1,448	0	0	5,019	2,312	1,060	1,846	3,918	2,0
TOTAL ODED ATION & MAINTEN ANCE												
TOTAL OPERATION & MAINTENANCE EXPENSES	5,928,409	3,339,403	350,116	168,581	0	0	581,929	266,984	236,651	214,680	454,393	315,6
		- , ,					/ -		/	,	- ,	

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SUMMARY OF ALLOCATION OF OPERATING COSTS TO SERVICE COST FUNCTIONS

									CUS	STOMER CO	STS	_
	_	BASE	COSTS	МАХ	K DAY		MAX HOUR					
										Equivalent	Equivalent	Fire
	TOTAL	System	Distribution	System	Distribution	System	Distribution	Storage	Billing	Meter	Service	Protection
OPERATING COST	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
OPERATION AND MAINTENANCE	5,928,409	3,339,403	350,116	168,581	0	0	581,929	266,984	236,651	214,680	454,393	315,673
DEPRECIATION EXPENSE	695,259	140,769	18,992	61,467	0	0	31,566	29,645	0	101,016	167,549	144,255
AMORTIZATION EXPENSE	0	0	0	0	0	0	0	0	0	0	0	0
TAXES AND TAX EQUIVALENT	1,030,748	197,780	114,269	88,663	0	0	189,928	33,996	0	103,288	155,684	147,139
RETURN ON NET INVESTMENT RATE BASE	1,102,037	289,078	46,527	129,591	0	0	77,332	49,691	0	116,988	184,003	208,828
TOTAL	8,756,453	3,967,030	529,904	448,302	0	0	880,755	380,316	236,651	535,972	961,629	815,895

CUSTOMER CLASS DEMAND RATIOS

		BASE COSTS					EXTRA-0	CAPACITY	MAX DAY I	DEMAND		EX	TRA-CAPA	CITY MAX	HOUR DEMA	ND
CUSTOMER CLASS	Annual Volume 100 CCF	Average Day Volume Gal	Percent (%)	System Adjusted Percent (%)	Distribution Adjusted Percent (%)	Extra Capacity Ratio	Volume Rate Gal Per Day	Percent (%)	System Adjusted Percent (%)	Distribution Adjusted Percent (%)	Extra Capacity Ratio	Volume Rate Gal Per Hour	Percent (%)	System Adjusted Percent (%)	Distribution Adjusted Percent (%)	Storage Adjusted Percent (%)
Residential	1,164,327	318,994	52.18%	52.18%	52.18%	2.00	637,987	46.08%	46.08%	46.08%	4.25	56,488	39.15%	39.15%	39.15%	39.15%
Multifamily Residential	309,816	84,881	13.88%	13.88%	13.88%	1.80	152,786	11.04%	11.04%	11.04%	3.78	13,369	9.26%	9.26%	9.26%	9.26%
Commercial	476,547	130,561	21.36%	21.36%	21.36%	1.60	208,897	15.09%	15.09%	15.09%	3.30	17,952	12.44%	12.44%	12.44%	12.44%
Industrial	104,678	28,679	4.69%	4.69%	4.69%	1.00	28,679	2.07%	2.07%	2.07%	2.15	2,569	1.78%	1.78%	1.78%	1.78%
Public Authority	153,651	42,096	6.89%	6.89%	6.89%	1.60	67,354	4.86%	4.86%	4.86%	3.30	5,788	4.01%	4.01%	4.01%	4.01%
Public Fire Protection	22,313	6,113	1.00%	1.00%	1.00%		288,770	20.86%	20.86%	20.86%		48,128	33.35%	33.35%	33.35%	33.35%
TOTALS	2,231,332	611,324	100%	100%	100%		1,384,474	100%	100%	100%		144,295	100%	100%	100%	100%

50% <-- Public Fire % Limits --> 50% 50% 50%

Maximum Day Demand = 1,700,914 (CUBIC FEET/DAY)

Maximum Hour Demand = 121,384 (CUBIC FEET/HR) SUM OF GENERAL SERVICE AVERAGE AND MAXIMUM DAY EXTRA CAPACITY DEMAND

SUM OF GENERAL SERVICE AVERAGE AND MAXIMUM HOUR EXTRA CAPACITY DEMAND

= NON-COINCIDENT / COINCIDENT RATIO FOR MAX DAY 1.63

= NON-COINCIDENT / COINCIDENT RATIO FOR MAX HOUR 1.86

80%

CUSTOMER CLASS ALLOCATION FACTORS

NUMBER OF METERS

_						(COMDER (or meters							TOTAL	
Meter size (inches):	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	METERS	PERCENT
Residential	16,538	670	19	0	2	0	0	0	0	0	0	0	0	17,229	88%
Multifamily Residential	143	234	171	0	77	21	0	13	3	0	0	0	0	662	3%
Commercial	596	363	212	0	159	75	0	32	5	5	0	0	0	1,447	7%
Industrial	9	11	7	0	16	8	0	0	8	1	0	0	0	60	0%
Public Authority	2	4	17	2	12	11	0	14	7	8	0	0	0	77	0%
TOTALS	17,288	1,282	426	2	266	115	0	59	23	14	0	0	0	19,475	100%
						EQUIVALE	ONT METERS	5							
ALLOCATION FACTOR: Meter size (inches):	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	TOTAL EQUIV.	
Equiv. meters ratio:	5/8 1.0	5/4 1.0	2.5	3.7	5.0	8.0	12.5	3 15.0	25.0	50.0	80.0	120.0	160.0		PERCENT
Residential	16,538	670	48	0	10	0	0	0	0	0	0	0	0	17,266	72%
Multifamily Residential	143	234	428	0	385	168	0	195	75	0	0	0	0	1,628	7%
Commercial	596	363	530	0	795	600	0	480	125	250	0	0	0	3,739	16%
Industrial	9	11	18	0	80	64	0	0	200	50	0	0	0	432	2%
Public Authority	2	4	43	7	60	88	0	210	175	400	0	0	0	989	4%
TOTALS	17,288	1,282	1,065	7	1,330	920	0	885	575	700	0	0	0	24,052	100%
					E	QUIVALEN	NT SERVICE	s							
ALLOCATION FACTOR: Meter size (inches):	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	TOTAL EQUIV.	
Equiv. services ratio:	1.0	1.0	1.3	1.7	2.0	3.0	3.5	4.0	5.0	6.0	7.0	8.0			PERCENT
Residential	16,538	670	25	0	4	0	0	0	0	0	0	0	0	17,237	84%
Multifamily Residential	143	234	222	0	154	63	0	52	15	0	0	0	0	883	4%
Commercial	596	363	276	0	318	225	0	128	25	30	0	0	0	1,961	10%
Industrial	9	11	9	0	32	24	0	0	40	6	0	0	0	131	1%
Public Authority	2	4	22	3	24	33	0	56	35	48	0	0	0	228	1%
TOTALS	17,288	1,282	554	3	532	345	0	236	115	84	0	0	0	20,439	100%
-															

ALLOCATION OF SERVICE COST FUNCTIONS TO CUSTOMER CLASSES

	TOTAL (\$)	Residential (\$)	Multifamily Residential (\$)	Commercial (\$)	Industrial (\$)	Public Authority (\$)	Public Fire Protection (\$)
BASE COSTS:							
SYSTEM	3,967,030	2,070,028	550,814	847,241	186,104	273,172	39,670
DISTRIBUTION	529,904	276,508	73,576	113,172	24,859	36,490	5,299
EXTRA-CAPACITY COSTS:							
MAXIMUM-DAY SYSTEM	448,302	206,585	49,473	67,642	9,286	21,810	93,506
MAXIMUM-DAY DISTRIBUTION	0	0	0	0	0	0	0
MAXIMUM-HOUR SYSTEM	0	0	0	0	0	0	0
MAXIMUM-HOUR DISTRIBUTION	880,755	344,797	81,601	109,577	15,682	35,330	293,768
MAXIMUM-HOUR STORAGE	380,316	148,886	35,236	47,316	6,771	15,256	126,851
CUSTOMER COSTS:							
BILLING	236,651	209,358	8,044	17,583	729	936	
EQUIVALENT METERS	535,972	384,736	36,266	83,318	9,615	22,036	
EQUIVALENT SERVICES	961,629	810,957	41,558	92,243	6,168	10,703	
FIRE PROTECTION	815,895						815,895
TOTAL COST	8,756,453	4,451,854	876,569	1,378,092	259,216	415,733	1,374,989
LESS OTHER REVENUE	401,324	203,249	40,020	62,917	11,834	18,980	64,324
COST OF SERVICE	8,355,129	4,248,605	836,549	1,315,176	247,381	396,753	1,310,665
REVENUE AT PRESENT RATES	7,732,643	3,935,625	761,846	1,213,668	239,849	357,764	1,223,891
DIFFERENCE	622,486	312,980	74,703	101,508	7,532	38,989	86,774
PERCENT INCREASE/DECREASE	8%	8%	10%	8%	3%	11%	7%

Docket 6360-WR-109

Schedule 11

WEST ALLIS MUNICIPAL WATER UTILITY Comparison of Revenue

at

Present Rates, Cost of Service and Proposed Rates

		Cost of	Service		Proposed Rates	
Customer Class	Revenue at Present Rates	Revenue Required	Increase over Present Rates	Revenue	Increase over Present Rates	Percent of Cost of Service
Residential	\$3,935,625	\$4,248,605	8%	\$4,262,328	8%	100%
Multifamily Residential	\$761,846	\$836,549	10%	\$824,101	8%	99%
Commercial	\$1,213,668	\$1,315,176	8%	\$1,312,914	8%	100%
Industrial	\$239,849	\$247,381	3%	\$259,768	8%	105%
Public Authority	\$357,764	\$396,753	11%	\$386,034	8%	97%
Public Fire Protection	\$1,223,891	\$1,310,665	7%	\$1,311,210	7%	100%
Total	\$7,732,643	\$8,355,129	8%	\$8,356,354	8%	100%

WEST ALLIS MUNICIPAL WATER UTILITY

Proposed Water Rates and Rules

Purchased Water Adjustment Clause - - - PWAC-1

West Allis Municipal Water Utility (utility) may apply a purchased water adjustment clause (PWAC) to its water rates set forth under Schedules F-1 and Mg-1 to reflect an increase or decrease in the rates charged by its wholesale water supplier, Milwaukee Water Works (wholesaler), **and only when the wholesaler's rates are adjusted through the conventional rate case process.** Adjustments under this PWAC that result in an increase cannot be effective until the utility has filed the PWAC application with the Public Service Commission (Commission), the utility provides notice to its customers of such change in rates, and the Commission holds a public hearing and authorizes the rate adjustments in a Final Decision.

Calculation of Adjusted Quarterly Public Fire Protection Service Charges - - - F-1

 $C = Z \times (1 + P)$ P = (N - B) / T

Where:

- C = Adjusted Schedule F-1 quarterly retail service charges rounded up to the nearest cent.
- Z = Current Schedule F-1 direct quarterly retail service charges.
- P = Adjustment factor rounded up to the nearest hundredth of a percent, which is four places past the decimal point (.XXXX).
- N = New quarterly wholesale public fire protection service charge.
- B = Current quarterly wholesale public fire protection service charge.
- T = Total quarterly dollar revenue from quarterly retail service charges per rate Schedule F-1.

Calculation of Adjusted Quarterly Service Charges - - - Mg-1

C = Z × (1 + P) P = (N - B) / T Where: C = Adjusted Schedule Mg-1 quarterly retail service charges rounded up to the nearest cent. Z = Current Schedule Mg-1 quarterly retail service charges.

- P = Adjustment factor rounded up to the nearest hundredth of a percent, which is four places past the decimal point (.XXXX).
- N = New quarterly wholesale service charge.
- B = Current quarterly wholesale service charge.
- T = Total quarterly dollar revenue from quarterly retail service charges per Schedule Mg-1.

Commodity Charge Adjustment - - - Mg-1

AVBR = VBR + A

- Where: AVBR = Adjusted Schedule Mg-1 retail volume block rates rounded up to the nearest cent.
 - VBR = Current Schedule Mg-1 retail volume block rates.
 - A = New wholesale volume charge less the current wholesale volume charge.

Public Fire Protection Service - - - F-1

Public fire protection service includes the use of hydrants for fire protection service only and such quantities of water as may be demanded for the purpose of extinguishing fires within the service area. This service shall also include water used for testing equipment and training personnel. For all other purposes, the metered or other rates set forth, or as may be filed with the Public Service Commission, shall apply.

Under Wis. Stat. § 196.03(3)(b), the municipality has chosen to have the utility bill the retail general service customers for public fire protection service.

Quarterly Public Fire Protection Service Charges:

⁵ / ₈ -inch meter - \$	16.05	3 -inch meter - \$	63.00
$\frac{3}{4}$ -inch meter - \$	16.05	4 -inch meter - \$	78.00
1 -inch meter - \$	21.00	6 -inch meter - \$	96.00
1¼ -inch meter - \$	27.00	8 -inch meter - \$	114.00
$1\frac{1}{2}$ -inch meter - \$	31.50	10 -inch meter - \$	126.00
2 -inch meter - \$	48.00	12 -inch meter - \$	144.00

Customers who are provided service under Schedules Mg-1, Ug-1, or Sg-1 shall be subject to the charges in this schedule according to the size of their primary meter. Customers who are provided service under Schedule Am-1 are exempt from these charges for any additional meters.

Billing: Same as Schedule Mg-1.

Public Fire Protection Service - - - Fd-1

Delete.

Private Fire Protection Service - Unmetered - - - Upf-1

This service shall consist of permanent or continuous unmetered connections to the main for the purpose of supplying water to private fire protection systems such as automatic sprinkler systems, standpipes, and private hydrants. This service shall also include reasonable quantities of water used for testing check valves and other backflow prevention devices.

Quarterly Private Fire Protection Service Demand Charges:

- inch or smaller connection - \$	10.00
3 - inch connection - \$	15.00
4 - inch connection - \$	27.00
6 - inch connection - \$	54.00
8 - inch connection - \$	84.00
10 - inch connection - \$	126.00
12 - inch connection - \$	168.00
14 - inch connection - \$	213.00
16 - inch connection - \$	255.00

Billing: Same as Schedule Mg-1.

General Service - Metered - - - Mg-1

Quarterly Service Charges:

2

⁵ / ₈ -inch meter - \$	21.00	3 -inch meter - \$	135.00
$\frac{3}{4}$ -inch meter - \$	21.00	4 -inch meter - \$	204.00
1 -inch meter - \$	33.00	6 -inch meter - \$	354.00
$1\frac{1}{4}$ -inch meter - \$	45.00	8 -inch meter - \$	534.00
$1\frac{1}{2}$ -inch meter - \$	57.00	10 -inch meter - \$	768.00
2 -inch meter - \$	84.00	12 -inch meter - \$	1,002.00

Plus Volume Charges:

First	10,000	cubic feet used quarterly - \$2.42 per 100 cubic feet
Next	490,000	cubic feet used quarterly - \$2.32 per 100 cubic feet

Next 500,000 cubic feet used quarterly - \$2.18 per 100 cubic feet Over 1,000,000 cubic feet used quarterly - \$2.08 per 100 cubic feet

<u>Billing</u>: Bills for water service are rendered quarterly and become due and payable upon issuance following the period for which service is rendered. A late payment charge of 1 percent per month will be added to bills not paid within 20 days of issuance. This late payment charge shall be applied to the total unpaid balance for utility service, including unpaid late payment charges. This late payment charge is applicable to all customers. The utility customer may be given a written notice that the bill is overdue no sooner than 20 days after the bill is issued. Unless payment or satisfactory arrangement for payment is made within the next 10 days, service may be disconnected pursuant to Wis. Admin. Code ch. PSC 185.

<u>Combined Metering</u>: For a residential customer with more than one meter on a single service lateral, volumetric reading from all meters shall be combined for billing. For a nonresidential customer, volumetric readings may be combined for billing if the utility for its own convenience places more than one meter on a single water service lateral. Multiple meters placed for the purpose of identifying water not discharged into the sanitary sewer are not considered for utility from combining readings where metering configurations support such an approach. Volumetric readings from individually metered separate service laterals may not be combined for billing purposes.

Additional Meter Rental Charge - - - Am-1

Upon request, the utility shall furnish and install additional meters to:

- A. Water service customers for the purpose of measuring the volume of water used that is not discharged into the sanitary sewer system; and
- B. Sewerage service customers who are not customers of the water utility for the purpose of determining the volume of sewage that is discharged into the sanitary sewer system.

The utility shall charge a meter installation charge of \$50.00 and a quarterly rental fee for the use of this additional meter.

Quarterly Additional Meter Rental Charges:

⁵ / ₈ -inch meter - \$	10.50
$\frac{3}{4}$ -inch meter - \$	10.50
1 -inch meter - \$	16.50
1¼ -inch meter - \$	22.50
$1\frac{1}{2}$ -inch meter - \$	28.50
2 -inch meter - \$	42.00

This schedule applies only if the additional meter is installed on the same service lateral as the primary meter and either:

- A. The additional meter is ³/₄-inch or smaller if the metering configuration is the Addition Method; or
- B. The additional meter is 2-inch or smaller for all other metering configurations.

If the additional meter is larger than 2-inch or larger than ³/₄-inch and installed in the Addition Method, each meter shall be treated as a separate account and Schedule Mg-1 rates shall apply.

Billing: Same as Schedule Mg-1.

Other Charges - - - OC-1

<u>Payment Not Honored by Financial Institution Charge:</u> The utility shall assess a \$25.00 charge when a payment rendered for utility service is not honored by the customer's financial institution. This charge may not be in addition to, but may be inclusive of, other such charges when the payment was for multiple services.

<u>Missed Appointment Charge</u>: The utility shall assess a missed appointment charge when a customer, without providing reasonable cancellation notice, fails to be present at the customer's location for an appointment scheduled with utility personnel. The utility may not apply the charge for the first such missed appointment during normal business hours. The utility shall apply the charge for the first such missed appointment after normal business hours.

During normal business hours:	\$40.00
After normal business hours:	\$50.00

Billing: Same as Schedule Mg-1.

Public Service - - - Mpa-1

Metered Service

Water used by the City of West Allis on an intermittent basis for flushing sewers, street washing, flooding skating rinks, drinking fountains, etc., shall be metered and billed according to the rates set forth in Schedule Mg-1.

Unmetered Service

Where it is impossible to meter the service, the utility shall estimate the volume of water used based on the pressure, size of opening, and the period of time the water is used. The estimated quantity shall be billed at the volumetric rates set forth in Schedule Mg-1, excluding any service charges.

Billing: Same as Schedule Mg-1.

General Water Service - Unmetered - - - Ug-1

Service may be supplied temporarily on an unmetered basis where the utility cannot immediately install a water meter, including water used for construction. Unmetered service shall be billed the amount that would be charged to a metered residential customer using 17,000 cubic feet (or approximately 12,716 gallons) cubic feet of water per quarter under Schedule Mg-1, including the service charge for a ⁵/₈-inch meter. If the utility determines that actual usage exceeds 17,000 cubic feet (or approximately 12,716 gallons) cubic feet of water per quarter, an additional charge for the estimated excess usage shall be made according to the rates under Schedule Mg-1.

This schedule applies only to customers with a 1-inch or smaller service connection. For customers with a larger service connection, the utility shall install a temporary meter and charges shall be based on the rates set forth under Schedule Mg-1.

Billing: Same as Schedule Mg-1.

Seasonal, Emergency, or Temporary Service - - - Mgt-1

Delete.

Seasonal Service - - - Sg-1

Seasonal customers are general service customers who voluntarily request disconnection of water service and who resume service at the same location within 12 months of the disconnection, unless service has been provided to another customer at that location in the intervening period. The utility shall bill seasonal customers the applicable service charges under Schedule Mg-1 year-round, including the period of temporary disconnection.

Seasonal service shall include customers taking service under Schedule Mg-1, Schedule Ug-1, or Schedule Am-1.

Upon reconnection, the utility shall apply a charge under Schedule R-1 and require payment of any unpaid charges under this schedule.

<u>Billing</u>: Same as Schedule Mg-1, unless the utility and customer agree to an alternative payment schedule for the period of voluntary disconnection.

Building and Construction Water Service - - - Mz-1

Delete.

Bulk Water - - - BW-1

All bulk water supplied from the water system through hydrants or other connections shall be metered or estimated by the utility. Utility personnel or a party approved by the utility shall supervise the delivery of water.

Bulk water sales are:

- A. Water supplied by tank trucks or from hydrants for the purpose of extinguishing fires outside the utility's service area;
- B. Water supplied by tank trucks or from hydrants for purposes other than extinguishing fires, such as water used for irrigation or filling swimming pools; or,
- C. Water supplied from hydrants or other temporary connections for general service type applications, except that Schedule Ug-1 applies for water supplied for construction purposes.

A service charge of \$50.00 and a charge for the volume of water used shall be billed to the party using the water. The volumetric charge shall be calculated using the highest volumetric rate for residential customers under Schedule Mg-1. In addition, for meters that are assigned to bulk water customers for more than 7 days, the applicable service charge in Schedule Mg-1 will apply after the first 7 days.

The water utility may require a reasonable deposit for the temporary use of its equipment under this and other rate schedules. The deposit(s) collected shall be refunded upon return of the utility's equipment. Damaged or lost equipment shall be repaired or replaced at the customer's expense.

Billing: Same as Schedule Mg-1.

Reconnection Charges - - - R-1

The utility shall assess a charge to reconnect a customer, which includes reinstalling a meter and turning on the valve at the curb stop, if necessary. A utility may not assess a charge for disconnecting a customer.

During normal business hours:	\$50.00
After normal business hours:	\$60.00

Billing: Same as Schedule Mg-1.

Water Lateral Installation Charge - - - Cz-1

The utility shall charge a customer for the actual cost of installing a water service lateral from the main through curb stop and box if these costs are not contributed as part of a subdivision development or otherwise recovered under Wis. Stats. Chapter 66.

Billing: Same as Schedule Mg-1.

Emergency Hose Service - - - EHS-1

Charges for labor, materials, and equipment required to furnish such emergency service to a premise will be billed separately by the Municipal Water Utility by using the following schedule:

For a hose line one and one half (1 ½) inches in diameter or greater, a fee of forty dollars (\$40.00) for an initial three (3) calendar day period or fraction thereof. Ten dollars (\$10.00) per calendar day or fraction thereof following the initial three (3) calendar day period if the failure or break is in the portion of the water service line which the property owner is required to maintain and repair.

For a hose line less than one and one half (1 ½) inches in diameter, a fee of twenty dollars (\$20.00) for an initial three (3) calendar day period or fraction thereof. Five dollars (\$5.00) per calendar day or fraction thereof following the initial three (3) calendar day period if the failure or break is in the portion of the water service line which the property owner is required to maintain and repair.

The above charges will be waived if the failure or break in the water service is caused by an employee or authorized agent of the Municipal Water Utility or is located on the Municipal Water Utility's portion of the service line.

Billing: Same as Schedule Mg-1.

Rules and Regulations - - - X-1

Delete Schedule X-1. Incorporate the operating rules for municipal water utilities as provided by the Public Service Commission.

Water Main Extension Rule - - - X-2

Water mains will be extended for new customers on the following basis:

A. Where the cost of the extension is to immediately be collected through assessment by the municipality against the abutting property, the procedure set forth under Wis. Stat.

§ 66.0703 will apply, and no additional customer contribution to the utility will be required.

- B. Where the municipality is unwilling or unable to make a special assessment, the extension will be made on a customer-financed basis as follows:
 - 1. The applicant(s) will advance as a contribution in aid of construction the total amount equivalent to that which would have been assessed for all property under paragraph A.
 - 2. Part of the contribution required in paragraph B.1. will be refundable. When additional customers are connected to the extended main within 10 years of the date of completion, contributions in aid of construction will be collected equal to the amount which would have been assessed under paragraph A. for the abutting property being served. This amount will be refunded to the original contributor(s). In no case will the contributions received from additional customers exceed the proportionate amount which would have been required under paragraph A., nor will it exceed the total assessable cost of the original extension.
- C. When a customer connects to a transmission main or connecting loop installed at utility expense within 10 years of the date of completion, there will be a contribution required of an amount equivalent to that which would have been assessed under paragraph A.

Water Main Installations in Platted Subdivisions - - - X-3

Application for installation of water mains in regularly platted real estate development subdivisions shall be filed with the utility.

If the developer, or a contractor employed by the developer, is to install the water mains (with the approval of the utility), the developer shall be responsible for the total cost of construction.

If the utility or its contractor is to install the water mains, the developer shall be required to advance to the utility, prior to the beginning of the construction, the total estimated cost of the extension. If the final costs exceed estimated costs, an additional billing will be made for the balance of the cost due. This balance is to be paid within 30 days. If final costs are less than estimated, a refund of the overpayment will be made by the water utility.

Water Utility Supplemental Customer Rules - - - X-4

Compliance with Rules

All persons now receiving water service from this water utility, or who may request service in the future, shall be considered as having agreed to be bound by the rules and regulations as filed with the Public Service Commission of Wisconsin.

Charges for Water Wasted Due to Leaks

Pursuant to Wis. Admin. Code § 185.35(6) and the utility's policy, when a leak unknown to the customer is found in an appliance or the plumbing, the utility shall estimate the water wasted due to the leak and bill for this excess usage at a reduced rate not less than the utility's cost. If this provision applies, the utility shall bill the customer for excess usage at the lowest volumetric rate in the utility's Schedule Mg-1, General Service – Metered. No additional adjustments shall be made for water supplied after the customer has been notified of the leak and has had an opportunity to correct the condition.

Deferred Payment Agreement

See Wis. Admin. Code § PSC 185.38.

The utility shall offer deferred payment agreements to residential accounts and may offer such agreements to other customers. However, the utility will not offer a deferred payment agreement to a residential customer who is a tenant if the tenant has defaulted on a deferred payment agreement in the past 12 months. This criterion only applies to deferred payment agreements and not to other types of payment extensions or agreements.

WEST ALLIS MUNICIPAL WATER UTILITY

Customer Water Bill Comparison at Present and Proposed Rates

		<u>Quarterly</u>			Quarterly Including Public Fire Protec							
Customer Type	Meter Size	Volume (100 Cubic Feet)	B	Bills at Old Rates	B	ills at New Rates	Percent Change	Bi	ills at Old Rates	Bi	lls at New Rates	Percent Change
Small Residential	5/8"	9	\$	39.30	\$	42.78	9%	\$	54.27	\$	58.83	8%
Average Residential	5/8"	17	\$	57.38	\$	62.14	8%	\$	72.35	\$	78.19	8%
Large Residential	5/8"	25	\$	75.46	\$	81.50	8%	\$	90.43	\$	97.55	8%
Large Residential	5/8"	50	\$	131.96	\$	142.00	8%	\$	146.93	\$	158.05	8%
Large Residential	5/8"	100	\$	244.96	\$	263.00	7%	\$	259.93	\$	279.05	7%
Multifamily Residential	3"	450	\$	1,089.09	\$	1,189.00	9%	\$	1,148.95	\$	1,252.00	9%
Multifamily Residential	3"	900	\$	2,056.59	\$	2,233.00	9%	\$	2,116.45	\$	2,296.00	8%
Multifamily Residential	3"	1,350	\$	3,024.09	\$	3,277.00	8%	\$	3,083.95	\$	3,340.00	8%
Multifamily Residential	3"	1,800	\$	3,991.59	\$	4,321.00	8%	\$	4,051.45	\$	4,384.00	8%
Commercial	1"	7,000	\$	14,990.39	\$	16,003.00	7%	\$	15,009.85	\$	16,024.00	7%
Commercial	1 1/4"	23,000	\$	47,819.87	\$	49,595.00	4%	\$	47,845.31	\$	49,622.00	4%
Commercial	2"	3,000	\$	6,532.10	\$	7,054.00	8%	\$	6,577.01	\$	7,102.00	8%
Commercial	4"	17,000	\$	35,705.33	\$	37,274.00	4%	\$	35,780.17	\$	37,352.00	4%
Industrial	4"	1,500	\$	3,400.33	\$	3,694.00	9%	\$	3,475.17	\$	3,772.00	9%
Industrial	4"	3,000	\$	6,625.33	\$	7,174.00	8%	\$	6,700.17	\$	7,252.00	8%
Industrial	4"	4,500	\$	9,850.33	\$	10,654.00	8%	\$	9,925.17	\$	10,732.00	8%
Industrial	4"	6,000	\$	13,025.33	\$	13,994.00	7%	\$	13,100.17	\$	14,072.00	7%
Public Authority	3/4"	300	\$	674.96	\$	727.00	8%	\$	689.93	\$	743.05	8%
Public Authority	1 1/2"	350	\$	810.90	\$	879.00	8%	\$	840.84	\$	910.50	8%
Public Authority	6"	1,000	\$	2,439.12	\$	2,684.00	10%	\$	2,528.93	\$	2,780.00	10%
Public Authority	6"	6,000	\$	13,139.12	\$	14,144.00	8%	\$	13,228.93	\$	14,240.00	8%
-												

WEST ALLIS MUNICIPAL WATER UTILITY

Schedule of Water Depreciation Rates Effective January 1, 2017

Account Number	Account Title	Depreciation Rate
0.1.1	SOURCE OF SUPPLY PLANT	2.201
311	Structures and Improvements	3.2%
	PUMPING PLANT	
321	Structures and Improvements	3.2%
325	Electric Pumping Equipment	4.4%
	WATER TREATMENT EQUIPMENT	
334	Other Water Treatment Equipment	6.0%
	TRANSMISSION AND DISTRIBUTION PLANT	
342	Distribution Reservoirs and Standpipes	1.9%
343	Transmission and Distribution Mains	1.3%
345	Services	2.9%
346	Meters	5.5%
348	Hydrants	2.2%
	GENERAL PLANT	
390	Structures and Improvements	2.9%
391	Office Furniture and Equipment	5.8%
391.1	Computer Equipment	26.7%
392	Transportation Equipment	UNIT
394	Tools, Shop and Garage Equipment	5.8%
396	Power Operated Equipment	UNIT
397	Communication Equipment	15.0%
398	Miscellaneous Equipment	5.8%