

Attachment C

Step II Cost of Service Study Schedules

Hampstead Area Water Company  
Rate Year Requirements & Adjustments

	<b>Proposed <u>Step 1</u></b>	<b>Adjustments <u>Permanent</u></b>	<b>Proposed <u>Step 2</u></b>
<b>Operating Expenses</b>			
<u>Source of Water Supply Expenses</u>			
Operation Labor and Expenses	\$ 14,466	\$ -	\$ 14,466
Maintenance Supervision and Engineering	1,754	-	1,754
Maintenance of Structures and Improvements	10,290	-	10,290
Maintenance of Wells and Springs	2,065	-	2,065
Purchased Water	120,919	399,986	520,905
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<i>Total: Source of Water Supply Expenses</i>	\$ 149,494	\$ 399,986	\$ 549,480
<u>Pumping Expenses</u>			
Fuel or Power Purchased for Pumping	\$ 169,646	\$ -	\$ 169,646
Pumping Labor and Expenses	37,885	-	37,885
Miscellaneous Expenses	65,931	-	65,931
Maintenance of Structures and Improvements	27,552	-	27,552
Maintenance of Pumping Equipment	40,399	-	40,399
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<i>Total: Pumping Expenses</i>	\$ 341,413	\$ -	\$ 341,413
<u>Water Treatment Expenses</u>			
Chemicals	\$ 13,500	\$ -	\$ 13,500
Operation Labor and Expenses	172,741	-	172,741
Maintenance of Water Treatment Equipment	1,443	-	1,443
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<i>Total: Water Treatment Expenses</i>	\$ 187,684	\$ -	\$ 187,684
<u>Transmission &amp; Distribution Expenses</u>			
Transmission and Distribution Lines Expenses	\$ 28,205	\$ -	\$ 28,205
Meter Expenses	20,024	-	20,024
Customer Installation Expenses	3,919	-	3,919
Miscellaneous Expenses	1,251	-	1,251
Maintenance of Distribution Reservoirs and Standpipes	3,356	-	3,356
Maintenance of Transmission and Distribution Mains	23,615	-	23,615
Maintenance of Services	28,063	-	28,063
Maintenance of Meters	15,767	-	15,767
Maintenance of Hydrants	5,332	-	5,332
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<i>Total: Transmission &amp; Distribution Expenses</i>	\$ 129,532	\$ -	\$ 129,532

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Hampstead Area Water Company  
Rate Year Requirements and Adjustments

<u>Customer Accounts Expenses</u>			
Meter Reading Expenses	\$ 11,288	\$ -	\$ 11,288
Customer Records and Collection Expenses	119,940	-	119,940
<i>Total: Customer Accounts Expenses</i>	<u>\$ 131,228</u>	<u>\$ -</u>	<u>\$ 131,228</u>
<u>General &amp; Miscellaneous Expenses</u>			
Administrative and General Salaries	\$ 20,452	\$ -	\$ 20,452
Office Supplies and Other Expenses	57,864	-	57,864
Outside Services Employed	557,635	-	557,635
Injuries and Damages	44,136	-	44,136
Employee Pension and Benefits	107,378	-	107,378
Franchise Requirements	5,840	-	5,840
Regulatory Commission Expenses	7,300	-	7,300
Miscellaneous General Expenses	39,290	-	39,290
General Rents	16,928	-	16,928
<i>Total: General &amp; Miscellaneous Expenses</i>	<u>\$ 856,823</u>	<u>\$ -</u>	<u>\$ 856,823</u>
<b>Total: Operating Expenses</b>	<b>\$ 1,796,174</b>	<b>\$ 399,986</b>	<b>\$ 2,196,160</b>

	<b>Proposed Step 1</b>	<b>Adjustments Permanent</b>	<b>Proposed Step 2</b>
<b>Non-Operating Costs/Miscellaneous Revenues</b>			
<u>Non-Operating Costs/Miscellaneous Revenues</u>			
Depreciation	\$ 710,913	\$ 115,598	\$ 826,511
Miscellaneous Service Revenues	(38,074)	-	(38,074)
Other Water Revenues	(79,861)	-	(79,861)
Sale of Water to Plaistow	-	(175,180)	(175,180)
Revenue from New Customers	-	(50,524)	(50,524)
Amortization of CIAC	(328,765)	(121,606)	(450,371)
Amortization of Utility Plant Acquisition Adj.	84	-	84
Amortization Expense - Other	47,314	-	47,314
Taxes Other Than Income	181,898	29,277	211,175
Income Taxes	125,052	883	125,935
Interest Expense	-	-	-
Interest and Dividend Income	-	-	-
Amortization of Debt Discount & Expense	-	-	-
Return on Rate Base	384,197	3,635	387,832
<i>Total: Non-Operating Costs/Miscellaneous Revenues</i>	<u>\$ 1,002,758</u>	<u>\$ (197,917)</u>	<u>\$ 804,841</u>
<b>Total: Non-Operating Costs/Miscellaneous Revenues</b>	<b>\$ 1,002,758</b>	<b>\$ (197,917)</b>	<b>\$ 804,841</b>
<b>Net Retail Revenue Requirements</b>	<b><u>\$ 2,798,932</u></b>	<b><u>\$ 202,069</u></b>	<b><u>\$ 3,001,001</u></b>

Hampstead Area Water Company  
Units of Service & Equivalents

	<u>Accounts</u>	<u>Monthly Bills</u>	<u>Meter</u> <u>Equivalency</u> <u>Factor*</u>	<u>Equivalent</u> <u>Accounts</u>
<b>Water Service Accounts (Billed Monthly)</b>				
5/8"	3,785	45,420	1.00	3,785
3/4"	-	-	2.50	-
1"	65	780	5.00	325
1 1/2"	2	24	10.00	20
2"	5	60	13.00	65
<i>Total: Accounts</i>	<u>3,857</u>	<u>46,284</u>		<u>4,195</u>

\* Based on actual average consumption by meter size.

	<u>Connections</u>	<u>Monthly Bills</u>	<u>Demand</u> <u>Equivalency</u> <u>Factor</u>	<u>Equivalent</u> <u>Connections</u>
<b>Fire Service Accounts (Annually)</b>				
<u>Public Fire Service</u>				
Public Hydrants	137	na	111.31	15,250
<u>Private Fire Service</u>				
1 1/2"	1	12	2.90	3
2"	1,090	13,080	6.19	6,747
3"	-	-	17.98	-
4"	8	96	38.32	307
6"	12	144	111.31	1,336
<i>Total: Private Fire Service</i>	<u>1,111</u>	<u>13,332</u>		<u>8,393</u>

**Demand**

Consumption (in Ccf)	242,622
Average Day Demand (MGD)	0.59
Max Day Demand (MGD)	1.78
<u>Fire Flow</u>	
Fire Flow During Event (GPM)	2,000
Concurrent Events	1.00
Duration (Hours)	3.00
Fire Demand (MGD)	0.36



**Calculation of Customer Charges**

Costs to be Recovered

Billing	\$ 71,075
Metering	639,678
	<u>\$ 710,753</u>

Units

Monthly Water Bills per Year	46,284
Equivalent Accounts per Year	50,340

Cost per Unit

Billing	\$ 1.54
Metering	12.71
	<u>\$ 14.24</u>

Monthly Rates

	<u>Billing</u>	<u>Metering</u>	<u>Total</u>
5/8"	\$ 1.54	\$ 12.71	\$ 14.24
3/4"	1.54	31.77	33.30
1"	1.54	63.54	65.07
1 1/2"	1.54	127.07	128.61
2"	1.54	165.19	166.73

**Water Volumetric Rate Calculation**

Costs to be Recovered

General Water	\$ 2,041,512
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Units

All Water Consumption (Ccf/Year)	242,622
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Calculated Volumetric Rates (per Ccf)

All Consumption	\$ 8.41
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**Private Fire Protection Calculation**

Costs to be Recovered

<i>Fire Service</i>	\$ 249,570
Hydrant Operating	5,332
<i>Net Non-Hydrant Fire Protection</i>	\$ 244,238
Non-Hydrant Costs Allocated to Public	157,538
Non-Hydrant Allocated to Private	86,701

*Total Fire Protection Allocation*

Allocated to Public (Hydrant & Non-Hydrant)	\$ 162,870
Allocated to Private	86,701
	<u>\$ 249,570</u>

Public Fire Charges- Annual

Per Hydrant	\$ 1,189
Availability Charge	\$ -

Private Fire Charge per Equivalent Connection - Monthly

1 1/2"	\$ 2.50
2"	5.33
3"	15.48
4"	32.99
6"	95.83

**Attach. C STEP 2**

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Hampstead Area Water Company  
DW 23-020  
Schedule DF 5  
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Hampstead Area Water Company  
Current & Proposed Rates

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<b>Rates</b>	<b>Proposed Step 1</b>	<b>Proposed Step 2</b>	<b>Percent Change</b>
<b>Water Rates</b>			
<u>Customer Charges (Billed Monthly)</u>			
5/8"	\$ 12.89	\$ 14.24	10.5%
3/4"	30.15	33.30	10.4%
1"	58.91	65.07	10.5%
1 1/2"	116.42	128.61	10.5%
2"	150.93	166.73	10.5%
<u>Volumetric Charges</u>			
Per Ccf	\$ 7.72	\$ 8.41	8.9%
<b>Fire Rates</b>			
<u>Public Fire Protection (Billed Annually)</u>			
Per Hydrant	\$ 1,185.00	\$ 1,185.00	0.0%
Annual Availability	-	-	n/a
<u>Private Fire Protection (Billed Monthly)</u>			
1 1/2"	\$ 2.49	\$ 2.49	0.0%
2"	5.31	5.31	0.0%
3"	15.43	15.43	0.0%
4"	32.87	32.87	0.0%
6"	95.49	95.49	0.0%

Hampstead Area Water Company  
Customer Impact Schedule

Cons. (Ccf/Month)	Meter Size	Class	<u>Permanent</u>			<u>Proposed Step 2</u>			<u>Change</u>	
			<u>Volumetric Charge</u>	<u>Monthly Cust. Charge</u>	<u>Monthly Total Bill</u>	<u>Volumetric Charge</u>	<u>Monthly Cust. Charge</u>	<u>Monthly Total Bill</u>	<u>\$</u>	<u>%</u>
3	5/8"	Residential	\$ 23.16	\$ 12.89	\$ 36.05	\$ 25.23	\$ 14.24	\$ 39.47	3.42	9.5%
5	5/8"	Residential	38.60	12.89	51.49	42.05	14.24	56.29	4.80	9.3%
10	5/8"	Residential	77.20	12.89	90.09	84.10	14.24	98.34	8.25	9.2%
25	1"	Residential	193.00	58.91	251.91	210.25	65.07	275.32	23.41	9.3%
50	1"	Residential	386.00	58.91	444.91	420.50	65.07	485.57	40.66	9.1%
50	1 1/2"	Non-Residential	386.00	116.42	502.42	420.50	128.61	549.11	46.69	9.3%
75	2"	Non-Residential	579.00	150.93	729.93	630.75	166.73	797.48	67.55	9.3%
150	2"	Non-Residential	1,158.00	150.93	1,308.93	1,261.50	166.73	1,428.23	119.30	9.1%
250	2"	Non-Residential	1,930.00	150.93	2,080.93	2,102.50	166.73	2,269.23	188.30	9.0%
500	2"	Non-Residential	3,860.00	150.93	4,010.93	4,205.00	166.73	4,371.73	360.80	9.0%



**Attach. C STEP 2**

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Hampstead Area Water Company  
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Hampstead Area Water Company  
Revenue Proof

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<b>User Charge Revenues</b>						
<b>Water Revenues</b>	<u>Units</u>	<u>Permanent Rates</u>	<u>Proposed Rates</u>	<u>Frequency</u>	<u>Proposed Step 2 Revenue</u>	
<u>Customer Charges</u>						
5/8"	3,785	\$ 12.89	\$ 14.24	12	\$ 646,781	
1"	65	58.91	65.07	12	50,755	
1 1/2"	2	116.42	128.61	12	3,087	
2"	5	150.93	166.73	12	10,004	
<i>Subtotal: Customer Charges</i>					\$ 710,626	
<u>Volumetric Revenues</u>						
All Consumption	242,622	\$ 7.72	\$ 8.41		\$ 2,040,455	
<i>Subtotal: Volumetric Revenues</i>					\$ 2,040,455	
<i>Total: Water Revenues</i>					\$ 2,751,080	
 <b>Fire Service Revenues</b>						
<u>Public Fire Protection</u>						
Per Hydrant	137	\$ 1,185	\$ 1,185	1	\$ 162,345	
Annual Availability	2	-	-	1	-	
<i>Subtotal: Public Fire Protection</i>					\$ 162,345	
<u>Private Fire Protection</u>						
1 1/2"	1	\$ 2.49	\$ 2.49	12	\$ 30	
2"	1,090	5.31	5.31	12	69,455	
3"	-	15.43	15.43	12	-	
4"	8	32.87	32.87	12	3,156	
6"	12	95.49	95.49	12	13,751	
<i>Subtotal: Private Fire Protection</i>					\$ 86,391	
<i>Total: Fire Service Revenues</i>					\$ 248,736	
 <b>Calculated User Charge Revenues</b>					<b>\$ 2,999,816</b>	
Check Against Rate Year Revenue Requirements					3,001,001	
Difference					(1,184)	
Difference (%)					-0.04%	
Difference Due to Rounding						