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AGENDA

REGULAR SESSION

READING MUNICIPAL LIGHT DEPARTMENT CITIZENS' ADVISORY BOARD (CAB) MEETING

Joint Meeting with RMLD Board of Commissioners

Thursday, May 8, 2014

6:30 pm

230 Ash Street

Reading, MA 01867

Winfred Spurr/Audio Visual Room

- 1. CALL MEETING TO ORDER:** J. Norton, Chairman
- 2. COST OF SERVICE STUDY PRESENTATION :** M. Seavey, PLM Electric Power Engineering
- 3. NEXT MEETING:** J. Norton, Chairman
- 4. ADJOURNMENT:** J. Norton, Chairman

This Agenda has been prepared in advance and does not necessarily include all matters which may be taken up at this meeting.





Cost of Service and Rate Design

A Presentation to the
RMLD Board and Citizens' Advisory Board
May 8, 2014

Outline of Presentation

1. Results of Proforma Fiscal Year (FY)15 Cost of Service Analysis
2. Rate Design Recommendations
3. Next Steps
4. Discussion

Results of the Proforma Future Test Year (FY15) Cost of Service Study

- ◆ FY13 Historic Test Year Cost of Service model was updated with expenses and sales from RMLD Operating Budget for FY15
- ◆ An overall increase of 1.3% in revenues is necessary to meet budgeted expenses

Rate of Return

- ◆ Existing rates of return by customer class are at the range of standard municipal utility practice
- ◆ Existing rates are very competitive with other municipal and private utilities across the board
- ◆ A main objective of RMLD is to attract and retain commercial load to support the stabilization of rates

Proposed Rates

Case 1 – Uniform Increase

- ◆ Overall revenue increase required is only 1.3% for all customer classes.

Proposed Rates

Case 2 – Smoothed Rates of Return

- ◆ Same overall revenue increase of 1.3%
- ◆ Class rates of return moved within the standard municipal utility range
 - Residential increase to produce a breakeven
 - ◆ Would require a 5% increase
 - Industrial increase of 1.3% (Same as Case 1)
 - ◆ Would require a 1.3% increase
 - Commercial and School decrease rate of return
 - ◆ Would require a 3% decrease

Rate Classification

Small Commercial Class

- ◆ Investigated adding a Small Commercial class for customers using less than 10,000 kWh per month
 - No demand charge
 - Consistent with private utility rate structure
- ◆ Results indicate that this would not be a viable option
 - Would cause increases of up to 20% for a large number of high load factor customers
 - Would result in decreases of up to 50% for a large number of low load factor customers
 - Not consistent with the goal of sending accurate price signals to customers

Rate Classification

Residential Low Income Rate

- ◆ Option 1 – Eliminate Customer Charge for qualifying customers
 - Used by several Municipal Light Departments
 - Provide same benefit (\$3.73 per month) for all customers regardless of usage
 - Higher percentage reduction for low usage customers
 - ◆ 9% reduction for 250 kWh customer
 - ◆ 5% reduction for 500 kWh customer
- ◆ Option 2 – Percentage discount on entire bill exclusive of purchased power charges
 - National Grid uses a 25% discount on Delivery Services
 - Nstar uses 27% (25.7% for electric heat customers)
 - A 25% discount in place of the Prompt Payment discount would reduce the total bill by 6% relative to a bill using the Prompt Payment discount

Rate Structure

Unbundled Rates

- ◆ All purchased power costs removed from Base Rate Charge
 - Becomes Distribution Charge
- ◆ Capacity, Energy and Transmission costs recovered through Purchase Power Charge
 - Includes a portion of the Base Rate Charge as well as all of the Fuel Charge and Purchase Power Adjustment (PPA)
 - Billed using estimated costs and sales then reconciled to actual costs and revenues after the fact
- ◆ Prompt payment discount applies to Customer Charge and Distribution Charge
 - Percentage remains at 10%, however dollar amount is smaller to customer because there is no discount on the portion of purchase power cost built into the Energy Charge

Residential Rate

Present		Proposed
Customer Charge	\$3.73	Customer Charge \$3.73
Base Rate Charge	\$0.08980	Distribution Charge \$0.0457
Fuel Adjustment	0.05167	
Purchase Power Adjustment	0.00197	Purchased Power Charge \$0.09503*
Energy Conservation Charge	0.00100	Energy Conservation Charge 0.00100
NYPA Credit	(\$0.00274)	NYPA Credit (\$0.00274)
Prompt Payment Discount	10%	Prompt Payment Discount 10%
500 kWh bill	\$69.72	\$70.57

*Purchased Power Charge estimated based on budgeted purchased power costs for FY15

Results of the Historic Test Year (FY13) Cost of Service Study **Rate Structure**

Recommend changing the methodology for calculating the NYPA hydropower adjustment

$$\text{NYPA Savings} = \text{NK} \times [\text{ACEWO} - \text{ACN}]$$

Where

NK = total kWh of NYPA received

ACEWO = average cost of energy excluding NYPA

ACN = average cost of NYPA energy

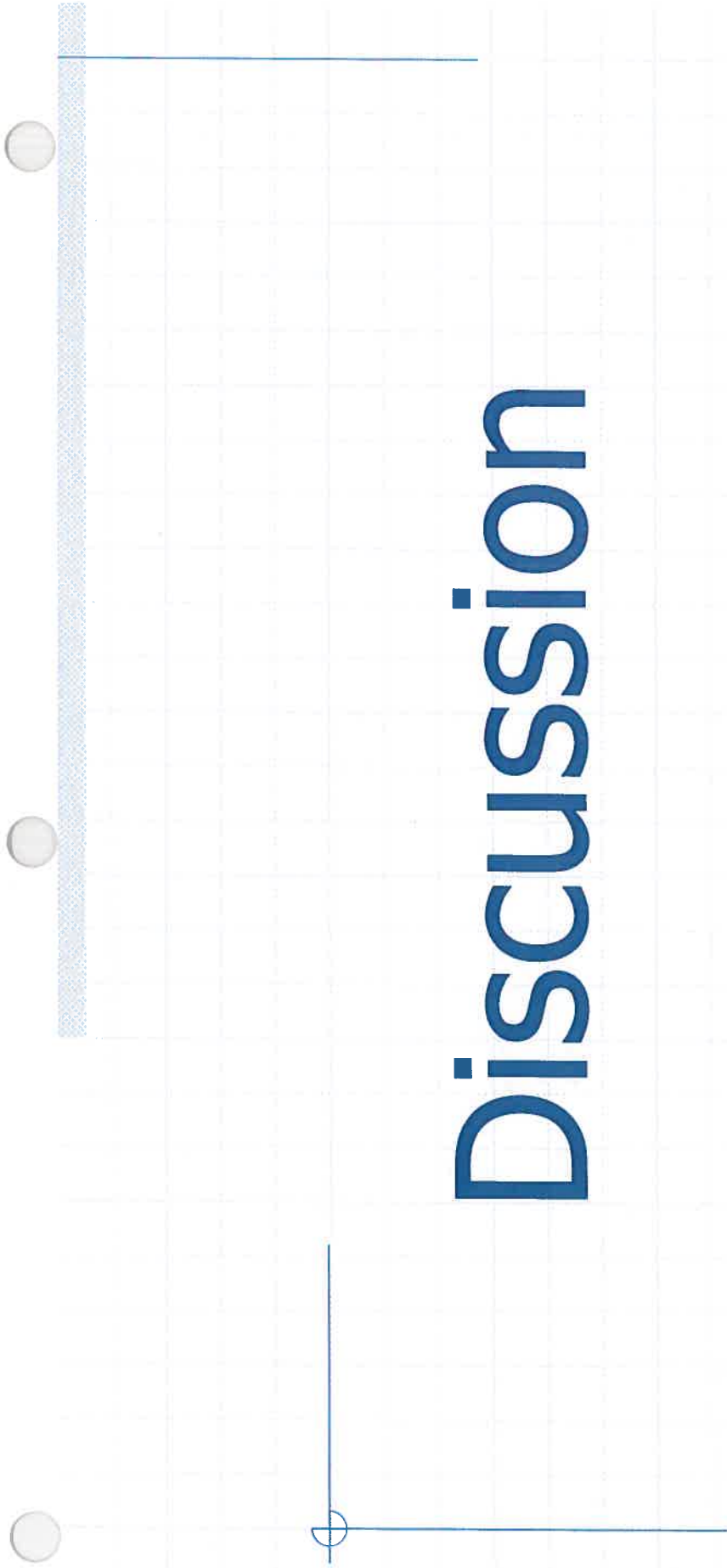
Should reduce customer bills since the average cost of energy purchased is expected to increase

Results of the Historic Test Year (FY13)

Cost of Service Study

Rate Structure

- ◆ In the process of reviewing the Street Lighting rate to determine if there is a need to adjust the present rates in order to recover the cost of service
- ◆ Gathering data to develop a rate for LED Street Lights in addition to the present Street Light rates



Discussion

CONFIDENTIAL

FY15 Proforma Test Year Cost of Service Study TYPICAL & SPECIFIC ALLOCATION FACTORS (IN PER UNIT)

SYM	ALLOCATION FACTOR	Residential		Residential Time-of-Use A-2	School SCH	Commercial C	Industrial I	Small Commercial SC	Coop COOP	Lighting		TOTALS
		A								Municipal Street	Private Area Lights	
<u>DEMAND:</u>												
12CP	AVERAGE 12 COINCIDENT PEAKS	0.4507		0.0072	0.0191	0.1946	0.2518	0.0661	0.0051	0.0041	0.0013	1.0000
1CP	ICAP (ISO ANNUAL PEAK)	0.4648		0.0074	0.0193	0.1967	0.2388	0.0678	0.0052	0.0000	0.0000	1.0000
AED	AVERAGE & EXCESS	0.3645		0.0058	0.0210	0.2136	0.3111	0.0729	0.0056	0.0041	0.0013	1.0000
PR	PEAK RESPBLTY (SEE ABOVE)	0.4507		0.0072	0.0191	0.1946	0.2518	0.0661	0.0051	0.0041	0.0013	1.0000
NCP	NON-COINCIDENT PEAK DEMAND	0.4392		0.0070	0.0179	0.1827	0.2660	0.0770	0.0048	0.0041	0.0013	1.0000
<u>ENERGY:</u>												
E	ENERGY	0.3678		0.0057	0.0206	0.2139	0.3106	0.0711	0.0054	0.0037	0.0012	1.0000
	ENERGY PRICE-WEIGHTED SALES	256,569,112		3,944,216	14,351,890	149,202,281	216,663,541	49,594,874	3,775,245	2,587,739	804,071	
	PER-UNIT MARGINAL ENERGY COST	1.0159		0.9802	0.9877	1.0080	1.0051	0.9821	0.9658	0.9000	0.9000	
<u>CUSTOMER:</u>												
CTM	CUSTOMER METERED - TOTAL	0.8877		0.0112	0.0011	0.0135	0.0023	0.0841	0.0002	0.0000	0.0000	1.0000
	CUSTOMER UNMETERED	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006	0.0137	0.0144
	CUSTOMER METERED	0.8749		0.0110	0.0011	0.0133	0.0023	0.0829	0.0002	0.0000	0.0000	0.9856
CT	CUSTOMER TOTAL	0.8749		0.0110	0.0011	0.0133	0.0023	0.0829	0.0002	0.0006	0.0137	1.0000
CWM	CUSTOMER WEIGHTED METERED	0.4416		0.0070	0.0180	0.1837	0.2675	0.0774	0.0049	0.0000	0.0000	1.0000
	CUSTOMER WEIGHTED UNMETERED	0.3770		0.0047	0.0005	0.0057	0.0010	0.0357	0.0001	0.000265	0.0059	0.4309
	CUSTOMER WEIGHTED METERED	0.2513		0.0040	0.0103	0.1045	0.1522	0.0440	0.0028	0.000000	0.0000	0.5691
CWT	CUSTOMER WEIGHTED TOTAL	0.6283		0.0087	0.0107	0.1103	0.1532	0.0798	0.0028	0.000265	0.0059	1.0000
<u>DEMAND & CUSTOMER:</u>												
0.75	DEMAND (NCD*WEIGHT)	0.3294		0.0052	0.0134	0.1370	0.1995	0.0577	0.0036	0.0031	0.0010	0.7500
0.25	CUSTOMER (C*WEIGHT)	0.2187		0.0028	0.0003	0.0033	0.0006	0.0207	0.0000	0.000154	0.0034	0.2500
D&C	D&C OVERALL	0.5481		0.0080	0.0137	0.1403	0.2001	0.0784	0.0037	0.0032	0.0044	1.0000
<u>DEMAND & ENERGY:</u>												
0.5	DEMAND (AED*WEIGHT)	0.1823		0.0029	0.0105	0.1068	0.1556	0.0364	0.0028	0.0021	0.0006	0.5000
0.5	ENERGY (E*WEIGHT)	0.1839		0.0028	0.0103	0.1070	0.1553	0.0356	0.0027	0.0019	0.0006	0.5000
D&E	D&E OVERALL	0.3662		0.0057	0.0208	0.2138	0.3109	0.0720	0.0055	0.0039	0.0012	1.0000
<u>STREET LIGHTS:</u>												
LA	CUSTOMER-LIGHT AREA	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	1.0000
LS	CUSTOMER-LIGHT STREET	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000
<u>PURCHASED POWER FACTOR:</u>												
VAR	SEE ABOVE DEMAND FACTORS	0.4507		0.0072	0.0191	0.1946	0.2518	0.0661	0.0051	0.0041	0.0013	1.0000
PS	PASNY..PER KWH BASIS	0.9843		0.0157	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000







FY15 Proforma Test Year Cost of Service Study
COST OF ELECTRIC PLANT 6-30-13

ACNT	DESCRIPTION	Allocation Factor	FY2013 Test Year Total	Residential A	Residential Time-of-Use A-2	School SCH	Commercial C	Industrial I	Small Commercial SC	Coop COOP	Lighting	
											Municipal Street	Private Area Lights
350	LAND AND LAND RIGHTS	AED	0									
351	CLEARING LAND AND RIGHTS/WAY	AED	25,015									
352	STRUCTURES AND IMPROVEMENTS	AED	765,613									
353	STATION EQUIP	AED	4,257,806									
354	TOWERS AND FIXTURES	AED	0									
355	POLES AND FIXTURES	AED	0									
356	OVERHEAD CONDUCTOR AND DEVICES	AED	20,923									
357	UNDERGROUND CONDUIT	AED	9,056									
358	UNDERGRD CONDUCTOR AND DEVICES	AED	3,475									
359	ROADS AND TRAILS	AED	0									
	TOTAL TRANSMISSION PLANT		5,081,890	1,852,463	29,516	106,570	1,085,607	1,581,016	370,405	28,670	21,089	6,553

FY15 Proforma Test Year Cost of Service Study
COST OF ELECTRIC PLANT 6-30-13

ACNT	DESCRIPTION	Allocation Factor	FY2013 Test Year Total	Residential		Residential Time-of-Use A-2	School SCH	Commercial C	Industrial I	Small Commercial		Coop COOP	Lighting	
				A						SC			Municipal Street	Private Area Lights
360	LAND AND LAND RIGHTS	NCP	843,454											
362	STATION EQUIP	NCP	5,321,547											
363	STORAGE BATTERY EQUIP	NCP	16,281											
361	STRUCTURES AND IMPROVEMENTS	D&C	6,181,283	2,714,878		43,258	110,839	1,129,097	1,644,353	475,660		29,818	25,466	7,913
364	POLES, TOWERS AND FIXTURES	D&C	3,036,175											
365	OVERHEAD CONDUCTOR AND DEVICES	D&C	16,424,832											
366	UNDERGROUND CONDUIT	D&C	14,500,151											
367	UNDERGRD CONDUCTOR AND DEVICES	D&C	3,534,637											
368	LINE TRANSFORMERS	D&C	4,395,290											
			4,840,478											
369	SERVICES		46,731,562	25,615,640		373,880	640,854	6,557,490	9,350,052	3,665,567		171,071	151,586	205,421
370	METERS	CWT	2,168,550	1,362,528		18,969	23,241	239,091	332,212	172,947		6,146	575	12,841
371	INSTALLATNS ON CUST PREMISES	CWM	3,409,205	1,505,485		23,988	61,464	626,120	911,845	263,768		16,535	0	0
372	LEASED PROP ON CUST PREMISES	DA	0	0		0	0	0	0	0		0	0	0
373	STREET LIGHT AND SIGNAL SYSTEM	LA	0	0		0	0	0	0	0		0	0	0
		LS	790,969	0		0	0	0	0	0		0	790,969	0
			6,368,724	2,868,013		42,957	84,705	865,211	1,244,057	436,715		22,681	791,544	12,841
			59,281,569	31,198,531		460,095	836,398	8,551,799	12,238,462	4,577,942		223,571	968,596	226,175
	TOTAL DISTRIBUTION PLANT PER UNIT	=D	1.0000	0.5263		0.0078	0.0141	0.1443	0.2064	0.0772		0.0038	0.0163	0.0038
	COMPONENTS:													
	DEMAND		41,229,954	18,108,588		288,535	739,312	7,531,226	10,968,046	3,172,711		198,893	169,863	52,780
		=DD	0.6955	0.3055		0.0049	0.0125	0.1270	0.1850	0.0535		0.0034	0.0029	0.0009
	CUSTOMER		18,051,615	13,089,943		171,560	97,086	1,020,573	1,270,416	1,405,231		24,678	798,733	173,394
		=DC	0.3045	0.2208		0.0029	0.0016	0.0172	0.0214	0.0237		0.0004	0.0135	0.0029
	TOTAL BEFORE GENERAL PLANT PER UNIT	=PTD	64,363,458	33,050,995		489,611	942,968	9,637,406	13,819,478	4,948,346		252,241	989,685	232,728
			1.0000	0.5135		0.0076	0.0147	0.1497	0.2147	0.0769		0.0039	0.0154	0.0036
	COMPONENTS:													
	DEMAND		46,311,844	19,961,052		318,051	845,882	8,616,833	12,549,062	3,543,116		227,563	190,952	59,333
		=PDTD	0.7195	0.3101		0.0049	0.0131	0.1339	0.1950	0.0550		0.0035	0.0030	0.0009
	CUSTOMER		18,051,615	13,089,943		171,560	97,086	1,020,573	1,270,416	1,405,231		24,678	798,733	173,394
		=PTDC	0.2805	0.2034		0.0027	0.0015	0.0159	0.0197	0.0218		0.0004	0.0124	0.0027

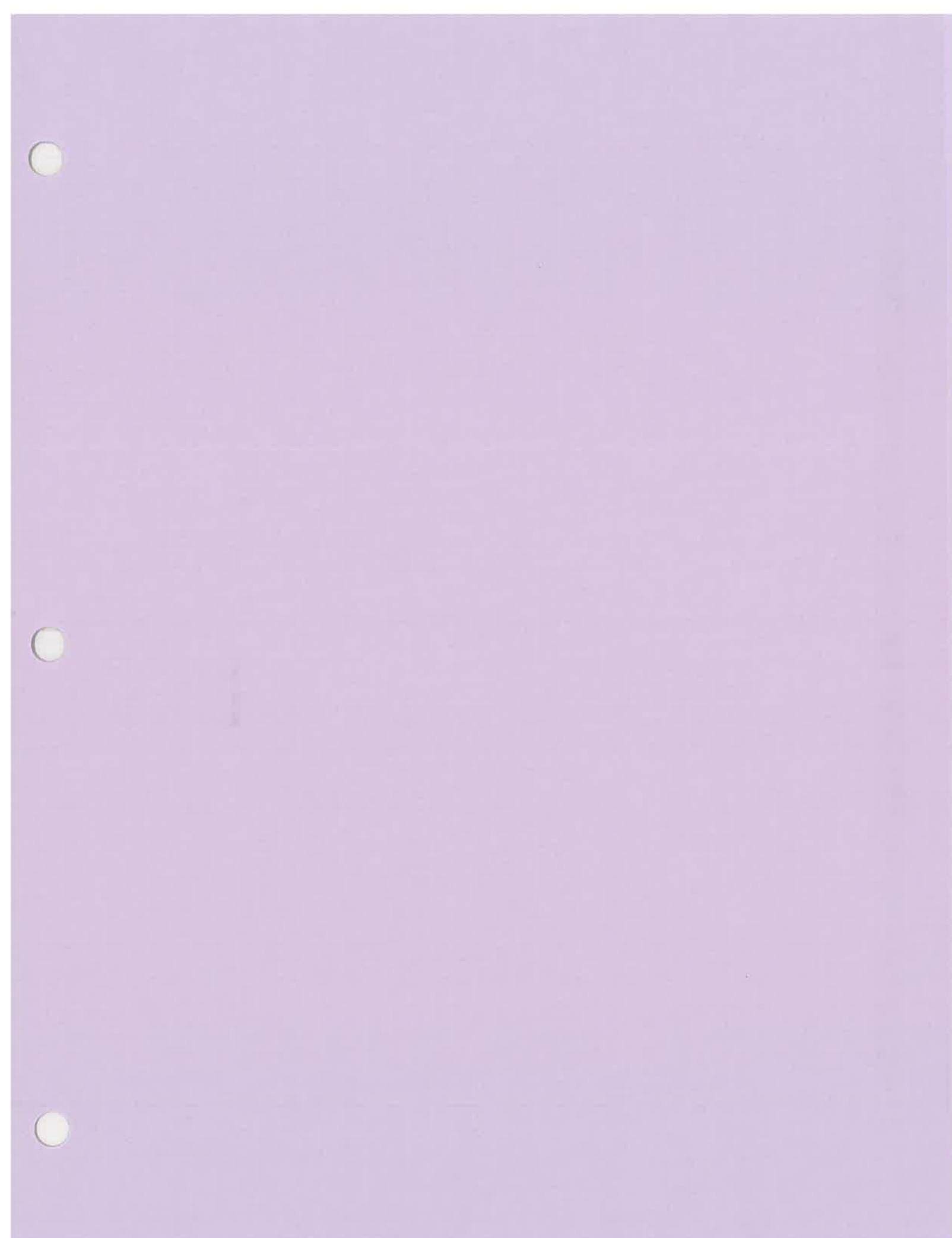
FY15 Proforma Test Year Cost of Service Study

COST OF ELECTRIC PLANT 6-30-13

ACNT	DESCRIPTION	Allocation Factor	FY2013 Test Year Total	Residential A	Residential Time-of-Use A-2	School SCH	Commercial C	Industrial I	Small Commercial SC	Coop COOP	Lighting	
											Municipal Street	Private Area Lights
389	LAND AND LAND RIGHTS	PTD	397,372									
390	STRUCTURES AND IMPROVEMENTS	PTD	2,628,819									
391	OFFICE FURNITURE AND EQUIP	PTD	349,281									
392	TRANSPORTATION EQUIP	PTD	1,075,372									
393	STORES EQUIP	PTD	20,114									
394	TOOLS, SHOP AND GARAGE EQUIP	PTD	6,641									
395	LABORATORY EQUIP	PTD	159,975									
396	POWER OPERATED EQUIP	PTD	0									
397	COMMUNICATION EQUIP	PTD	1,174,712									
398	MISC EQUIP	PTD	18,703									
399	OTHER TANGIBLE PROPERTY	PTD	0									
	TOTAL GENERAL PLANT		5,830,989	2,994,245	44,356	85,428	873,098	1,251,972	448,294	22,852	89,660	21,084

FY15 Proforma Test Year Cost of Service Study
COST OF ELECTRIC PLANT 6-30-13

ACNT	DESCRIPTION	Allocation Factor	FY2013 Test Year Total	Residential		Residential Time-of-Use A-2	School SCH	Commercial		Industrial I	Small Commercial		Coop COOP	Lighting	
				A				C			SC			Municipal Street	Private Area Lights
	TOTAL GROSS PLANT, INCL UNCLASFD		70,194,448	36,045,240		533,968	1,028,396	10,510,504		15,071,450	5,396,640		275,092	1,079,346	253,812
	PER UNIT		1.0000	0.5135		0.0076	0.0147	0.1497		0.2147	0.0769		0.0039	0.0154	0.0036
	DEMAND		50,507,452	21,769,417		346,865	922,515	9,397,472		13,685,941	3,864,103		248,179	208,251	64,709
			0.7195	0.3101		0.0049	0.0131	0.1339		0.1950	0.0550		0.0035	0.0030	0.0009
	CUSTOMER		19,686,996	14,275,823		187,102	105,882	1,113,032		1,385,509	1,532,537		26,914	871,094	189,103
	PER UNIT		0.2805	0.2034		0.0027	0.0015	0.0159		0.0197	0.0218		0.0004	0.012410	0.0027
	LESS ACCOUNTS NOT DEPRECIABLE:														
	FULLY DEPRECIATED 1 (-)	AED	0	0		0	0	0		0	0		0	0	0
	FULLY DEPRECIATED 2 (-)	D&C	0	0		0	0	0		0	0		0	0	0
	SUBTOTAL		0	0		0	0	0		0	0		0	0	0
	TOTAL RATE BASE		70,194,448	36,045,240		533,968	1,028,396	10,510,504		15,071,450	5,396,640		275,092	1,079,346	253,812
	PER UNIT	=PLNT	1.0000	0.5135		0.0076	0.0147	0.1497		0.2147	0.0769		0.0039	0.0154	0.0036
	COMPONENTS:														
	DEMAND		50,507,452	21,769,417		346,865	922,515	9,397,472		13,685,941	3,864,103		248,179	208,251	64,709
			0.7195	0.3101		0.0049	0.0131	0.1339		0.1950	0.0550		0.0035	0.0030	0.0009
	CUSTOMER		19,686,996	14,275,823		187,102	105,882	1,113,032		1,385,509	1,532,537		26,914	871,094	189,103
	PER UNIT	=PLNTC	0.2805	0.2034		0.0027	0.0015	0.0159		0.0197	0.0218		0.0004	0.012410	0.0027





FY15 Proforma Test Year Cost of Service Study **ELECTRIC OPERATING AND MAINTENANCE EXPENSES**

ACNT	DESCRIPTION	Allocation Factor	FY15 Test Year Total	Residential		Residential Time-of-Use A-2	School SCH	Commercial C	Industrial I	Small Commercial SC	Coop COOP	Lighting	
				A								Municipal Street	Private Area Lights
E. OTHER POWER SUPPLY EXPENSES													
555	PURCHASED POWER (1)	E	36,952,025										
	ENERGY	E	0										
	NET INTERCHANGE (1)	E	36,952,025										
	GROSS PURCHASED ENERGY												
	LESS SALES FOR RESALE (-)	E	0										
	NET PURCHASED ENERGY		36,952,025	13,592,608	208,958	760,339	7,904,490	11,478,476	2,627,454	200,006	137,094	42,598	
	PASNY SAVINGS		-702,372	-691,356	-11,016	0	0	0	0	0	0	0	
	CAPACITY (1)	VAR	16,332,287										
	LESS CAP SALES FOR RESALE (-)	VAR	0										
	NET PURCHASED CAPACITY	VAR	16,332,287	7,360,557	117,280	312,000	3,178,278	4,112,171	1,080,131	83,935	67,088	20,846	
		VAR	0	0	0	0	0	0	0	0	0	0	
555C	OTHER:HYDRO Q-Ph2	VAR	52,581,940	20,261,808	315,222	1,072,339	11,082,769	15,590,648	3,707,585	283,942	204,182	63,444	
	555 TOTAL												
556	SYS CONTROL AND LOAD DISPT'G	AED	0	0	0	0	0	0	0	0	0	0	
557	OTHER EXPENSES		52,581,940	20,261,808	315,222	1,072,339	11,082,769	15,590,648	3,707,585	283,942	204,182	63,444	
	SUBTOTAL												
	TOTAL PRODUCTION		52,581,940	20,261,808	315,222	1,072,339	11,082,769	15,590,648	3,707,585	283,942	204,182	63,444	
PRODUCTION COMPONENTS:													
	DEMAND		16,332,287	7,360,557	117,280	312,000	3,178,278	4,112,171	1,080,131	83,935	67,088	20,846	
	ENERGY		0	0	0	0	0	0	0	0	0	0	
	PP&FA-FUEL		36,952,025	13,592,608	208,958	760,339	7,904,490	11,478,476	2,627,454	200,006	137,094	42,598	
	PASNY SAVINGS		-702,372	-691,356	-11,016	0	0	0	0	0	0	0	
	SUBTOTAL		52,581,940										

FY15 Proforma Test Year Cost of Service Study

ELECTRIC OPERATING AND MAINTENANCE EXPENSES

ACNT	DESCRIPTION	Allocation Factor	FY15 Test Year Total	Residential A	Residential Time-of-Use A-2	School SCH	Commercial C	Industrial I	Small Commercial SC	COOP	Lighting	
											Municipal Street	Private Area Lights
	OPERATION:											
	560 OPER, SUPERVN AND ENGINEER'G	AED	0									
	561 LOAD DISPATCHING	AED	0									
	562 STATION EXPENSES	AED	0									
	563 OVERHEAD LINE EXPENSES	AED	0									
	564 UNDERGROUND LINE EXPENSES	AED	0									
	566 MISC TRANS EXPENSE	AED	0									
	567 RENTS	AED	0									
	SUBTOTAL		0	0	0	0	0	0	0	0	0	0
	565 TRANS OF ELECTV BY OTHERS	VAR	12,556,727	5,659,006	90,168	239,874	2,443,551	3,161,554	830,435	64,532	51,579	16,027
	TOTAL		12,556,727	5,659,006	90,168	239,874	2,443,551	3,161,554	830,435	64,532	51,579	16,027
	MAINTENANCE:											
	568 MAINT, SUPERVN AND ENGINEER'G	AED	3,000									
	569 MAINT OF STRUCTURES	AED	0									
	570 MAINT OF STATION EQUIP	AED	0									
	571 MAINT OF OVERHEAD LINES	AED	0									
	572 MAINT OF UNDERGROUND LINES	AED	0									
	573 MAINT OF MISC TRANS PLANT	AED	0									
	SUBTOTAL		3,000	1,094	17	63	641	933	219	17	12	4
	TOTAL		12,559,727	5,660,099	90,186	239,937	2,444,192	3,162,488	830,654	64,549	51,592	16,031
	COMPONENTS:											
	DEMAND	#####	12,559,727	5,660,099	90,186	239,937	2,444,192	3,162,488	830,654	64,549	51,592	16,031
	TOTAL PRODUCTION & TRANSM EXP		65,141,667									

FY15 Proforma Test Year Cost of Service Study **ELECTRIC OPERATING AND MAINTENANCE EXPENSES**

ACNT	DESCRIPTION	Allocation Factor	FY15 Test Year Total	Residential		Residential Time-of-Use A-2	School SCH	Commercial C	Industrial I	Small Commercial SC	Coop COOP	Lighting	
				A								Municipal Street	Private Area Lights
3. DISTRIBUTION EXPENSES													
OPERATION:													
580	OPER, SUPERVN AND ENGINEER'G	D&C	583,668	319,934	4,670	8,004	81,902	116,780	45,782	2,137	1,893	2,566	
581	OPERATION LABOR	NCP	750,286	329,533	5,251	13,454	137,050	199,592	57,736	3,619	3,091	960	
582	STATION EXPENSES	NCP	398,849	175,178	2,791	7,152	72,855	106,102	30,692	1,924	1,643	511	
583	OVERHEAD LINE EXPENSES	D&C	0	0	0	0	0	0	0	0	0	0	
584	UNDERGROUND LINE EXPENSES	D&C	0	0	0	0	0	0	0	0	0	0	
585	STREET LIGHT'G AND SIG SYS EXP	LS	82,907	0	0	0	0	0	0	0	82,907	0	
586	METER EXPENSES	CWM	247,938	109,488	1,745	4,470	45,535	66,315	19,183	1,203	0	0	
587	CUSTOMER INSTALLATION EXPENSES	CT	0	0	0	0	0	0	0	0	0	0	
588	MISC DISTRIBUTION EXPENSES	D	402,885	212,029	3,127	5,684	58,119	83,174	31,112	1,519	6,583	1,537	
589	RENTS	D	0	0	0	0	0	0	0	0	0	0	
	SUBTOTAL		2,466,533	1,146,162	17,583	38,764	395,462	571,964	184,505	10,402	96,117	5,574	
MAINTENANCE:													
590	MAINT, SUPERVN AND ENGINEER'G	D&C	484,026	265,316	3,872	6,638	67,920	96,844	37,966	1,772	1,570	2,128	
591	MAINT OF STRUCTURES	D&C	0	0	0	0	0	0	0	0	0	0	
592	MAINT OF STATION EQUIP	NCP	0	0	0	0	0	0	0	0	0	0	
593	MAINT OF OVERHEAD LINES	D&C	1,792,794	982,710	14,343	24,586	251,569	358,702	140,625	6,563	5,815	7,881	
594	MAINT OF UNDERGROUND LINES	D&C	130,694	71,639	1,046	1,792	18,339	26,149	10,251	478	424	575	
595	MAINT OF LINE TRANSFORMERS	D&C	156,000	85,511	1,248	2,139	21,890	31,212	12,236	571	506	686	
596	MAINT OF ST LGHT'G AND SIG SYS	LS	9,745	0	0	0	0	0	0	0	9,745	0	
597	MAINT OF METERS	CWM	43,290	19,117	305	780	7,950	11,579	3,349	210	0	0	
598	MAINT OF MISC DISTRIB'N PLANT	DA	0	0	0	0	0	0	0	0	0	0	
	SUBTOTAL		2,616,549	1,424,292	20,814	35,935	367,669	524,487	204,428	9,594	18,060	11,269	
	TOTAL		5,083,082	2,570,455	38,397	74,699	763,131	1,096,450	388,933	19,996	114,178	16,842	
COMPONENTS:													
	DEMAND		3,789,725	1,664,483	26,521	67,955	692,246	1,008,148	291,625	18,282	15,613	4,851	
	CUSTOMER		1,293,357	905,971	11,876	6,744	70,885	88,303	97,308	1,715	98,564	11,991	
	TOTAL		5,083,082										

FY15 Proforma Test Year Cost of Service Study **ELECTRIC OPERATING AND MAINTENANCE EXPENSES**

ACNT	DESCRIPTION	Allocation Factor	FY15 Test Year Total	Residential A	Residential Time-of-Use A-2	School SCH	Commercial C	Industrial I	Small Commercial SC	Coop COOP	Lighting	
											Municipal Street	Private Area Lights

4. CUSTOMER ACCOUNTS EXPENSES

OPERATION:												
901 SUPERVISION	CTM	0	0	0	0	0	0	0	0	0	0	0
902 METER READING EXPENSES	CTM	30,922	27,449	345	417	33	417	71	2,601	5	0	0
903 CUSTR RECORDS & COLLECTN EXP	CTM	1,705,333	1,513,814	19,045	23,008	1,834	23,008	3,904	143,432	296	0	0
904 UNCOLLECTIBLE ACCOUNTS	CTM	120,000	106,523	1,340	1,619	129	1,619	275	10,093	21	0	0
906 CUSTOMER SERVICE & INFORMATION	CTM	0	0	0	0	0	0	0	0	0	0	0
908 CONSUMER EDUCATION	CTM	0	0	0	0	0	0	0	0	0	0	0
909 INFO & INSTRUCTIONAL SERVICES	CTM	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL		1,856,255	1,647,787	20,731	25,045	1,996	25,045	4,249	156,126	322	0	0
PER UNIT	=CA	1.0000	0.8877	0.0112	0.0135	0.0011	0.0135	0.0023	0.0841	0.0002	0.0000	0.0000
910 MISC CUSTR ACCOUNTS EXPENSES	CA	0	0	0	0	0	0	0	0	0	0	0
TOTAL		1,856,255	1,647,787	20,731	25,045	1,996	25,045	4,249	156,126	322	0	0
COMPONENTS:												
CUSTOMER		1,856,255	1,647,787	20,731	25,045	1,996	25,045	4,249	156,126	322	0	0

5. SALES EXPENSES

OPERATION:												
909 ENERGY CONSERVATION	CT	1,267,096	1,108,644	13,948	16,850	1,343	16,850	2,859	105,043	217	780	17,413
911 SUPERVISION	CT	0	0	0	0	0	0	0	0	0	0	0
912 DEMONSTRATING AND SELLING EXP	CT	0	0	0	0	0	0	0	0	0	0	0
913 ADVERTISING EXPENSES	CT	0	0	0	0	0	0	0	0	0	0	0
916 MISC SALES EXPENSES	CT	0	0	0	0	0	0	0	0	0	0	0
TOTAL		1,267,096	1,108,644	13,948	16,850	1,343	16,850	2,859	105,043	217	780	17,413
COMPONENTS:												
DEMAND		0	0	0	0	0	0	0	0	0	0	0
CUSTOMER		1,267,096	1,108,644	13,948	16,850	1,343	16,850	2,859	105,043	217	780	17,413
TOTAL O&M (EXCLUDING PP)												
PER UNIT	=O&M	20,766,160	10,986,985	163,262	3,249,217	317,975	3,249,217	4,266,046	1,480,756	85,084	166,549	50,286
DEMAND		1,0000	0.5291	0.0079	0.1565	0.0153	0.1565	0.2054	0.0713	0.0041	0.0080	0.0024
PER UNIT	=O&MD	16,349,452	7,324,583	116,707	3,136,438	307,892	3,136,438	4,170,635	1,122,279	82,830	67,205	20,882
CUSTOMER		0.7873	0.3527	0.0056	0.1510	0.0148	0.1510	0.2008	0.0540	0.0040	0.0032	0.0010
PER UNIT	=O&MC	4,416,708	3,662,402	46,555	112,779	10,083	112,779	95,411	358,476	2,253	99,344	29,404
ENERGY		0.2127	0.1764	0.0022	0.0054	0.0005	0.0054	0.0046	0.0173	0.0001	0.0048	0.0014
PER UNIT	=O&MF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

FY15 Proforma Test Year Cost of Service Study
ELECTRIC OPERATING AND MAINTENANCE EXPENSES

ACNT	DESCRIPTION	Allocation Factor	FY15 Test Year Total	Residential A	Residential Time-of-Use A-2	School SCH	Commercial C	Industrial I	Small Commercial SC	Coop COOP	Municipal Street	Private Area Lights
6. ADMIN & GENERAL EXPENSES												
OPERATION:												
920	ADMIN & GENERAL SALARIES	O&M	842,170									
921	OFFICE SUPPLIES AND EXPENSES	O&M	301,000									
922	ADMIN EXPENSES TRANSFERRED	O&M	0									
923	OUTSIDE SERVICES EMPLOYED	O&M	351,650									
925	INJURIES & DAMAGE	O&M	49,059									
926	EMPLOYEE PENSIONS & BENEFITS	O&M	2,746,619									
928	REGULATORY COMMISSION EXPENSES	O&M	0									
934	Inventory Adjustment	O&M	0									
930	MISC GENERAL EXPENSES	O&M	240,772									
931	RENTS	O&M	212,000									
	SUBTOTAL		4,743,270	2,509,575	37,291	72,630	742,165	974,422	338,224	19,434	38,042	11,486
			453,200	233,145	3,451	6,621	67,671	97,014	34,842	1,771	7,033	1,652
924	PROPERTY INSURANCE	DPLNT	5,196,470	2,742,720	40,742	79,251	809,836	1,071,436	373,067	21,205	45,075	13,138
	SUBTOTAL											
MAINTENANCE:												
932	MAINTENANCE OF GENERAL PLANT	O&M	737,711									
933	TRANSPORTATION EXPENSE	O&M	0									
	SUBTOTAL		737,711	390,309	5,800	11,296	115,427	151,550	52,603	3,023	5,917	1,786
	TOTAL		5,934,181	3,133,029	46,542	90,547	925,264	1,222,986	425,670	24,228	50,992	14,925
COMPONENTS:												
	DEMAND		4,557,076	2,073,050	36,732	87,193	888,220	1,102,385	321,035	23,457	19,076	5,927
	CUSTOMER		1,285,032	1,059,978	12,980	3,353	37,043	25,358	104,635	771	31,916	8,997
	ENERGY		0	0	0	0	0	0	0	0	0	0
	TOTAL		5,842,108									
	TOTAL OPER & MAINT EXPENSES		79,282,281	34,381,822	525,026	1,480,861	15,257,249	21,079,680	5,614,011	393,253	421,723	128,655
COMPONENTS:												
	DEMAND (INCLUDES 500-557)		37,238,816	16,758,190	270,719	707,085	7,202,936	9,385,191	2,523,445	190,223	153,369	47,655
	CUSTOMER		5,701,740	4,722,381	59,535	13,436	149,823	120,769	463,111	3,024	131,260	38,402
	ENERGY		0	0	0	0	0	0	0	0	0	0
	PP&FA-FUEL		36,952,025	13,592,608	208,958	760,339	7,904,490	11,478,476	2,627,454	200,006	137,094	42,598
	PASNY SAVINGS		-702,372	-691,356	-11,016	0	0	0	0	0	0	0
	TOTAL		79,190,208	34,381,822	528,196	1,480,861	15,257,249	20,984,437	5,614,011	393,253	421,723	128,655

FY15 Proforma Test Year Cost of Service Study

ELECTRIC OPERATING AND MAINTENANCE EXPENSES

ACNT	DESCRIPTION	Allocation Factor	FY15 Test Year Total	Residential		School SCH	Commercial C	Industrial I	Small Commercial SC	Coop COOP	Lighting		
				A	A-2						Municipal Street	Private Area Lights	
OTHER EXPENSES													
403	DEPRECIATION - PRODUCTION	DPLNT	0										
	- NON PRODUCTION	DPLNT	3,892,000										
404	AMORT OF LTD TERM ELECT PLNT	DPLNT	0										
	SUBTOTAL		3,892,000	2,002,207	29,636	56,860	581,150	833,135	299,219	15,208	60,397	14,187	
426	OTHER INCOME DEDUCTIONS	PLNT	0	0	0	0	0	0	0	0	0	0	
INTEREST CHARGES:													
427	INT ON BONDS & NOTES - PROD *	PLNT	0										
	- NONPROD	PLNT	0										
428	AMORT OF DEBT DISC & EXPENSE *	PLNT	0										
429	AMORT OF PREMIUM ON DEBT *	PLNT	0										
432	INTEREST CHARGED TO CONTRS	PLNT	0										
	SUBTOTAL		0	0	0	0	0	0	0	0	0	0	0
431	OTHER INTEREST EXPENSE	O&M	0	0	0	0	0	0	0	0	0	0	0
	SUBTOTAL		0	0	0	0	0	0	0	0	0	0	0
MISC SURPLUS ADJUSTMENT:													
434	MISC CREDITS TO SURPLUS	PLNT	0										
435	MISC DEBITS TO SURPLUS	PLNT	0										
436	APPROPRIATIONS OF SURPLUS	PLNT	1,416,000										
	DEBT PRINCIPAL - PRODUCTION	PLNT	0										
	- NON PRODUCTN	PLNT	0										
437	SURPLUS APPL'D TO DEPRECIATION	PLNT											
	SUBTOTAL		1,416,000	727,124	10,771	20,745	212,024	304,029	108,864	5,549	21,773	5,120	
	TOTAL		5,308,000	2,729,331	40,408	77,605	793,174	1,137,165	408,082	20,758	82,171	19,307	
* PRODUCTION RELATED - OTHER EXPENSES:													
COMPONENTS:													
	DEMAND		0	0	0	0	0	0	0	0	0	0	0
	CUSTOMER/ENERGY		0	0	0	0	0	0	0	0	0	0	0
	TOTAL		0	0	0	0	0	0	0	0	0	0	0
DISTRIBUTION RELATED - OTHER EXPENSES:													
COMPONENTS:													
	DEMAND		5,308,000	2,729,331	40,408	77,605	793,174	1,137,165	408,082	20,758	82,171	19,307	
	CUSTOMER/ENERGY		5,308,000										
	TOTAL		84,590,281	37,111,153	565,434	1,558,466	16,050,423	22,216,844	6,022,093	414,011	503,894	147,963	
TOTAL ANNUAL EXPENSES													
COMPONENTS:													
	DEMAND (INCLUDES 500-557)		41,044,361	18,398,032	296,848	776,610	7,911,167	10,416,618	2,814,569	208,927	169,060	52,531	
	CUSTOMER/ENERGY		7,204,194	5,811,870	73,814	21,517	234,766	226,507	580,070	5,078	197,739	52,833	
	ENERGY		0	0	0	0	0	0	0	0	0	0	0
	PP&A-FUEL		36,952,025	13,592,608	208,958	760,339	7,904,490	11,478,476	2,627,454	200,006	137,094	42,598	
	PASNY SAVINGS		-702,372	-691,356	-11,016	0	0	0	0	0	0	0	
	TOTAL		84,498,208	37,111,153	568,604	1,558,466	16,050,423	22,121,602	6,022,093	414,011	503,894	147,963	