

**READING MUNICIPAL
LIGHT DEPARTMENT**

**BOARD
OF
COMMISSIONERS**

REGULAR SESSION

MARCH 23, 2017

**POWER SUPPLY REPORT
JANUARY 2017
ATTACHMENT 1**

Integrated Resources

March 23, 2017

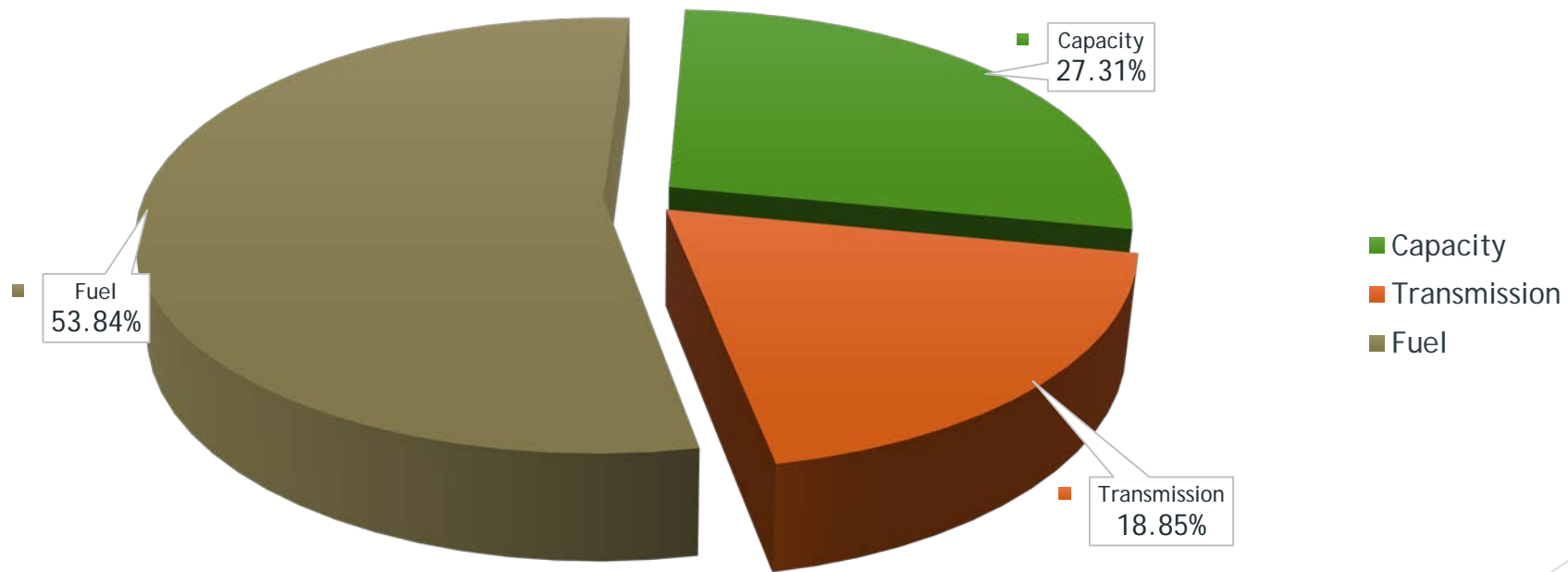
RMLD Board of Commissioners Meeting

Reporting for January

Jane Parenteau
Director of Integrated Resources

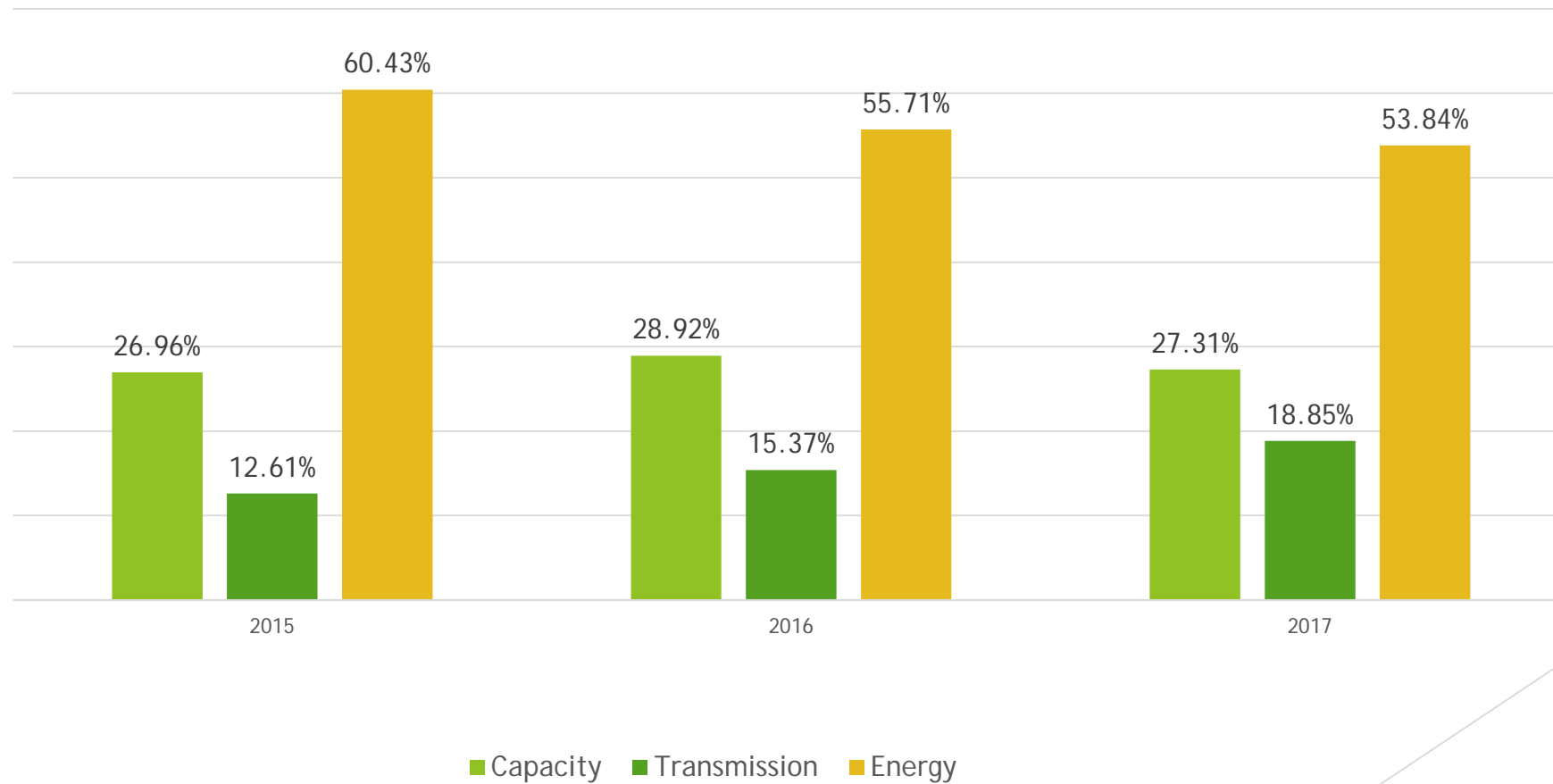
Purchase Power Allocated Costs

January 2017



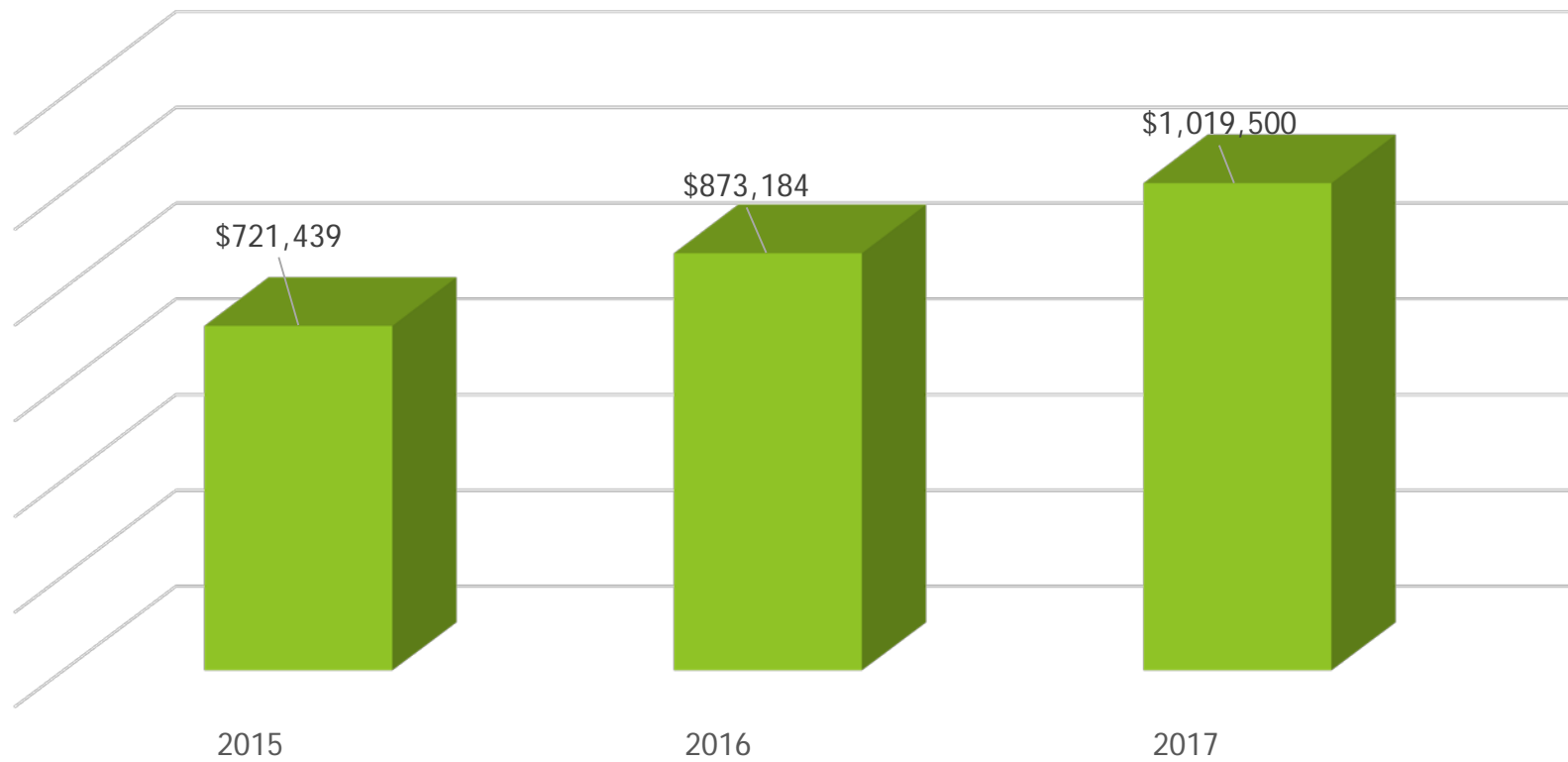
Purchase Power Allocations

January 2015-2017



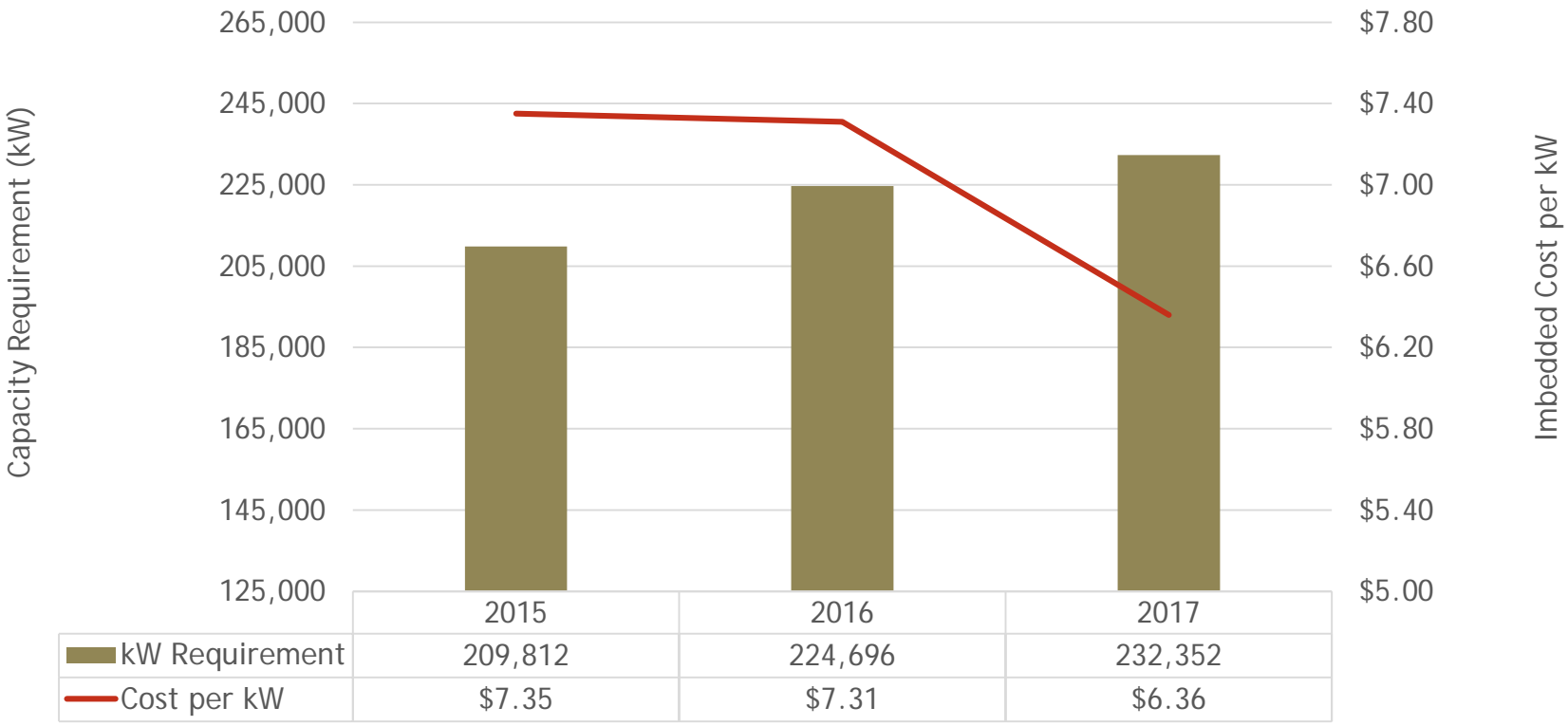
Transmission Costs

January 2015-2017



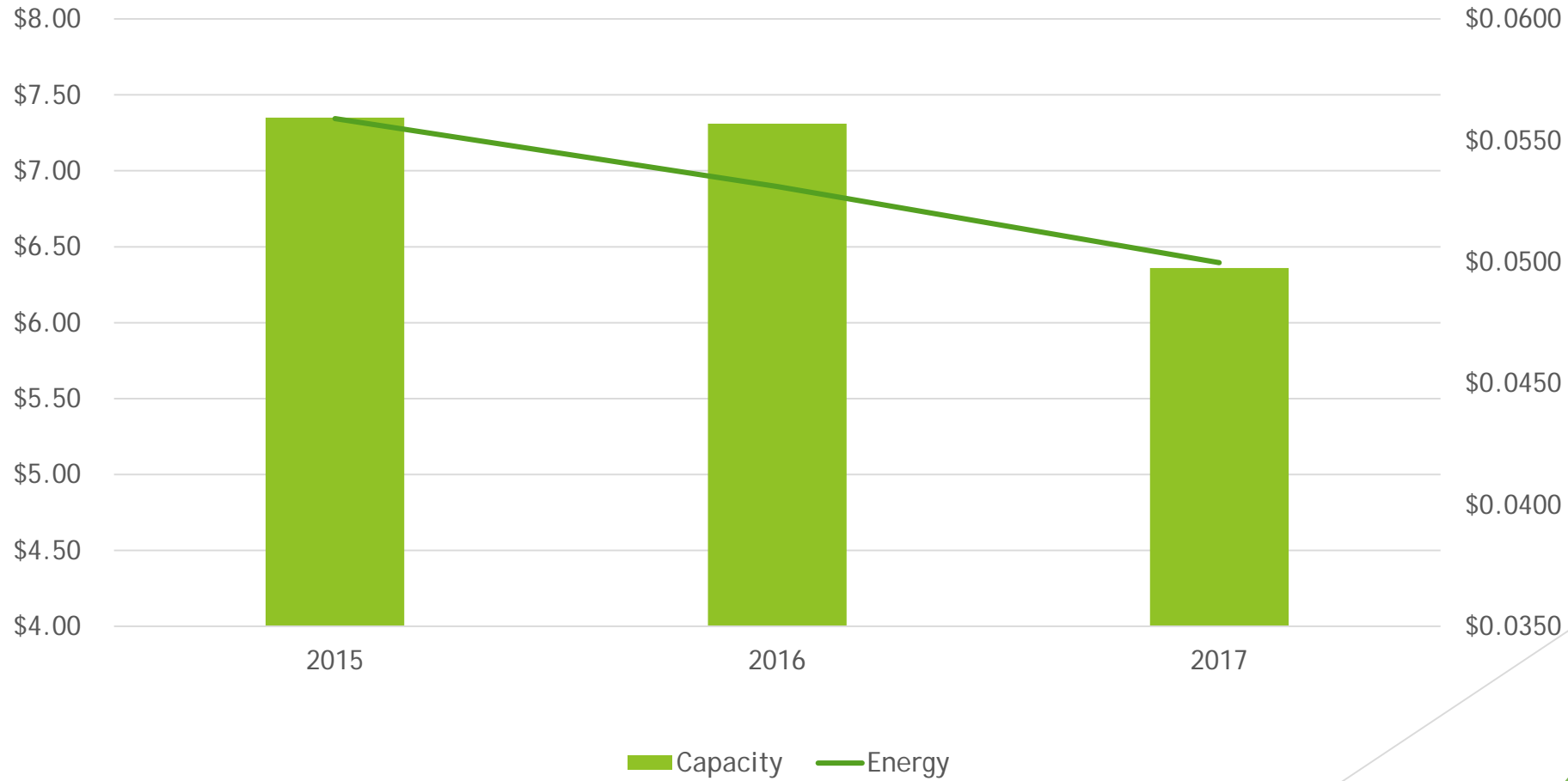
Capacity Requirement vs Imbedded Capacity Cost

January 2015-2017



Imbedded Fuel & Capacity Costs

January 2015-2017



To: Coleen O'Brien

From: Maureen McHugh, Jane Parenteau

WPS for Jane Parenteau

Date: March 9, 2017

Subject: Purchase Power Summary – January, 2017

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of January, 2017.

ENERGY

The RMLD's total metered load for the month was 57,580,442 kWh, which is a 2.59% decrease from the January, 2016 figures.

Table 1 is a breakdown by source of the energy purchases.

Table 1					
Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy	Total \$ Costs	\$ as a %
Millstone #3	3,703,589	\$6.72	6.36%	\$24,894	0.86%
Seabrook	5,908,402	\$6.32	10.14%	\$37,341	1.28%
Stonybrook Intermediate	0	\$0.00	0.00%	\$0	0.00%
Shell Energy	8,772,600	\$59.53	15.06%	\$522,247	17.94%
EDF	4,675,200	\$57.16	8.02%	\$267,225	9.18%
NYPA	2,353,452	\$4.92	4.04%	\$11,579	0.40%
ISO Interchange	9,774,137	\$52.88	16.77%	\$516,871	17.75%
NEMA Congestion	0	\$0.00	0.00%	-\$192,620	-6.62%
Coop Resales	6,888	\$165.09	0.01%	\$1,137	0.04%
BP Energy	9,460,200	\$46.78	16.24%	\$442,548	15.20%
Hydro Projects*	4,617,134	\$83.77	7.92%	\$386,766	13.28%
Braintree Watson Unit	622,800	\$113.86	1.07%	\$70,913	2.44%
Saddleback/Jericho Wind	2,424,030	\$100.19	4.16%	\$242,856	8.34%
One Burlington Solar	122,231	\$70.00	0.21%	\$8,556	0.29%
Exelon	5,791,200	\$97.04	9.94%	\$561,971	19.30%
Stonybrook Peaking	38,252	\$242.04	0.07%	\$9,258	0.32%
Monthly Total	58,270,115	\$49.97	100.00%	\$2,911,543	100.00%

*Pepperell, Woronoco, Indian River, Turner Falls, Collins, Pioneer, Hosiery Mills, Summit Hydro

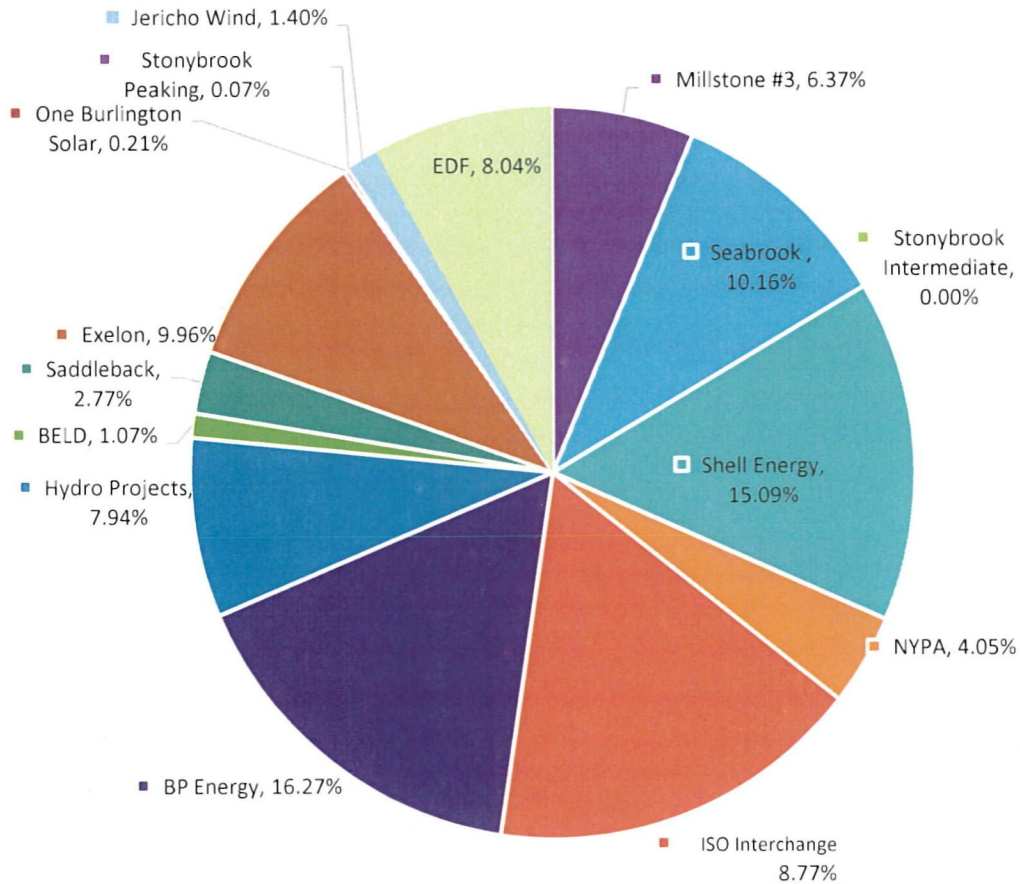
Table 2 breaks down the ISO interchange between the DA LMP Settlement and the RT Net Energy for the month of January, 2017.

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP * Settlement	17,101,952	\$44.47	29.35%
RT Net Energy ** Settlement	(7,327,815)	\$33.13	-12.58%
ISO Interchange (subtotal)	9,774,137	\$52.88	16.77%

* Independent System Operator Day-Ahead Locational Marginal Price

** Real Time Net Energy

JANUARY 2017 ENERGY BY RESOURCE



CAPACITY

The RMLD hit a demand of 105,335 kW, which occurred on January 9, at 7 pm. The RMLD's monthly UCAP requirement for January, 2017 was 232,352 kW.

Table 3 shows the sources of capacity that the RMLD utilized to meet its requirements.

Table 3

Source	Amount (kWs)	Cost (\$/kW-month)	Total Cost \$	% of Total Cost
Millstone #3	4,950	28.03	\$138,728	9.44%
Seabrook	7,909	22.69	\$179,450	12.22%
Stonybrook Peaking	24,981	1.74	\$43,508	2.96%
Stonybrook CC	42,925	3.33	\$142,825	9.72%
NYPA	0	0.00	\$7,252	0.49%
Hydro Quebec	0	0	\$1,790	0.12%
Nextera	60,000	6.15	\$369,000	25.12%
Braintree Watson Unit	0	0.00	\$81,700	5.56%
ISO-NE Supply Auction	91,587	5.51	\$504,623	34.35%
Total	232,352	\$6.36	\$1,468,876	100.00%

Table 4 shows the dollar amounts for energy and capacity per source.

Table 4

Resource	Energy	Capacity	Total cost	% of Total Cost	Amt of Energy (kWh)	Cost of Power (\$/kWh)
Millstone #3	\$24,894	\$138,728	\$163,622	3.73%	3,703,589	0.0442
Seabrook	\$37,341	\$179,450	\$216,791	4.94%	5,908,402	0.0367
Stonybrook Intermediate	\$0	\$142,825	\$142,825	3.25%	-	0.0000
Hydro Quebec	\$0	\$1,790	\$1,790	0.04%	-	0.0000
EDF	\$267,225	\$0	\$267,225	6.09%	4,675,200	0.0572
Shell Energy	\$522,247	\$0	\$522,247	11.90%	8,772,600	0.0595
NextEra	\$0	\$369,000	\$369,000	8.41%	-	0.0000
* NYPA	\$11,579	\$7,252	\$18,831	0.43%	2,353,452	0.0080
ISO Interchange	\$516,871	\$504,623	\$1,021,494	23.28%	9,774,137	0.1045
Nema Congestion	-\$192,620	\$0	-\$192,620	-4.39%	-	0.0000
BP Energy	\$442,548	\$0	\$442,548	10.08%	9,460,200	0.0468
* Hydro Projects	\$386,766	\$8,324	\$395,090	9.00%	4,617,134	0.0856
Braintree Watson Unit	\$70,913	\$81,700	\$152,613	3.48%	622,800	0.2450
* Saddleback/Jericho	\$242,856	\$0	\$242,856	5.53%	2,424,030	0.1002
* One Burlington Solar	\$8,556	\$0	\$8,556	0.19%	122,231	0.0700
Coop Resales	\$1,137	\$0	\$1,137	0.03%	6,888	0.1651
Exelon Energy	\$561,971	\$0	\$561,971	12.80%	5,791,200	0.0970
Stonybrook Peaking	\$9,258	\$43,508	\$52,767	1.20%	38,252	1.3794
Monthly Total	\$2,911,543	\$1,477,200	\$4,388,743	100.00%	58,270,115	0.0753
* Renewable Resources					16.33%	

RENEWABLE ENERGY CERTIFICATES (RECs)

Table 5 shows the amount of banked and projected RECs for the Swift River Hydro Projects through January 2017, as well as their estimated market value.

Table 5
RECs Summary
Period - January 2016 - January 2017

	Banked RECs	Projected RECs	Total RECs	Est. Dollars
Woronoco	0	10,715	10,715	\$198,228
Pepperell	0	6,895	6,895	\$127,558
Indian River	0	2,103	2,103	\$38,906
Turners Falls	0	1,135	1,135	\$20,998
Saddleback	0	12,148	12,148	\$224,738
Jericho	0	6,894	6,894	\$127,539
Sub total	0	39,890	39,890	737,965
RECs Sold	\$0		0	\$0
Grand Total	0	39,890	39,890	\$737,965

TRANSMISSION

The RMLD's total transmission costs for the month of January, 2017 were \$1,019,500. This is an increase of 18.05% from the December transmission cost of \$863,599. In January, 2016 the transmission costs were \$873,184.

Table 6

	Current Month	Last Month	Last Year
Peak Demand (kW)	105,335	107,565	105,260
Energy (kWh)	58,270,115	58,589,656	59,610,620
Energy (\$)	\$2,911,543	\$2,986,249	\$3,163,762
Capacity (\$)	\$1,477,200	\$1,795,516	\$1,642,335
Transmission(\$)	\$1,019,500	\$863,599	\$873,184
Total	\$5,408,243	\$5,645,364	\$5,679,280

**FINANCIAL REPORT
JANUARY 2017
ATTACHMENT 2**

Town of Reading, Massachusetts
Municipal Light Department
Statement of Net Assets
1/31/2017

	<u>2017</u>	<u>2016</u>
ASSETS		
Current:		
Unrestricted Cash	\$15,850,224.24	\$10,898,477.11
Restricted Cash	22,605,998.32	21,091,052.83
Restricted Investments	1,345,663.06	1,284,061.45
Receivables, Net	8,285,113.20	8,362,181.76
Prepaid Expenses	1,937,910.40	2,641,259.88
Inventory	1,568,809.91	1,729,535.24
Total Current Assets	<u>51,593,719.13</u>	<u>46,006,568.27</u>
Noncurrent:		
Investment in Associated Companies	26,993.75	26,993.75
Capital Assets, Net	73,414,409.00	70,413,182.84
Total Noncurrent Assets	<u>73,441,402.75</u>	<u>70,440,176.59</u>
Deferred Outflows - Pension Plan	<u>6,338,218.00</u>	<u>1,547,815.00</u>
TOTAL ASSETS	<u><u>131,373,339.88</u></u>	<u><u>117,994,559.86</u></u>
 LIABILITIES		
Current		
Accounts Payable	6,939,310.44	7,684,893.28
Accrued Liabilities	710,032.79	(1,122,646.20)
Customer Deposits	986,734.14	905,204.18
Customer Advances for Construction	1,110,355.53	967,879.15
Total Current Liabilities	<u>9,746,432.90</u>	<u>8,435,330.41</u>
Non-current		
Accrued Employee Compensated Absences	3,257,809.00	3,070,487.93
Net Pension Liability	8,833,549.00	4,524,191.00
Total Non-current Liabilities	<u>12,091,358.00</u>	<u>7,594,678.93</u>
Deferred Inflows - Pension Plan	883,172.00	0.00
TOTAL LIABILITIES	<u>22,720,962.90</u>	<u>16,030,009.34</u>
 NET POSITION		
Invested in Capital Assets, Net of Related Debt	73,414,409.00	70,413,182.84
Restricted for Depreciation Fund	4,863,316.41	6,350,404.06
Unrestricted	30,374,651.57	25,200,963.62
TOTAL NET POSITION	<u>108,652,376.98</u>	<u>101,964,550.52</u>
Total Liabilities and Net Assets	<u><u>131,373,339.88</u></u>	<u><u>117,994,559.86</u></u>

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
RECONCILIATION OF CAPITAL FUNDS
1/31/17

SOURCE OF CAPITAL FUNDS:

DEPRECIATION FUND BALANCE 7/1/16	4,494,952.86
CONSTRUCTION FUND BALANCE 7/1/16	1,500,000.00
INTEREST ON DEPRECIATION FUND FY 17	17,860.04
DEPRECIATION TRANSFER FY 17	2,392,429.69
LED GRANT PROGRAM	<u>62,500.00</u>
 TOTAL SOURCE OF CAPITAL FUNDS	 8,467,742.59

USE OF CAPITAL FUNDS:

LESS PAID ADDITIONS TO PLANT THRU JANUARY	
 TOTAL USE OF CAPITAL FUNDS	 3,604,426.18
 GENERAL LEDGER CAPITAL FUNDS BALANCE 1/31/17	 <u><u>4,863,316.41</u></u>

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets
1/31/2017

	Month Current Year	Month Last Year	Year to Date Current Year	Year to Date Last Year	Percent Change
Operating Revenues: (Sch D p. 11)					
Base Revenue	\$2,082,018.94	\$1,864,067.44	\$15,604,822.26	\$14,099,007.90	10.7%
Fuel Revenue	3,149,834.16	2,656,333.87	20,279,370.80	20,282,310.51	(0.0%)
Purchased Power Capacity	2,904,975.54	2,075,758.47	20,735,924.07	17,498,194.81	18.5%
Forfeited Discounts	76,354.02	68,040.93	533,226.80	473,822.61	12.5%
Energy Conservation Revenue	55,706.82	47,810.39	406,649.34	399,434.44	1.8%
NYPA Credit	(121,364.18)	(108,747.38)	(655,911.36)	(629,549.39)	4.2%
Total Operating Revenues	8,147,525.30	6,603,263.72	56,904,081.91	52,123,220.88	9.2%
Operating Expenses: (Sch E p. 12)					
Purchased Power Capacity	1,513,015.67	1,691,412.49	11,785,879.65	11,083,628.14	6.3%
Purchased Power Transmission	1,019,499.88	873,183.82	8,110,789.47	7,686,115.05	5.5%
Purchased Power Fuel	2,911,543.18	3,163,761.69	20,087,288.22	21,019,051.42	(4.4%)
Operating	1,267,600.09	778,110.02	6,851,293.93	6,053,646.95	13.2%
Maintenance	360,664.60	235,485.37	2,166,974.04	1,732,112.83	25.1%
Depreciation	341,775.67	328,732.65	2,392,429.69	2,301,128.55	4.0%
Voluntary Payments to Towns	118,000.00	118,000.00	821,372.00	814,973.00	0.8%
Total Operating Expenses	7,532,099.09	7,188,686.04	52,216,027.00	50,690,655.94	3.0%
Operating Income	615,426.21	(585,422.32)	4,688,054.91	1,432,564.94	227.2%
Non Operating Revenues (Expenses)					
Contribution in Aid of Construction					
Return on Investment to Reading	(198,722.33)	(197,537.08)	(1,391,056.33)	(1,382,759.58)	0.6%
Interest Income	11,645.97	10,131.95	85,118.76	79,246.33	7.4%
Interest Expense	(182.39)	(1,156.02)	(3,108.30)	(2,243.03)	38.6%
Other	202,725.97	205,484.04	458,880.70	392,658.63	16.9%
Total Non Operating Revenues (Expenses)	15,467.22	16,922.89	(850,165.17)	(913,097.65)	(6.9%)
Change in Net Assets	630,893.43	(568,499.43)	3,837,889.74	519,467.29	638.8%
Net Assets at Beginning of Year	104,814,487.24	101,445,083.23	104,814,487.24	101,445,083.23	3.3%
Ending Net Assets	105,445,380.67	100,876,583.80	108,652,376.98	101,964,550.52	6.6%

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets
1/31/2017

	Month Current Year	Month Last Year	Year to Date Current Year	Year to Date Last Year	Percent Change
Operating Revenues					
Base Revenue	\$2,082,018.94	\$1,864,067.44	\$15,604,822.26	\$14,099,007.90	10.7%
Fuel Revenue	3,149,834.16	2,656,333.87	20,279,370.80	20,282,310.51	(0.0%)
Purchased Power Capacity	2,904,975.54	2,075,758.47	20,735,924.07	17,498,194.81	18.5%
Forfeited Discounts	76,354.02	68,040.93	533,226.80	473,822.61	12.5%
Energy Conservation Revenue	55,706.82	47,810.39	406,649.34	399,434.44	1.8%
NYPA Credit	(121,364.18)	(108,747.38)	(655,911.36)	(629,549.39)	4.2%
Total Operating Revenues	8,147,525.30	6,603,263.72	56,904,081.91	52,123,220.88	9.2%
Expenses					
Power Expenses:					
Purchased Power Capacity	1,513,015.67	1,691,412.49	11,785,879.65	11,083,628.14	6.3%
Purchased Power Transmission	1,019,499.88	873,183.82	8,110,789.47	7,686,115.05	5.5%
Total Purchased Power	2,532,515.55	2,564,596.31	19,896,669.12	18,769,743.19	6.0%
Operations Expenses:					
Operation Supervision and Engineering	4,015.60	44,754.63	232,633.51	317,019.40	(26.6%)
Station Supervisor Labor and Misc Expense	13,099.46	13,167.24	81,764.82	88,712.54	(7.8%)
Line Miscellaneous Labor and Expense	66,244.90	29,845.60	376,950.96	411,409.43	(8.4%)
Station Labor and Expense	32,181.22	30,836.07	283,064.57	232,823.80	21.6%
Street Lighting Expense	8,323.09	13,381.99	70,691.69	70,515.07	0.3%
Meter Expense	21,408.05	19,008.17	123,314.04	130,138.17	(5.2%)
Miscellaneous Distribution Expense	43,161.34	38,932.31	256,925.41	258,409.61	(0.6%)
Meter Reading Labor and Expense	3,026.87	1,924.89	16,062.35	16,444.63	(2.3%)
Accounting and Collection Labor and Expense	84,708.69	122,199.73	946,694.65	963,408.88	(1.7%)
Uncollectible Accounts	12,500.00	10,000.00	87,500.00	70,000.00	25.0%
Energy Audit Expense	46,224.35	55,715.28	289,026.29	330,721.86	(12.6%)
Administrative and General Salaries	76,169.73	69,962.35	553,552.59	514,887.61	7.5%
Office Supplies and Expense	7,700.59	30,608.74	158,803.42	188,549.60	(15.8%)
Outside Services	(41,380.76)	10,530.85	296,093.84	191,653.85	54.5%
Property Insurance	7,184.86	30,594.30	173,471.16	218,048.71	(20.4%)
Injuries and Damages	9,233.24	3,627.56	35,995.54	28,173.88	27.8%
Employee Pensions and Benefits	762,737.55	193,472.01	2,283,236.68	1,593,232.94	43.3%
Miscellaneous General Expense	11,742.36	10,263.60	85,161.52	88,964.21	(4.3%)
Rent Expense	16,398.29	14,385.08	100,569.81	100,135.81	0.4%
Energy Conservation	82,920.66	34,899.62	399,781.08	240,396.95	66.3%
Total Operations Expenses	1,267,600.09	778,110.02	6,851,293.93	6,053,646.95	13.2%
Maintenance Expenses:					
Transmission Plant	(6,268.92)	227.08	3,213.58	1,589.58	102.2%
Structures and Equipment	36,771.69	41,190.66	273,861.81	217,441.42	25.9%
Lines - Overhead	231,710.44	125,439.45	1,130,871.43	969,092.22	16.7%
Lines - Underground	35,755.43	4,704.68	189,480.78	68,899.79	175.0%
Line Transformers	1,725.00	7,752.67	20,112.89	87,669.33	(77.1%)
Street Lights and Signal Systems	(10.87)	(44.05)	70,089.24	(368.90)	*
Garage and Stockroom	47,655.24	44,240.70	297,081.86	313,151.87	(5.1%)
Meters					
General Plant	13,326.59	11,974.18	182,262.45	74,637.52	144.2%
Total Maintenance Expenses	360,664.60	235,485.37	2,166,974.04	1,732,112.83	25.1%
Other Operating Expenses:					
Depreciation	341,775.67	328,732.65	2,392,429.69	2,301,128.55	4.0%
Purchased Power Fuel Expense	2,911,543.18	3,163,761.69	20,087,288.22	21,019,051.42	(4.4%)
Voluntary Payments to Towns	118,000.00	118,000.00	821,372.00	814,973.00	0.8%
Total Other Expenses	3,371,318.85	3,610,494.34	23,301,089.91	24,135,152.97	(3.5%)
Operating Income	615,426.21	(585,422.32)	4,688,054.91	1,432,564.94	227.2%
Non Operating Revenues (Expenses):					
Contribution in Aid of Construction					
Return on Investment to Reading	(198,722.33)	(197,537.08)	(1,391,056.33)	(1,382,759.58)	0.6%
Interest Income	11,645.97	10,131.95	85,118.76	79,246.33	7.4%
Interest Expense	(182.39)	(1,156.02)	(3,108.30)	(2,243.03)	38.6%
Other	202,725.97	205,484.04	458,880.70	392,658.63	16.9%
Total Non Operating Revenues (Expenses)	15,467.22	16,922.89	(850,165.17)	(913,097.65)	(6.9%)
Change in Net Assets	630,893.43	(568,499.43)	3,837,889.74	519,467.29	638.8%
Net Assets at Beginning of Year	104,814,487.24	101,445,083.23	104,814,487.24	101,445,083.23	3.3%
Ending Net Assets	105,445,380.67	100,876,583.80	108,652,376.98	101,964,550.52	6.6%

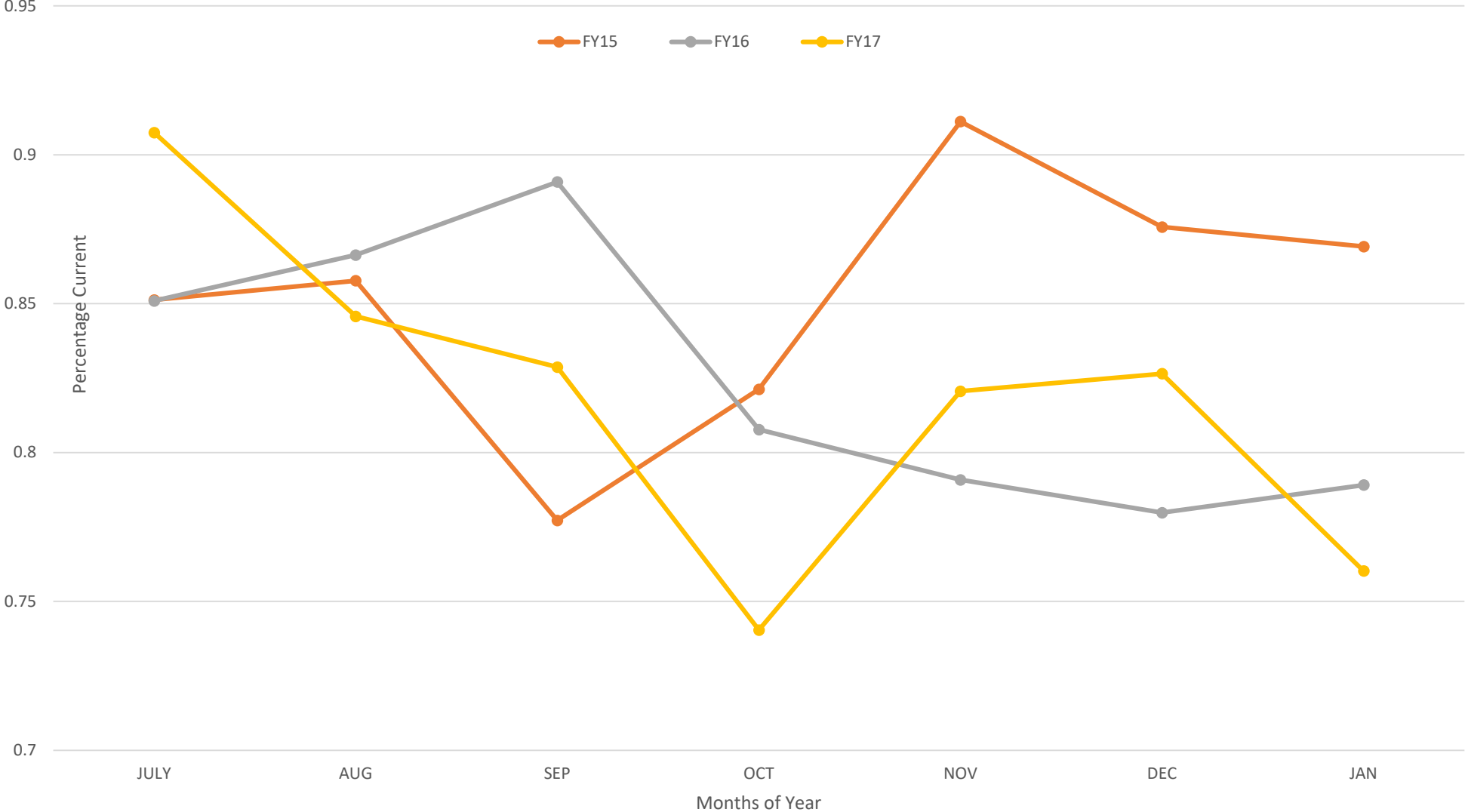
* New project started this fiscal year

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets
1/31/2017

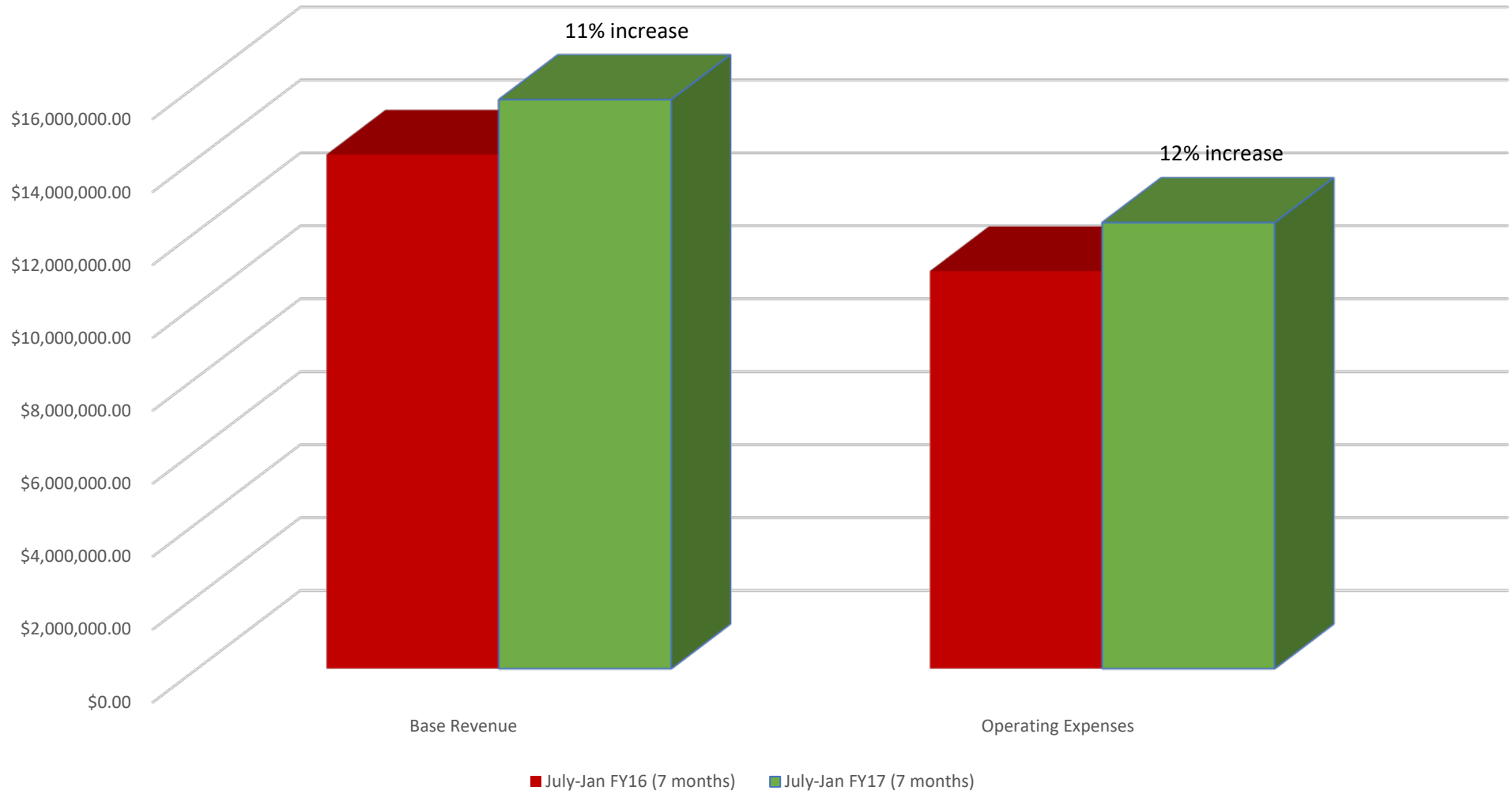
	Actual Year to Date	Budget Full Year	Remaining Budget	Remaining Budget %
Operating Revenues				
Base Revenue	\$15,604,822.26	\$25,500,000.00	\$9,895,177.74	38.8%
Fuel Revenue	20,279,370.80	34,074,492.00	13,795,121.20	40.5%
Purchased Power Capacity	20,735,924.07	34,322,278.00	13,586,353.93	39.6%
Forfeited Discounts	533,226.80	688,500.00	155,273.20	22.6%
Energy Conservation Revenue	406,649.34	673,000.00	266,350.66	39.6%
NYP&A Credit	(655,911.36)	(900,000.00)	(244,088.64)	27.1%
Total Operating Revenues	56,904,081.91	94,358,270.00	37,454,188.09	39.7%
Expenses				
Power Expenses:				
Purchased Power Capacity	11,785,879.65	20,943,651.00	9,157,771.35	43.7%
Purchased Power Transmission	8,110,789.47	13,378,627.00	5,267,837.53	39.4%
Total Purchased Power	19,896,669.12	34,322,278.00	14,425,608.88	42.0%
Operations Expenses:				
Operation Supervision and Engineering	232,633.51	655,196.00	422,562.49	64.5%
Station Supervision Labor and Miscellaneous Expense	81,764.82	91,269.00	9,504.18	10.4%
Line Miscellaneous Labor and Expense	376,950.96	901,213.00	524,262.04	58.2%
Station Labor and Expense	283,064.57	472,879.00	189,814.43	40.1%
Street Lighting Expense	70,691.69	102,402.00	31,710.31	31.0%
Meter Expense	123,314.04	205,717.00	82,402.96	40.1%
Miscellaneous Distribution Expense	256,925.41	464,418.00	207,492.59	44.7%
Meter Reading Labor and Expense	16,062.35	32,641.00	16,578.65	50.8%
Accounting and Collection Labor and Expense	946,694.65	1,792,724.00	846,029.35	47.2%
Uncollectible Accounts	87,500.00	150,000.00	62,500.00	41.7%
Energy Audit Expense	289,026.29	630,232.00	341,205.71	54.1%
Administrative and General Salaries	553,552.59	1,134,674.00	581,121.41	51.2%
Office Supplies and Expense	158,803.42	349,000.00	190,196.58	54.5%
Outside Services	296,093.84	418,100.00	122,006.16	29.2%
Property Insurance	173,471.16	424,500.00	251,028.84	59.1%
Injuries and Damages	35,995.54	57,215.00	21,219.46	37.1%
Employee Pensions and Benefits	2,283,236.68	2,922,673.00	639,436.32	21.9%
Miscellaneous General Expense	85,161.52	217,956.00	132,794.48	60.9%
Rent Expense	100,569.81	212,000.00	111,430.19	52.6%
Energy Conservation	399,781.08	871,575.00	471,793.92	54.1%
Total Operations Expenses	6,851,293.93	12,106,384.00	5,255,090.07	43.4%
Maintenance Expenses:				
Transmission Plant	3,213.58	3,000.00	(213.58)	(7.1%)
Structures and Equipment	273,861.81	414,599.00	140,737.19	33.9%
Lines - Overhead	1,130,871.43	2,044,499.00	913,627.57	44.7%
Lines - Underground	189,480.78	125,066.00	(64,414.78)	(51.5%)
Line Transformers	20,112.89	300,000.00	279,887.11	93.3%
Street Lights and Signal Systems	70,089.24	10,287.00	(59,802.24)	(581.3%)
Garage and Stockroom	297,081.86	590,523.00	293,441.14	49.7%
Meters		44,658.00	44,658.00	100.0%
General Plant	182,262.45	180,000.00	(2,262.45)	(1.3%)
Total Maintenance Expenses	2,166,974.04	3,712,632.00	1,545,657.96	41.6%
Other Operating Expenses:				
Depreciation	2,392,429.69	4,134,000.00	1,741,570.31	42.1%
Purchased Power Fuel Expense	20,087,288.22	33,174,492.00	13,087,203.78	39.4%
Voluntary Payments to Towns	821,372.00	1,445,420.00	624,048.00	43.2%
Total Other Expenses	23,301,089.91	38,753,912.00	15,452,822.09	39.9%
Operating Income	4,688,054.91	5,463,064.00	775,009.09	14.2%
Non Operating Revenues (Expenses):				
Contribution in Aid of Construction		150,000.00	150,000.00	100.0%
Return on Investment to Reading	(1,391,056.33)	(2,534,668.00)	(1,143,611.67)	45.1%
Interest Income	85,118.76	125,000.00	39,881.24	31.9%
Interest Expense	(3,108.30)	(2,100.00)	1,008.30	(48.0%)
Other	458,880.70	740,000.00	281,119.30	38.0%
Total Non Operating Revenues (Expenses)	(850,165.17)	(1,521,768.00)	(671,602.83)	44.1%
Net Income	3,837,889.74	3,941,296.00	103,406.26	2.6%

FINANCIAL REPORT
JANUARY 31, 2017

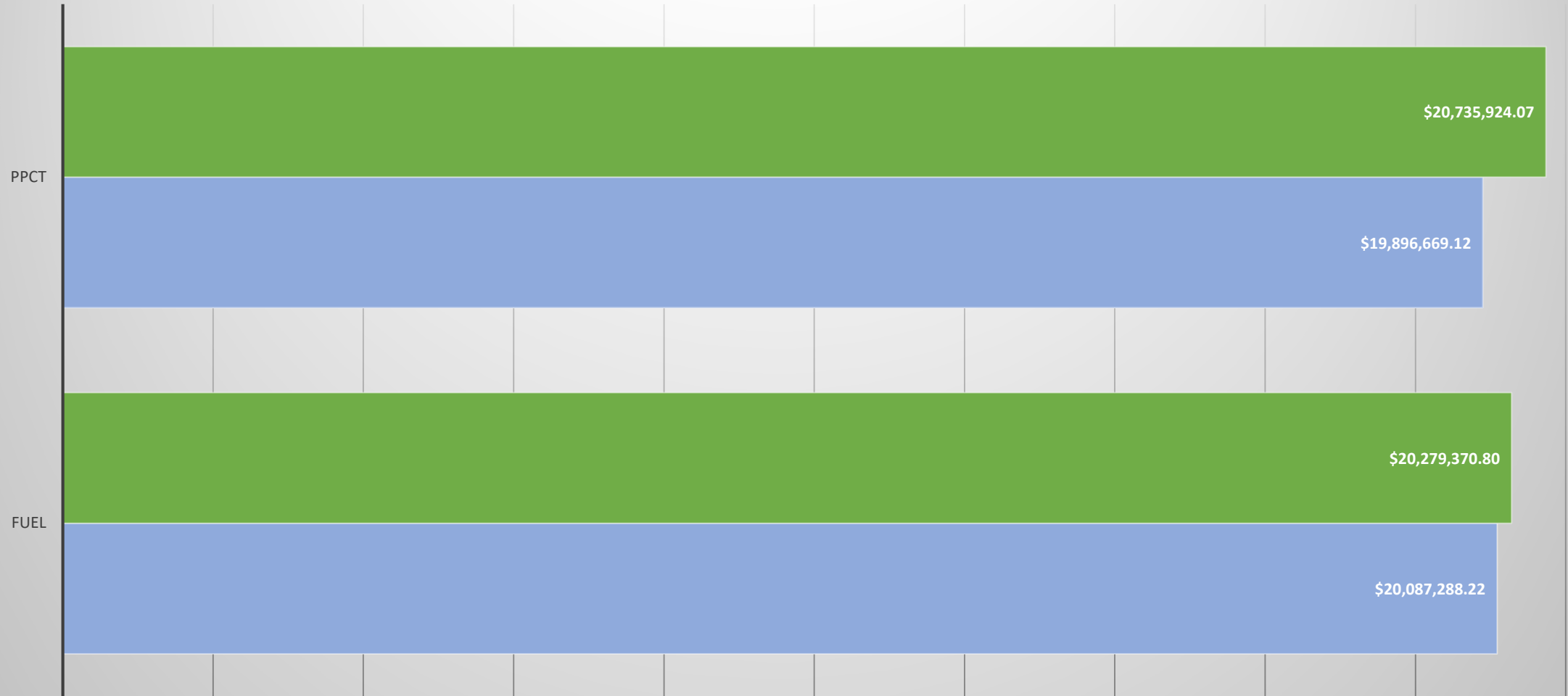
Accounts Receivable Aging by Months



Base Revenue & Operating Expenses Comparison FY16 and FY17

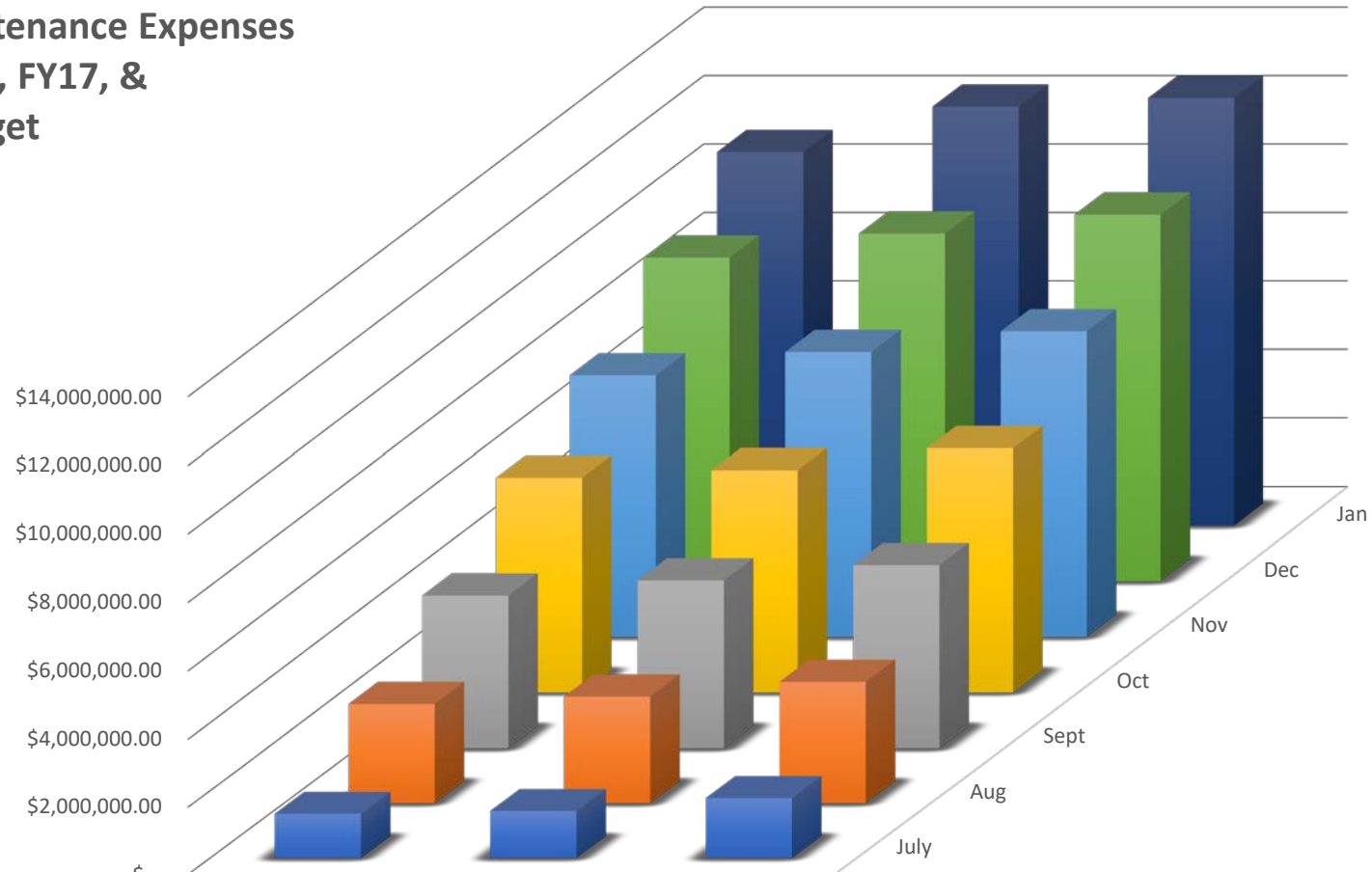


PPCT and Fuel Revenue and Expenses July-Jan FY17 (7 months)



■ Revenue ■ Expense

YTD Operating and Maintenance Expenses Comparing FY16, FY17, & FY17 Budget



	Year to Date FY16 Actual	Year to Date FY17 Actual	Year to Date FY17 Budget
July	\$1,315,415.23	\$1,399,966.01	\$1,783,203.00
Aug	\$2,918,703.69	\$3,134,666.17	\$3,566,406.00
Sept	\$4,461,345.01	\$4,904,753.21	\$5,349,609.00
Oct	\$6,272,430.27	\$6,493,213.21	\$7,132,812.00
Nov	\$7,627,630.82	\$8,309,938.88	\$8,916,015.00
Dec	\$9,441,533.29	\$10,144,029.30	\$10,699,218.00
Jan	\$10,901,861.33	\$12,232,069.66	\$12,482,421.00

ENGINEERING & OPERATIONS REPORT
JANUARY 2017
ATTACHMENT 3

READING MUNICIPAL LIGHT DEPARTMENT

FOR PERIOD ENDING JANUARY 2017

PROJ	DESCRIPTION	TOWN	ACTUAL COST	YTD ADDITIONS	ANNUAL BUDGET	REMAINING BALANCE
CONSTRUCTION:						
106	Underground Facilities Upgrades (URD's, Manholes, etc)	ALL	1,934	264,915	149,965	(114,950)
107	13.8kV Upgrade (Step-down areas, etc.)	ALL	-	4,909	105,748	100,839
	SUB-TOTAL		1,934	269,824	255,713	(14,111)
STATION UPGRADES:						
108	Station 4 (GAW) Relay Replacement Project	R	864	102,709	48,904	(53,805)
109	Station 4 35kV Potential Transformer Replacement	R	-	57	-	(57)
110	4W9 Getaway Replacement-Station 4	R	-	-	234,747	234,747
111	Substation Equipment Upgrade (all)	ALL	-	-	74,590	74,590
113	Station 4 (GAW) Battery Bank Upgrade	R	-	24,000	17,037	(6,963)
120	Station 4 - Relay/SCADA Integration for Bus A&B	R	-	24,261	70,308	46,047
130	Station 3 - Remote Terminal Unit (RTU) Replacement	NR	-	-	39,330	39,330
133	Station 3 - Relay Upgrades and SCADA Integration	NR	153,697	248,995	252,225	3,230
139	Station 5 - LTC Control Replacement	W	6,187	6,187	41,543	35,356
140	Substation Grounding Equipment Upgrade	ALL	-	-	20,671	20,671
	SUB-TOTAL		160,748	406,209	799,355	393,146
NEW CUSTOMER SERVICES:						
	New Service Installations (Commercial / Industrial)	ALL	6,929	69,743	139,570	69,827
	SUB-TOTAL		6,929	69,743	139,570	69,827
ROUTINE CONSTRUCTION:						
		ALL	158,863	1,062,014	1,012,962	(49,052)
SPECIAL PROJECTS / CAPITAL PURCHASES:						
100	Distributed Gas Generation (Pilot FY16-17)	ALL	43,132	86,307	2,720,409	2,634,102
102	Padmount Switchgear Upgrade at Industrial Parks	W	2,286	2,286	194,518	192,232
103	Grid Modernization and Optmization	ALL	79,693	204,032	284,000	79,968
105	New Wilmington Sub-Station	W	-	-	250,000	250,000
112	AMI Mesh Network Expansion	ALL	20,349	125,394	220,021	94,627
115	Fault Indicators	ALL	-	1,340	25,000	23,660
116	Transformers and Capacitors	ALL	-	9,102	668,000	658,898
117	Meter Purchases	ALL	12,096	28,236	80,000	51,764
125	GIS	ALL	134,595	134,595	360,000	225,405
126	Communication Equipment (Fiber Optic)	ALL	-	7,064	69,173	62,109
131	LED Street Light Implementation	ALL	61,737	430,271	804,070	373,799
134	Substation Test Equipment	ALL	-	14,270	30,000	15,730
135	Analog Devices Cap Bank Upgrade	W	-	-	54,188	54,188
136	Voltage Data Recorders	ALL	-	-	25,000	25,000
	SUB-TOTAL		353,888	1,042,896	5,784,379	4,741,483
OTHER CAPITAL PROJECTS:						
96	Control Center Modifications	ALL	-	-	100,000	100,000
97	HVAC Roof Units - Garage	R	-	44,484	-	(44,484)
98	Carpet Upgrade	R	-	8,430	71,653	63,223
99	Electric Vehicle Supply Equipment	ALL	-	1,303	10,000	8,697
104	RMLD Lighting (LED) Upgrade		-	-	25,000	25,000
118	Rolling Stock Replacement	ALL	22,606	53,083	310,000	256,917
119	Security Upgrades All Sites	ALL	-	34,684	5,000	(29,684)
121	HVAC System Upgrade - 230 Ash Street	R	51,765	519,550	500,000	(19,550)
127	Hardware Upgrades	ALL	5,943	63,021	112,065	49,044
128	Software and Licensing	ALL	16,500	29,187	230,519	201,333
129	Master Facilities Site Plan	R	-	-	50,000	50,000
	SUB-TOTAL		96,814	753,741	1,414,237	660,496
TOTAL CAPITAL BUDGET			\$ 779,176	\$ 3,604,426	\$ 9,406,216	\$ 5,801,790



Engineering & Operations Report

RMLD Board of Commissioners Meeting

March 23, 2017

January 2017 Reporting Period

Hamid Jaffari, Director of Engineering & Operations

Capital Improvement Projects

Construction Projects:		% Complete Status	DEC	YTD
100	Distributed Gas Generator Pilot	15%	\$43,132	\$86,307
106	Underground Facilities Upgrades (URDs, Manholes, etc.) - All Towns <ul style="list-style-type: none"> Crestwood Road, North Reading 	On-going	\$1,934	\$264,916
133	Station 3: Relay Upgrades and SCADA Integration	15%	\$153,697	\$248,995
139	Station 5: LTC Control Replacement	20%	\$6,187	\$6,187
Service Installations – Residential and Commercial: This item includes new or upgraded overhead and underground services.		On-going	\$6,929	\$69,743
103	Grid Modernization and Optimization	On-Going	\$79,693	\$204,032
112	AMI Mesh Network Expansion	On-going	\$20,349	\$125,394
117	Meter Purchases	n/a	\$12,096	\$28,236
125	GIS	40%	\$134,594	\$134,594
131	LED Street Light Conversion	61.5%	\$61,737	\$430,271

Routine Construction

	JAN	YTD
Pole Setting/Transfers	\$44,577	\$203,275
Overhead/Underground	\$10,155	\$265,038
Projects Assigned as Required <ul style="list-style-type: none"> • Solar Project 326 Ballardvale Street, Wilmington • AT&T Appl, Wilmington • Lighttower, 600 Research Drive, Wilmington 	\$19,059	\$133,271
Pole Damage/Knockdowns - Some Reimbursable <ul style="list-style-type: none"> • Work was done to repair or replace seven (7) poles. 	\$15,190	\$76,286
Station Group	\$59,789	\$168,019
Hazmat/Oil Spills	-	\$5,296
Porcelain Cutout Replacement Program	-	-
Lighting (Street Light Connections)	-	\$15,444
Storm Trouble	\$4,685	\$17,981
Underground Subdivisions (new construction)	-	\$45,828
Animal Guard Installation	-	\$795
Miscellaneous Capital Costs	\$5,410	\$130,781
TOTAL:	<u>\$158,863</u>	<u>\$1,062,014</u>

Routine Maintenance

► Transformer Replacement (through January 2017)

Pad mount 25.39% Overhead 16.08%

► Pole Inspection (as of 3/10/17)

219 poles have been replaced 123 of 219 transfers have been completed

► Quarterly Inspection of Feeders (as of 3/10/17)

Inspected circuits (Jan-Mar): 3W5, 3W6, 3W7, 3W8, 3W13, 3W14, 3W15, 3W18, 4W4, 4W5, 4W6, 4W7, 4W9, 4W23, 4W24, 5W9, 4P9, 4P2

► Manhole Inspection (through January 2017)

961 of 1,237 manholes have been inspected.

► Porcelain Cutout Replacements (through January 2017)

91% complete 256 remaining to be replaced

► Tree Trimming

January: 105 spans trimmed YTD: 756 spans trimmed

► Substation Maintenance

Infrared Scanning – January complete - no hot spots found

Double Poles

➤ Ownership: 16,000 (approximately)

50% RMLD

50% Verizon

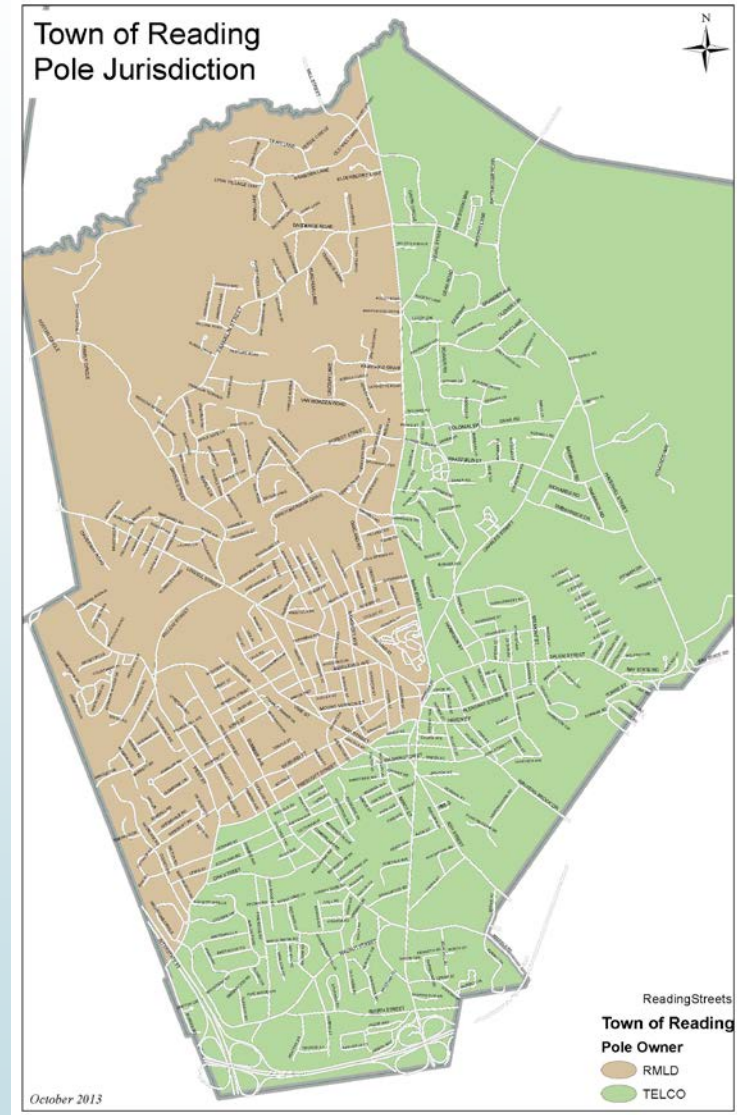
➤ Custodial:

Reading – split (see map) →

North Reading – RMLD

Lynnfield – Verizon

Wilmington - Verizon



NJUNS

"Next to Go" as of March 11, 2017

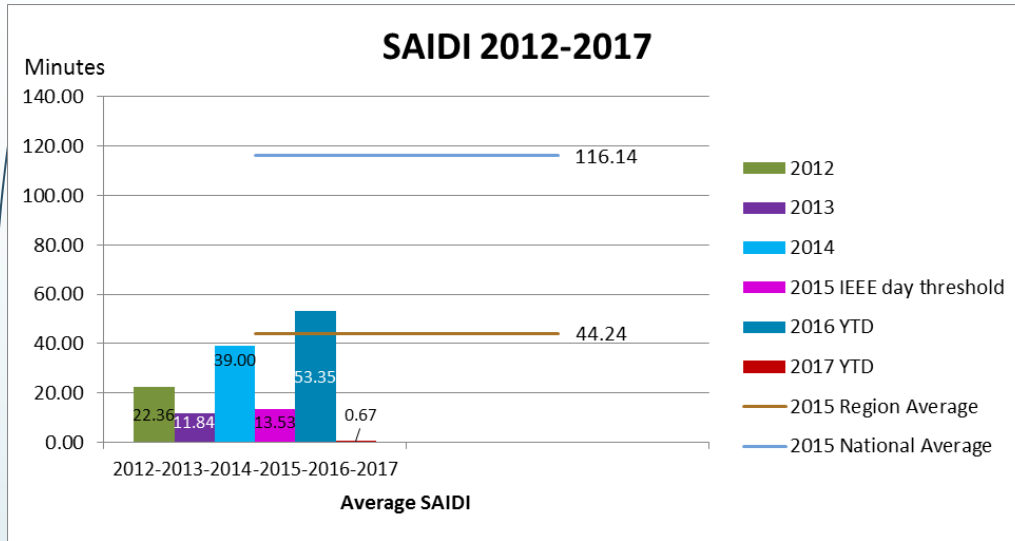
LYNNFIELD	
NTG Member and JobType	Count of Ticket Number
LFDFD	3
Lynnfield Fire Department	
TRANSFER	3
RMLD	1
Reading Municipal Light Department	
TRANSFER	1
VZNEA	14
Verizon	
TRANSFER	8
PULL POLE	6
(blank)	
Grand Total	18

NORTH READING	
NTG Member and JobType	Count of Ticket
CMCTNR	3
Comcast	
TRANSFER	3
NGMA	1
National Grid	
TRANSFER	1
NP3PMA	1
Non-participating 3rd Party Attacher - Massachusetts	
TRANSFER	1
NRDGF	44
North Reading Fire Department	
TRANSFER	44
RMLD	121
Reading Municipal Light Department	
TRANSFER	13
PULL POLE	108
VZNEDR	23
Verizon	
TRANSFER	15
PULL POLE	8
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Grand Total	193

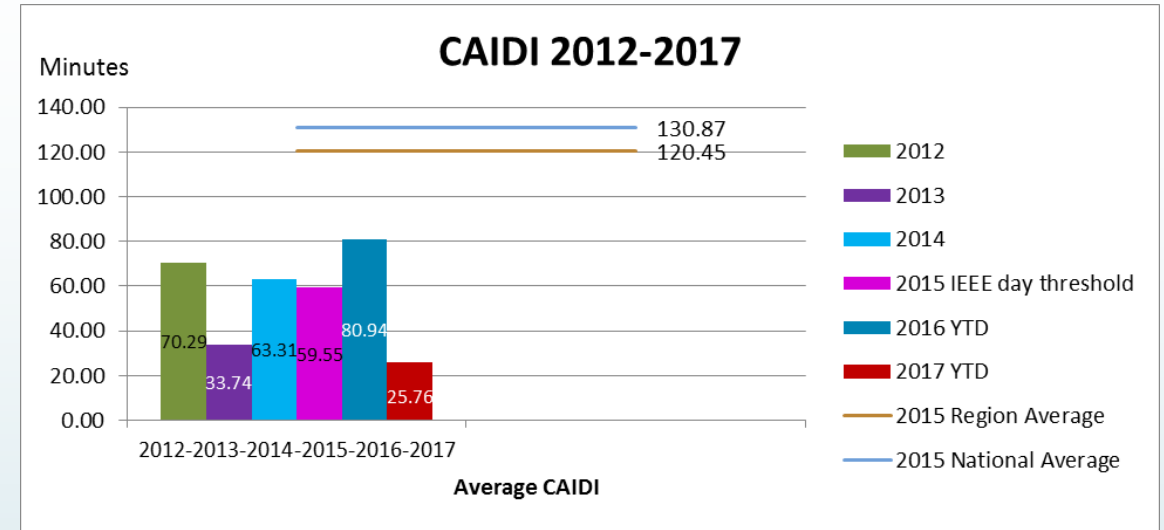
READING	
NTG Member and JobType	Count of Ticket Number
CMCTNR	9
Comcast	
TRANSFER	9
LTFMA	1
Lighttower Fiber Networks	
TRANSFER	1
NP3PMA	11
Non-participating 3rd Party Attacher - Massachusetts	
TRANSFER	11
RDNGFD	8
Reading Fire Department	
TRANSFER	8
RMLD	50
Reading Municipal Light Department	
TRANSFER	23
PULL POLE	27
VZNEDR	1
Verizon	
TRANSFER	1
VZNEA	111
Verizon	
TRANSFER	107
PULL POLE	4
(blank)	
Grand Total	191

WILMINGTON	
NTG Member and JobType	Count of Ticket Number
CMCTNR	3
Comcast	
TRANSFER	3
NP3PMA	7
Non-participating 3rd Party Attacher - Massachusetts	
TRANSFER	7
RMLD	64
Reading Municipal Light Department	
TRANSFER	59
PULL POLE	4
INSTL GUY	1
VZNEDR	71
Verizon	
TRANSFER	55
ATTACH	1
PULL POLE	15
WLMFIB	3
Town of Wilmington	
TRANSFER	3
WMGNFD	72
Wilmington Fire Department	
TRANSFER	72
(blank)	
Grand Total	220

RMLD Reliability Indices

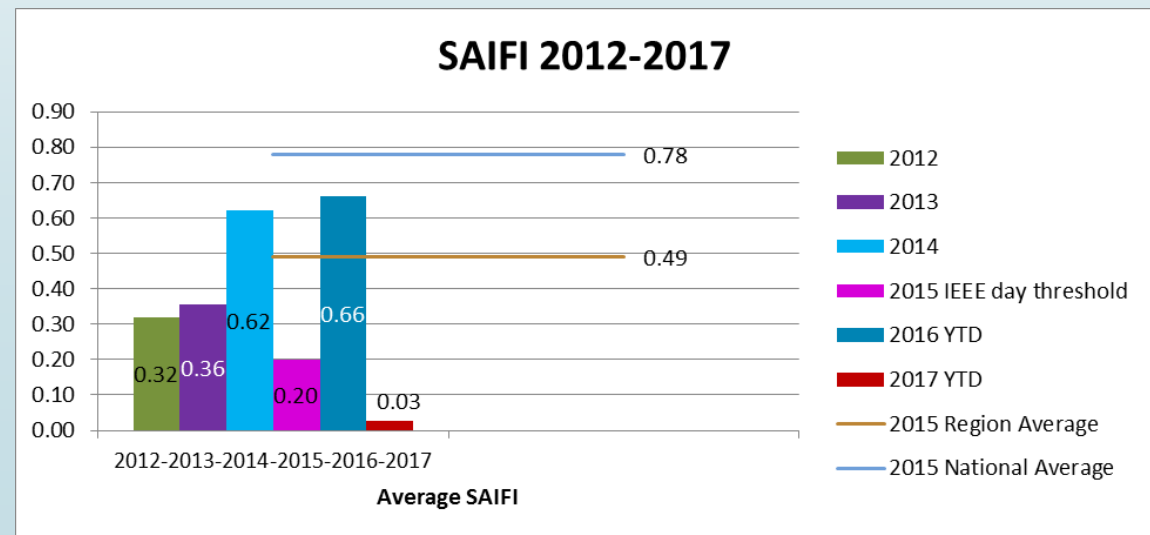


$$SAIDI \text{ (Minutes)} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customers Served}}$$



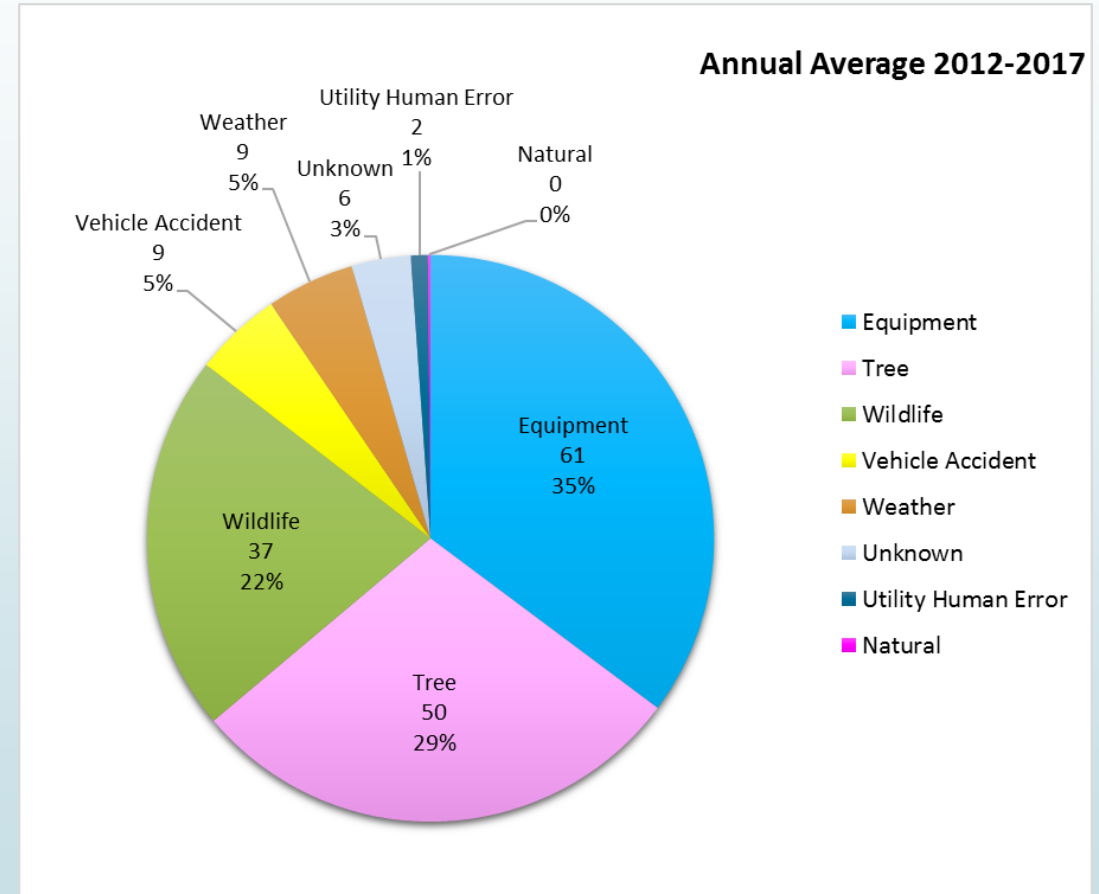
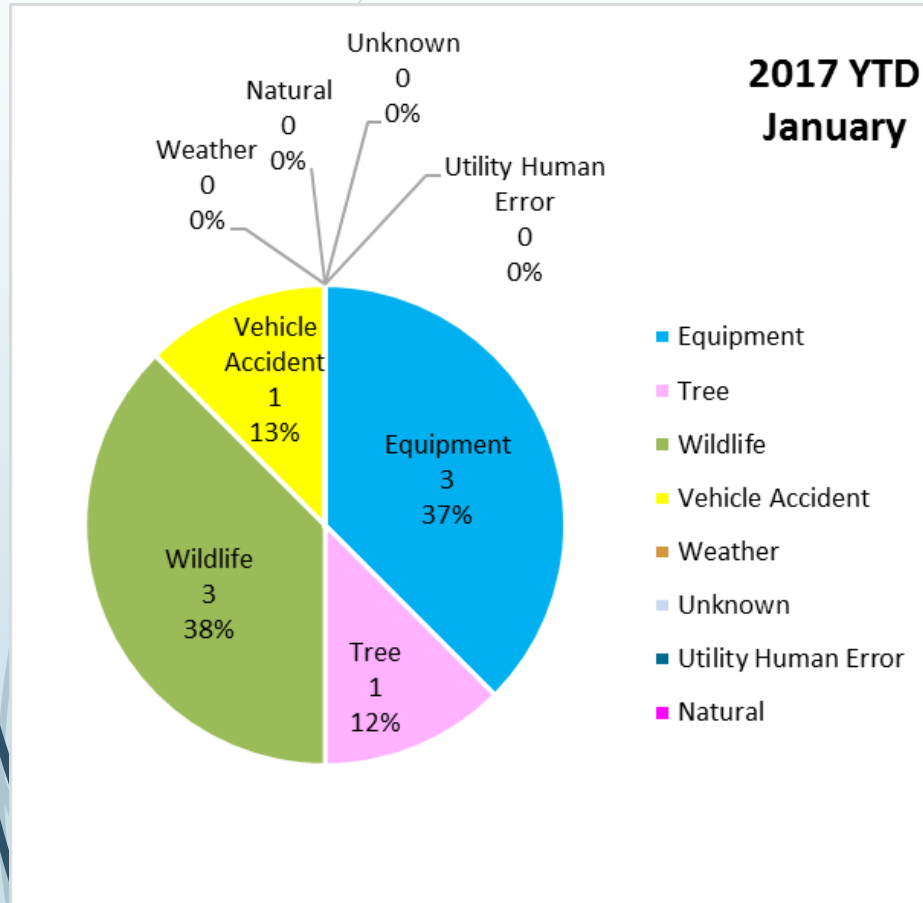
$$CAIDI \text{ (Minutes)} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customers Interruptions}}$$

$$SAIFI = \frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers Served}}$$



Outages Causes

Outages Causes YTD (from eReliability website)



Questions ?



**RMLD PROCUREMENT REQUEST
REQUIRING BOARD APPROVAL
ATTACHMENT 4**



230 Ash Street
P.O. Box 150
Reading, MA 01867-0250

Tel: (781) 944-1340
Fax: (781) 942-2409
Web: www.rmld.com

March 9, 2017

Town of Reading Municipal Light Board

Subject: IFB 2017-35 Distributed Generation Site Work

Pursuant to M.G.L c. 30 § 39M, on February 15, 2017, a bid invitation for bid was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle and on the ECNE (Energy Council of the Northeast) website requesting sealed bids for Distributed Generation Site Work.

An invitation for bid was sent to the following fifty-one companies:

Blue Diamond	Botti Co. Inc.	Caruso and McGovern
Cella Construction Co. LLC	ConstructConnect	Construction Journal
CRL, Inc.	Dec Corp (for Power Line Contractors, Inc.)	
Digitalogic via ECNE	Dowling Corporation	East Coast Developments, Inc.
Eaton's Cooper Power Systems Business		Edward Paige Corp. ElectriComm, Inc.
Fischbach & Moore	G Lopes Construction	InSite Contracting, Inc.
James Lynch Construction	Joseph Bottico, Inc.	K & R Construction Co. LLC
KOBO Utility Construction Corp.	LaRovere Design/Build Corp.	LIG Consultants
M.Keane Excavating Inc.	Mattuchio Construction	McLaughlin Bros. Contracting Corp.
Meninno Construction	Methuen Construction	MJS Construction, Inc.
Murphy & Fahy Construction Co., Inc.	NEDP	ONVIA
Ostrow Electric Company	PM Zilioli, Inc.	Power Line Contractors, Inc.
Project Dog	R.H White	R.S. Hurford Co., Inc.
Robinson Sales, Inc.	Rotondi Construction	Site Improvements, Inc.
Strength in Concrete, LLC	SumCo Eco Contracting	Systems Electrical Services Inc
T Ford Company	Target Construction	Tasco Construction, Inc.
The Ryan Company	Tim Zanelli Excavating	Tro-Con Corporation
Ventresca, Inc.	W.L. French	

Sealed bids were received from seven companies: Cella Construction Co, LLC, CRL, Inc., MJS Construction, Inc., SumCo Eco Contracting, T Ford Company, Tasco Construction, Inc. and Tim Zanelli Excavating.

The sealed bids were publicly opened and read aloud at 11:00 a.m., March 8, 2017, in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

230 Ash Street, P.O. Box 150
Reading, MA 01867-0250

The bids were reviewed, analyzed and evaluated by staff and recommended to the General Manager.

Move that bid 2017-35 for: Distributed Generation Site Work be awarded to: **Tim Zanelli Excavating for \$214,969** as the lowest responsible and eligible bidder on the recommendation of the General Manager.

The FY17 Capital Budget amount for this item is \$205,875.

A handwritten signature in cursive script, appearing to read "Hamid Jaffari".

Hamid Jaffari

A handwritten signature in cursive script, appearing to read "Coleen O'Brien".

Coleen O'Brien

**Distributed Generation Site Work
IFB 2017-35**

Bidder	<u>Total Price</u>	<u>Meet Specification requirement</u>	<u>Firm Price</u>	<u>All forms filled out</u>	<u>Certified Check or Bid Bond</u>	<u>Exceptions to stated bid requirements</u>	<u>Authorized signature</u>
Tim Zanelli Excavating	\$214,969.00	yes	yes	yes	yes	no	yes
T-Ford	\$252,100.00	yes	yes	yes	yes	no	yes
Cella Construction Co., LLC	\$258,850.00	yes	yes	yes	yes	no	yes
MJS Construction	\$283,420.00	yes	yes	yes	yes	no	yes
SumCo Eco-Contracting, LLC	\$285,000.00	yes	yes	yes	yes	no	yes
Tesco Construction, Inc.	\$287,000.00	yes	yes	yes	yes	no	yes
CRL, Inc.	\$289,000.00	yes	yes	yes	yes	no	yes

**BOARD MATERIAL AVAILABLE
BUT NOT DISCUSSED**

From: [Tracy Schultz](#)
To: [RMLD Board Members Group](#)
Cc: [Jeanne Foti](#)
Subject: AP Warrant and Payroll
Date: Friday, March 17, 2017 7:09:00 AM

Good morning,

There were no Account Payable Warrant questions for the following dates:
February 17, February 24, March 3, and March 10.

There were no Payroll questions for the following dates:
February 27 and March 6.

This message will be included in the Board Packet for the RMLD Board Meeting on
Thursday March 23, 2017.

Tracy Schultz

Executive Assistant
Reading Municipal Light Department
230 Ash Street
Reading, MA 01867
Tel: (781) 942-6489
Ext: 489

TOWN OF READING MUNICIPAL LIGHT DEPARTMENT
 RATE COMPARISONS READING & SURROUNDING TOWNS

March-17

	RESIDENTIAL 750 kWh's	RESIDENTIAL-TOU 1500 kWh's 75/25 Split	RES. HOT WATER 1000 kWh's	COMMERCIAL 7,300 kWh's 25.000 kW Demand	SMALL COMMERCIAL 1,080 kWh's 10.000 kW Demand	SCHOOL RATE 35000 kWh's 130.5 kW Demand	INDUSTRIAL - TOU 109,500 kWh's 250.000 kW Demand 80/20 Split
READING MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$113.69	\$195.90	\$138.62	\$1,020.73	\$201.20	\$4,744.25	\$746,869.38
PER KWH CHARGE	\$0.15158	\$0.13060	\$0.13862	\$0.13983	\$0.18630	\$0.13555	\$0.10856
NATIONAL GRID							
TOTAL BILL	\$152.26	\$359.49	\$188.73	\$2,052.32	\$312.15	\$5,877.72	\$1,646,658.27
PER KWH CHARGE	\$0.20301	\$0.23966	\$0.18873	\$0.28114	\$0.28903	\$0.16793	\$0.23935
% DIFFERENCE	33.93%	83.51%	36.15%	101.06%	55.14%	23.89%	120.47%
EVERSOURCE(NSTAR)							
TOTAL BILL	\$143.50	\$253.51	\$189.19	\$1,233.41	\$204.73	\$6,692.17	\$882,679.70
PER KWH CHARGE	\$0.19133	\$0.16901	\$0.18919	\$0.16896	\$0.18956	\$0.19120	\$0.12830
% DIFFERENCE	26.22%	29.41%	36.48%	20.84%	1.75%	41.06%	18.18%
PEABODY MUNICIPAL LIGHT PLANT							
TOTAL BILL	\$89.37	\$177.53	\$120.42	\$988.74	\$156.46	\$4,883.88	\$672,615.67
PER KWH CHARGE	\$0.11916	\$0.11835	\$0.12042	\$0.13544	\$0.14487	\$0.13954	\$0.09777
% DIFFERENCE	-21.39%	-9.37%	-13.13%	-3.13%	-22.24%	2.94%	-9.94%
MIDDLETON MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$98.74	\$201.66	\$132.75	\$959.51	\$168.44	\$4,762.93	\$807,171.40
PER KWH CHARGE	\$0.13165	\$0.13444	\$0.13275	\$0.13144	\$0.15596	\$0.13608	\$0.11733
% DIFFERENCE	-13.15%	2.94%	-4.24%	-6.00%	-16.29%	0.39%	8.07%
WAKEFIELD MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$119.24	\$220.92	\$149.38	\$1,129.79	\$180.88	\$5,298.08	\$887,163.30
PER KWH CHARGE	\$0.15898	\$0.14728	\$0.14938	\$0.15477	\$0.16749	\$0.15137	\$0.12896
% DIFFERENCE	4.88%	12.77%	7.76%	10.68%	-10.10%	11.67%	18.78%