

**READING MUNICIPAL
LIGHT DEPARTMENT**

**BOARD
OF
COMMISSIONERS**

REGULAR SESSION

JANUARY 31, 2017

**READING MUNICIPAL LIGHT DEPARTMENT
BOARD OF COMMISSIONERS MEETING
230 Ash Street
Reading, MA 01867
January 31, 2017
7:30 p.m.**

1. **Call Meeting to Order**
2. **Opening Remarks**
 - a. **Condolences on the passing of former Commission member Frederick J. Nemurgut**
3. **Introductions**
4. **Public Comment**
 - **RMLD Citizens' Advisory Board – Dennis Kelley**
 - **Liaisons to RMLD Board**
 - **Public Comment**
5. **Report of the Committee**
 - a. **General Manager Committee - Chairman O'Rourke**
 - b. **Policy Committee - Commissioner Hennessy** **ACTION ITEMS**
 - i. **RMLD Policy No. 1 Revision No. 3 Community Relations**
 - ii. **RMLD Policy No. 3 Revision No. 2 Safety Committee**
 - iii. **RMLD Policy No. 15 Revision No. 3 Sexual Harassment**
 - iv. **RMLD Policy No. 16 Revision No. 2 Violence Prevention in the Workplace**
 - v. **RMLD Policy No. 19 Revision No. 13 Board of Commissioners**
6. **Report RMLD Board Member Attendance at Citizens' Advisory Board (CAB) Meeting**
Note: There was no CAB meeting in December.
7. **General Manager's Report - Ms. O'Brien**
 - a. **Burlington Electric Security Breach**
 - b. **APPA 2017 Legislative Rally Travel Approval** **ACTION ITEM**
February 26 through March 1, 2017; Washington DC
Note: Board approval is required for overnight travel.
8. **Power Supply Report - November 2016 - Ms. Parenteau (Attachment 1)**
9. **Financial Report - 2016 – November 2016 - Ms. Markiewicz (Attachment 2)**
10. **Engineering and Operations Report - November 2016 - Mr. Jaffari (Attachment 3)**
11. **RMLD Procurement Request Requiring Board Approval - Mr. Jaffari (Attachment 4)** **ACTION ITEM**
 - a. **IFP 2017-31 Fiberglass Poles and Spare Handhole Covers**
Suggested Motion:

Move that proposal 2017-31 for: Fiberglass Poles and Spare Handhole Covers be awarded to: Irby for \$26,740.40 pursuant to Chapter 164 § 56D on the recommendation of the General Manager.

12. General Discussion

RMLD Board Meetings

Art Award Ceremonies: Thursday, February 9 and Thursday, February 16 at 7:00 p.m.

Thursday, February 23, 2017

Thursday, March 30, 2017

CAB Meeting

To be determined.

BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED

E-Mail responses to Account Payable/Payroll Questions

Rate Comparison, January 2017

13. Executive Session

ACTION ITEM

Suggested Motion:

Move that the Board go into Executive Session to discuss the deployment of security personnel or devices, or strategies with respect thereto; to consider the purchase of real property and to discuss strategy with respect to collective bargaining and return to Regular Session for the sole purpose of adjournment.

14. Adjournment

ACTION ITEM

Move to adjourn to Regular Session

**POWER SUPPLY REPORT
NOVEMBER, 2016
ATTACHMENT 1**

Integrated Resources

January 31, 2017

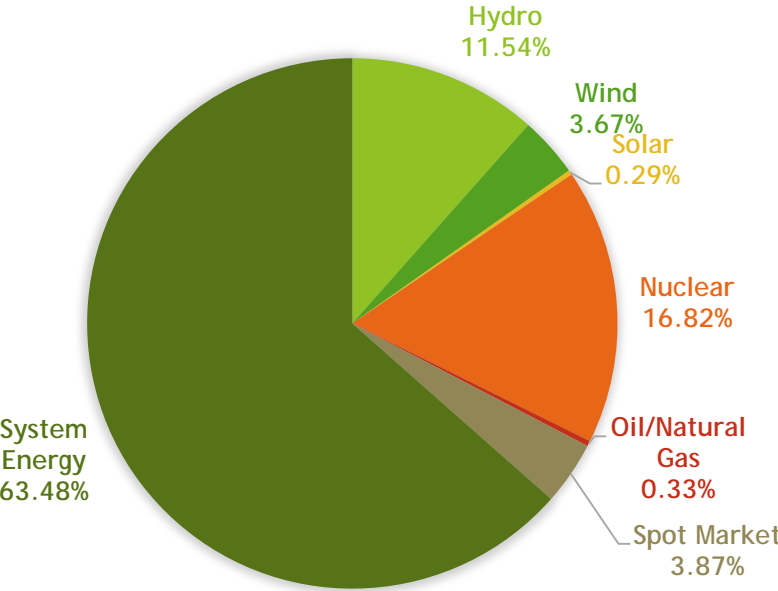
RMLD Board of Commissioners Meeting

Reporting for November, 2016

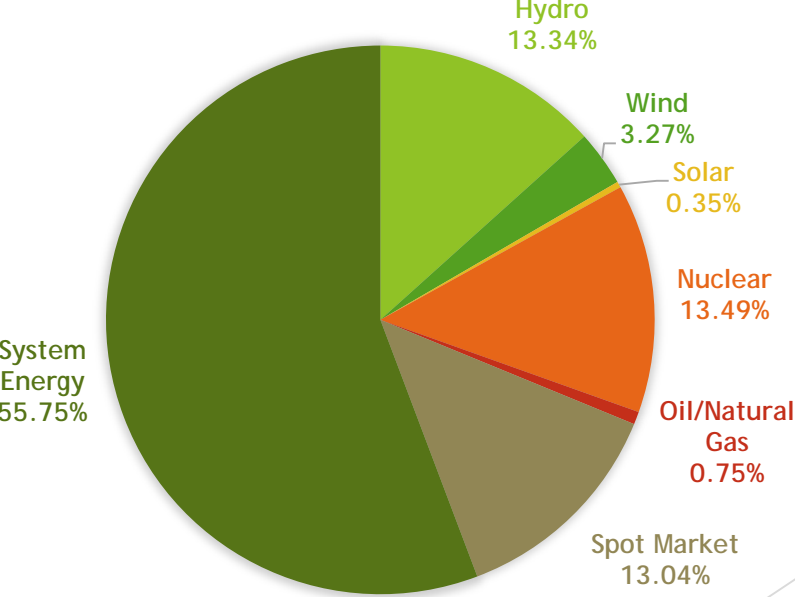
Jane Parenteau
Director of Integrated
Resources

PURCHASE POWER by Resource

November, 2016

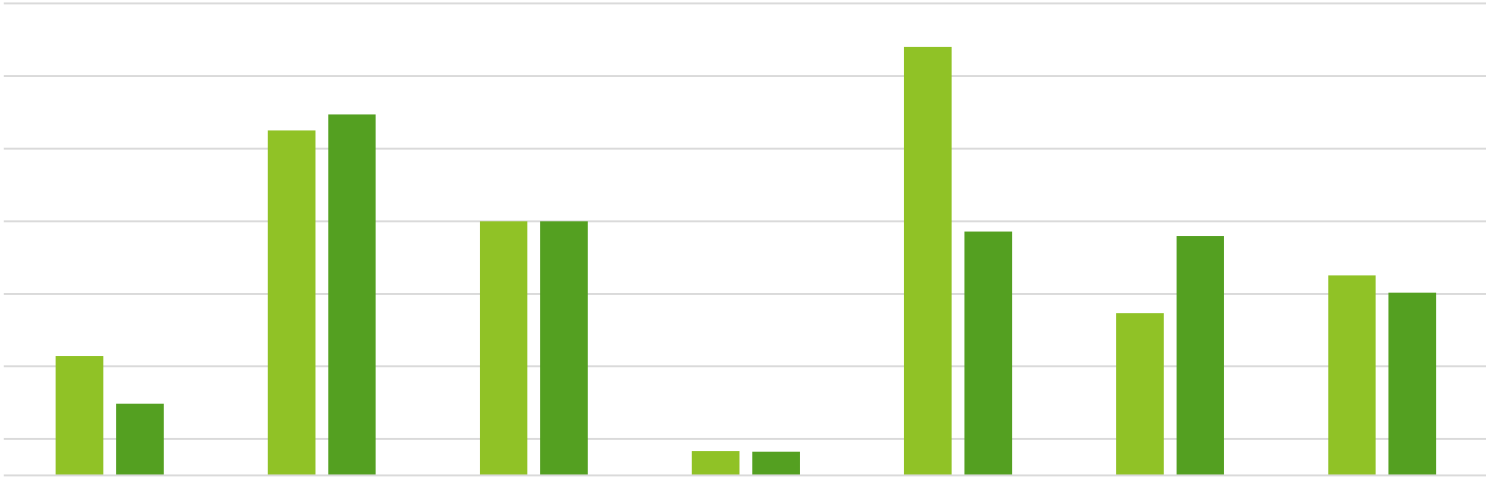


November, 2015




ENERGY COST per Resource

November 2015 vs. November 2016



	Hydro	Wind	Solar	Nuclear	Oil/Natural Gas	Spot Market	System Energy
■ 2015	\$0.0329	\$0.0950	\$0.0700	\$0.0067	\$0.1180	\$0.0446	\$0.0551
■ 2016	\$0.0197	\$0.0994	\$0.0700	\$0.0065	\$0.0671	\$0.0659	\$0.0503

To: Coleen O'Brien

From: *Maureen* Maureen McHugh, Jane Parenteau 

Date: January 13, 2017

Subject: Purchase Power Summary – November, 2016

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of November, 2016.

ENERGY

The RMLD's total metered load for the month was 52,057,363 kWh, which is a 1.03% decrease from the November, 2015 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	3,581,534	\$6.72	6.86%	\$24,074	0.95%
Seabrook	5,721,488	\$6.32	10.96%	\$36,159	1.42%
Stonybrook Intermediate	0	\$0.00	0.00%	\$11,753	0.46%
Shell Energy	10,324,830	\$64.39	19.77%	\$664,799	26.12%
NYPA	2,479,320	\$4.92	4.75%	\$12,198	0.48%
ISO Interchange	2,139,900	\$65.94	4.10%	\$141,113	5.54%
NEMA Congestion	0	\$0.00	0.00%	\$285,554	11.22%
Coop Resales	12,487	\$121.70	0.02%	\$1,520	0.06%
BP Energy	8,044,930	\$46.90	15.41%	\$377,307	14.82%
Hydro Projects*	789,186	\$66.29	1.51%	\$52,315	2.06%
Braintree Watson Unit	181,355	\$2.34	0.35%	\$425	0.02%
Saddleback/Jericho Wind	2,032,070	\$99.45	3.89%	\$202,083	7.94%
One Burlington Solar	159,134	\$70.00	0.30%	\$11,139	0.44%
Exelon	16,751,180	\$43.28	32.08%	\$724,959	28.48%
Stonybrook Peaking	0	\$0.00	0.00%	\$0	0.00%
Monthly Total	52,217,414	\$48.75	100.00%	\$2,545,398	100.00%

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

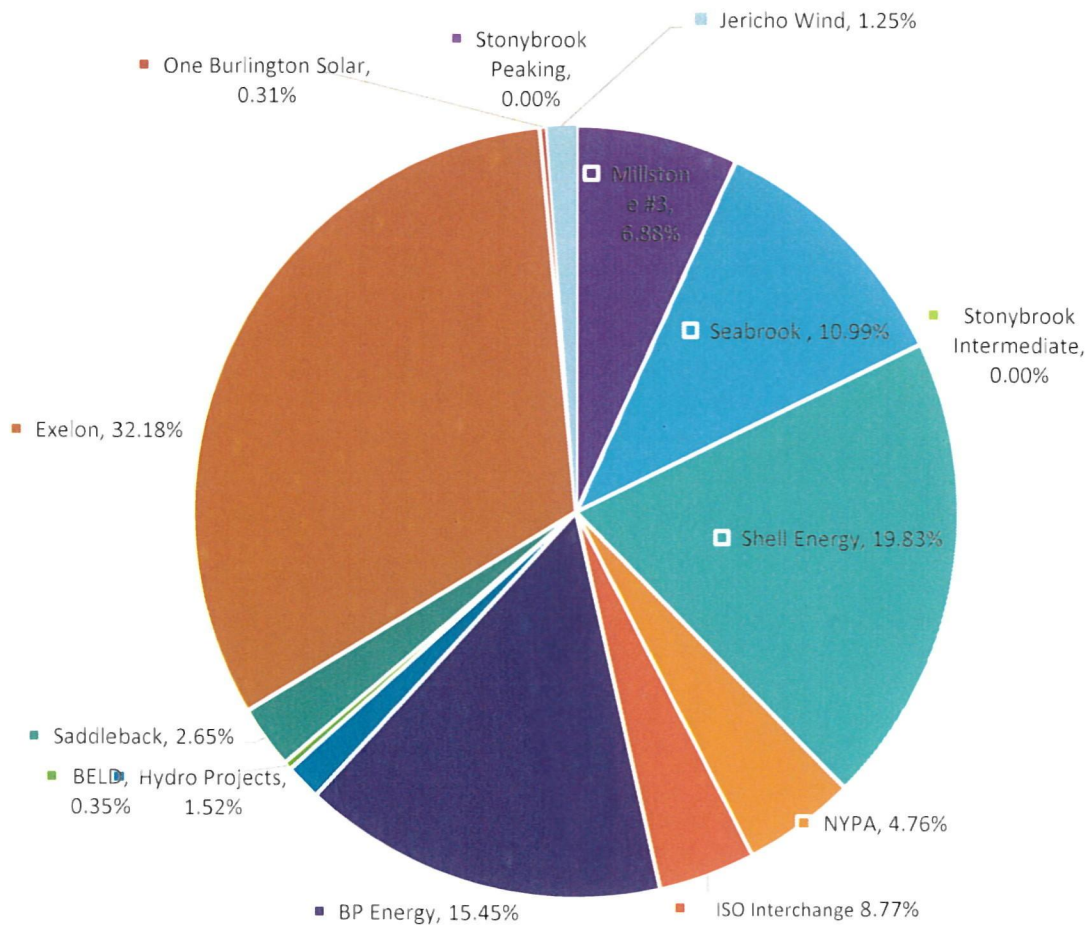
Table 2 breaks down the ISO interchange between the DA LMP Settlement and the RT Net Energy for the month of November, 2016.

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP *	5,577,551	\$40.73	10.68%
Settlement			
RT Net Energy **	(3,437,652)	\$25.05	-6.58%
Settlement			
ISO Interchange (subtotal)	2,139,900	\$65.93	4.10%

* Independent System Operator Day-Ahead Locational Marginal Price

** Real Time Net Energy

NOVEMBER 2016 ENERGY BY RESOURCE



CAPACITY

The RMLD hit a demand of 95,704 kW, which occurred on November 21, at 6 pm. The RMLD's monthly UCAP requirement for November, 2016 was 232,348 kW.

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

Table 3

Source	Amount (kW)	Cost (\$/kW-month)	Total Cost \$	% of Total Cost
Millstone #3	4,950	33.39	\$165,285	10.14%
Seabrook	7,909	36.42	\$288,075	17.67%
Stonybrook Peaking	24,981	2.76	\$69,008	4.23%
Stonybrook CC	42,925	7.08	\$303,904	18.64%
NYP&A	0	0.00	\$7,209	0.44%
Hydro Quebec	0	0	\$449	0.03%
Nextera	60,000	6.15	\$369,000	22.63%
Braintree Watson Unit	0	0.00	-\$92,705	-5.69%
ISO-NE Supply Auction	91,583	5.68	\$520,018	31.90%
Total	232,348	\$7.02	\$1,630,243	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	\$24,074	\$165,285	\$189,359	4.53%	3,581,534	0.0529
Seabrook	\$36,159	\$288,075	\$324,235	7.76%	5,721,488	0.0567
Stonybrook Intermediate	\$11,753	\$303,904	\$315,657	7.56%	-	0.0000
Hydro Quebec	\$0	\$449	\$449	0.01%	-	0.0000
Shell Energy	\$664,799	\$0	\$664,799	15.92%	10,324,830	0.0644
NextEra	\$0	\$369,000	\$369,000	8.84%	-	0.0000
* NYP&A	\$12,198	\$7,209	\$19,407	0.46%	2,479,320	0.0078
ISO Interchange	\$141,113	\$520,018	\$661,130	15.83%	2,139,900	0.3090
Nema Congestion	\$285,554	\$0	\$285,554	6.84%	-	0.0000
BP Energy	\$377,307	\$0	\$377,307	9.04%	8,044,930	0.0469
* Hydro Projects	\$52,315	\$0	\$52,315	1.25%	789,186	0.0663
Braintree Watson Unit	\$425	-\$92,705	-\$92,281	-2.21%	181,355	-0.5088
* Saddleback/Jericho	\$202,083	\$0	\$202,083	4.84%	2,032,070	0.0994
* One Burlington Solar	\$11,139	\$0	\$11,139	0.27%	159,134	0.0700
Coop Resales	\$1,520	\$0	\$1,520	0.04%	12,487	0.1217
Exelon Energy	\$724,959	\$0	\$724,959	17.36%	16,751,180	0.0433
Stonybrook Peaking	\$0	\$69,008	\$69,008	1.65%	-	0.0000
Monthly Total	\$2,545,398	\$1,630,243	\$4,175,641	100.00%	52,217,414	0.0800
* Renewable Resources					10.46%	

RENEWABLE ENERGY CERTIFICATES (RECs)

Table 5 shows the amount of banked and projected RECs for the Swift River Hydro Projects through November 2016, as well as their estimated market value.

Table 5
RECs Summary
Period - January 2016 - September 2016

	Banked RECs	Projected RECs	Total RECs	Est. Dollars
Woronoco	0	8,678	8,678	\$216,950
Pepperell	0	5,605	5,605	\$140,125
Indian River	0	1,857	1,857	\$46,425
Turners Falls	0	1,135	1,135	\$28,375
Saddleback	0	7,254	7,254	\$181,350
Jericho	0	5,040	5,040	\$126,000
Sub total	0	29,569	29,569	739,225
RECs Sold	\$0		0	\$0
Grand Total	0	29,569	29,569	\$739,225

TRANSMISSION

The RMLD's total transmission costs for the month of November, 2016 were \$865,917. This is a decrease of 29.95% from the October transmission cost of \$1,236,067. In November, 2015 the transmission costs were \$806,354.

Table 6

	Current Month	Last Month	Last Year
Peak Demand (kW)	106,927	91,673	99,819
Energy (kWh)	52,217,414	52,590,960	52,857,245
Energy (\$)	\$2,545,398	\$2,463,471	\$2,489,548
Capacity (\$)	\$1,630,243	\$1,745,945	\$1,553,714
Transmission(\$)	\$865,917	\$1,236,067	\$806,354
Total	\$5,041,558	\$5,445,482	\$4,849,617

**FINANCIAL REPORT
NOVEMBER, 2016
ATTACHMENT 2**

Reading Municipal Light Department
Statement of Net Assets
November 30, 2016

ASSETS	2016	2017
CURRENT		
UNRESTRICTED CASH	\$ 13,678,729.92	\$ 14,482,164.40
RESTRICTED CASH	23,113,271.56	22,954,343.33
RESTRICTED INVESTMENTS	1,284,061.45	1,345,663.06
RECEIVABLES, NET	7,454,839.79	9,592,381.08
PREPAID EXPENSES	1,611,014.31	1,126,193.95
INVENTORY	1,663,281.00	1,639,843.28
OTHER	1,547,815.00	6,338,218.00
TOTAL CURRENT ASSETS	50,353,013.03	57,478,807.10
NONCURRENT		
INVESTMENT IN ASSOCIATED CO	26,993.75	26,993.75
CAPITAL ASSETS, NET	70,252,378.65	72,873,194.92
TOTAL CAPITAL ASSETS, NET	70,279,372.40	72,900,188.67
TOTAL ASSETS	120,632,385.43	130,378,995.77
LIABILITIES		
CURRENT		
ACCOUNTS PAYABLE	9,514,232.95	6,258,887.39
CUSTOMER DEPOSITS	903,399.18	1,013,683.17
CUSTOMER ADVANCES FOR CONSTRUCTION	904,439.15	1,003,670.84
ACCRUED LIABILITIES	3,057,822.03	9,290,841.39
CURRENT PORTION OF BONDS PAYABLE		
TOTAL CURRENT LIABILITIES	14,379,893.31	17,567,082.79
NONCURRENT		
ACCRUED EMPLOYEE COMPENSATED BALANCES	3,070,487.93	3,257,809.00
DEFERRED INFLOWS-PENSION PLAN	-	883,172.00
TOTAL NONCURRENT LIABILITIES	3,070,487.93	4,140,981.00
TOTAL LIABILITIES	17,450,381.24	21,708,063.79
NET ASSETS		
INVESTED IN CAPITAL ASSETS, NET OF RELATED DEBT	70,252,378.65	72,873,194.92
RESTRICTED FOR DEPRECIATION FUND	6,508,973.15	5,398,965.79
UNRESTRICTED	26,420,652.39	30,398,771.27
TOTAL NET ASSETS	103,182,004.19	108,670,931.98
TOTAL LIABILITIES AND NET ASSETS	\$ 120,632,385.43	\$ 130,378,995.77

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TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF CASH AND INVESTMENTS
11/30/16

SCHEDULE A

	PREVIOUS YEAR	CURRENT YEAR
UNRESTRICTED CASH		
CASH - OPERATING FUND	13,675,729.91	14,479,164.39
CASH - PETTY CASH	3,000.00	3,000.00
TOTAL UNRESTRICTED CASH	<u><u>13,678,729.91</u></u>	<u><u>14,482,164.39</u></u>
 RESTRICTED CASH		
CASH - DEPRECIATION FUND	6,508,973.15	5,398,965.79
CASH - CONSTRUCTION FUND	0.00	0.00
CASH - TOWN PAYMENT	1,577,685.00	1,583,611.65
CASH - DEFERRED FUEL RESERVE	4,451,648.54	5,040,513.53
CASH - RATE STABILIZATION FUND	6,792,422.72	6,843,853.44
CASH - UNCOLLECTIBLE ACCTS RESERVE	200,000.00	200,000.00
CASH - SICK LEAVE BENEFITS	1,798,459.74	1,933,143.36
CASH - HAZARD WASTE RESERVE	150,000.00	150,000.00
CASH - CUSTOMER DEPOSITS	903,399.18	1,013,683.17
CASH - ENERGY CONSERVATION	730,683.23	790,572.39
TOTAL RESTRICTED CASH	<u><u>23,113,271.56</u></u>	<u><u>22,954,343.33</u></u>
 INVESTMENTS		
SICK LEAVE BUYBACK	<u><u>1,284,061.45</u></u>	<u><u>1,345,663.06</u></u>
 TOTAL CASH BALANCE	 <u><u>38,076,062.92</u></u>	 <u><u>38,782,170.78</u></u>

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TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SALES OF KILOWATT HOURS
11/30/16

SALES OF ELECTRICITY:	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
RESIDENTIAL SALES	17,009,576	16,690,734	115,575,544	101,099,034	-12.53%
COMM. AND INDUSTRIAL SALES	32,102,880	29,815,636	179,106,929	145,842,269	-18.57%
PRIVATE STREET LIGHTING	79,418	89,171	397,360	365,416	-8.04%
TOTAL PRIVATE CONSUMERS	<u>49,191,874</u>	<u>46,595,541</u>	<u>295,079,833</u>	<u>247,306,719</u>	-16.19%
MUNICIPAL SALES:					
STREET LIGHTING	222,241	186,335	1,159,623	878,561	-24.24%
MUNICIPAL BUILDINGS	752,346	685,159	3,870,941	3,016,961	-22.06%
TOTAL MUNICIPAL CONSUMERS	<u>974,587</u>	<u>871,494</u>	<u>5,030,564</u>	<u>3,895,522</u>	-22.56%
SALES FOR RESALE	203,175	168,708	1,522,735	1,250,761	-17.86%
SCHOOL	1,259,857	1,164,732	5,851,984	4,347,914	-25.70%
TOTAL KILOWATT HOURS SOLD	<u>51,629,493</u>	<u>48,800,475</u>	<u>307,485,116</u>	<u>256,800,916</u>	-16.48%

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Reading Municipal Light Department
Schedule of Operating Expenses
For the Five Months Ending Wednesday, November 30, 2016

	MONTH LY	MONTH CY	YTD LY	YTD CY
OPERATING EXPENSES:				
PURCHASED POWER CAPACITY	\$ 1,556,484.47	\$ 1,634,731.43	\$ 7,618,471.87	\$ 8,470,768.06
PURCHASED POWER TRANSMISSION	806,354.28	865,916.73	5,857,669.10	6,227,690.59
TOTAL PURCHASED POWER	2,362,838.75	2,500,648.16	13,476,140.97	14,698,458.65
OPERATION SUP AND ENGINEERING EXP	42,900.84	41,165.21	221,618.40	201,724.34
STATION SUP LABOR AND MISC	12,452.40	15,293.80	61,030.43	60,321.94
LINE MISC LABOR AND EXPENSE	62,349.86	61,820.80	306,507.10	254,676.27
STATION LABOR AND EXPENSE	30,028.90	48,117.33	163,116.66	209,980.06
STREET LIGHTING EXPENSE	10,759.04	10,473.75	46,245.46	53,112.16
METER EXPENSE	18,041.00	23,409.52	90,174.17	87,398.74
MISC DISTRIBUTION EXPENSE	31,494.31	34,407.15	179,718.50	163,806.61
METER READING LABOR AND EXPENSE	1,046.21	1,201.27	12,535.86	11,178.17
ACCT & COLL LABOR AND EXPENSE	126,190.27	136,058.09	668,205.88	709,476.52
UNCOLLECTIBLE ACCOUNTS	10,000.00	12,500.00	50,000.00	62,500.00
ENERGY AUDIT EXPENSE	47,185.30	64,057.21	232,149.26	206,061.34
ADMIN & GEN SALARIES	72,476.27	87,911.57	356,960.00	405,719.33
OFFICE SUPPLIES AND EXPENSE	10,883.75	28,849.77	111,631.94	106,394.17
OUTSIDE SERVICES	41,607.44	83,949.18	159,544.94	196,820.19
PROPERTY INSURANCE	31,242.39	27,632.72	156,211.95	138,635.60
INJURIES AND DAMAGES	2,986.02	6,071.09	18,678.49	23,199.77
EMPLOYEES PENSIONS AND BENEFITS	142,683.08	239,841.95	1,062,397.32	1,246,717.32
MISC GENERAL EXPENSE	16,270.47	15,972.63	61,631.59	57,468.14
RENT EXPENSE	13,816.91	13,883.02	71,593.24	69,140.89
ENERGY CONSERVATION	21,621.51	66,571.16	155,274.16	225,869.79
TOTAL OPERATION EXPENSES	746,035.97	1,019,187.22	4,185,225.35	4,490,201.35
MAINTENANCE EXPENSES:				
MAINT OF TRANSMISSION PLANT	227.08	227.08	1,135.40	1,135.40
MAINT OF STRUCT AND EQUIPMENT	30,059.78	59,463.20	145,412.49	213,428.76
MAINT OF LINES - OH	74,849.27	213,586.58	673,443.80	765,119.12
MAINT OF LINES - UG	1,124.29	13,536.23	49,675.76	129,772.26
MAINT OF LINE TRANSFORMERS	11,598.86	-	79,916.66	21,950.95
MAINT OF ST LT & SIG SYSTEM	(60.03)	(55.08)	(304.13)	70,494.45
MAINT OF GARAGE AND STOCKROOM	32,573.78	33,434.47	211,366.38	214,344.87
MAINT OF GEN PLANT	12,058.90	17,570.30	48,095.86	104,613.37
TOTAL MAINTENANCE EXPENSES	162,431.93	337,762.78	1,208,742.22	1,520,859.18
DEPRECIATION EXPENSE	328,732.65	341,775.67	1,643,663.25	1,708,878.35
PURCHASED POWER FUEL EXPENSE	2,489,548.12	2,545,398.43	15,098,143.47	14,189,496.10
VOLUNTARY PAYMENTS TO TOWN	118,000.00	118,000.00	590,000.00	590,000.00
TOTAL OPERATING EXPENSES	\$ 6,207,587.42	\$ 6,862,772.26	\$36,201,915.26	\$37,197,893.63

Reading Municipal Light Department
 Schedule of Operating Expenses
 November 30, 2016

	2017 ANNUAL BUDGET	ACTUAL YEAR TO DATE	REMAINING BUDGET BALANCE	REMAINING BUDGET %
OPERATING EXPENSES:				
PURCHASED POWER CAPACITY	\$ 20,943,651.00	\$ 8,470,768.06	\$ 12,472,882.94	59.55%
PURCHASED POWER TRANSMISSION	13,378,627.00	6,227,690.59	7,150,936.41	53.45%
TOTAL PURCHASED POWER	34,322,278.00	14,698,458.65	19,623,819.35	57.18%
OPERATION SUP AND ENGINEERING EXP	655,195.00	201,724.34	453,470.66	69.21%
STATION SUP LABOR AND MISC	91,269.00	60,321.94	30,947.06	33.91%
LINE MISC LABOR AND EXPENSE	901,213.00	254,676.27	646,536.73	71.74%
STATION LABOR AND EXPENSE	472,879.00	209,980.06	262,898.94	55.60%
STREET LIGHTING EXPENSE	102,402.00	53,112.16	49,289.84	48.13%
METER EXPENSE	205,717.00	87,398.74	118,318.26	57.52%
MISC DISTRIBUTION EXPENSE	464,418.00	163,806.61	300,611.39	64.73%
METER READING LABOR AND EXPENSE	32,640.00	11,178.17	21,461.83	65.75%
ACCT & COLL LABOR AND EXPENSE	1,792,724.00	709,476.52	1,083,247.48	60.42%
UNCOLLECTIBLE ACCOUNTS	150,000.00	62,500.00	87,500.00	58.33%
ENERGY AUDIT EXPENSE	1,501,806.00	206,061.34	1,295,744.66	86.28%
ADMIN & GEN SALARIES	1,134,674.00	405,719.33	728,954.67	64.24%
OFFICE SUPPLIES AND EXPENSE	349,000.00	106,394.17	242,605.83	69.51%
OUTSIDE SERVICES	418,100.00	196,820.19	221,279.81	52.93%
PROPERTY INSURANCE	424,500.00	138,635.60	285,864.40	67.34%
INJURIES AND DAMAGES	57,215.00	23,199.77	34,015.23	59.45%
EMPLOYEES PENSIONS AND BENEFITS	2,922,673.00	1,246,717.32	1,675,955.68	57.34%
MISC GENERAL EXPENSE	219,156.00	57,468.14	161,687.86	73.78%
RENT EXPENSE	212,000.00	69,140.89	142,859.11	67.39%
ENERGY CONSERVATION	673,000.00	225,869.79	447,130.21	66.44%
TOTAL OPERATION EXPENSES	12,780,581.00	4,490,201.35	8,290,379.65	64.87%
MAINTENANCE EXPENSES:				
MAINT OF TRANSMISSION PLANT	3,000.00	1,135.40	1,864.60	62.15%
MAINT OF STRUCT AND EQUIPMENT	419,599.00	213,428.76	206,170.24	49.14%
MAINT OF LINES - OH	2,044,499.00	765,119.12	1,279,379.88	62.58%
MAINT OF LINES - UG	125,066.00	129,772.26	(4,706.26)	-3.76%
MAINT OF LINE TRANSFORMERS	300,000.00	21,950.95	278,049.05	92.68%
MAINT OF ST LT & SIG SYSTEM	10,287.00	70,494.45	(60,207.45)	-585.28%
MAINT OF METERS	44,658.00	-	44,658.00	100.00%
MAINT OF GARAGE AND STOCKROOM	590,523.00	214,344.87	376,178.13	63.70%
MAINT OF GEN PLANT	180,000.00	104,613.37	75,386.63	41.88%
TOTAL MAINTENANCE EXPENSES	3,717,632.00	1,520,859.18	2,196,772.82	59.09%
DEPRECIATION EXPENSE	4,134,000.00	1,708,878.35	2,425,121.65	58.66%
PURCHASED POWER FUEL EXPENSE	33,174,492.00	14,189,496.10	18,984,995.90	57.23%
VOLUNTARY PAYMENTS TO TOWN	1,445,420.00	590,000.00	855,420.00	59.18%
TOTAL OPERATING EXPENSES	\$ 89,574,403.00	\$ 37,197,893.63	\$ 52,376,509.37	58.47%

DRAFT

**ENGINEERING & OPERATIONS REPORT
NOVEMBER, 2016
ATTACHMENT 3**

READING MUNICIPAL LIGHT DEPARTMENT

FOR PERIOD ENDING NOVEMBER, 2016

PROJ	DESCRIPTION	TOWN	ACTUAL		ANNUAL	REMAINING
			COST	YTD		
			NOVEMBER	ADDITIONS		
CONSTRUCTION:						
106	Underground Facilities Upgrades (URD's, Manholes, etc)	ALL	63,826	251,813	149,965	(101,848)
107	13.8kV Upgrade (Step-down areas, etc.)	ALL	328	4,909	105,748	100,839
	SUB-TOTAL		64,154	256,721	255,713	(1,008)
STATION UPGRADES:						
108	Station 4 (GAW) Relay Replacement Project	R	1,291	14,766	48,904	34,138
109	Station 4 35kV Potential Transformer Replacement	R	57	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	-	-	17,037	17,037
120	Station 4 - Relay/SCADA Integration for Bus A&B	R	8,197	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	18,889	74,505	252,225	177,720
139	Station 5 - LTC Control Replacement	W	-	-	41,543	41,543
140	Substation Grounding Equipment Upgrade	ALL	-	-	20,671	20,671
	SUB-TOTAL		28,434	113,589	799,355	685,766
NEW CUSTOMER SERVICES:						
	New Service Installations (Commercial / Industrial)	ALL	14,027	52,451	139,570	87,119
	SUB-TOTAL		14,027	52,451	139,570	87,119
ROUTINE CONSTRUCTION:						
		ALL	134,860	754,685	1,012,962	258,277
SPECIAL PROJECTS / CAPITAL PURCHASES:						
100	Distributed Gas Generation (Pilot FY16-17)	ALL	1,074	43,175	2,720,409	2,677,234
102	Padmount Switchgear Upgrade at Industrial Parks	W	-	-	194,518	194,518
103	Grid Modernization and Optimization	ALL	115,076	122,242	284,000	161,758
105	New Wilmington Sub-Station	W	-	-	250,000	250,000
112	AMI Mesh Network Expansion	ALL	-	100,200	220,021	119,821
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	-	16,140	80,000	63,860
125	GIS	ALL	-	-	360,000	360,000
126	Communication Equipment (Fiber Optic)	ALL	3,443	4,573	69,173	64,600
131	LED Street Light Implementation	ALL	55,281	315,784	804,070	488,286
134	Substation Test Equipment	ALL	8,030	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		182,903	626,825	5,784,379	5,157,554
OTHER CAPITAL PROJECTS:						
96	Control Center Modifications	ALL	-	-	100,000	100,000
97	HVAC Roof Units - Garage	R	713	41,373	-	(41,373)
98	Carpet Upgrade	R	-	8,430	71,653	63,223
99	Electric Vehicle Supply Equipment	ALL	-	-	10,000	10,000
104	RMLD Lighting (LED) Upgrade		-	-	25,000	25,000
118	Rolling Stock Replacement	ALL	-	30,477	310,000	279,523
119	Security Upgrades All Sites	ALL	-	6,844	5,000	(1,844)
121	HVAC System Upgrade - 230 Ash Street	R	136,912	415,571	500,000	84,429
127	Hardware Upgrades	ALL	33,583	38,351	112,065	73,714
128	Software and Licensing	ALL	-	12,687	230,519	217,833
129	Master Facilities Site Plan	R	-	-	50,000	50,000
	SUB-TOTAL		171,208	553,732	1,414,237	860,505
TOTAL CAPITAL BUDGET			\$ 595,586	\$ 2,358,003	\$ 9,406,216	\$ 7,048,213



Engineering & Operations Report

RMLD Board of Commissioners Meeting

January 31, 2017

November 2016 Reporting Period

Hamid Jaffari, Director of Engineering & Operations

Capital Improvement Projects

Construction Projects:		% Complete Status	Nov	YTD
100	Distributed Gas Generation Pilot	25%	\$1,074	\$43,175
106	Underground Facilities Upgrades (URDs, Manholes, etc.) - All Towns <ul style="list-style-type: none"> • Lucaya Estates, Wilmington • Crestwood Road, North Reading 	On-going	\$63,826	\$251,813
107	13.8kV Upgrade (Stepdown Areas, etc.)- All Towns <ul style="list-style-type: none"> • Main Street, Reading 	On-going	\$328	\$4,909
108	Relay Replacement – Station 4 (GAW)	100%	\$1,291	\$14,766
120	Station 4: Relay/SCADA Integration for Bus A&B	10%	\$8,197	\$24,261
133	Station 3: Relay Upgrades and SCADA Integration	10%	\$18,889	\$74,505
	Service Installations – Residential and Commercial: This item includes new or upgraded overhead and underground services.	On-going	\$14,027	\$52,451
103	Grid Modernization and Optimization	On-going	\$115,076	\$122,242
131	LED Street Light Conversion	58%	\$55,281	\$315,784

Routine Construction

	NOV	YTD
Pole Setting/Transfers	\$23,935	\$127,435
Overhead/Underground	\$29,741	\$235,392
Projects Assigned as Required <ul style="list-style-type: none"> • Solar Project, Ballardvale Street, Wilmington • Pumping Stations (West Street and Batchelder Road), Reading • Wilmington Recreation Center, Wilmington 	\$30,134	\$104,046
Pole Damage/Knockdowns - Some Reimbursable <ul style="list-style-type: none"> • Work was done to repair or replace eight (8) poles. 	\$14,113	\$47,987
Station Group	\$13,738	\$75,901
Hazmat/Oil Spills	-	\$5,296
Porcelain Cutout Replacement Program	-	-
Lighting (Street Light Connections)	\$3,633	\$13,538
Storm Trouble	-	\$10,743
Underground Subdivisions (new construction) <ul style="list-style-type: none"> • McGrane Road Subdivision, Wilmington • North Wilmington Estates, Wilmington 	\$12,482	\$45,828
Animal Guard Installation	\$200	\$795
Miscellaneous Capital Costs	\$6,884	\$87,723
TOTAL:	<u>\$134,860</u>	<u>\$754,684</u>

Routine Maintenance

► Transformer Replacement (through November 2016)

Pad mount 24.35% Overhead 15.74%

► Pole Inspection (as of 11/30/2016)

204 poles have been replaced 117 of 204 transfers have been completed

► Quarterly Inspection of Feeders (as of 1/23/17)

Inspected circuits (Jan-Mar): 3W5, 3W6, 3W7, 3W8, 4W5, 4W6, 4P9, 4P2

► Manhole Inspection (through November 2016)

961 of 1,237 manholes have been inspected.

► Porcelain Cutout Replacements (through November 2016)

91% complete 256 remaining to be replaced

► Tree Trimming

November: 188 spans trimmed YTD: 564 spans trimmed

► Substation Maintenance

Infrared Scanning – November complete - no hot spots found

Double Poles

➤ Ownership: 16,000 (approximately)

50% RMLD

50% Verizon

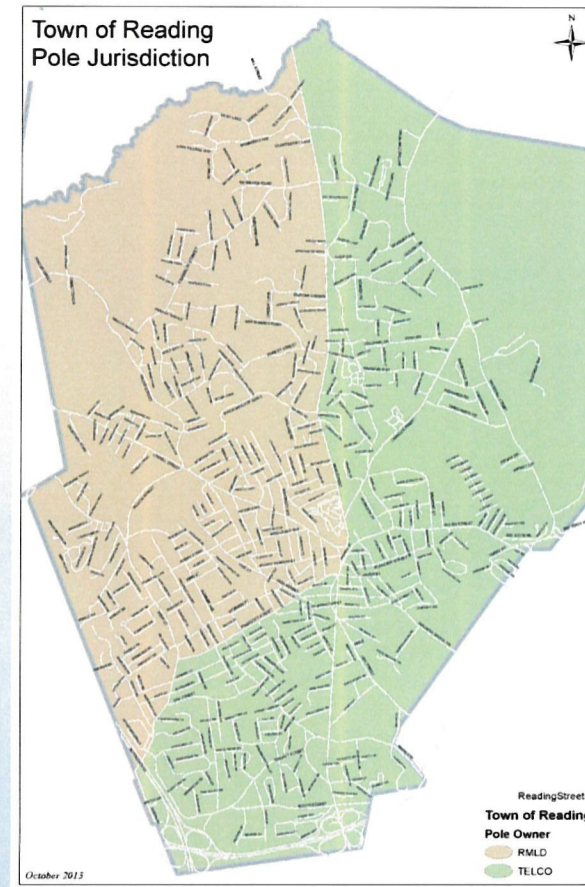
➤ Custodial:

Reading – split (see map)

North Reading – RMLD

Lynnfield – Verizon

Wilmington - Verizon



NJUNS

"Next to Go" as of January 20, 2017

LYNNFIELD

NTG Member and JobType	Count of Ticket Number
LFDFD	2
Lynnfield Fire Department	
TRANSFER	2
RMLD	4
Reading Municipal Light Department	
TRANSFER	4
VZNSA	14
Verizon	
TRANSFER	8
PULL POLE	6
(blank)	
Grand Total	20

NORTH READING

NTG Member and JobType	Count of Ticket Number
CMCTNR	3
Comcast	
TRANSFER	3
NGMA	1
National Grid	
TRANSFER	1
NRDGF	44
North Reading Fire Department	
TRANSFER	44
RMLD	73
Reading Municipal Light Department	
TRANSFER	15
PULL POLE	58
VZNE	97
Verizon	
TRANSFER	87
PULL POLE	10
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Grand Total	218

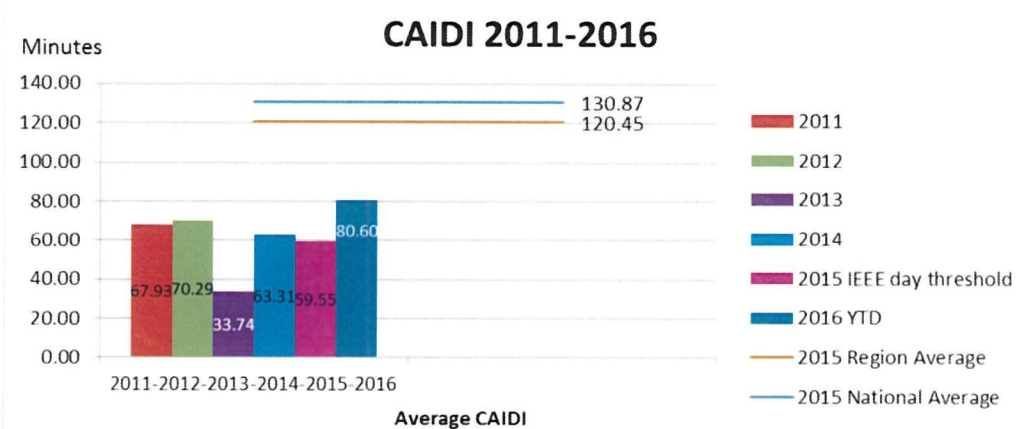
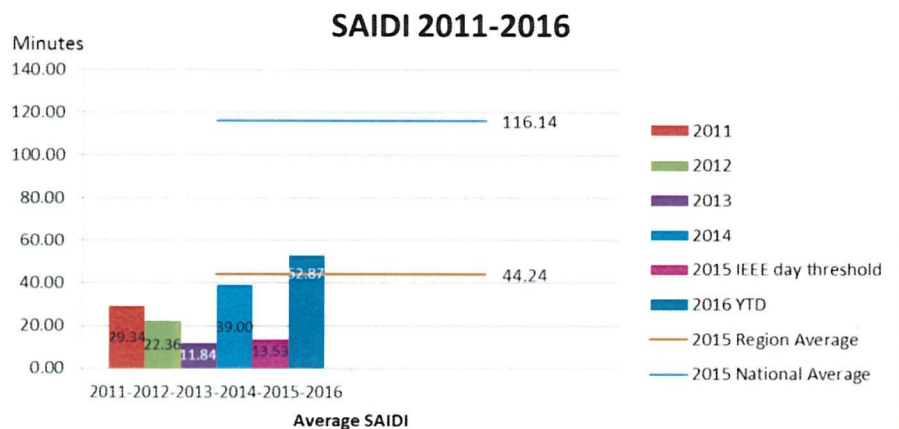
READING

NTG Member and JobType	Count of Ticket Number
CMCTNR	2
Comcast	
TRANSFER	2
NP3PMA	11
Non-participating 3rd Party Attacher	
TRANSFER	11
RDNGFD	2
Reading Fire Department	
TRANSFER	2
RMLD	95
Reading Municipal Light Department	
TRANSFER	48
PULL POLE	47
VZNE	1
Verizon	
TRANSFER	1
VZNSA	110
Verizon	
TRANSFER	108
PULL POLE	2
(blank)	
Grand Total	221

WILMINGTON

NTG Member and JobType	Count of Ticket Numbers
CMCTNR	2
Comcast	
TRANSFER	2
NP3PMA	10
Non-participating 3rd Party Attacher	
TRANSFER	10
RMLD	64
Reading Municipal Light Department	
TRANSFER	58
ATTACH	1
PULL POLE	4
INSTL GUY	1
VZNE	75
Verizon	
TRANSFER	56
PULL POLE	19
WGMNFD	72
Wilmington Fire Department	
TRANSFER	72
(blank)	
Grand Total	223

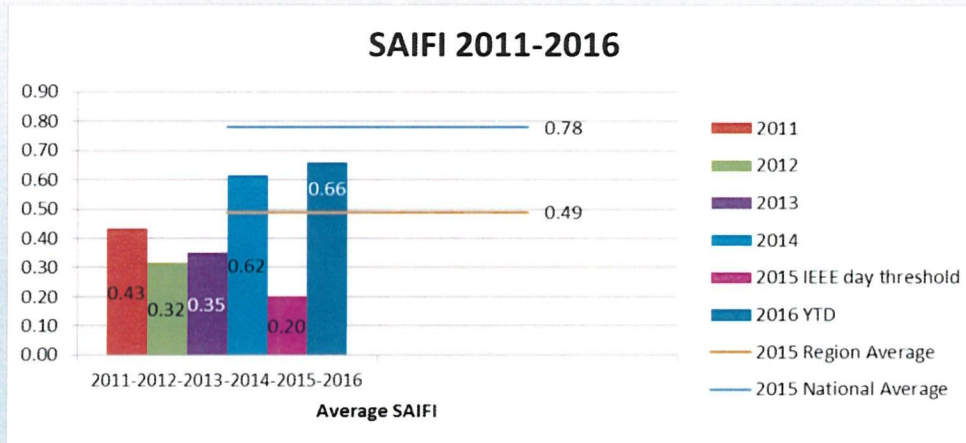
RMLD Reliability Indices



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

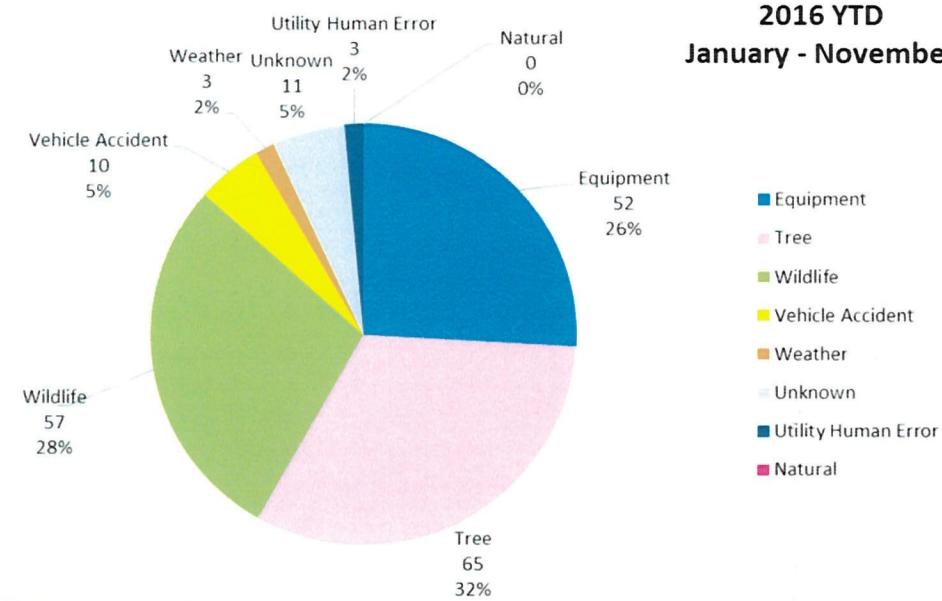
$$CAIDI(\text{Minutes}) = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customers Interruptions}}$$

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

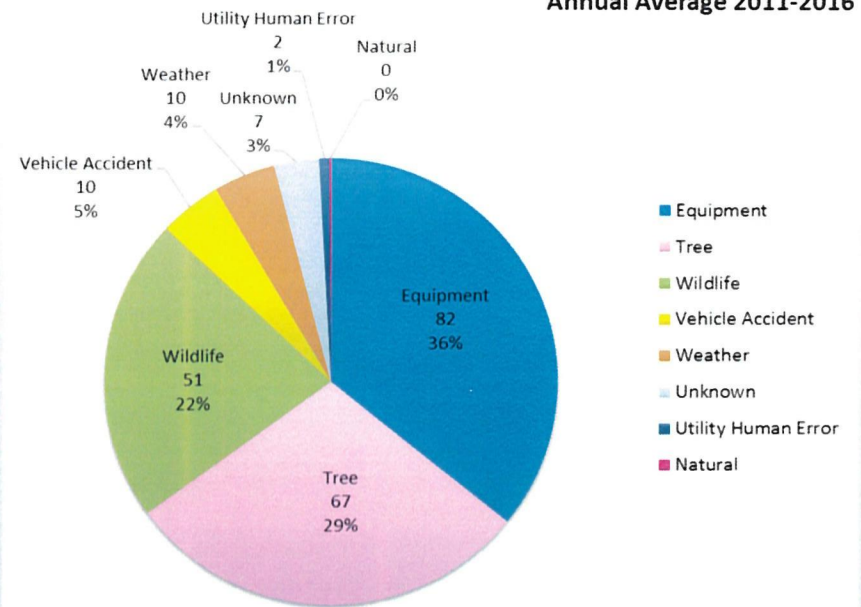


Outages Causes

Outages Causes YTD (from eReliability website)



Annual Average 2011-2016



Questions ?



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

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

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

January 19, 2017

Town of Reading Municipal Light Board

Subject: IFP 2017-31 Fiberglass Poles and Spare Handhole Covers

Pursuant to M.G.L. c. 164 § 56D, on December 28, 2016, a bid invitation 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 proposals for Fiberglass Poles and Spare Handhole Covers.

An invitation for proposals was sent to the following six companies:

Graybar	Irby	Power Sales Group
Power Tech dba UPSC	Shamrock Power	Wesco

Sealed proposals were received from three companies: Graybar, Irby and WESCO.

The sealed proposals were publicly opened and read aloud at 11:00 a.m., January 11, 2016, in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.

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

Move that proposal 2017-31 for: Fiberglass Poles and Spare Handhole Covers be awarded to: **Irby for \$26,740.40** pursuant to Chapter 164 § 56D on the recommendation of the General Manager.

The FY17 Routine Construction Budget will be charged for these items.

Brian Smith

Hamid Jafari

Coleen O'Brien

**Fiberglass Poles
Bid 2017-31**

<u>Bidder</u>	<u>Manufacturer</u>	<u>Delivery Date</u>	<u>Unit Cost</u>	<u>Qty</u>	<u>Total Net Cost</u>	<u>Meet Specification requirement</u>	<u>Specification Data Sheets</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>
Irby						yes	yes	yes	yes	yes	no	yes
Item 1	Shakespeare	11 weeks ARO*	\$660.36	40	\$26,414.40							
Item 2	Shakespeare	11 weeks ARO*	\$16.30	20	\$326.00							
		<i>* subject to change</i>			<u>\$26,740.40</u>							
<hr/>												
WESCO						yes	yes	yes	yes	yes	no	yes
Item 1	Shakespeare	11-12 weeks ARO	\$665.00	40	\$26,600.00							
Item 2	Shakespeare	11-12 weeks ARO	\$16.00	20	\$320.00							
					<u>\$26,920.00</u>							

Non responsive bidders:

Graybar Rejected based on the following:
1. Tax compliance form not submitted.

**BOARD MATERIAL AVAILABLE
BUT NOT DISCUSSED**

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

January-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	\$118.01	\$204.54	\$144.38	\$1,063.29	\$207.50	\$4,948.30	\$769,366.08
PER KWH CHARGE	\$0.15734	\$0.13636	\$0.14438	\$0.14566	\$0.19213	\$0.14138	\$0.11183
NATIONAL GRID							
TOTAL BILL	\$146.32	\$311.18	\$182.69	\$2,671.58	\$456.82	\$5,595.27	\$1,513,955.46
PER KWH CHARGE	\$0.19509	\$0.20745	\$0.18269	\$0.36597	\$0.42298	\$0.15986	\$0.22006
% DIFFERENCE	23.99%	52.14%	26.54%	151.26%	120.15%	13.07%	96.78%
EVERSOURCE(NSTAR)							
TOTAL BILL	\$143.50	\$253.38	\$189.19	\$1,084.62	\$165.48	\$6,077.76	\$1,027,836.65
PER KWH CHARGE	\$0.19133	\$0.16892	\$0.18919	\$0.14858	\$0.15322	\$0.17365	\$0.14940
% DIFFERENCE	21.60%	23.88%	31.04%	2.01%	-20.25%	22.83%	33.60%
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	-24.27%	-13.20%	-16.59%	-7.01%	-24.60%	-1.30%	-12.58%
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	-16.33%	-1.41%	-8.06%	-9.76%	-18.83%	-3.75%	4.91%
WAKEFIELD MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$121.11	\$224.67	\$151.88	\$1,148.04	\$183.58	\$5,385.58	\$904,362.30
PER KWH CHARGE	\$0.16148	\$0.14978	\$0.15188	\$0.15727	\$0.16999	\$0.15387	\$0.13146
% DIFFERENCE	2.63%	9.84%	5.20%	7.97%	-11.53%	8.84%	17.55%

From: [Tracy Schultz](#)
To: [RMLD Board Members Group](#)
Cc: [Jeanne Foti](#)
Subject: Account Payable and Payroll Questions
Date: Thursday, January 26, 2017 8:06:00 AM

Good morning,

There were no Account Payable Warrant questions for the following dates:
December 9, December 23, January 6, and January 13.

Chairman O'Rourke had a question on an invoice amount on the December 16 AP, which was due to a credit being applied.

Commissioner Hennessy had a question on a customer credit on the January 20 AP, which was due to a new customer backdating their service start date at that meter after the customer of record had paid for that same time of service.

There were no Payroll questions for the following dates:
December 12, December 27, January 9, and January 23.

This message will be printed for the Board Packet for the RMLD Board Meeting on Tuesday, January 31, 2017.

Tracy Schultz

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