

Reading Municipal Light Board of Commissioners

Regular Session

230 Ash Street

Reading, MA 01867

July 28, 2016

Start Time of Regular Session: 7:30 p.m.

End Time of Regular Session: 9:18 p.m.

Commissioners:

Thomas O'Rourke, Chairman - Absent

Philip B. Pacino, Commissioner

Dave Hennessy, Commissioner Secretary - Pro Tem

David Talbot, Vice Chair - Chairman

John Stempeck, Commissioner

Staff:

Coleen O'Brien, General Manager

Hamid Jaffari, Director of Engineering and Operations

Wendy Markiewicz, Senior Accountant

Jeanne Foti, Executive Assistant

Jane Parenteau, Director of Integrated Resources

Call Meeting to Order

Chairman Pacino called the meeting to order and stated that the meeting was being videotaped, it is not a live broadcast. The meeting is also being videotaped for distribution for community television stations in North Reading, Wilmington and Lynnfield.

Opening Remarks

Chairman Pacino read the RMLD Board of Commissioners Code of Conduct.

Chairman O'Rourke will not be in attendance at the meeting, Vice Chair Pacino will be Chairman at this meeting,

Public Comment

There was no public comment.

RMLD Citizens' Advisory Board

There was no RMLD Citizens' Advisory Board member present.

Liaisons to RMLD Board

There were no liaisons present.

Report RMLD Board Member Attendance at RMLD Citizens' Advisory Board Meeting

Note: Vice Chair Pacino attended the CAB meeting on July 13, 2016.

Chairman Pacino reported that he attended the last CAB meeting. The wholesale power supply was discussed and it was a good meeting.

Report of the Committee

Policy Committee – Commissioner Hennessy

Mr. Hennessy reported that the Policy Committee met before the meeting, RMLD Policy Number 6, Drug and Alcohol Free Workplace policy was updated to reflect current law especially in the regards to certain prescription and nonprescription drugs, including medical marijuana.

Mr. Hennessy made a motion seconded by Mr. Stempeck to approve the revisions made to RMLD Policy Number 6, Revision 2, Drug and Alcohol Workplace.

Motion carried 4:0:0.

Approval of Board Minutes

January 28, 2016 and March 31, 2016

Mr. Stempeck made a motion seconded by Mr. Hennessy to approve the January 28, 2016 minutes, as presented.

Motion carried 4:0:0.

Mr. Stempeck made a motion seconded by Mr. Hennessy to approve the March 31, 2016 minutes, as presented.

Motion carried 4:0:0.

Chairman Pacino said that Mr. Hennessy will be the Secretary this evening.

General Manager's Report – Ms. O'Brien

Ms. O'Brien reported that the RMLD held an Informational Forum on the gas generator and the benefits of peak shaving using this type of generation technology. This was held on Tuesday, July 26, 2016 at 7:00 pm, Edith A O'Leary Senior Center, North Reading. There was no public attendance. Ms. O'Brien said that the gas generator should be installed by June 2017. Chairman Pacino said that he and the RMLD Citizens' Advisory Board member Mark Chrisos were in attendance.

Ms. O'Brien stated that Vehicle Day is August 8 from about 10:15-12:15, 5 Central Street in North Reading. Ms. O'Brien stated that there is no surplus to report on. Also, there will be no RMLD Board meeting in August.

Power Supply Report – May 2016 – Ms. Parenteau (Attachment 1)

Ms. Parenteau presented the May power supply report provided in the Commissioner packets covering power supply changes, energy cost, fuel charges and collections, fuel reserve balance, spot market purchases, capacity costs, demand as well as the percentage of RMLD's renewable projects.

Ms. Parenteau reported that the majority of RMLD's portfolio is purchased by a layering and laddering approach. For the month of May, 54.8% of RMLD's portfolio is representative of system energy, with RMLD's renewable increasing, 11.7% hydro, 2.8% wind and .5% solar. The renewables represent approximately 15% of the portfolio in May. Nuclear represented 13.8% and natural gas 1.8%. Ms. Parenteau pointed out that comparing the renewables May 2015 to May 2016 there was more hydro generated in 2016 than 2015. The RMLD had Jericho Wind that came online in October 2015. Saddleback Mountain was in the portfolio as well in 2015. The solar portion represents a two megawatt solar array located at 1 Burlington Place, Wilmington in which the RMLD is buying the off take of that project which came online at the end of last year.

Ms. Parenteau stated that the average cost of the portfolio for May was a little over 3.5¢. The wind and solar have a higher cost which is anticipated. The directive on renewable projects is to review such projects to try to find economic and competitively effective renewables to include in the portfolio. Mr. Hennessy asked where the directive comes from. Ms. Parenteau responded Ms. O'Brien and the RMLD have a Sustainable Energy Policy. The policy contains the specific sustainability target percentages.

RMLD RFP for Wholesale Power Supply

Ms. Parenteau reported that at the July 13 Citizens' Advisory Board (CAB) meeting, the same report for RMLD's layering and laddering approach of procuring power supply was presented. Ms. Parenteau explained that the RMLD needs to procure monthly on peak and monthly off peak, as well as what needs to be procured pending Board approval. This methodology is being used to hedge power supply costs. Ms. Parenteau said that the prices have come down from July 6 to July 28 by approximately \$800,000 which is a very attractive time to lock in competitive prices. A year ago, the average cost was \$47 per megawatt hour for the year period, the energy prices are currently under \$38.52, which is representative of the fact the RMLD is accurately timing the market.

Mr. Stempeck made a motion seconded by Mr. Hennessy that the RMLD Board of Commissioners authorize the General Manager to execute one or more Power Supply Agreements in accordance with RMLD's Wholesale Power Supply Plan for power supply purchases for a period not to exceed 2017 through 2020 and in amounts not to exceed 13 megawatts in 2017, 16 megawatts in 2018, 20 megawatts in 2019, and 23 megawatts in 2020, as presented by the Director of Integrated Resources and on the recommendation of the General Manager.

Motion carried 4:0:0.

Chairman Pacino pointed out that the CAB approved this at its meeting on July 13, 3:0:1.

On another matter, Ms. O'Brien said that there was a topic brought up with the CAB relative to the minutes. It is really important that if someone makes a meaningful comment that it goes on record, she asked the CAB if the minutes could be consolidated, not verbatim with being consistent with RMLD's goals of being more efficient. Mr. Pacino pointed out the minutes are not supposed to be transcription, but a summarization of what has been said. The minutes can be amended to add statements. The Board was in agreement.

Engineering and Operations Report – May 2016 – Mr. Jaffari (Attachment 2)

Mr. Jaffari presented the May report included in the Commissioner packet covering the monthly capital improvement projects, routine construction, routine maintenance, double poles, NJUNS and an update on the reliability reporting.

Mr. Jaffari reported that the capital improvement and routine construction projects spending in May was \$115,307, bringing the year to date spending to \$1,404,284.

RMLD has initiated seven preventative maintenance programs to maintain its assets and improve the operating conditions. These programs are: **Transformer Replacement:** 17.36% of aged padmount transformers and 13.31 % of aged overhead transformers have been replaced, **Pole Inspection:** 172 poles replaced, 96 transfers have been completed, **Visual Inspection of Overhead Lines:** 21 circuits inspected to identify potential problems or failures, no problems found, **Manhole Inspection:** 397 manholes have been

Engineering and Operations Report – May 2016 – Mr. Jaffari (Attachment 2)

inspected since inception, **Porcelain Cutout Replacements:** 91% system wide have been replaced with 257 in need of replacement, **Tree Trimming:** 187 spans year to date totaling 2,461 spans trimmed and **Substation Maintenance:** this is a monthly maintenance program for substations and industrial parks with no hot spots found.

Mr. Jaffari reported there are approximately 16,000 poles in all four communities, 50% owned by RMLD and 50% by Verizon. The custodial (who maintains the poles) of the poles in Reading is split between RMLD and Verizon, North Reading is RMLD's custodial, and Lynnfield and Wilmington are Verizon's custodial areas. Refer to the NJUNs report for a more detailed break out of poles: transfers, set, removal and guy installation.

On another matter Mr. Talbot asked how RMLD's efforts to shave the peak has turned out, with the public's response is there any measures on that because there have been many warm days. Ms. Parenteau said that it is too early to say, ISO's preliminary peak occurred at 18:00 July 22 at approximately 24,000 megawatts. Ms. Parenteau stated that is as of right now.

The reliability indices for SAIDI, CAIDI and SAIFI are well below the regional and national average. The outage causes were 26% equipment, 44% trees and 20% wildlife.

Financial Report – May 2016 – Ms. Markiewicz (Attachment 3)

Ms. Markiewicz presented the May financial report included in the Commissioner packet. Ms. Markiewicz said that the Net Income was \$332,716, increasing year to date Net Income to \$3.9 million. The year to date budgeted Net Income was \$2.5 million resulting in Net Income being over budget \$1.4 million or 55%. Year to date Base Revenues exceeded the budgeted amount by \$189,000 or under 1%. Actual Base Revenues \$21.3 million compared to the budgeted amount of \$21.1 million. Year to date Purchase Power Base Expense was over budget by \$1.3 million or 4.9%. Actual Purchase Power Base cost was \$28.2 million, the budgeted amount is \$26.9 million.

Purchase Power Fuel Expense was under budget by \$1.6 million. The actual Purchase Power Fuel cost was \$29.9 million, the budgeted amount is \$31.5 million. The Operating and Maintenance expenses were under budget by \$739,000 or 5.5%. The Operating and Maintenance expenses were \$12.6 million, the budgeted amount \$13.3 million.

Cash is at \$38.3 million, Operating Fund \$15.1 million, Capital Fund \$4.5 million, Rate Stabilization Fund \$6.8 million, Deferred Fuel \$5.1 million and the Energy Conservation Fund \$781,734. Year to date kilowatt hour sales 618 million kilowatt hours which is 15.7 million kilowatt hours, 2.48% less than last year's actual figures.

Mr. Hennessy commented that RMLD is doing well. Ms. Markiewicz said that is due to the fact there have not been any major significant events such as storms or major oil spills.

Chairman Pacino asked about the status of the audit. Ms. Markiewicz explained that the audit process is ongoing with the auditors coming in the week of August 8 with Mr. Fournier also assisting.

RMLD Procurement Requests Requiring Board Approval (Attachment 4)

RFP 2016-24 Distributed Generation

Mr. Jaffari reported that this project was rebid and the bid has provided a cost savings of \$300,000. The RMLD will be taking the optional seven-year warrantee for parts and labor, the maintenance will be paid separately. The payback is five to seven years.

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2016-24 Distributed Generation be awarded to Milton CAT as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$2,008,538.00.

Motion carried 4:0:0.

IFP 2017-02 1kV Padmounted Switchgear

Mr. Stempeck made a motion seconded by Mr. Hennessy Move that bid 2017-02 for 15kV Padmounted Switchgear be awarded to Trayer Engineering Corp. as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$226,100.00.

Motion carried 4:0:0.

IFP 2017-03 S&C SCADA-Mate CX Switch

Mr. Stempeck made a motion seconded by Mr. Hennessy Move that bid 2017-03 for S&C SCADA-Mate CX Switch be awarded to WESCO as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$114,720.00.

Motion carried 4:0:0.

RMLD Procurement Requests Requiring Board Approval (Attachment 4)

IFP 2017-04 S&C IntelliRupter Pulse Closer

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2017-04 for S&C IntelliRupter Pulse Closer be awarded to WESCO as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$73,940.00.

Motion carried 4:0:0.

IFB 2017-05 Hourly Rates for Professional Manpower, Vehicles, Trade Tools, and Equipment for Underground Electrical Distribution Construction and Maintenance

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2017-05 for Hourly Rates for Professional Manpower, Vehicles, Trade Tools, and Equipment for Underground Electrical Distribution Construction and Maintenance be awarded to McDonald Electrical Corporation as the lowest responsible and eligible bidder on the recommendation of the General Manager.

Motion carried 4:0:0.

IFP 2017-06 Cooper Power System or Compatible Meters and Equipment for AMI Mesh Network System Expansion and Mitigation

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2017-06 for Cooper Power System or Compatible Meters and Equipment for the AMI Mesh Network System Expansion and Migration be awarded to Eaton as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$119,531.76.

Motion carried 4:0:0.

IFB 2017-08 Bus Insulation at Station 5

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2017-08 for Bus Insulation at Substation 5 be awarded to Powerline Contractors, Inc. as the lowest responsible and eligible bidder on the recommendation of the General Manager for a total cost of \$57,332.00.

Motion carried 4:0:0.

General Discussion

There was none.

BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED

E-Mail responses to Account Payable/Payroll Questions

Rate Comparisons, June and July 2016

RMLD Board Meetings

Thursday, September 29, 2016

Thursday, October 27, 2016

RMLD Board Policy Committee Meeting

To be determined, early September timeframe.

Fiber Optic Committee Meeting

To be determined, early September timeframe.

CAB Meetings

Wednesday, September 14, 2016, Commissioner Hennessy will attend this meeting.

Executive Session

At 8:08 p.m. Mr. Stempeck made a motion seconded by Mr. Hennessy that the Board go into Executive Session to approve the Executive Session Meeting minutes of March 31, 2016 and to discuss strategy with respect to collective bargaining and return to Regular Session for the sole purpose of adjournment.

Chairman Pacino called for a poll of the vote:

Mr. Hennessy; Aye; Chairman Pacino, Aye; Mr. Stempeck, Aye; and Mr. Talbot, Aye.

Motion carried 4:0:0.

Adjournment

At 9:18 p.m. Mr. Stempeck made a motion seconded by Mr. Hennessy to adjourn the Regular Session.

Motion carried 4:0:0.

A true copy of the RMLD Board of Commissioners minutes
as approved by a majority of the Commission.

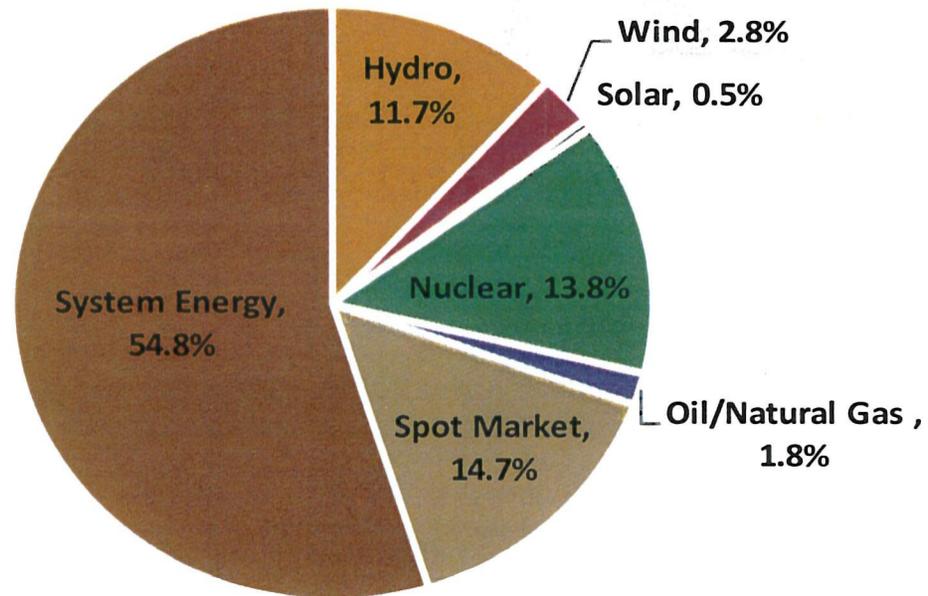
Dave Hennessy, Secretary Pro Tem
RMLD Board of Commissioners

INTEGRATED RESOURCES

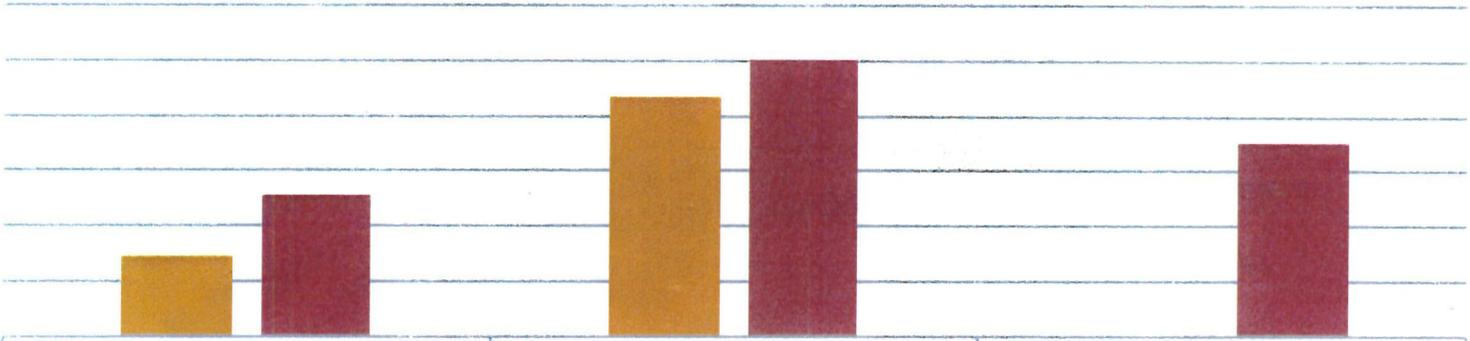
July 28, 2016
RMLD Board of Commissioners Meeting
Reporting for May, 2016

Jane Parenteau
Director of Integrated
Resources

MAY 2016



May 2015 vs. May 2016

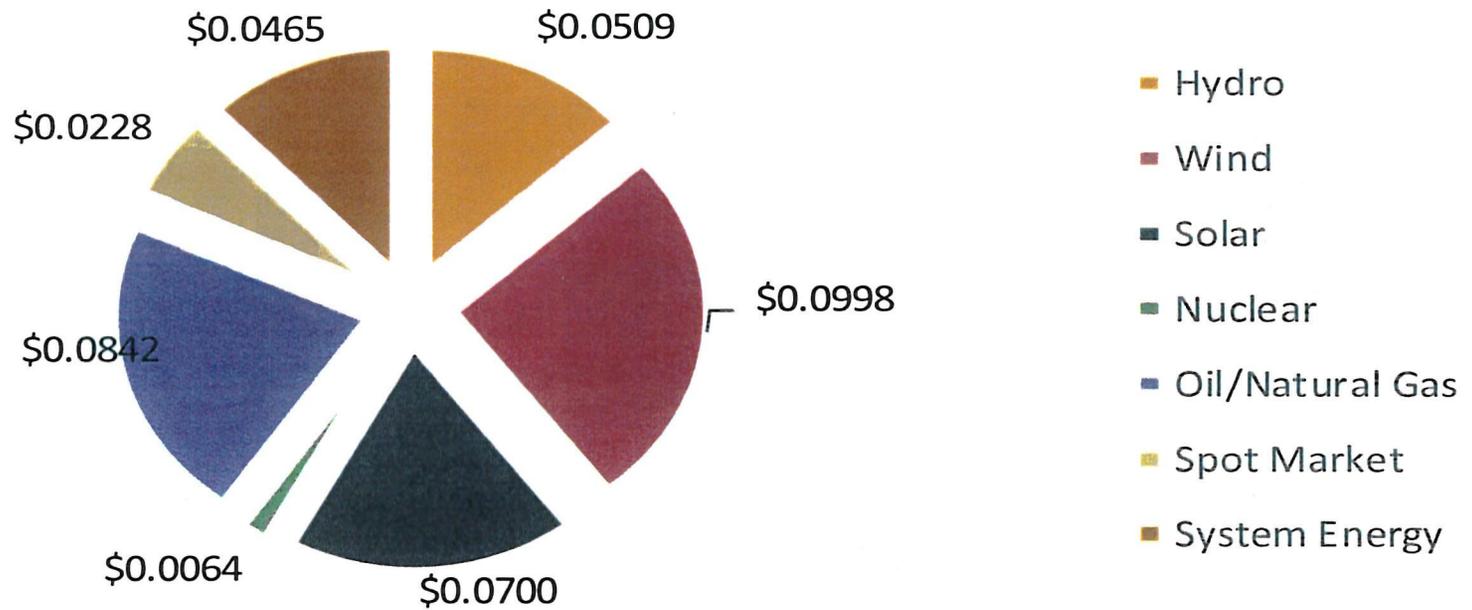


	HYDRO	WIND	SOLAR
2015	\$0.0290	\$0.0869	\$-
2016	\$0.0509	\$0.0998	\$0.0700

Renewable costs per kWh

2015 2016

May 2016
Imbedded Fuel Cost (\$/kWh) per Resource



To: Coleen O'Brien

From:  Maureen McHugh, Jane Parenteau

Date: July 13, 2016

Subject: Purchase Power Summary – May, 2016

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

ENERGY

The RMLD's total metered load for the month was 54,323,179 kWh, which is a 7.79% decrease from the May, 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	1,632,287	\$6.71	2.99%	\$10,953	0.56%
Seabrook	5,911,394	\$6.32	10.83%	\$37,360	1.92%
Stonybrook Intermediate	294,840	\$120.85	0.54%	\$35,632	1.83%
Shell Energy	9,086,400	\$63.50	16.64%	\$576,979	29.67%
NYPA	2,861,732	\$4.92	5.24%	\$14,080	0.72%
ISO Interchange	8,007,420	\$22.80	14.67%	\$182,548	9.39%
NEMA Congestion	0	\$0.00	0.00%	-\$254,777	-13.10%
Coop Resales	17,884	\$126.70	0.03%	\$2,266	0.12%
BP Energy	8,036,400	\$46.90	14.72%	\$376,907	19.38%
Hydro Projects*	3,520,132	\$88.26	6.45%	\$310,685	15.97%
Braintree Watson Unit	605,872	\$51.99	1.11%	\$31,502	1.62%
Saddleback/Jericho Wind	1,502,261	\$99.79	2.75%	\$149,912	7.71%
One Burlington Solar	262,325	\$70.00	0.48%	\$18,363	0.94%
Exelon	12,805,200	\$34.28	23.45%	\$438,925	22.57%
Stonybrook Peaking	57,768	\$235.22	0.11%	\$13,588	0.70%
Monthly Total	54,601,915	\$35.62	100.00%	\$1,944,922	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 May, 2016.

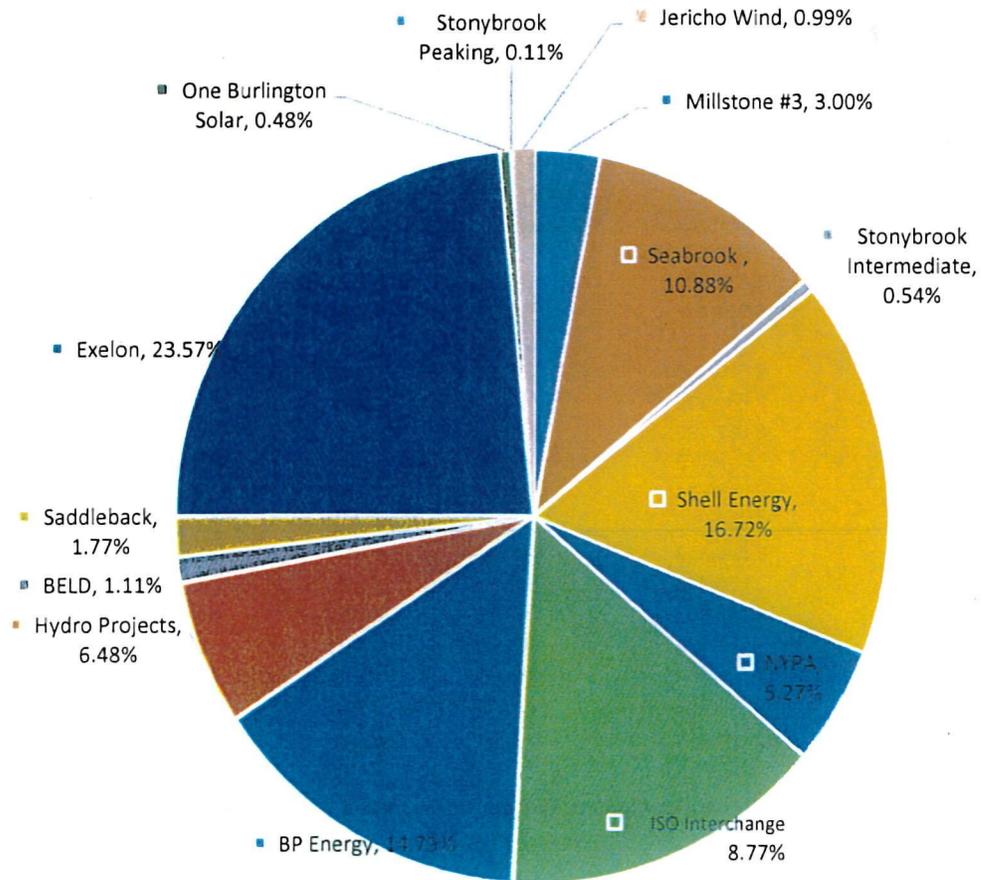
Table 2

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP * Settlement	7,010,719	\$28.33	12.84%
RT Net Energy ** Settlement	996,701	\$14.23	1.83%
ISO Interchange (subtotal)	8,007,420	\$22.80	14.67%

* Independent System Operator Day-Ahead Locational Marginal Price

** Real Time Net Energy

MAY 2016 ENERGY BY RESOURCE



CAPACITY

The RMLD hit a demand of 120,445 kW, which occurred on May 31, at 6 pm. The RMLD's monthly UCAP requirement for May, 2016 was 224,094 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	30.84	\$152,663	9.86%
Seabrook	7,910	38.53	\$304,789	19.68%
Stonybrook Peaking	24,981	1.93	\$48,181	3.11%
Stonybrook CC	42,925	7.08	\$303,870	19.62%
NYPA	4,019	4.19	\$16,834	1.09%
Hydro Quebec	0	0	\$16,855	1.09%
Nextera	60,000	5.90	\$354,000	22.85%
Braintree Watson Unit	10,520	12.02	\$126,431	8.16%
ISO-NE Supply Auction	66,787	3.38	\$225,462	14.55%
Hydro Projects	2,002	0.00	\$0	0.00%
Total	224,094	\$6.91	\$1,549,085	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	\$10,953	\$152,663	\$163,615	4.68%	1,632,287	0.1002
Seabrook	\$37,360	\$304,789	\$342,149	9.79%	5,911,394	0.0579
Stonybrook Intermediate	\$35,632	\$303,870	\$339,503	9.72%	294,840	1.1515
Hydro Quebec	\$0	\$16,855	\$16,855	0.48%	-	0.0000
Shell Energy	\$576,979	\$0	\$576,979	16.51%	9,086,400	0.0635
NextEra	\$0	\$354,000	\$354,000	10.13%	-	0.0000
* NYPA	\$14,080	\$16,834	\$30,914	0.88%	2,861,732	0.0108
ISO Interchange	\$182,548	\$225,462	\$408,010	11.68%	8,007,420	0.0510
Nema Congestion	-\$254,777	\$0	-\$254,777	-7.29%	-	0.0000
BP Energy	\$376,907	\$0	\$376,907	10.79%	8,036,400	0.0469
* Hydro Projects	\$310,685	\$0	\$310,685	8.89%	3,520,132	0.0883
Braintree Watson Unit	\$31,502	\$126,431	\$157,933	4.52%	605,872	0.2607
* Saddleback/Jericho	\$149,912	\$0	\$149,912	4.29%	1,502,261	0.0998
* One Burlington Solar	\$18,363	\$0	\$18,363	0.53%	262,325	0.0700
Coop Resales	\$2,266	\$0	\$2,266	0.06%	17,884	0.1267
Exelon Energy	\$438,925	\$0	\$438,925	12.56%	12,805,200	0.0343
Stonybrook Peaking	\$13,588	\$48,181	\$61,769	1.77%	57,768	1.0693
Monthly Total	\$1,944,922	\$1,549,085	\$3,494,007	100.00%	54,601,915	0.0640
* Renewable Resources						14.92%

RENEWABLE ENERGY CERTIFICATES (RECs)

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

Table 5
RECs Summary
Period - January 2016 - May 2016

	Banked RECs	Projected RECs	Total RECs	Est. Dollars
Woronoco	1,076	5,030	6,106	\$152,650
Pepperell	714	3,004	3,718	\$92,950
Indian River	690	1,474	2,164	\$54,100
Turners Falls	1,377	1,251	2,628	\$0
Saddleback	4,348	6,694	11,042	\$276,050
Jericho	0	3,817	3,817	\$95,425
Sub total	8,205	21,270	29,475	671,175
RECs Sold	\$0		0	\$0
Grand Total	8,205	21,270	29,475	\$671,175

*RMLD sold 18,640 RECs for a total of \$695,538.25 in calendar year 2015.

TRANSMISSION

The RMLD's total transmission costs for the month of May, 2016 were \$865,693. This is a decrease of 3.73% from the April transmission cost of \$834,561. In May, 2015 the transmission costs were \$613,139.

Table 6

	Current Month	Last Month	Last Year
Peak Demand (kW)	120,445	93,804	138,424
Energy (kWh)	54,601,915	50,971,493	58,248,608
Energy (\$)	\$1,944,922	\$2,149,376	\$2,012,239
Capacity (\$)	\$1,549,085	\$1,457,057	\$1,547,092
Transmission(\$)	\$865,693	\$834,561	\$613,139
Total	\$4,359,700	\$4,440,995	\$4,172,470

ENERGY EFFICIENCY

Table 7 shows the comprehensive results from the Energy Conservation program. The amount of savings is broken down by both demand and energy for the Commercial and Residential sectors.

Table 7				Total \$		Total		Total \$			
Commercial	Year	Capacity Saved (kW)	Energy Saved (kwh)	Capacity	\$/kW	Energy	\$/kWh	Rebate	Rebate/kWh	Rebate/kWh	Cost Benefit
Total to date	FY07-15	25,966	102,495,709	\$ 2,557,553		5,550,957		\$ 1,732,385	\$ 1.59	\$ 5,334.73	\$ 6,376,125
Current	FY16	223	903,888	\$ 30,673	\$ 11.45	54,233	\$ 0.06	\$ 186,611	\$ 0.22	\$ 738.75	\$ (129,898)
Residential											
Total to date	FY07-15	4,513	3,642,362	\$ 787,845		329,349		\$ 718,531	\$ 0.20	\$ 159.22	\$ 398,663
Current	FY16	127	53,235	\$ 17,516	\$ 11.45	3,194	\$ 0.06	\$ 71,535	\$ 2.46	\$ 1,025.96	\$ (110,084)
Total											
Total to date	FY07-15	30,479	106,138,071	\$ 3,020,981		5,740,107		\$ 2,846,612	\$ 0.03	\$ 93.40	\$ 5,914,476
Current	FY16	351	957,123	\$ 48,189	\$ 11.45	57,427	\$ 0.06	\$ 258,146	\$ 0.39	\$ 1,056.95	\$ (265,079)

Table 8 shows the breakdown for residential appliance rebates by type and year.

Table 8																								
Year	Washing Machine		Refrigerator		Dishwasher		Dehumidifier		Central A/C		Window A/C		Thermostat		Audits		Renewable		Air Source Heat Pump		HP Water Heater		Fan	
	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars
2007																								
2008	86	\$ 4,300	47	\$ 2,350	55	\$ 2,750	7	\$ 175	17	\$ 1,700	10	\$ 250	23	\$ 230	107	\$ 14,940								
2009	406	\$ 20,300	259	\$ 12,950	235	\$ 11,750	40	\$ 1,000	41	\$ 4,100	50	\$ 1,250	114	\$ 1,140	107	\$ 14,940								
2010	519	\$ 25,950	371	\$ 18,550	382	\$ 19,100	37	\$ 925	64	\$ 6,400	49	\$ 1,225	127	\$ 1,270	64	\$ 8,960	6	\$ 20,700						
2011	425	\$ 21,250	383	\$ 19,150	313	\$ 15,650	47	\$ 1,175	57	\$ 5,700	65	\$ 1,625	118	\$ 1,180	180	\$ 26,960	4	\$ 18,000						
2012	339	\$ 16,950	354	\$ 17,700	289	\$ 14,450	38	\$ 950	44	\$ 4,400	56	\$ 1,400	105	\$ 1,050	219	\$ 32,731	3	\$ 14,000			9	\$ 2,250	3	\$ 30
2013	285	\$ 14,250	336	\$ 16,800	311	\$ 15,550	29	\$ 725	24	\$ 2,400	54	\$ 1,350	57	\$ 570	375	\$ 75,000	3	\$ 15,000	19	\$ 1,900	4	\$ 1,000	5	\$ 50
2014	322	\$ 16,100	333	\$ 16,650	298	\$ 14,900	27	\$ 675	38	\$ 3,800	76	\$ 1,900	83	\$ 1,245	363	\$ 72,600	4	\$ 17,250	20	\$ 2,000	11	\$ 2,750	7	\$ 70
2015	257	\$ 12,850	256	\$ 12,800	261	\$ 13,050	26	\$ 650	27	\$ 2,700	36	\$ 900	41	\$ 615	314	\$ 62,800	7	\$ 19,000	24	\$ 2,400	12	\$ 3,000	3	\$ 30
2016	130	\$ 6,500	120	\$ 6,000	180	\$ 9,000	22	\$ 550	22	\$ 2,200	15	\$ 375	37	\$ 555	247	\$ 43,225	0	\$ -	16	\$ 1,600	0	\$ -	3	\$ 30
Total	2769	\$ 138,450	2459	\$ 122,950	2324	\$ 116,200	273	\$ 6,825	334	\$ 33,400	411	\$ 10,275	705	\$ 7,855	1976	\$ 352,156	27	\$ 103,950	79	\$ 7,900	36	\$ 9,000	21	\$ 210

READING MUNICIPAL LIGHT DEPARTMENT

To: Coleen O'Brien

Date: July 6, 2016

From: Jane Parenteau

William Seldon

Subject: 2016 Request For Proposals (RFP) Wholesale Power Supply

Reading Municipal Light Department (RMLD) will be going out with an RPP for Power Supply for the period January 2017 – December 2020.

The attached table shows the monthly maximum amounts of energy, in kW, the RMLD is planning to purchase for 2017 through 2020. This table reflects a laddering and layering approach that the RMLD is utilizing. Using this approach, RMLD purchases 25% of the projected energy requirement on a monthly basis for the next four years.

The first two lines show the year and month in the planning period.

Lines labeled (1) reflect the On Peak Energy Entitlements (kW) and Off Peak Energy Entitlements (kW) that were purchased from Exelon, and BP Energy and Shell in the 2012, 2013 and 2014 RFPs.

Lines labeled (2) show the maximum amount of monthly kW's that the RMLD is planning to purchase in the 2016 RFP. These amounts are the hourly amount of energy which translate into kWh's by summing the On Peak periods (Hours 08 – Hours 23) and Off Peak periods (Hours 01-07, 24, including all day Saturday and Sunday).

Lines labeled (3) indicate the Future On Peak and Off Peak Purchase which will be included in subsequent RFPs.

Lines labeled (4) show the Total Requirement On Peak and Off Peak which sums the amount of power supply either purchased, proposed to be purchased before the end of 2016, and possible future procurements. It should also be noted that the Total Requirement assumes an average 25% annual open position in the ISO-NE Spot Market.

The total amount of energy for the 48 month period from January 2017 through December 2020 represents approximately 270,300 Mw's and, based on today's

indicative pricing would result in contracts having a value of approximately \$11.2 million which is equivalent to approximately \$41.42/Mwh.

The Integrated Resources Division (IRD) will continue monitoring the forward energy prices as well as the NYMEX Natural Gas futures. The NYMEX Natural Gas futures for the balance of calendar year 2016 and beyond are projected to be in the low to mid \$3.00 range through 2020. Per the IRD strategy, the RMLD will continue to monitor the markets and procure RMLD's energy needs through the RFP process for the period 2016 - 2020 as reflected in the attached table.

RMLD intends to request indicative pricing for Fixed, Heat Rate (HR) Index and basis products from the following suppliers, Nextera, PSEG, Merrill Lynch, Morgan Stanley, J P Morgan, Dominion, Shell, PPL, Macquarie, Exelon, Hydro Quebec US, BP, Dynergy and Boston Energy Trading. These entities have recently been contacted by other municipals for pricing or have produced indicative pricing in the past. After receiving the indicative quotes from the suppliers, IRD will analyze the pricing and short list those entities which best fit RMLD's requirements. RMLD will negotiate contracts with the short listed entities. A contract matrix will be developed which will include the various provisions in each supplier's contract as well as overall pricing. Along with the General Manager, IRD will analyze final pricing and select one or more suppliers.

The Board of Commissioners and CAB will be updated on the results of the RFP.

RMLD Proposed Power Contract Timeline
(Amounts below represent kW proposed to be purchased hourly)

Year Month	100%												75%											
	2017 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	2018 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
(1) On Peak Entitlements (kW)	41,800	39,500	33,600	35,200	30,800	51,400	73,500	73,500	46,400	43,200	45,500	41,800	28,200	26,600	22,700	23,700	20,600	34,600	49,500	49,500	31,200	29,100	30,600	28,200
(1) Off Peak Entitlements (kW)	24,500	27,800	25,700	25,700	30,000	30,200	34,900	34,900	31,400	27,500	29,600	24,300	16,500	18,700	17,400	17,300	20,000	20,300	23,500	23,500	21,200	18,500	19,900	24,300
(2) RFP On-Peak Purchases (kW)	2,500	4,800	5,300	0	3,200	0	12,900	12,900	7,000	5,300	0	2,500	5,400	7,000	6,800	3,000	5,200	4,400	16,000	16,000	9,300	7,700	3,900	5,400
(2) RFP Off-Peak Purchases (kW)	9,400	4,300	7,100	0	0	3,000	5,400	5,400	5,700	9,800	3,600	2,900	9,200	5,700	7,500	2,200	2,800	4,900	7,100	7,100	6,900	9,800	5,300	0
(3) Future On-Peak Purchases (kW)	0	0	0	0	0	0	0	0	0	0	0	0	11,200	11,200	9,900	8,900	8,600	13,000	21,900	21,900	13,500	12,300	11,500	11,200
(3) Future Off-Peak Purchases (kW)	0	0	0	0	0	0	0	0	0	0	0	0	8,600	8,100	8,300	6,500	7,600	8,400	10,200	10,200	9,400	9,400	8,400	6,900
(4) Total Requirement On Peak (kW)	44,300	44,300	38,900	35,200	34,000	51,400	86,400	86,400	53,400	48,500	45,500	44,300	44,800	44,800	39,400	35,600	34,400	52,000	87,400	87,400	54,000	49,100	46,000	44,800
(4) Total Requirement Off Peak (kW)	33,900	32,100	32,800	25,700	30,000	33,200	40,300	40,300	37,100	37,300	33,200	27,200	34,300	32,500	33,200	26,000	30,400	33,600	40,800	40,800	37,500	37,700	33,600	27,500
	50%												25%											
Year Month	2019 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	2020 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
(1) On Peak Entitlements (kW)	14,200	13,400	11,400	11,900	10,400	17,400	24,900	24,900	15,800	14,700	15,400	14,200	0	0	0	0	0	0	0	0	0	0	0	0
(1) Off Peak Entitlements (kW)	8,300	9,400	8,700	8,700	10,800	10,200	11,800	11,800	10,700	9,300	10,000	8,300	0	0	0	0	0	0	0	0	0	0	0	0
(2) RFP On-Peak Purchases (kW)	8,400	9,200	8,500	6,100	7,000	8,800	19,200	19,200	11,400	10,100	7,800	8,400	11,400	11,400	10,000	9,100	8,800	13,200	22,300	22,300	13,700	12,500	11,700	11,400
(2) RFP Off-Peak Purchases (kW)	9,000	7,000	8,100	4,400	4,500	6,800	8,800	8,800	8,200	9,700	7,000	5,600	8,800	8,300	8,500	6,600	7,700	8,600	10,400	10,400	9,600	9,600	8,600	7,000
(3) Future On-Peak Purchases (kW)	22,700	22,700	19,900	18,000	17,400	26,300	44,200	44,200	27,300	24,800	23,300	22,700	34,300	34,300	30,200	27,300	26,400	39,800	66,800	66,800	41,300	37,600	35,300	34,300
(3) Future Off-Peak Purchases (kW)	17,400	16,400	16,800	13,200	15,400	17,000	20,600	20,600	19,000	19,100	17,000	13,900	26,300	24,800	25,400	20,000	23,300	25,700	31,200	31,200	28,700	28,900	25,700	21,100
(4) Total Requirement On Peak (kW)	45,300	45,300	39,800	36,000	34,800	52,500	88,300	88,300	54,500	49,600	46,500	45,300	45,700	45,700	40,200	36,400	35,200	53,000	89,100	89,100	55,000	50,100	47,000	45,700
(4) Total Requirement Off Peak (kW)	34,700	32,800	33,600	26,300	30,700	34,000	41,200	41,200	37,900	38,100	34,000	27,800	35,100	33,100	33,900	26,600	31,000	34,300	41,600	41,600	38,300	38,500	34,300	28,100

- (1) RFP Purchases in 2013, 2014 & 2015 (BP Energy, Shell & Exelon)
- (2) RFP Purchases in 2016
- (3) Amount of kW's that RMLD will purchase in subsequent RFP process
- (4) Total Requirement of energy which represents on average 20% open position in ISO-NE Spot Market

On-Peak: Mon - Fri Hours Ending 08-23
Off-Peak: Mon - Fri Hours Ending 24-07, Sat/Sun



Engineering & Operations Report

RMLD Board of Commissioners Meeting

July 28, 2016

May 2016 Reporting Period

Hamid Jaffari, Director of Engineering & Operations

Capital Improvement Projects

Construction Projects:		% Complete Status	May	YTD
102	Pole Line Upgrade - Lowell Street, Wilmington	100%	\$38,492	\$162,671
104	Upgrading Old Lynnfield Center URDs (Cook's Farm)	100%	\$27,806	\$268,045
107	Stepdown Area Upgrades – All Towns <ul style="list-style-type: none"> • Main Street, Reading • Vale Road, Reading 	On-going	\$3,076	\$42,658
108	Relay Replacement – Station 4 (GAW)	5%	\$45,163	\$69,838
	Service Installations – Residential: This item includes new or upgraded overhead and underground services.	On-going	\$9,675	\$123,335
100	Distributed Generation	20%	\$3,000	\$27,021
103	Distribution Protection and Automation	On-going	\$433	\$111,066
116	Transformers & Capacitors	n/a	\$36,555	\$612,901
125	GIS	7%	\$8,645	\$13,835
131	LED Street Light Conversion	39%	\$79,094	\$523,991

Routine Construction

	May	YTD
Pole Setting/Transfers	\$23,129	\$303,850
Overhead/Underground	\$19,494	\$319,436
Projects Assigned as Required <ul style="list-style-type: none"> • Artis Senior Living Center, Reading • AT&T Appl W15-1 (Salem/Woburn), Wilmington • 45 Industrial Way, Wilmington 	\$12,080	\$185,523
Pole Damage/Knockdowns - Some Reimbursable <ul style="list-style-type: none"> • Work was done to repair or replace two poles 	\$4,642	\$35,184
Station Group	\$368	\$3,506
Hazmat/Oil Spills	-	\$5,727
Porcelain Cutout Replacement Program	-	\$4,910
Lighting (Street Light Connections)	\$1,991	\$33,048
Storm Trouble	\$1,007	\$45,759
Underground Subdivisions (new construction) <ul style="list-style-type: none"> • Murray Hill Subdivision, Wilmington 	\$7,197	\$50,818
Animal Guard Installation	-	\$2,987
Miscellaneous Capital Costs	\$45,398	\$413,536
TOTAL:	<u>\$115,307</u>	<u>\$1,404,284</u>

Routine Maintenance

► Transformer Replacement (through May 2016)

Pad mount 17.36% Overhead 13.31%

► Pole Inspection (as of 7/14/16)

172 poles have been replaced 96 of 172 transfers have been completed

► Visual Inspection of OH Lines (as of 5/31/16)

Inspected circuits 5W8, 5W9, 5W5, 4W10, 5W4, 4W28, 4W5, 4W6, 3W8, 3W18, 4W13, 4W12, 3W15, 4W24, 4W28, 5W4, 3W6, 3W7, 3W14, 3W5, 4W9

► Manhole Inspection (through May 2016)

397 manholes have been inspected.

► Porcelain Cutout Replacements (through May 2016)

91% complete 257 remaining to be replaced

► Tree Trimming

May: 180 spans trimmed

YTD: 2,461 spans trimmed

► Substation Maintenance

Infrared Scanning – May complete - no hot spots found

Double Poles

➤ Ownership: 16,000 (approximately)

50% RMLD

50% Verizon

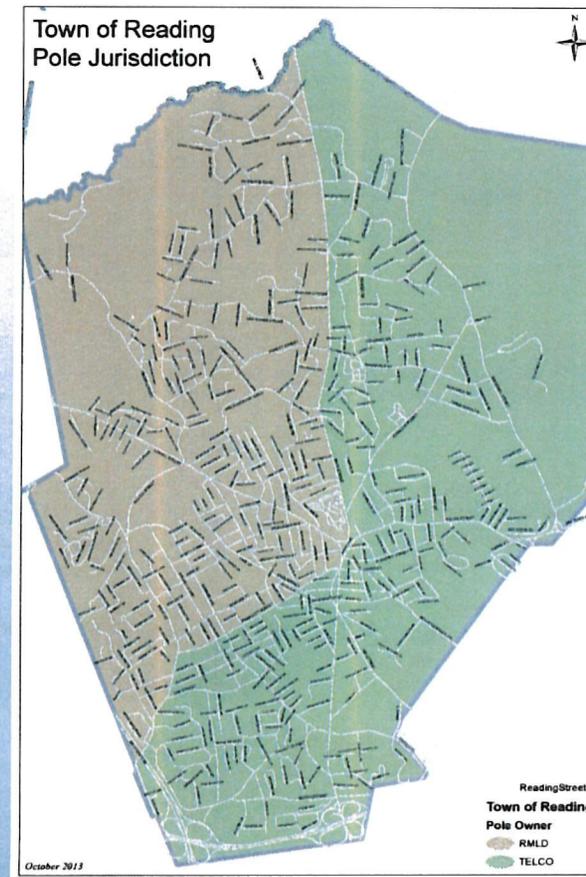
➤ Custodial:

Reading – split (see map) →

North Reading – RMLD

Lynnfield – Verizon

Wilmington - Verizon



NJUNS

"Next to Go" as of July 22, 2016

LYNNFIELD

NTG Member and Job Type	Count of Ticket Number
LFLDFD	3
Lynnfield Fire Department TRANSFER	3
RMLD	4
Reading Municipal Light Department TRANSFER	4
VZNESEA	14
Verizon	
TRANSFER	6
PULL POLE	6
DROPWORK	2
(blank)	
Grand Total	21

NORTH READING

NTG Member and Job Type	Count of Ticket Number
CMCTNR	7
Comcast	
TRANSFER	7
NGMA	1
National Grid	
TRANSFER	1
NRDGFDF	41
North Reading Fire Department	
TRANSFER	41
RMLD	61
Reading Municipal Light Department	
TRANSFER	16
SET POLE	1
PULL POLE	44
VZNEEDR	93
Verizon	
PULL POLE	10
DROPWORK	83
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Grand Total	203

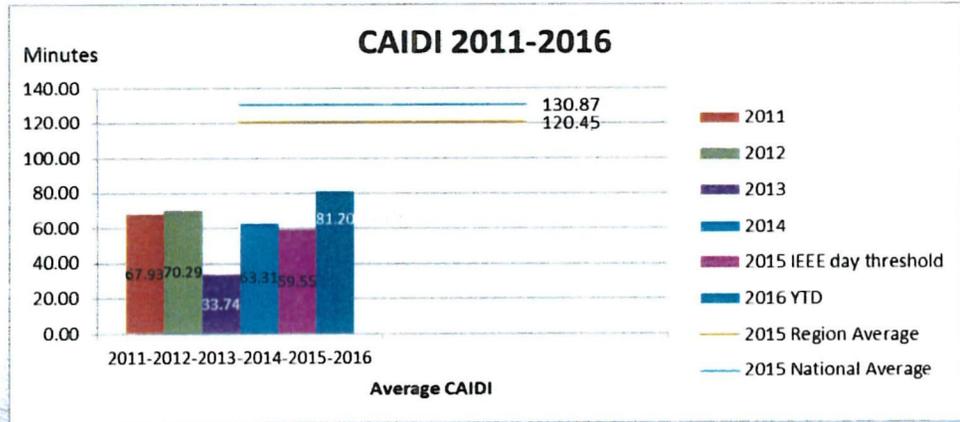
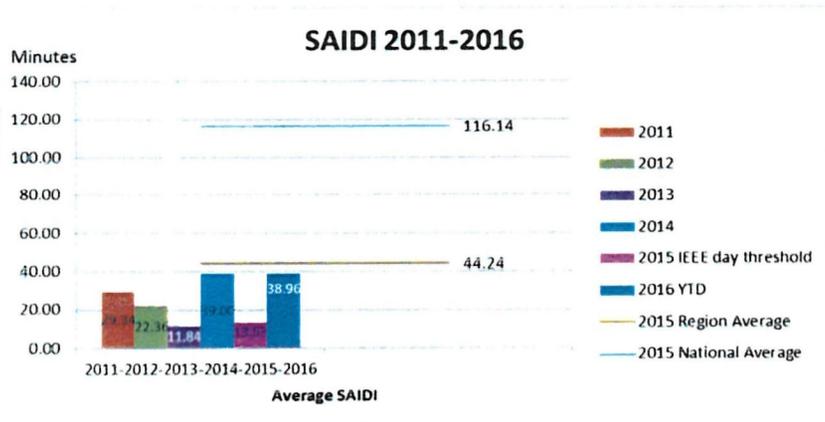
READING

NTG Member and Job Type	Count of Ticket Number
NP3PMA	10
Non-participating 3rd Party	
Attacher - Massachusetts	
TRANSFER	10
RDNGFD	4
Reading Fire Department	
TRANSFER	4
RMLD	61
Reading Municipal Light Department	
TRANSFER	47
PULL POLE	14
VZNESEA	189
Verizon	
TRANSFER	26
PULL POLE	31
DROPWORK	132
(blank)	
Grand Total	264

WILMINGTON

NTG Member and Job Type	Count of Ticket Number
NGMA	2
National Grid	
TRANSFER	2
NP3PMA	10
Non-participating 3rd Party	
Attacher - Massachusetts	
TRANSFER	10
RMLD	49
Reading Municipal Light Department	
TRANSFER	44
PULL POLE	4
INSTL GUY	1
VZBMA	1
Verizon Business	
TRANSFER	1
VZNEEDR	82
Verizon	
TRANSFER	7
PULL POLE	19
DROPWORK	56
WMGNFD	99
Wilmington Fire Department	
TRANSFER	99
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Grand Total	243

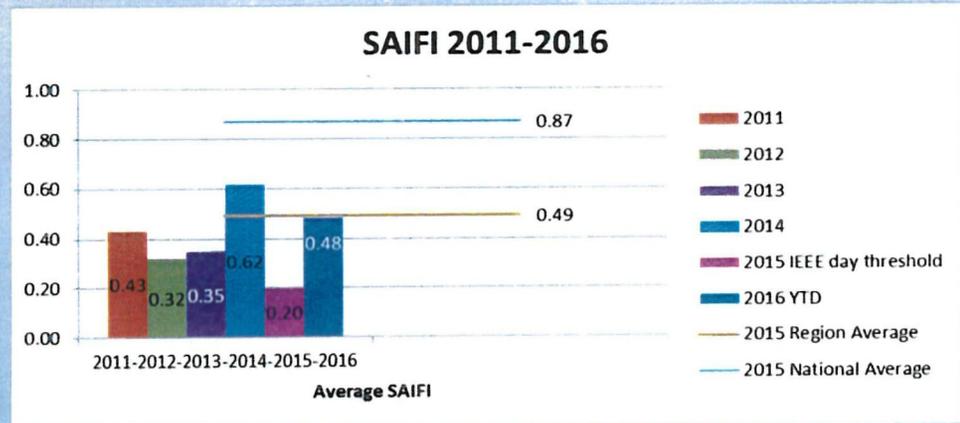
Reliability exceeds regional and local indices . . .



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

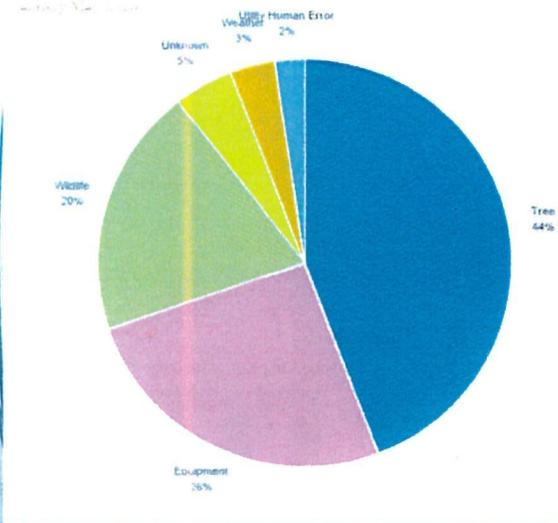
$$CAIDI \text{ (Minutes)} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customers Interrupted}}$$

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

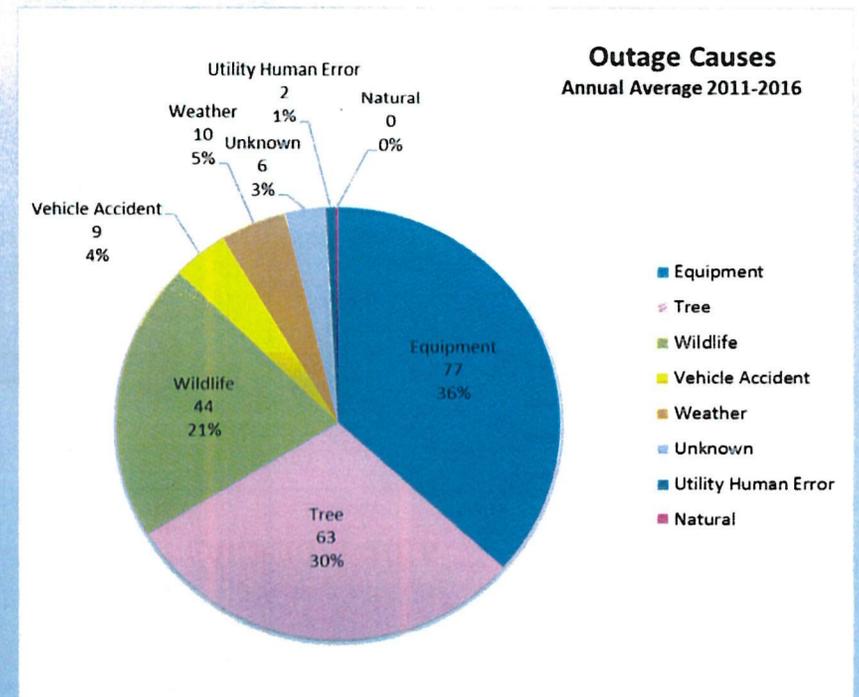


Outages Causes

Outages Causes Calendar YTD (from eReliability website)



Outage Cause	Count
Tree	44
Equipment	22
Wildlife	17
Unknown	4
Weather	3
Utility Human Error	2
Total	86



Questions ?



READING MUNICIPAL LIGHT DEPARTMENT
FY 15 CAPITAL BUDGET VARIANCE REPORT
FOR PERIOD ENDING MAY 31, 2016

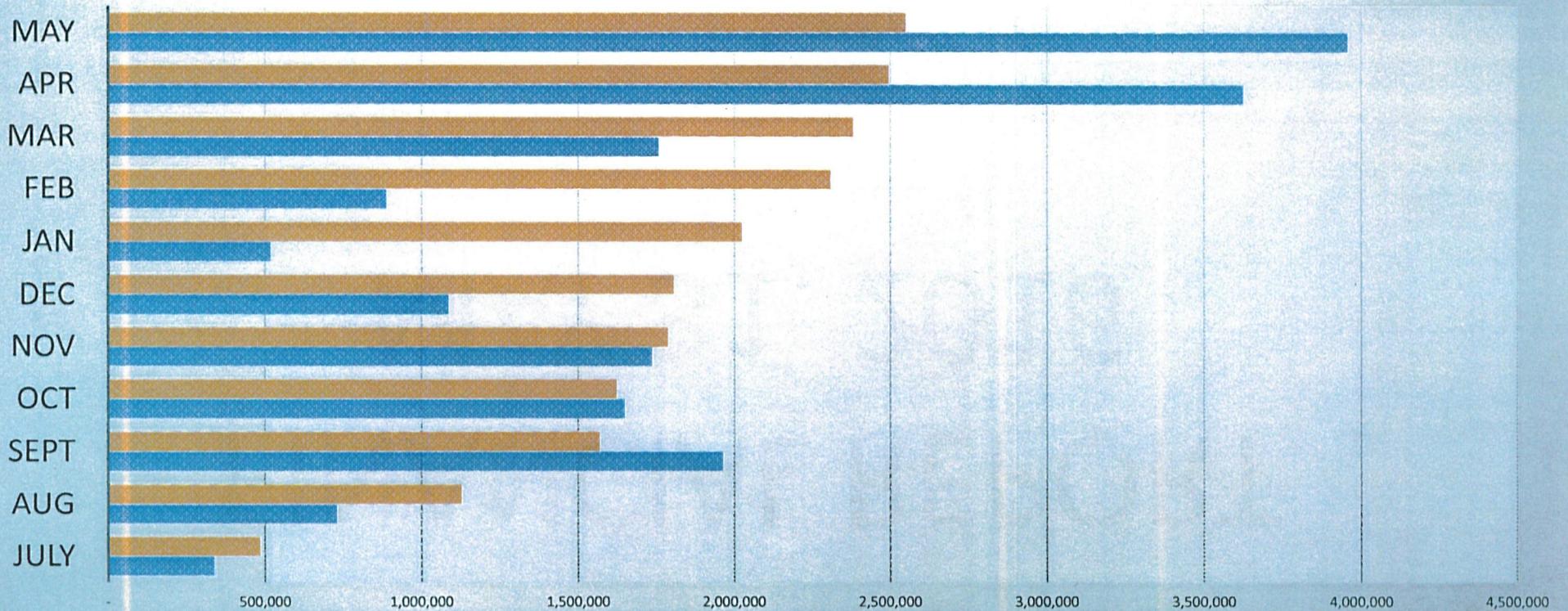
PROJ	DESCRIPTION	TOWN	ACTUAL COST MAY	YTD ADDITIONS	ANNUAL BUDGET	REMAINING BALANCE
CONSTRUCTION:						
101	5W9 Reconductoring - Ballardvale Area	W			100,000	100,000
102	Pole Line Upgrade - Lowell Street, W	W	38,492	162,671	113,000	(49,671)
104	Upgrade Old Lynnfield Center URDs (Cook's Farm)	LC	27,806	268,045	42,000	(226,045)
105	4W5-4W6 Tie	R		107,111	-	(107,111)
106	URD Upgrades	ALL		4,885	340,000	335,115
107	Step-down Area Upgrades	ALL	3,076	42,657	352,000	309,343
110	Pole Line Upgrade - Woburn Street, W	W			91,000	91,000
212	Force Account West Street	R		139,932	150,000	10,068
	SUB-TOTAL		69,374	725,301	1,188,000	462,699
STATION UPGRADES:						
96	Station 4 (GAW) Back-up Generator	R		49,290	107,000	57,710
108	Station 4 (GAW) Relay Replacement Project	R	45,163	69,838	73,000	3,162
109	Station 4 (GAW) Transformer Replacement	R			41,000	41,000
111	Station Equipment Upgrade (all)	ALL		110,233	254,000	143,767
112	Station 4 (GAW) Switchgear/Breaker Replacement	R		583,409	508,000	(75,409)
113	Station 4 (GAW) Battery Bank Upgrade	R			57,000	57,000
130	Station 3 - Remote Terminal Unit (RTU) Replacement	NR			94,000	94,000
	SUB-TOTAL		45,163	812,770	1,134,000	321,230
NEW CUSTOMER SERVICES:						
	New Service Installations (Commercial / Industrial)	ALL			34,000	34,000
	New Service Installations (Residential)	ALL	9,675	123,334	164,000	40,666
	SUB-TOTAL		9,675	123,334	198,000	74,666
ROUTINE CONSTRUCTION:						
114	Routine Construction	ALL	115,308	1,404,285	1,000,000	(404,285)
SPECIAL PROJECTS / CAPITAL PURCHASES:						
100	Distributed Generation	ALL	3,000	27,020	2,164,000	2,136,980
103	Distribution Protection and Automation	ALL	433	111,067	70,000	(41,067)
114	Fiber Optic Test Equipment	ALL		9,013	15,000	5,987
115	Fault Indicators	ALL			50,000	50,000
116	Transformers and Capacitors	ALL	36,555	612,901	668,000	55,099
117	Meter Purchases (including "500 Club")	ALL		150,177	219,000	68,823
122	Engineering Analysis Software and Data Conversion	ALL		73,250	73,000	(250)
125	GIS	ALL	8,645	13,835	420,000	406,165
126	Communication Equipment (Fiber Optic)	ALL		17,202	98,000	80,798
131	LED Street Light Implementation	ALL	79,094	523,992	1,200,000	676,008
134	Substation Test Equipment	ALL		51,540	100,000	48,460
	SUB-TOTAL		127,727	1,589,997	5,077,000	3,487,003
OTHER CAPITAL PROJECTS:						
95	230 Ash St Building	R			80,000	80,000
97	HVAC Roof Units - Garage	R			50,000	50,000
98	IRD hardware	ALL			10,000	10,000
99	Electric Vehicle Supply Equipment	ALL			50,000	50,000
118	Rolling Stock Replacement	ALL		407,887	448,000	40,113
119	Security Upgrades All Sites	ALL		10,515	50,000	39,486
120	Great Plains / Cogsdale Upgrade	ALL		29,090	127,000	97,910
121	HVAC System Upgrade - 230 Ash Street	R		571,906	600,000	28,094
123	Oil Containment Facility Construction	ALL		47,835	59,000	11,165
127	Hardware Upgrades	ALL	4,440	75,873	152,000	76,127
128	Software and Licensing	ALL		81,968	172,000	90,033
129	Master Facilities Site Plan	R			150,000	150,000
136	Voltage Data Recorders	ALL			50,000	50,000
	SUB-TOTAL		4,440	1,225,073	1,998,000	772,927
TOTAL CAPITAL BUDGET			\$ 371,687	\$ 5,880,760	\$ 10,595,000	\$ 4,714,240

FINANCIAL REPORT

MAY 31, 2016

Wendy Markiewicz – Assistant Director Business Finance

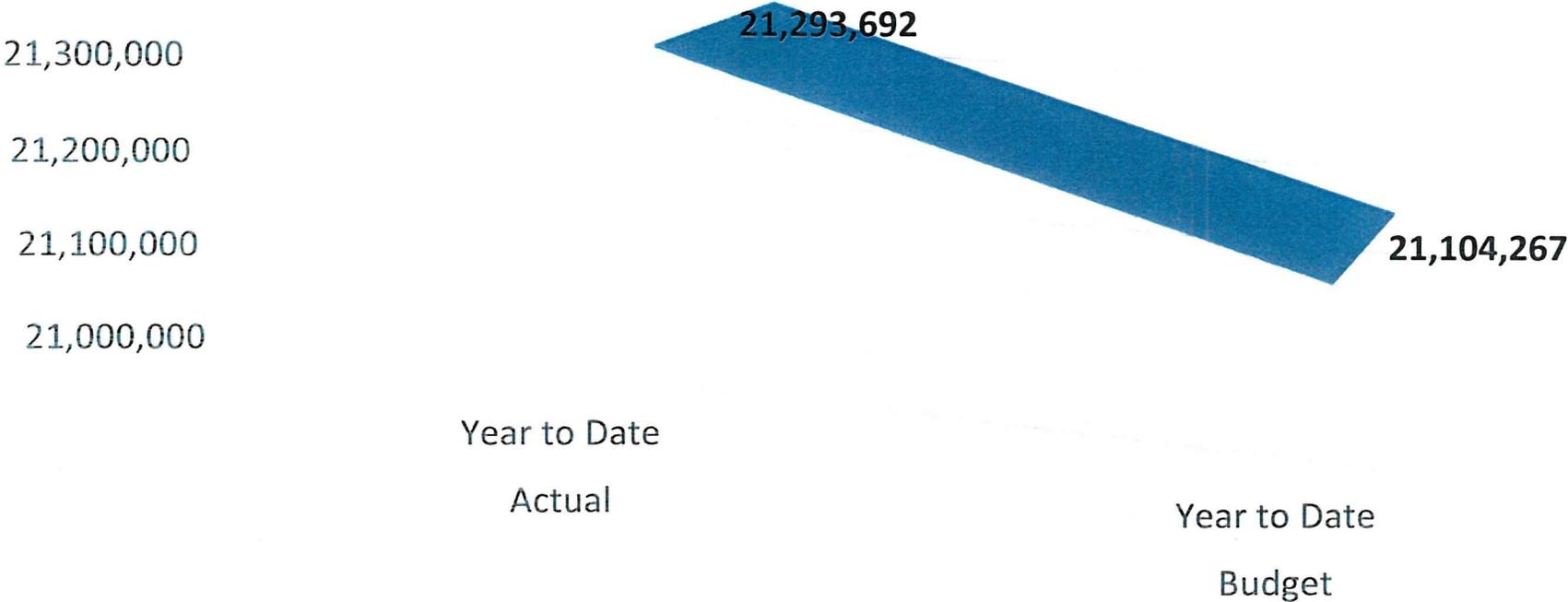
Change in Net Assets FY 16



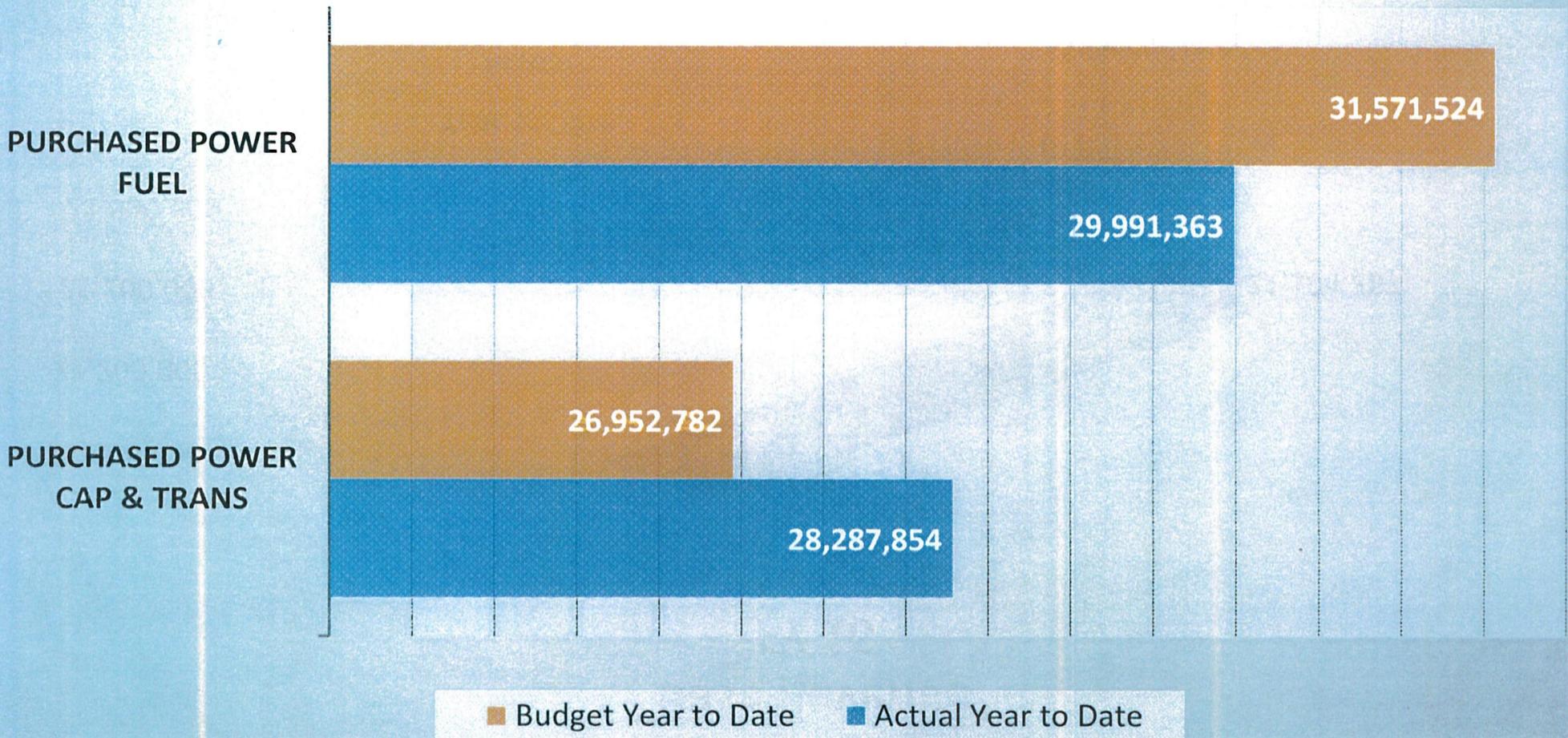
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
■ Budget YTD	486,580	1,129,662	1,570,360	1,624,710	1,789,036	1,807,087	2,025,150	2,310,515	2,382,739	2,497,316	2,551,258
■ Actual YTD	339,133	730,276	1,963,790	1,649,947	1,736,921	1,087,967	519,467	888,648	1,758,781	3,626,091	3,958,807

■ Budget YTD ■ Actual YTD

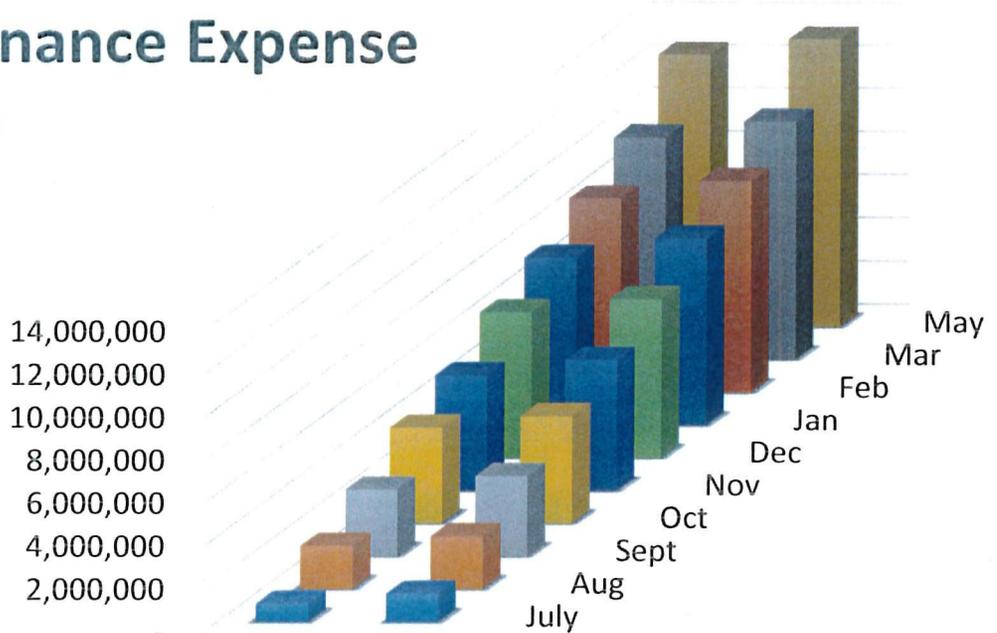
Base Revenue FY 16



Purchased Power Expenses FY 16



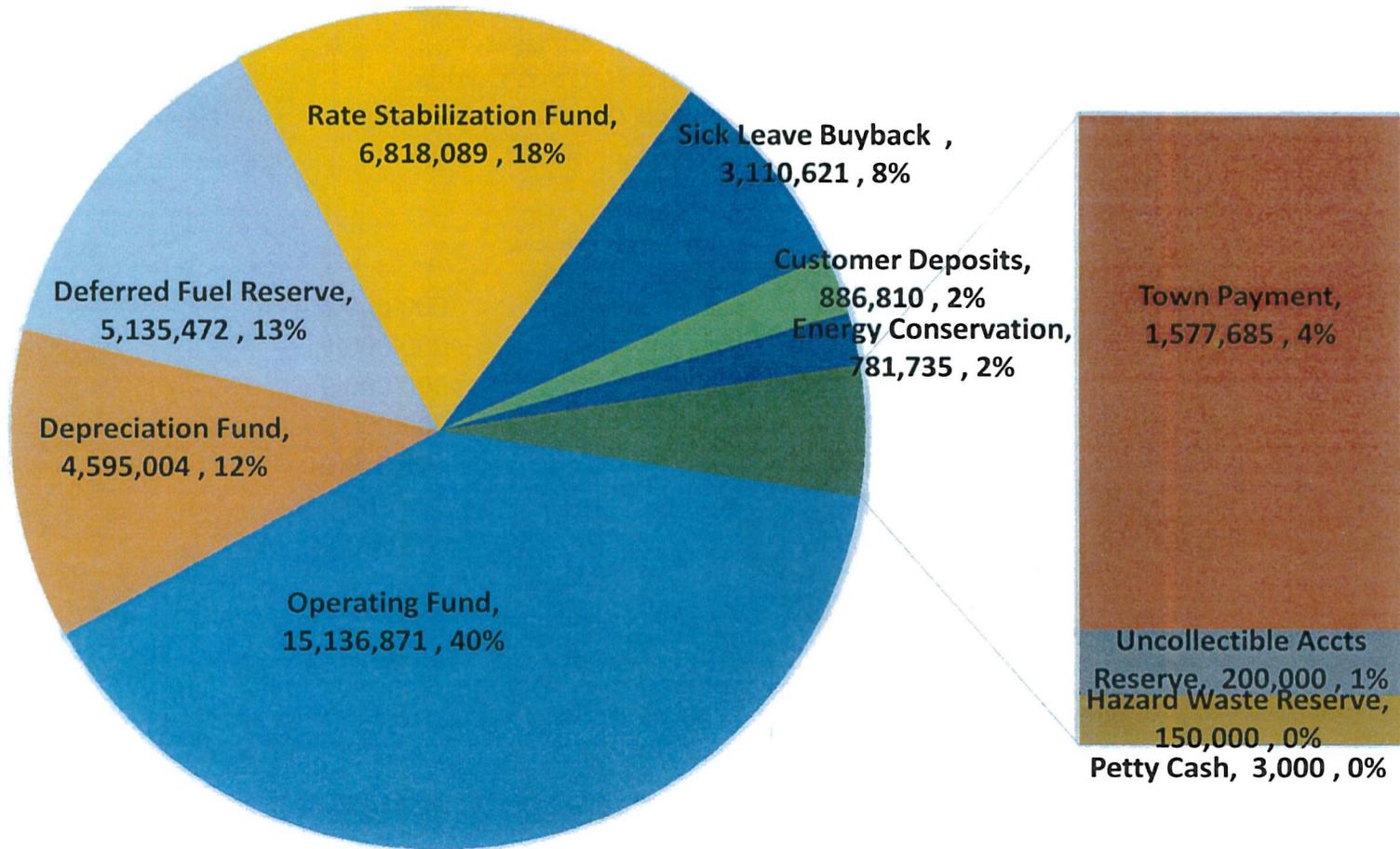
Operating & Maintenance Expense FY 16



	Year to Date Actual	Year to Date Budget
July	868,683	1,343,108
Aug	2,025,238	2,482,941
Sept	3,121,147	3,761,748
Oct	4,485,500	5,017,937
Nov	5,393,968	6,109,754
Dec	6,772,164	7,394,213
Jan	7,785,760	8,691,548
Feb	9,000,772	9,802,098
Mar	10,288,340	11,030,340
May	12,603,018	13,342,283

CASH

\$38,395,287



FINANCIAL REPORT

MAY 31, 2016

ISSUE DATE: JULY 6, 2016

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUSINESS-TYPE PROPRIETARY FUND
STATEMENT OF NET ASSETS
5/31/16

	PREVIOUS YEAR	CURRENT YEAR
ASSETS		
CURRENT		
UNRESTRICTED CASH (SCH A P.9)	9,405,133.55	15,139,870.95
RESTRICTED CASH (SCH A P.9)	22,942,848.80	21,971,355.14
RESTRICTED INVESTMENTS (SCH A P.9)	1,292,906.26	1,284,061.45
RECEIVABLES, NET (SCH B P.10)	9,189,137.52	8,305,484.21
PREPAID EXPENSES (SCH B P.10)	1,818,316.27	910,000.97
OTHER DEFERRED DEBITS (SCH B P.10)	0.00	1,547,815.00
INVENTORY	1,662,933.40	1,584,320.51
TOTAL CURRENT ASSETS	46,311,275.80	50,742,908.23
NONCURRENT		
INVESTMENT IN ASSOCIATED CO (SCH C P.2)	26,993.75	26,993.75
CAPITAL ASSETS, NET (SCH C P.2)	69,715,489.17	72,181,095.95
TOTAL NONCURRENT ASSETS	69,742,482.92	72,208,089.70
TOTAL ASSETS	116,053,758.72	122,950,997.93
 LIABILITIES		
CURRENT		
ACCOUNTS PAYABLE	6,166,183.69	9,462,683.96
CUSTOMER DEPOSITS	849,517.02	886,810.03
CUSTOMER ADVANCES FOR CONSTRUCTION	768,882.48	1,068,525.55
ACCRUED LIABILITIES	35,333.18	3,058,599.85
TOTAL CURRENT LIABILITIES	7,819,916.37	14,476,619.39
NONCURRENT		
ACCRUED EMPLOYEE COMPENSATED ABSENCES	2,918,870.73	3,070,487.93
TOTAL NONCURRENT LIABILITIES	2,918,870.73	3,070,487.93
TOTAL LIABILITIES	10,738,787.10	17,547,107.32
 NET ASSETS		
INVESTED IN CAPITAL ASSETS, NET OF RELATED DEBT	69,715,489.17	72,181,095.95
RESTRICTED FOR DEPRECIATION FUND (P.9)	5,691,478.73	4,595,004.37
UNRESTRICTED	29,908,003.72	28,627,790.29
TOTAL NET ASSETS (P.3)	105,314,971.62	105,403,890.61
TOTAL LIABILITIES AND NET ASSETS	116,053,758.72	122,950,997.93

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
NONCURRENT ASSET SCHEDULE
5/31/16

SCHEDULE C

	PREVIOUS YEAR	CURRENT YEAR
SCHEDULE OF INVESTMENTS IN ASSOCIATED COMPANIES		
NEW ENGLAND HYDRO ELECTRIC	2,975.74	2,975.74
NEW ENGLAND HYDRO TRANSMISSION	24,018.01	24,018.01
TOTAL INVESTMENTS IN ASSOCIATED COMPANIES	<u>26,993.75</u>	<u>26,993.75</u>
SCHEDULE OF CAPITAL ASSETS		
LAND	1,265,842.23	1,265,842.23
STRUCTURES AND IMPROVEMENTS	6,367,468.38	7,469,228.73
EQUIPMENT AND FURNISHINGS	12,565,774.17	12,524,228.54
INFRASTRUCTURE	<u>49,516,404.39</u>	<u>50,921,796.45</u>
TOTAL CAPITAL ASSETS, NET	<u>69,715,489.17</u>	<u>72,181,095.95</u>
TOTAL NONCURRENT ASSETS	<u>69,742,482.92</u>	<u>72,208,089.70</u>

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUSINESS-TYPE PROPRIETARY FUND
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS
5/31/16

	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
OPERATING REVENUES: (SCH D P.11)					
BASE REVENUE	1,582,056.77	1,591,263.85	19,718,591.36	21,293,692.09	7.99%
FUEL REVENUE	2,954,806.93	2,356,620.39	31,687,066.76	31,030,678.91	-2.07%
PURCHASED POWER CAPACITY	2,140,988.70	2,489,960.26	26,857,018.39	28,701,975.75	6.87%
FORFEITED DISCOUNTS	36,859.32	55,348.68	747,552.25	729,265.53	-2.45%
ENERGY CONSERVATION REVENUE	52,448.28	48,874.22	620,627.19	612,529.56	-1.30%
NYPA CREDIT	(129,361.54)	(94,374.91)	(957,893.04)	(1,084,128.48)	13.18%
TOTAL OPERATING REVENUES	6,637,798.46	6,447,692.49	78,672,962.91	81,284,013.36	3.32%
OPERATING EXPENSES: (SCH E P.12)					
PURCHASED POWER CAPACITY	1,535,658.77	1,547,456.65	15,808,238.16	17,040,100.53	7.79%
PURCHASED POWER TRANSMISSION	608,787.17	865,692.96	10,696,274.17	11,247,753.86	5.16%
PURCHASED POWER FUEL	2,012,238.83	1,944,922.16	29,488,315.64	29,991,363.21	1.71%
OPERATING MAINTENANCE	901,438.44	925,100.45	10,015,111.34	9,809,579.68	-2.05%
DEPRECIATION	263,533.73	219,035.16	2,994,945.13	2,793,438.60	-6.73%
VOLUNTARY PAYMENTS TO TOWNS	321,788.79	328,732.65	3,539,676.69	3,616,059.15	2.16%
	118,000.00	118,000.00	1,288,754.00	1,286,973.00	-0.14%
TOTAL OPERATING EXPENSES	5,761,445.73	5,948,940.03	73,831,315.13	75,785,268.03	2.65%
OPERATING INCOME	876,352.73	498,752.46	4,841,647.78	5,498,745.33	13.57%
NONOPERATING REVENUES (EXPENSES)					
CONTRIBUTIONS IN AID OF CONST	48,362.84	3,136.54	173,464.84	139,877.79	-19.36%
RETURN ON INVESTMENT TO READING	(194,405.26)	(197,537.08)	(2,138,457.80)	(2,172,907.90)	1.61%
INTEREST INCOME	14,575.72	13,612.50	117,923.16	127,144.18	7.82%
INTEREST EXPENSE	(251.55)	(181.33)	(4,048.05)	(2,973.15)	-26.55%
OTHER (MDSE AND AMORT)	73,489.51	14,932.98	451,107.53	368,921.13	-18.22%
TOTAL NONOPERATING REV (EXP)	(58,228.74)	(166,036.39)	(1,400,010.32)	(1,539,937.95)	9.99%
CHANGE IN NET ASSETS	818,123.99	332,716.07	3,441,637.46	3,958,807.38	15.03%
NET ASSETS AT BEGINNING OF YEAR			101,873,334.16	101,445,083.23	-0.42%
NET ASSETS AT END OF MAY			<u>105,314,971.62</u>	<u>105,403,890.61</u>	0.08%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUSINESS-TYPE PROPRIETARY FUND
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS
5/31/16

	ACTUAL YEAR TO DATE	BUDGET YEAR TO DATE	VARIANCE*	% CHANGE
OPERATING REVENUES: (SCH F P.11B)				
BASE REVENUE	21,293,692.09	21,104,267.00	189,425.09	0.90%
FUEL REVENUE	31,030,678.91	32,396,524.00	(1,365,845.09)	-4.22%
PURCHASED POWER CAPACITY	28,701,975.75	26,952,782.00	1,749,193.75	6.49%
FORFEITED DISCOUNTS	729,265.53	633,130.00	96,135.53	15.18%
ENERGY CONSERVATION REVENUE	612,529.56	612,299.00	230.56	0.04%
NYPA CREDIT	(1,084,128.48)	(825,000.00)	(259,128.48)	31.41%
TOTAL OPERATING REVENUES	81,284,013.36	80,874,002.00	410,011.36	0.51%
OPERATING EXPENSES: (SCH G P.12A)				
PURCHASED POWER - CAPACITY	17,040,100.53	15,605,550.00	1,434,550.53	9.19%
PURCHASED POWER - TRANSMISSION	11,247,753.86	11,347,232.00	(99,478.14)	-0.88%
PURCHASED POWER FUEL	29,991,363.21	31,571,524.00	(1,580,160.79)	-5.01%
OPERATING MAINTENANCE	9,809,579.68	9,950,509.00	(140,929.32)	-1.42%
DEPRECIATION	2,793,438.60	3,391,774.00	(598,335.40)	-17.64%
VOLUNTARY PAYMENTS TO TOWNS	3,616,059.15	3,651,230.00	(35,170.85)	-0.96%
	1,286,973.00	1,298,000.00	(11,027.00)	-0.85%
TOTAL OPERATING EXPENSES	75,785,268.03	76,815,819.00	(1,030,550.97)	-1.34%
OPERATING INCOME	5,498,745.33	4,058,183.00	1,440,562.33	35.50%
NONOPERATING REVENUES (EXPENSES)				
CONTRIBUTIONS IN AID OF CONST	139,877.79	200,000.00	(60,122.21)	-30.06%
RETURN ON INVESTMENT TO READING	(2,172,907.90)	(2,172,500.00)	(407.90)	0.02%
INTEREST INCOME	127,144.18	137,500.00	(10,355.82)	-7.53%
INTEREST EXPENSE	(2,973.15)	(1,925.00)	(1,048.15)	54.45%
OTHER (MDSE AND AMORT)	368,921.13	330,000.00	38,921.13	11.79%
TOTAL NONOPERATING REV (EXP)	(1,539,937.95)	(1,506,925.00)	(33,012.95)	2.19%
CHANGE IN NET ASSETS	3,958,807.38	2,551,258.00	1,407,549.38	55.17%
NET ASSETS AT BEGINNING OF YEAR	101,445,083.23	101,445,083.23	0.00	0.00%
NET ASSETS AT END OF MAY	105,403,890.61	103,996,341.23	1,407,549.38	1.35%

* () = ACTUAL UNDER BUDGET

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
RECONCILIATION OF CAPITAL FUNDS
5/31/16

SOURCE OF CAPITAL FUNDS:

DEPRECIATION FUND BALANCE 7/1/15	5,434,307.79
CONSTRUCTION FUND BALANCE 7/1/15	1,400,000.00
INTEREST ON DEPRECIATION FUND FY 16	25,396.00
DEPRECIATION TRANSFER FY 16	<u>3,616,059.15</u>
TOTAL SOURCE OF CAPITAL FUNDS	10,475,762.94

USE OF CAPITAL FUNDS:

LESS PAID ADDITIONS TO PLANT THRU MAY	
TOTAL USE OF CAPITAL FUNDS	5,880,758.57
GENERAL LEDGER CAPITAL FUNDS BALANCE 5/31/16	<u><u>4,595,004.37</u></u>

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SALES OF KILOWATT HOURS
5/31/16

SALES OF ELECTRICITY:	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
RESIDENTIAL SALES	16,868,689	15,607,554	234,873,905	229,173,421	-2.43%
COMM. AND INDUSTRIAL SALES	34,104,361	30,723,078	369,478,608	361,092,206	-2.27%
PRIVATE STREET LIGHTING	79,486	91,753	871,497	918,877	5.44%
TOTAL PRIVATE CONSUMERS	<u>51,052,536</u>	<u>46,422,385</u>	<u>605,224,010</u>	<u>591,184,504</u>	-2.32%
MUNICIPAL SALES:					
STREET LIGHTING	236,421	214,472	2,652,709	2,483,160	-6.39%
MUNICIPAL BUILDINGS	779,330	729,669	9,006,113	8,529,442	-5.29%
TOTAL MUNICIPAL CONSUMERS	<u>1,015,751</u>	<u>944,141</u>	<u>11,658,822</u>	<u>11,012,602</u>	-5.54%
SALES FOR RESALE	219,381	186,274	3,040,794	2,824,482	-7.11%
SCHOOL	1,290,230	1,171,246	14,274,796	13,420,569	-5.98%
TOTAL KILOWATT HOURS SOLD	<u>53,577,898</u>	<u>48,724,046</u>	<u>634,198,422</u>	<u>618,442,157</u>	-2.48%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
KILOWATT HOURS SOLD BY TOWN
5/31/16

MONTH	TOTAL	READING	LYNNFIELD	NO. READING	WILMINGTON
RESIDENTIAL	15,607,554	4,882,156	2,089,091	3,524,442	5,111,865
COMM & IND	30,723,078	3,923,659	229,277	4,481,930	22,088,212
PVT ST LIGHTS	91,753	18,455	2,792	27,331	43,175
PUB ST LIGHTS	214,472	71,845	28,145	38,469	76,013
MUNI BLDGS	729,669	185,925	166,706	118,761	258,277
SALES/RESALE	186,274	186,274	0	0	0
SCHOOL	1,171,246	388,108	286,260	222,840	274,038
TOTAL	48,724,046	9,656,422	2,802,271	8,413,773	27,851,580

YEAR TO DATE

RESIDENTIAL	229,173,421	72,735,462	32,279,289	52,798,226	71,360,444
COMM & IND	361,092,206	44,653,452	2,850,685	55,913,933	257,674,136
PVT ST LIGHTS	918,877	165,627	22,424	281,445	449,381
PUB ST LIGHTS	2,483,160	836,783	326,284	440,729	879,364
MUNI BLDGS	8,529,442	2,114,408	1,837,311	1,427,056	3,150,667
SALES/RESALE	2,824,482	2,824,482	0	0	0
SCHOOL	13,420,569	4,588,904	2,963,147	2,718,580	3,149,938
TOTAL	618,442,157	127,919,118	40,279,140	113,579,969	336,663,930

LAST YEAR TO DATE

RESIDENTIAL	234,873,905	73,758,578	33,073,136	54,032,356	74,009,835
COMM & IND	369,478,608	45,991,518	2,883,684	56,814,433	263,788,973
PVT ST LIGHTS	871,497	147,282	16,629	272,941	434,645
PUB ST LIGHTS	2,652,709	891,187	358,881	465,009	937,632
MUNI BLDGS	9,006,113	2,461,956	1,835,874	1,544,143	3,164,140
SALES/RESALE	3,040,794	3,040,794	0	0	0
SCHOOL	14,274,796	4,806,827	2,979,677	2,523,780	3,964,512
TOTAL	634,198,422	131,098,142	41,147,881	115,652,662	346,299,737

KILOWATT HOURS SOLD TO TOTAL

MONTH	TOTAL	READING	LYNNFIELD	NO. READING	WILMINGTON
RESIDENTIAL	32.03%	10.02%	4.29%	7.23%	10.49%
COMM & IND	63.06%	8.05%	0.47%	9.20%	45.34%
PVT ST LIGHTS	0.19%	0.04%	0.01%	0.06%	0.08%
PUB ST LIGHTS	0.44%	0.15%	0.06%	0.08%	0.15%
MUNI BLDGS	1.50%	0.38%	0.34%	0.24%	0.54%
SALES/RESALE	0.38%	0.38%	0.00%	0.00%	0.00%
SCHOOL	2.40%	0.80%	0.59%	0.46%	0.55%
TOTAL	100.00%	19.82%	5.76%	17.27%	57.15%

YEAR TO DATE

RESIDENTIAL	37.06%	11.76%	5.22%	8.54%	11.54%
COMM & IND	58.39%	7.22%	0.46%	9.04%	41.67%
PVT ST LIGHTS	0.15%	0.03%	0.00%	0.05%	0.07%
PUB ST LIGHTS	0.40%	0.14%	0.05%	0.07%	0.14%
MUNI BLDGS	1.38%	0.34%	0.30%	0.23%	0.51%
SALES/RESALE	0.46%	0.46%	0.00%	0.00%	0.00%
SCHOOL	2.16%	0.74%	0.48%	0.44%	0.50%
TOTAL	100.00%	20.69%	6.51%	18.37%	54.43%

LAST YEAR TO DATE

RESIDENTIAL	37.03%	11.63%	5.21%	8.52%	11.67%
COMM & IND	58.26%	7.25%	0.45%	8.96%	41.60%
PVT ST LIGHTS	0.14%	0.02%	0.00%	0.04%	0.08%
PUB ST LIGHTS	0.42%	0.14%	0.06%	0.07%	0.15%
MUNI BLDGS	1.42%	0.39%	0.29%	0.24%	0.50%
SALES/RESALE	0.48%	0.48%	0.00%	0.00%	0.00%
SCHOOL	2.25%	0.76%	0.47%	0.40%	0.62%
TOTAL	100.00%	20.67%	6.48%	18.23%	54.62%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
FORMULA INCOME
5/31/16

TOTAL OPERATING REVENUES	(P.3)	81,284,013.36
ADD:		
POLE RENTAL		0.00
INTEREST INCOME ON CUSTOMER DEPOSITS		4,962.77
LESS:		
OPERATING EXPENSES	(P.3)	(75,785,268.03)
CUSTOMER DEPOSIT INTEREST EXPENSE		(2,973.15)
FORMULA INCOME (LOSS)		<u>5,500,734.95</u>

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
GENERAL STATISTICS
5/31/16

	MONTH OF MAY 2015	MONTH OF MAY 2016	% CHANGE		YEAR MAY 2015	THRU MAY 2016
			2015	2016		
SALE OF KWH (P.5)	53,577,898	48,724,046	0.21%	-2.48%	634,198,422	618,442,157
KWH PURCHASED	58,248,608	54,601,915	-1.88%	-0.12%	645,675,652	644,901,438
AVE BASE COST PER KWH	0.026364	0.028341	-38.20%	7.92%	0.024483	0.026423
AVE BASE SALE PER KWH	0.029528	0.032659	-53.64%	10.74%	0.031092	0.034431
AVE COST PER KWH	0.060910	0.063961	-17.60%	3.95%	0.070154	0.072928
AVE SALE PER KWH	0.084678	0.081025	-29.78%	4.38%	0.081056	0.084607
FUEL CHARGE REVENUE (P.3)	2,954,806.93	2,356,620.39	3.71%	-2.07%	31,687,066.76	31,030,678.91
LOAD FACTOR	57.64%	62.10%				
PEAK LOAD	138,424	120,445				

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF CASH AND INVESTMENTS
5/31/16

SCHEDULE A

	PREVIOUS YEAR	CURRENT YEAR
UNRESTRICTED CASH		
CASH - OPERATING FUND	9,402,133.55	15,136,870.95
CASH - PETTY CASH	3,000.00	3,000.00
TOTAL UNRESTRICTED CASH	9,405,133.55	15,139,870.95
RESTRICTED CASH		
CASH - DEPRECIATION FUND	5,691,478.73	4,595,004.37
CASH - TOWN PAYMENT	1,562,026.25	1,577,685.00
CASH - DEFERRED FUEL RESERVE	5,373,553.04	5,135,472.37
CASH - RATE STABILIZATION FUND	6,766,601.84	6,818,088.78
CASH - UNCOLLECTIBLE ACCTS RESERVE	200,000.00	200,000.00
CASH - SICK LEAVE BENEFITS	1,724,781.24	1,826,559.88
CASH - HAZARD WASTE RESERVE	150,000.00	150,000.00
CASH - CUSTOMER DEPOSITS	849,517.02	886,810.03
CASH - ENERGY CONSERVATION	624,890.68	781,734.71
TOTAL RESTRICTED CASH	22,942,848.80	21,971,355.14
INVESTMENTS		
SICK LEAVE BUYBACK	1,292,906.26	1,284,061.45
TOTAL CASH BALANCE	33,640,888.61	38,395,287.54

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF ACCOUNTS RECEIVABLE
5/31/16

SCHEDULE B

SCHEDULE OF ACCOUNTS RECEIVABLE	PREVIOUS YEAR	CURRENT YEAR
RESIDENTIAL AND COMMERCIAL	3,940,975.95	2,564,869.93
ACCOUNTS RECEIVABLE - OTHER	146,438.46	954,196.47
ACCOUNTS RECEIVABLE - LIENS	28,019.51	19,398.28
ACCOUNTS RECEIVABLE - EMPLOYEE ADVANCES	892.14	543.53
SALES DISCOUNT LIABILITY	(247,742.34)	(140,647.87)
RESERVE FOR UNCOLLECTIBLE ACCOUNTS	(301,715.48)	(259,226.08)
TOTAL ACCOUNTS RECEIVABLE BILLED	<u>3,566,868.24</u>	<u>3,139,134.26</u>
UNBILLED ACCOUNTS RECEIVABLE	5,622,269.28	5,166,349.95
TOTAL ACCOUNTS RECEIVABLE, NET	<u><u>9,189,137.52</u></u>	<u><u>8,305,484.21</u></u>

SCHEDULE OF PREPAYMENTS

PREPAID INSURANCE	551,033.67	607,953.98
PREPAYMENT PURCHASED POWER	576,560.20	(365,680.89)
PREPAYMENT PASNY	307,572.50	307,572.50
PREPAYMENT WATSON	370,449.79	345,285.32
PURCHASED POWER WORKING CAPITAL	12,700.11	14,870.06
TOTAL PREPAYMENT	<u><u>1,818,316.27</u></u>	<u><u>910,000.97</u></u>

OTHER DEFERRED DEBITS	<u><u>0.00</u></u>	<u><u>1,547,815.00</u></u>
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ACCOUNTS RECEIVABLE AGING MAY 2016:

RESIDENTIAL AND COMMERCIAL	2,564,869.93
LESS: SALES DISCOUNT LIABILITY	(140,647.87)
GENERAL LEDGER BALANCE	<u><u>2,424,222.06</u></u>

CURRENT	1,945,316.46	80.24%
30 DAYS	325,087.34	13.41%
60 DAYS	94,530.21	3.90%
90 DAYS	20,749.34	0.86%
OVER 90 DAYS	38,538.71	1.59%
TOTAL	<u><u>2,424,222.06</u></u>	<u><u>100.00%</u></u>

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF OPERATING REVENUE
5/31/16

SCHEDULE D

SALES OF ELECTRICITY:	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
RESIDENTIAL SALES	1,701,387.75	1,533,538.39	22,365,007.77	22,772,659.31	1.82%
COMM AND INDUSTRIAL SALES	2,625,351.65	2,212,271.17	26,668,770.57	27,209,368.69	2.03%
PRIVATE STREET LIGHTING	9,948.97	10,640.50	104,258.05	113,808.23	9.16%
TOTAL PRIVATE CONSUMERS	<u>4,336,688.37</u>	<u>3,756,450.06</u>	<u>49,138,036.39</u>	<u>50,095,836.23</u>	1.95%
 MUNICIPAL SALES:					
STREET LIGHTING	10,171.79	24,722.86	213,333.33	201,988.97	-5.32%
MUNICIPAL BUILDINGS	65,779.19	60,166.45	711,819.24	704,184.18	-1.07%
TOTAL MUNICIPAL CONSUMERS	<u>75,950.98</u>	<u>84,889.31</u>	<u>925,152.57</u>	<u>906,173.15</u>	-2.05%
 SALES FOR RESALE	 19,721.40	 16,003.99	 259,342.84	 247,048.56	 -4.74%
 SCHOOL	 104,502.95	 90,540.88	 1,083,126.32	 1,075,313.06	 -0.72%
 SUB-TOTAL	 <u>4,536,863.70</u>	 <u>3,947,884.24</u>	 <u>51,405,658.12</u>	 <u>52,324,371.00</u>	 1.79%
 FORFEITED DISCOUNTS	 36,859.32	 55,348.68	 747,552.25	 729,265.53	 -2.45%
 PURCHASED POWER CAPACITY	 2,140,988.70	 2,489,960.26	 26,857,018.39	 28,701,975.75	 6.87%
 ENERGY CONSERVATION - RESIDENTIAL	 16,878.76	 15,612.76	 235,029.93	 229,306.99	 -2.43%
ENERGY CONSERVATION - COMMERCIAL	35,569.52	33,261.46	385,597.26	383,222.57	-0.62%
 NYPA CREDIT	 (129,361.54)	 (94,374.91)	 (957,893.04)	 (1,084,128.48)	 13.18%
 TOTAL REVENUE	 <u><u>6,637,798.46</u></u>	 <u><u>6,447,692.49</u></u>	 <u><u>78,672,962.91</u></u>	 <u><u>81,284,013.36</u></u>	 3.32%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF OPERATING REVENUE BY TOWN
5/31/16

MONTH	TOTAL	READING	LYNNFIELD	NO. READING	WILMINGTON
RESIDENTIAL	1,533,538.39	485,091.45	203,716.59	345,435.66	499,294.69
INDUS/MUNI BLDG	2,272,437.62	330,189.54	34,091.49	354,884.80	1,553,271.79
PUB. ST. LIGHTS	24,722.86	8,261.40	3,236.38	4,453.92	8,771.16
PRV. ST. LIGHTS	10,640.50	1,871.76	264.16	3,364.62	5,139.96
CO-OP RESALE	16,003.99	16,003.99	0.00	0.00	0.00
SCHOOL	90,540.88	30,680.93	20,852.18	18,015.70	20,992.07
TOTAL	3,947,884.24	872,099.07	262,160.80	726,154.70	2,087,469.67

THIS YEAR TO DATE

RESIDENTIAL	22,772,659.31	7,276,944.28	3,181,714.23	5,232,643.52	7,081,357.28
INDUS/MUNI BLDG	27,913,552.87	3,873,487.85	407,046.33	4,459,570.39	19,173,448.30
PUB. ST. LIGHTS	201,988.97	68,178.06	26,167.62	36,310.33	71,332.96
PRV. ST. LIGHTS	113,808.23	19,191.78	2,498.94	36,745.25	55,372.26
CO-OP RESALE	247,048.56	247,048.56	0.00	0.00	0.00
SCHOOL	1,075,313.06	370,204.47	228,278.26	230,526.99	246,303.34
TOTAL	52,324,371.00	11,855,055.00	3,845,705.36	9,995,796.49	26,627,814.15

LAST YEAR TO DATE

RESIDENTIAL	22,365,007.77	7,058,690.70	3,130,113.83	5,134,231.79	7,041,971.45
INDUS/MUNI BLDG	27,380,589.81	3,877,243.07	387,730.56	4,422,686.28	18,692,929.90
PUB. ST. LIGHTS	213,333.33	71,700.09	28,895.11	37,370.40	75,367.73
PRV. ST. LIGHTS	104,258.05	17,270.96	2,022.53	33,861.54	51,103.02
CO-OP RESALE	259,342.84	259,342.84	0.00	0.00	0.00
SCHOOL	1,083,126.32	368,266.37	222,687.49	195,338.12	296,834.34
TOTAL	51,405,658.12	11,652,514.03	3,771,449.52	9,823,488.13	26,158,206.44

PERCENTAGE OF OPERATING INCOME TO TOTAL

MONTH	TOTAL	READING	LYNNFIELD	NO. READING	WILMINGTON
RESIDENTIAL	38.84%	12.29%	5.16%	8.75%	12.64%
INDUS/MUNI BLDG	57.56%	8.36%	0.86%	8.99%	39.35%
PUB. ST. LIGHTS	0.63%	0.21%	0.08%	0.11%	0.23%
PRV. ST. LIGHTS	0.27%	0.05%	0.01%	0.09%	0.12%
CO-OP RESALE	0.41%	0.41%	0.00%	0.00%	0.00%
SCHOOL	2.29%	0.78%	0.53%	0.46%	0.52%
TOTAL	100.00%	22.10%	6.64%	18.40%	52.86%

THIS YEAR TO DATE

RESIDENTIAL	43.52%	13.91%	6.08%	10.00%	13.53%
INDUS/MUNI BLDG	53.34%	7.40%	0.78%	8.52%	36.64%
PUB. ST. LIGHTS	0.39%	0.13%	0.05%	0.07%	0.14%
PRV. ST. LIGHTS	0.22%	0.04%	0.00%	0.07%	0.11%
CO-OP RESALE	0.47%	0.47%	0.00%	0.00%	0.00%
SCHOOL	2.06%	0.71%	0.44%	0.44%	0.47%
TOTAL	100.00%	22.66%	7.35%	19.10%	50.89%

LAST YEAR TO DATE

RESIDENTIAL	43.51%	13.73%	6.09%	9.99%	13.70%
INDUS/MUNI BLDG	53.26%	7.54%	0.75%	8.60%	36.37%
PUB. ST. LIGHTS	0.42%	0.14%	0.06%	0.07%	0.15%
PRV. ST. LIGHTS	0.20%	0.03%	0.00%	0.07%	0.10%
CO-OP RESALE	0.50%	0.50%	0.00%	0.00%	0.00%
SCHOOL	2.11%	0.72%	0.43%	0.38%	0.58%
TOTAL	100.00%	22.66%	7.33%	19.11%	50.90%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUDGETED REVENUE VARIANCE REPORT
5/31/16

SCHEDULE F

	ACTUAL YEAR TO DATE	BUDGET YEAR TO DATE	VARIANCE *	% CHANGE
SALES OF ELECTRICITY:				
RESIDENTIAL	11,353,821.94	11,259,115.00	94,706.94	0.84%
COMM AND INDUSTRIAL SALES PRIVATE STREET LIGHTING MUNICIPAL BUILDINGS	9,329,194.31	8,985,456.00	343,738.31	3.83%
PUBLIC STREET LIGHTING	98,804.58	347,350.00	(248,545.42)	-71.55%
SALES FOR RESALE	107,239.45	121,441.00	(14,201.55)	-11.69%
SCHOOL	<u>404,631.81</u>	<u>390,905.00</u>	<u>13,726.81</u>	3.51%
TOTAL BASE SALES	21,293,692.09	21,104,267.00	189,425.09	0.90%
TOTAL FUEL SALES	<u>31,030,678.91</u>	<u>32,396,524.00</u>	<u>(1,365,845.09)</u>	-4.22%
TOTAL OPERATING REVENUE	52,324,371.00	53,500,791.00	(1,176,420.00)	-2.20%
FORFEITED DISCOUNTS	729,265.53	633,130.00	96,135.53	15.18%
PURCHASED POWER CAPACITY	28,701,975.75	26,952,782.00	1,749,193.75	6.49%
ENERGY CONSERVATION - RESIDENTIAL	229,306.99	230,316.00	(1,009.01)	-0.44%
ENERGY CONSERVATION - COMMERCIAL	383,222.57	381,983.00	1,239.57	0.32%
NYPA CREDIT	(1,084,128.48)	(825,000.00)	(259,128.48)	31.41%
TOTAL OPERATING REVENUES	<u><u>81,284,013.36</u></u>	<u><u>80,874,002.00</u></u>	<u><u>410,011.36</u></u>	0.51%

* () = ACTUAL UNDER BUDGET

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF OPERATING EXPENSES
5/31/16

SCHEDULE E

OPERATION EXPENSES:	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
PURCHASED POWER CAPACITY	1,535,658.77	1,547,456.65	15,808,238.16	17,040,100.53	7.79%
PURCHASED POWER TRANSMISSION	608,787.17	865,692.96	10,696,274.17	11,247,753.86	5.16%
TOTAL PURCHASED POWER	2,144,445.94	2,413,149.61	26,504,512.33	28,287,854.39	6.73%
OPERATION SUP AND ENGINEERING EXP	45,484.41	7,156.47	490,024.00	431,854.30	-11.87%
STATION SUP LABOR AND MISC	17,203.31	12,984.63	154,341.41	142,003.88	-7.99%
LINE MISC LABOR AND EXPENSE	80,819.29	43,388.75	759,069.12	703,963.17	-7.26%
STATION LABOR AND EXPENSE	29,166.43	29,551.70	465,573.74	365,190.83	-21.56%
STREET LIGHTING EXPENSE	8,615.85	13,033.79	85,570.73	107,924.07	26.12%
METER EXPENSE	19,938.57	16,056.10	187,820.16	203,877.07	8.55%
MISC DISTRIBUTION EXPENSE	39,945.24	32,447.68	416,899.13	407,998.71	-2.13%
METER READING LABOR & EXPENSE	2,147.75	932.84	15,187.14	18,878.10	24.30%
ACCT & COLL LABOR & EXPENSE	169,479.11	173,665.10	1,654,712.78	1,542,677.21	-6.77%
UNCOLLECTIBLE ACCOUNTS	10,000.00	10,000.00	110,000.00	110,000.00	0.00%
ENERGY AUDIT EXPENSE	46,677.35	33,516.10	389,883.58	447,759.47	14.84%
ADMIN & GEN SALARIES	60,947.26	69,141.47	737,595.41	815,389.71	10.55%
OFFICE SUPPLIES & EXPENSE	26,890.63	31,326.34	294,375.27	320,402.01	8.84%
OUTSIDE SERVICES	43,729.37	74,922.59	460,194.40	401,198.50	-12.82%
PROPERTY INSURANCE	31,242.39	27,632.72	335,222.48	328,579.59	-1.98%
INJURIES AND DAMAGES	3,843.98	22,358.83	41,127.82	62,415.39	51.76%
EMPLOYEES PENSIONS & BENEFITS	236,029.10	228,803.97	2,688,368.01	2,558,181.51	-4.84%
MISC GENERAL EXPENSE	8,856.59	12,218.56	128,375.15	123,071.12	-4.13%
RENT EXPENSE	2,151.76	32,294.08	147,773.50	177,814.23	20.33%
ENERGY CONSERVATION	18,270.05	53,668.73	452,997.51	540,400.81	19.29%
TOTAL OPERATION EXPENSES	901,438.44	925,100.45	10,015,111.34	9,809,579.68	-2.05%
MAINTENANCE EXPENSES:					
MAINT OF TRANSMISSION PLANT	227.08	227.08	2,497.90	2,497.90	0.00%
MAINT OF STRUCT AND EQUIPMT	40,852.31	31,384.83	466,864.01	376,503.02	-19.35%
MAINT OF LINES - OH	167,006.33	121,799.69	1,603,545.80	1,529,010.87	-4.65%
MAINT OF LINES - UG	(346.25)	4,610.56	134,323.14	105,429.13	-21.51%
MAINT OF LINE TRANSFORMERS	0.00	1,293.15	62,622.70	94,417.03	50.77%
MAINT OF ST LT & SIG SYSTEM	(35.13)	(88.03)	(229.01)	(637.47)	178.36%
MAINT OF GARAGE AND STOCKROOM	40,780.04	38,866.69	534,467.93	508,138.99	-4.93%
MAINT OF METERS	0.00	(33.34)	0.00	0.00	0.00%
MAINT OF GEN PLANT	15,049.35	20,974.53	190,852.66	178,079.13	-6.69%
TOTAL MAINTENANCE EXPENSES	263,533.73	219,035.16	2,994,945.13	2,793,438.60	-6.73%
DEPRECIATION EXPENSE	321,788.79	328,732.65	3,539,676.69	3,616,059.15	2.16%
PURCHASED POWER FUEL EXPENSE	2,012,238.83	1,944,922.16	29,488,315.64	29,991,363.21	1.71%
VOLUNTARY PAYMENTS TO TOWNS	118,000.00	118,000.00	1,288,754.00	1,286,973.00	-0.14%
TOTAL OPERATING EXPENSES	5,761,445.73	5,948,940.03	73,831,315.13	75,785,268.03	2.65%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUDGETED OPERATING EXPENSE VARIANCE REPORT
5/31/16

SCHEDULE G

OPERATION EXPENSES:	ACTUAL YEAR TO DATE	BUDGET YEAR TO DATE	VARIANCE *	% CHANGE
PURCHASED POWER CAPACITY	17,040,100.53	15,605,550.00	1,434,550.53	9.19%
PURCHASED POWER TRANSMISSION	11,247,753.86	11,347,232.00	(99,478.14)	-0.88%
TOTAL PURCHASED POWER	<u>28,287,854.39</u>	<u>26,952,782.00</u>	<u>1,335,072.39</u>	4.95%
OPERATION SUP AND ENGINEERING EXP	431,854.30	573,052.00	(141,197.70)	-24.64%
STATION SUP LABOR AND MISC	142,003.88	76,220.00	65,783.88	86.31%
LINE MISC LABOR AND EXPENSE	703,963.17	616,477.00	87,486.17	14.19%
STATION LABOR AND EXPENSE	365,190.83	407,708.00	(42,517.17)	-10.43%
STREET LIGHTING EXPENSE	107,924.07	85,006.00	22,918.07	26.96%
METER EXPENSE	203,877.07	210,425.00	(6,547.93)	-3.11%
MISC DISTRIBUTION EXPENSE	407,998.71	415,849.00	(7,850.29)	-1.89%
METER READING LABOR & EXPENSE	18,878.10	29,658.00	(10,779.90)	-36.35%
ACCT & COLL LABOR & EXPENSE	1,542,677.21	1,540,326.00	2,351.21	0.15%
UNCOLLECTIBLE ACCOUNTS	110,000.00	110,000.00	0.00	0.00%
ENERGY AUDIT EXPENSE	447,759.47	438,433.00	9,326.47	2.13%
ADMIN & GEN SALARIES	815,389.71	758,277.00	57,112.71	7.53%
OFFICE SUPPLIES & EXPENSE	320,402.01	276,100.00	44,302.01	16.05%
OUTSIDE SERVICES	401,198.50	354,060.00	47,138.50	13.31%
PROPERTY INSURANCE	328,579.59	427,350.00	(98,770.41)	-23.11%
INJURIES AND DAMAGES	62,415.39	47,031.00	15,384.39	32.71%
EMPLOYEES PENSIONS & BENEFITS	2,558,181.51	2,420,788.00	137,393.51	5.68%
MISC GENERAL EXPENSE	123,071.12	223,390.00	(100,318.88)	-44.91%
RENT EXPENSE	177,814.23	194,337.00	(16,522.77)	-8.50%
ENERGY CONSERVATION	540,400.81	746,022.00	(205,621.19)	-27.56%
TOTAL OPERATION EXPENSES	<u>9,809,579.68</u>	<u>9,950,509.00</u>	<u>(140,929.32)</u>	-1.42%
MAINTENANCE EXPENSES:				
MAINT OF TRANSMISSION PLANT	2,497.90	2,750.00	(252.10)	-9.17%
MAINT OF STRUCT AND EQUIPMENT	376,503.02	347,242.00	29,261.02	8.43%
MAINT OF LINES - OH	1,529,010.87	1,793,804.00	(264,793.13)	-14.76%
MAINT OF LINES - UG	105,429.13	121,188.00	(15,758.87)	-13.00%
MAINT OF LINE TRANSFORMERS	94,417.03	300,000.00	(205,582.97)	-68.53%
MAINT OF ST LT & SIG SYSTEM	(637.47)	9,160.00	(9,797.47)	-106.96%
MAINT OF GARAGE AND STOCKROOM	508,138.99	612,518.00	(104,379.01)	-17.04%
MAINT OF METERS	0.00	41,762.00	(41,762.00)	-100.00%
MAINT OF GEN PLANT	178,079.13	163,350.00	14,729.13	9.02%
TOTAL MAINTENANCE EXPENSES	<u>2,793,438.60</u>	<u>3,391,774.00</u>	<u>(598,335.40)</u>	-17.64%
DEPRECIATION EXPENSE	3,616,059.15	3,651,230.00	(35,170.85)	-0.96%
PURCHASED POWER FUEL EXPENSE	29,991,363.21	31,571,524.00	(1,580,160.79)	-5.01%
VOLUNTARY PAYMENTS TO TOWNS	1,286,973.00	1,298,000.00	(11,027.00)	-0.85%
TOTAL OPERATING EXPENSES	<u>75,785,268.03</u>	<u>76,815,819.00</u>	<u>(1,030,550.97)</u>	-1.34%

* () = ACTUAL UNDER BUDGET

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUDGETED OPERATING EXPENSE VARIANCE REPORT
5/31/16

OPERATION EXPENSES:	RESPONSIBLE SENIOR MANAGER	2016 ANNUAL BUDGET	ACTUAL YEAR TO DATE	REMAINING BUDGET BALANCE	REMAINING BUDGET %
PURCHASED POWER CAPACITY	JP	17,095,785.00	17,040,100.53	55,684.47	0.33%
PURCHASED POWER TRANSMISSION	JP	12,600,639.00	11,247,753.86	1,352,885.14	10.74%
TOTAL PURCHASED POWER		<u>29,696,424.00</u>	<u>28,287,854.39</u>	<u>1,408,569.61</u>	4.74%
OPERATION SUP AND ENGINEERING EXP	HJ	629,691.00	431,854.30	197,836.70	31.42%
STATION SUP LABOR AND MISC	HJ	84,858.00	142,003.88	(57,145.88)	-67.34%
LINE MISC LABOR AND EXPENSE	HJ	666,641.00	703,963.17	(37,322.17)	-5.60%
STATION LABOR AND EXPENSE	HJ	448,347.00	365,190.83	83,156.17	18.55%
STREET LIGHTING EXPENSE	HJ	93,347.00	107,924.07	(14,577.07)	-15.62%
METER EXPENSE	HJ	233,648.00	203,877.07	29,770.93	12.74%
MISC DISTRIBUTION EXPENSE	HJ	457,068.00	407,998.71	49,069.29	10.74%
METER READING LABOR & EXPENSE	HJ	32,578.00	18,878.10	13,699.90	42.05%
ACCT & COLL LABOR & EXPENSE	RF	1,693,219.00	1,542,677.21	150,541.79	8.89%
UNCOLLECTIBLE ACCOUNTS	JP	120,000.00	110,000.00	10,000.00	8.33%
ENERGY AUDIT EXPENSE	JP	482,273.00	447,759.47	34,513.53	7.16%
ADMIN & GEN SALARIES	CO	838,461.00	815,389.71	23,071.29	2.75%
OFFICE SUPPLIES & EXPENSE	CO	301,000.00	320,402.01	(19,402.01)	-6.45%
OUTSIDE SERVICES	CO	377,332.00	401,198.50	(23,866.50)	-6.33%
PROPERTY INSURANCE	HJ	466,200.00	328,579.59	137,620.41	29.52%
INJURIES AND DAMAGES	HJ	51,254.00	62,415.39	(11,161.39)	-21.78%
EMPLOYEES PENSIONS & BENEFITS	HJ	2,633,591.00	2,558,181.51	75,409.49	2.86%
MISC GENERAL EXPENSE	CO	231,022.00	123,071.12	107,950.88	46.73%
RENT EXPENSE	HJ	212,000.00	177,814.23	34,185.77	16.13%
ENERGY CONSERVATION	JP	816,602.00	540,400.81	276,201.19	33.82%
TOTAL OPERATION EXPENSES		<u>10,869,132.00</u>	<u>9,809,579.68</u>	<u>1,059,552.32</u>	9.75%
MAINTENANCE EXPENSES:					
MAINT OF TRANSMISSION PLANT	HJ	3,000.00	2,497.90	502.10	16.74%
MAINT OF STRUCT AND EQUIPMT	HJ	484,026.00	376,503.02	107,522.98	22.21%
MAINT OF LINES - OH	HJ	1,675,794.00	1,529,010.87	146,783.13	8.76%
MAINT OF LINES - UG	HJ	130,694.00	105,429.13	25,264.87	19.33%
MAINT OF LINE TRANSFORMERS	HJ	156,000.00	94,417.03	61,582.97	39.48%
MAINT OF ST LT & SIG SYSTEM	HJ	9,745.00	(637.47)	10,382.47	106.54%
MAINT OF GARAGE AND STOCKROOM	HJ	660,131.00	508,138.99	151,992.01	23.02%
MAINT OF METERS	HJ	43,875.00	0.00	43,875.00	100.00%
MAINT OF GEN PLANT	RF	178,200.00	178,079.13	120.87	0.07%
TOTAL MAINTENANCE EXPENSES		<u>3,341,465.00</u>	<u>2,793,438.60</u>	<u>548,026.40</u>	16.40%
DEPRECIATION EXPENSE	RF	3,983,145.00	3,616,059.15	367,085.85	9.22%
PURCHASED POWER FUEL EXPENSE	JP	34,326,329.00	29,991,363.21	4,334,965.79	12.63%
VOLUNTARY PAYMENTS TO TOWNS	RF	1,416,000.00	1,286,973.00	129,027.00	9.11%
TOTAL OPERATING EXPENSES		<u>83,632,495.00</u>	<u>75,785,268.03</u>	<u>7,847,226.97</u>	9.38%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
PROFESSIONAL SERVICES
05/31/2016

PROFESSIONAL SERVICES BY PROJECT

ITEM	DEPARTMENT	ACTUAL	BUDGET	VARIANCE
1 RMLD AND PENSION TRUST AUDIT FEES	ACCOUNTING	28,895.25	35,000.00	(6,104.75)
2 LEGAL-FERC/ISO/POWER/OTHER	INTEGRATED RESOURCES	147,002.10	126,775.00	20,227.10
3 NERC COMPLIANCE AND AUDIT	E & O	29,521.35	14,125.00	15,396.35
4 LEGAL- SOLAR/FIBER	ENGINEERING	32,768.00	9,163.00	23,605.00
5 LEGAL-GENERAL	GM	101,905.17	68,750.00	33,155.17
6 LEGAL SERVICES	HR	37,600.25	66,334.00	(28,733.75)
7 SURVEY RIGHT OF WAY/ ENVIRONMENTAL	BLDG. MAINT.	0.00	9,163.00	(9,163.00)
8 INSURANCE CONSULTANT/OTHER	GEN. BENEFIT	23,506.38	24,750.00	(1,243.62)
TOTAL		<u>401,198.50</u>	<u>354,060.00</u>	<u>47,138.50</u>

PROFESSIONAL SERVICES BY VENDOR

	ACTUAL
MELANSON HEATH	28,500.00
DUNCAN AND ALLEN	95,677.74
CHOATE HALL & STEWART	589.60
COTTE MANAGEMENT CONSULTING LLC	633.75
UTILITY SERVICE INC.	15,860.00
RUBIN AND RUDMAN	160,989.31
SMERCZYNSKI & CONN, PC	28,696.25
PLM ELECTRIC POWER ENGINEERING	32,768.00
FERRITER SCOBBO & RODOPHELE, PC	20,871.35
FLEET COUNSELOR SERVICES INC.	16,612.50
TOTAL	<u>401,198.50</u>

RMLD
 DEFERRED FUEL CASH RESERVE ANALYSIS
 05/31/16

DATE	GROSS CHARGES	REVENUES	NYPA CREDIT	MONTHLY DEFERRED	TOTAL DEFERRED
Jun-15					5,180,285.15
Jul-15	3,492,949.80	3,083,024.15	(65,798.90)	(475,724.55)	4,704,560.60
Aug-15	3,269,589.09	3,172,916.67	(70,099.15)	(166,771.57)	4,537,789.03
Sep-15	3,302,139.93	3,385,022.47	(100,901.03)	(18,018.49)	4,519,770.54
Oct-15	2,543,916.53	2,607,127.52	(105,545.52)	(42,334.53)	4,477,436.01
Nov-15	2,489,548.12	2,551,186.05	(87,425.40)	(25,787.47)	4,451,648.54
Dec-15	2,757,146.26	2,826,699.78	(91,032.01)	(21,478.49)	4,430,170.05
Jan-16	3,163,761.69	2,656,333.87	(108,747.38)	(616,175.20)	3,813,994.85
Feb-16	3,056,024.39	2,978,402.24	(115,171.18)	(192,793.33)	3,621,201.52
Mar-16	2,149,376.47	2,668,095.44	(115,732.84)	402,986.13	4,024,187.65
Apr-16	1,821,988.77	2,745,250.33	(129,300.16)	793,961.40	4,818,149.05
May-16	1,944,922.16	2,356,620.39	(94,374.91)	317,323.32	5,135,472.37

RMLD
 BUDGET / ACTUAL COMPARISON SUMMARY SCHEDULE
 5/31/16

DIVISION	ACTUAL	BUDGET	VARIANCE	VAR %
BUSINESS DIVISION	9,279,547	9,263,562	15,985	0.17%
INTEGRATED RESOURCES	1,135,162	1,311,232	(176,070)	-13.43%
ENGINEERING AND OPERATIONS	4,355,542	4,843,252	(487,710)	-10.07%
FACILITY	4,227,566	4,294,581	(67,015)	-1.56%
GENERAL MANAGER	684,115	753,312	(69,197)	-9.19%
SUB-TOTAL	19,681,932	20,465,938	(784,006)	-3.83%
PURCHASED POWER BASE	28,287,854	26,952,782	1,335,072	4.95%
PURCHASED POWER FUEL	29,991,363	31,571,524	(1,580,161)	-5.01%
TOTAL	77,961,150	78,990,244	(1,029,095)	-1.30%



230 Ash Street
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July 19, 2016

Town of Reading Municipal Light Board

Subject: Distributed Generation

On May 25, 2016, a request for proposals was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle and on June 1, 2016, to it was sent to ECNE, requesting proposals for Distributed Generation for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

AZ Corporation	AB Energy USA, LLC	Gas/Power Energy Systems
Authorized Services of NE	Bond Brothers	Cummins Energy Solutions Business
Cummins Northeast	Energy Acuity	Energy Choice/Seva 2 MW
Epsilon Associates	Kraft Power Corporation	Milton CAT
Power Secure, Inc.	Siemens Industry, Inc.	SME Safety Power Inc.
SourceOne	Tangent Energy	TN Ward Company

Bids were received from AB Energy USA, Milton CAT, TN Ward Company, AZ Corporation and G. Green Construction Company.

The bids were publicly opened and read aloud at 11:00 a.m. June 22, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

MOVE that bid 2016-24 Distributed Generation be awarded to Milton CAT as the lowest responsive and responsible bidder on the recommendation of the General Manager.

<u>Item (desc.)</u>	<u>Qty</u>	<u>Unit Cost</u>	<u>Total Net Cost</u>
Unit 2 2.5 MW Distributed Generator	1	\$1,974,278.00	\$1,974,278.00
Optional 7 year warranty			\$34,260.00
		Total	<u>\$2,008,538.00</u>

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

The FY17 Capital Budget allocation for the purchase of these units under the Distributed Generator project was estimated at \$2,720,409.

A handwritten signature in black ink, appearing to read "CO'Brien".

Coleen O'Brien

A handwritten signature in blue ink, appearing to read "Hamid Jaffari".

Hamid Jaffari

A handwritten signature in black ink, appearing to read "Nick D'Alleva".

Nick D'Alleva

RMLD Distributed Generation Bid Analysis

<u>2000 kW Generator</u>						<u>2500 kW Generator</u>				
	<u>Min Output</u>	<u>Max Output</u>	<u>Bid Amount</u>	<u>3 years Warranty</u>	<u>5 years Warranty</u>	<u>Min Output</u>	<u>Max Output</u>	<u>Bid Amount</u>	<u>3 years Warranty</u>	<u>5 years Warranty</u>
Milton/CA1	2000	2000	\$1,780,626.00	\$6,030.00	\$16,430.00	2500	2500	\$1,974,278.00	\$6,030.00	\$20,530.00
TN Ward Company	2300	2300	\$2,163,000.00	\$44,000.00	\$117,000.00	2500	2500	\$2,399,000.00	NA	NA
AZ Corp	2000	2000	\$2,145,000.00	\$48,560.00	\$132,252.00	NA	NA		NA	NA
Green Construction Co	2000	2000	\$1,986,758.00	NA	NA	NA	NA		NA	NA
AB Energy USA	2000	2395	\$2,193,900.00	\$51,590.00	\$128,980.00	2500	2649	\$2,268,800.00	\$57,000.00	\$140,000.00

<u>2000 kW Generator</u>						<u>2500 kW Generator</u>				
	<u>Bid Amount</u>	<u>5 years Warranty</u>	<u>Total Cost</u>	<u>\$/Max-kW Output</u>	<u>Exeptions</u>	<u>Bid Amount</u>	<u>5 years Warranty</u>	<u>Total Cost</u>	<u>\$/Max-kW Output</u>	<u>Exeptions</u>
Milton/CA1	\$1,780,626.00	\$16,430.00	\$1,797,056.00	\$898.53	NO	\$1,974,278.00	\$20,530.00	\$1,994,808.00	\$797.92	NO
TN Ward Company	\$2,163,000.00	\$117,000.00	\$2,280,000.00	\$991.30	Yes	\$2,399,000.00	\$0.00	\$2,399,000.00	\$959.60	Yes
AZ Corp	\$2,145,000.00	\$132,252.00	\$2,277,252.00	\$1,138.63	Yes	\$0.00	\$0.00	\$0.00	\$0.00	Yes
Green Construction Co	\$1,986,758.00	\$0.00	\$1,986,758.00	\$993.38	Yes	\$0.00	\$0.00	\$0.00	\$0.00	Yes
AB Energy USA	\$2,193,900.00	\$128,980.00	\$2,322,880.00	\$969.89	Yes	\$2,268,800.00	\$140,000.00	\$2,408,800.00	\$909.32	Yes

Bid Award Recommendation

<u>2000 kW Generator</u>						<u>2500 kW Generator</u>				
	<u>Bid Amount</u>	<u>7-years Warranty</u>	<u>Total Cost</u>	<u>\$/Max-kW Output</u>	<u>Exeptions</u>	<u>Bid Amount</u>	<u>7- years Warranty</u>	<u>Total Cost</u>	<u>\$/Max-kW Output</u>	<u>Exeptions</u>
Milton/CA1	\$1,780,626.00	\$27,410.00	\$1,808,036.00	\$904.02	NO	\$1,974,278.00	\$34,260.00	\$2,008,538.00	\$803.42	NO

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July 20, 2016

Town of Reading Municipal Light Board

Subject: 15kV Padmounted Switchgear

On June 29, 2016, a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle and it was sent to ECNE requesting proposals for 15kV Padmounted Switchgear for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

ABM Electrical Power Services, LLC	Irby Utilities	BCS Switchgear, Inc.
Circuit Breaker Sales Co., Inc.	Graybar Electric	Diversified Electric Services, Inc.
Eaton Cooper Power Systems	Power Sales Group	Electric Control Equipment
ElectriComm	MEC Power Group	Innovative Switchgear Solutions, Inc.
Omicron Electronics Corp. USA	WESCO	National Switchgear
Robinson Sales Inc. aka RSI	Power Tech- UPSC	

Bids were received from Trayer Engineering Corp., Power Sales Group, Graybar Electric and WESCO.

The bids were publicly opened and read aloud at 11:00 a.m. July 13, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid 2017-02 for 15kV Padmounted Switchgear be awarded to Trayer Engineering Corp. as the lowest responsive and responsible bidder on the recommendation of the General Manager.

Item (description)	Unit Cost	Qty	Total Cost
2- 2 switched ways, 200 VFI Rating	\$54,260.00	2	\$108,520.00
1- 2 switched ways, 1-200 & 1-600 VFI Rating	\$60,916.00	1	\$60,916.00
1- 2 switched ways, 600 VFI Rating	\$56,664.00	1	\$56,664.00
Total for all 4 switches			<u>\$226,100.00</u>

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

The FY17 Capital Budget allocation for the purchase of these units under the Padmount Switchgear Upgrade at Industrial Parks project was estimated at \$187,500.

A handwritten signature in black ink, appearing to read "COLEEN O'BRIEN".

Coleen O'Brien

A handwritten signature in blue ink, appearing to read "Hamid Jaffari".

Hamid Jaffari

A handwritten signature in black ink, appearing to read "B. Smith".

Brian Smith (for Peter Price)

**Padmount Switchgear
Bid 2017-02**

Bidder	Manufacturer	Delivery Date	Unit Cost	Qty	Total Net Cost	Meet Specification requirement	Firm Price	All forms filled out	Certified Check or Bid Bond	Exceptions to stated bid requirements	Authorized signature	
Trayer Engineering Corp.												
2- 2 switched ways, 200 VFI Rating	Trayer Engineering Corp.	28 weeks	\$54,260.00	2	\$108,520.00	yes	yes	yes	yes	no	yes	
1- 2 switched ways, 1-200 & 1-600 VFI Rating			\$60,916.00	1	\$60,916.00							
1- 2 switched ways, 600 VFI Rating			\$56,664.00	1	\$56,664.00							
Total for all 4 switches							\$226,100.00					
G&W Electric Company c/o Power Sales Group												
2- 2 switched ways, 200 VFI Rating	G&W Electric Company	15 weeks	\$58,672.00	2	\$117,344.00	yes	yes	yes	yes	yes	yes	
1- 2 switched ways, 1-200 & 1-600 VFI Rating			\$58,672.00	1	\$58,672.00							
1- 2 switched ways, 600 VFI Rating			\$58,672.00	1	\$58,672.00							
Total for all 4 switches							\$234,688.00					
WESCO												
2- 2 switched ways, 200 VFI Rating	S&C Electric	16-18 weeks	\$71,673.00	2	\$143,346.00	yes	yes	yes	yes	no	yes	
1- 2 switched ways, 1-200 & 1-600 VFI Rating			\$71,925.00	1	\$71,925.00							
1- 2 switched ways, 600 VFI Rating			\$71,925.00	1	\$71,925.00							
Total for all 4 switches							\$287,196.00					

Graybar Electric - NON-RESPONSIVE **Note: Graybar quoted S&C General Terms & Conditions only.**

IRBY - Disqualified at opening **Note: Statutory forms not included.**



Reading Municipal Light Department
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July 21, 2016

Town of Reading Municipal Light Board

Subject: S&C SCADA-Mate CX Switch

On June 22, 2016, a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle and it was sent to ECNE requesting proposals for S&C SCADA-Mate CX Switch for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

Power Sales Group	WESCO	Shamrock Power
JF Gray & Associates	MetroWest	Power Tech dba UPSC
Hasgo Power Sales	Robinson Sales	EL Flowers & Associates
HD Industrial Services	Genergy Corp.	Omicron Electronics Corp. USA
Siemens	Eaton Cooper	Elster
Graybar	Irby	ITRON
MEC Power Group	Mueller Systems	Parijat Controlware, Inc.
Shay Enterprise	Silver Spring Networks	

Bids were received from Irby, Graybar and WESCO.

The bids were publicly opened and read aloud at 11:00 a.m. July 13, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

MOVE that bid 2017-03 for S&C SCADA-Mate CX Switch be awarded to WESCO as the lowest responsive and responsible bidder on the recommendation of the General Manager.

<u>Item (desc.)</u>	<u>Qty</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Item 1 - S&C SCADA-Mate Switch	4	\$28,680.25	\$114,720.00

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

The FY17 Capital Budget allocation for the purchase of these units under the Grid Modernization and Optimization project was estimated at \$140,000.



Coleen O'Brien



Hamid Jaffari



Brian Smith (for Peter Price)

**S&C SCADA-Mate CX Switch
Bid 2017-03**

Bidder	<u>Delivery Date</u>	<u>Manufacturer</u>	<u>Unit Cost</u>	<u>Qty</u>	<u>Total Net Cost</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>
WESCO Item 1 - S&C SCADA-Mate CX Switch	14-16 weeks		\$ 28,680.00	4	\$114,720.00	yes	yes	yes	yes	no	yes

Irby - *NON-RESPONSIVE*

Note: Unauthorized signature.

Graybar - *NON-RESPONSIVE*

Note: Graybar quoted S&C General Terms & Conditions only.



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July 18, 2016

Town of Reading Municipal Light Board

Subject: S&C IntelliRupter Pulse Closer

On June 22, 2016, a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle and it was sent to ECNE requesting proposals for S&C IntelliRupter Pulse Closer for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

Power Sales Group	WESCO	Graybar Electric Company
Shamrock Power Sales	JF Gray	MetroWest
Power Tech dba UPSC	Hasgo Power	Robinson Sales
Stuart C. Irby	HD Industrial Services	EL Flowers & Associates
Genergy	MVA Power, Inc.	Siemens Industry, Inc.
Eaton Cooper	Omicron Electronics Corp, USA	Elster
Mueller Systems	Silver Spring Networks	MEC Power Group

Bids were received from WESCO, Irby and Graybar Electric Company.

The bids were publicly opened and read aloud at 11:00 a.m. July 13, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

MOVE that bid 2017-04 for S&C IntelliRupter Pulse Closer be awarded to WESCO as the lowest responsive and responsible bidder on the recommendation of the General Manager.

<u>Item (desc.)</u>	<u>Manufacturer</u>	<u>Unit Cost</u>	<u>Qty</u>	<u>Total Cost</u>
1 - S&C IntelliRupter Pulse Closers	S&C Electric Co	\$36,970.00	2	\$73,940.00

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

The FY17 Capital Budget allocation for the purchase of these units under the Grid Modernization and Optimization project was estimated at \$90,000.

A handwritten signature in black ink, appearing to read "CO'Brien".

Coleen O'Brien

A handwritten signature in blue ink, appearing to read "Hamid Jaffari".

Hamid Jaffari

A handwritten signature in blue ink, appearing to read "B. E. K.". The signature is written in a stylized, cursive font.

Brian Smith (for Peter Price)

**S&C IntelliRupter Pulse Closers
Bid 2017-04**

Bidder	<u>Delivery Date</u>	<u>Manufacturer</u>	<u>Unit Cost</u>	<u>Qty</u>	<u>Total Net Cost</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>
WESCO Item 1 - S&C IntelliRupter Pulse Closers	16-18 weeks	S&C Electric Co	\$ 36,970.00	2	\$73,940.00	yes	yes	yes	yes	no	yes

Irby - *NON-RESPONSIVE*

Note: Unauthorized signature.

Graybar - *NON-RESPONSIVE*

Note: Graybar quoted S&C General Terms & Conditions only.

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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July 22, 2016

Town of Reading Municipal Light Board

Subject: Hourly Rates for Professional Manpower, Vehicles, Trade Tools, and Equipment for Underground Electrical Distribution Construction and Maintenance

On June 29, 2016, a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle requesting proposals for Hourly Rates for Professional Manpower, Vehicles, Trade Tools, and Equipment for Underground Electrical Distribution Construction and Maintenance for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

ABM Electrical Power Services, LLC	Mass Bay Electrical Corp.
Albanese Brothers, Inc.	Maverick Construction
Construction Journal	McDonald Electrical Corporation
Dagle Electrical Construction Corp.	McDonough Electric Construction
ElecComm Elecnor Hawkeye LLC	MEC Power Group
Elecnor Hawkeye LLC	Northeast Line Construction Corp.
Evermore Light and Power	OSP LLC
Fischbach & Moore Electric Group, LLC	Power Line Contractors
GEOD Consulting	Project Dog, Inc.
Grattan Line Construction Corp.	Spencer Contracting
Hamilton Electric Co., Inc.	Thirault LLC
Hi Volt Line Construction & Maintenance	Utility Service & Assistance, Inc.
K.B. Aruda Construction, Inc.	PowerLine Contractors, Inc.

Three bids were received from Elecnor Hawkeye LLC, Fischbach & Moore Electric Group, LLC, and McDonald Electrical Corporation.

The bids were publicly opened and read aloud at 11:00 a.m., July 14, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid 2017-05 for Hourly Rates for Professional Manpower, Vehicles, Trade Tools, and Equipment for Underground Electrical Distribution Construction and Maintenance be awarded to **McDonald Electrical Corporation** as the lowest responsible and eligible bidder on the recommendation of the General Manager.

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

This project will be paid from various operating and capital accounts as the work dictates.

Handwritten signature of Coleen O'Brien in cursive.

Coleen O'Brien

Handwritten signature of Hamid Jafari in cursive.

Hamid Jafari

Handwritten signature of Stephen DeFerrari in cursive.

Stephen DeFerrari

Hourly Rates for Professional Manpower, Vehicles, Trade Tools, and Equipment for Underground Electrical Distribution Construction and Maintenance
IFB 2017-05

Bidder:	McDonald Electrical Corporaton			Fischbach & Moore Electric Group, LLC			Elecnor Hawkeye, LLC		
	YEAR 1 <i>Sept 1, 2016 - Aug 31, 2017</i>	YEAR 2 <i>Sept 1, 2017 - Aug 31, 2018</i>	YEAR 3 <i>Sept 1, 2018 - Aug 31, 2019</i>	YEAR 1 <i>Sept 1, 2016 - Aug 31, 2017</i>	YEAR 2 <i>Sept 1, 2017 - Aug 31, 2018</i>	YEAR 3 <i>Sept 1, 2018 - Aug 31, 2019</i>	YEAR 1 <i>Sept 1, 2016 - Aug 31, 2017</i>	YEAR 2 <i>Sept 1, 2017 - Aug 31, 2018</i>	YEAR 3 <i>Sept 1, 2018 - Aug 31, 2019</i>
Crew Rate - Regular Hourly									
Working Foreman/Electrician/Cable Splicer	79.75	81.65	82.61	88.72	90.92	93.12	122.30	125.25	128.84
Journeyman Electrician/Cable Splicer	74.87	75.81	76.73	81.84	84.04	86.24	112.68	115.44	118.73
Splicing Van	15.00	16.00	17.00	1.00	1.00	1.00	25.00	25.00	25.00
Crew Rate Per Hour:	<u>\$169.62</u>	<u>\$173.46</u>	<u>\$176.34</u>	<u>\$171.56</u>	<u>\$175.96</u>	<u>\$180.36</u>	<u>\$259.98</u>	<u>\$265.69</u>	<u>\$272.57</u>
Crew Rate - Overtime Hourly									
Working Foreman/Electrician/Cable Splicer	111.93	114.77	116.21	126.23	129.53	132.06	153.31	156.85	161.38
Journeyman Electrician/Cable Splicer	104.63	106.05	107.48	115.92	119.22	121.75	139.87	143.14	147.26
Splicing Van	15.00	16.00	17.00	1.00	1.00	1.00	25.00	25.00	25.00
Crew Rate Per Hour:	<u>\$231.56</u>	<u>\$236.82</u>	<u>\$240.69</u>	<u>\$243.15</u>	<u>\$249.75</u>	<u>\$254.81</u>	<u>\$318.18</u>	<u>\$324.99</u>	<u>\$333.64</u>
Annual Cost - Regular Time (estimate)									
# of Hours Per Year (estimate)	710	710	710	710	710	710	710	710	710
Total Estimate Per Year (hours x rate):	\$120,430	\$123,157	\$125,201	\$121,808	\$124,932	\$128,056	\$184,586	\$188,640	\$193,525
Annual Cost - Over-time (estimate)									
# of Hours Per Year (estimate)	125	125	125	125	125	125	125	125	125
Total Estimate Per Year (hours x rate):	\$28,945	\$29,603	\$30,086	\$30,394	\$31,219	\$31,851	\$39,773	\$40,624	\$41,705
Total (Regular and Over Time) Combined									
Annual Total:	\$149,375	\$152,759	\$155,288	\$152,201	\$156,150	\$159,907	\$224,358	\$229,264	\$235,230
Three-Year Total:	\$457,422			\$468,259			\$688,852		



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July 19, 2016

Town of Reading Municipal Light Board

Subject: Cooper Power System or Compatible Meters and Equipment for the AMI Mesh Network System Expansion and Migration

On June 22, 2016, a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle and it was sent to ECNE requesting proposals for Cooper Power System or Compatible Meters and Equipment for the AMI Mesh Network System Expansion and Migration for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

AVCOM	ECI Sales	ITRON
Power Sales Group	WESCO	Graybar Electric Company
Shamrock Power Sales	JF Gray	MetroWest
Power Tech dba UPSC	Hasgo Power	Robinson Sales
Stuart C. Irby	HD Industrial Services	EL Flowers & Associates
Genergy	MVA Power, Inc.	Siemens Industry, Inc.
Eaton Cooper	Omicron Electronics Corp, USA	Elster
Mueller Systems	Silver Spring Networks	MEC Power Group

A bid was received from Eaton.

The bids were publicly opened and read aloud at 11:00 a.m. July 13, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

MOVE that bid 2017-06 for Cooper Power System or Compatible Meters and Equipment for the AMI Mesh Network System Expansion and Migration be awarded to Eaton as the lowest responsive and responsible bidder on the recommendation of the General Manager.

<u>Item (desc.)</u>	<u>Unit Cost</u>	<u>Qty</u>	<u>Total Net Cost</u>
1 Retrofit of 2S and 12S Meters	\$96.90	500	\$48,450.00
2 Mesh Network Relays	\$255.00	30	\$7,650.00
3 6S Meters	\$642.60	52	\$33,415.20
4 5S Meters	\$642.60	32	\$20,563.20
5 16S Meters, Class 200	\$586.50	12	\$7,038.00
6 16S Meters, Class 320	\$603.84	4	\$2,415.36
			\$119,531.76

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

The FY17 Capital Budget allocation for the purchase of these units under the AMI Mesh Network Expansion project was estimated at \$148,000.

Handwritten signature of Coleen O'Brien in cursive.

Coleen O'Brien

Handwritten signature of Hamid Jaffari in cursive.

Hamid Jaffari

Handwritten signature of Nick D'Alleva in cursive, with the text "for Nick D'Alleva" written below the signature.

Nick D'Alleva

Meters & Equipment for the AMI Mesh Network
 Bid 2017-06

Bidder	Manufacturer	Delivery Date	Unit Cost	Qty	Total Net Cost	Meet Specification requirement	Specification Data Sheets	Firm Price	All forms filled out	Certified Check or Bid Bond	Exceptions to stated bid requirements	Authorized signature
Eaton						yes	yes	yes	yes	yes	yes	yes
Item 1 Retrofit of 2S and 12S	Eaton	2-8 weeks ARO	\$96.90	500	\$48,450.00							
Item 2 Mesh Network Relays	Eaton	2-10 weeks ARO	\$255.00	30	\$7,650.00							
Item 3 6S Meters	Elster	2-10 weeks ARO	\$642.60	52	\$33,415.20	Exceptions:	Are based on T&C already In place between RMLD and Cooper Power Systems.					
Item 4 5S Meters	Elster	2-10 weeks ARO	\$642.60	32	\$20,563.20							
Item 5 16S Meters, Class 200	Elster	2-10 weeks ARO	\$586.50	12	\$7,038.00	Note:	Although Eaton checked exceptions, this is actually a clarification and is acceptable.					
Item 6 16S Meters, Class 320	Elster	2-10 weeks ARO	\$603.84	4	\$2,415.36							
					<u>\$119,531.76</u>							



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July 19, 2016

Town of Reading Municipal Light Board

Subject: Bus Insulation at Substation 5

On June 29, 2016, a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle, the Commonwealth of MA Central Register and it was sent to ECNE requesting proposals for Repair of 15kV McGraw Edison Switchgear at Substation 5 for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

American Electrical Testing Co., Inc.	AtlanBay	Circuit Breaker Sales North East
Construction Journal	Dec Corp.	Eaton & Eastman Electric
No-Outage Electrical Testing	OnTarget Services	PowerLine Contractors, Inc.
PowerTech Associates	Schneider Electric	Shermco Industries
Three Phase Line Construction, Inc.	CMDG-USA	Western Electrical Services, Inc.
USNE, Inc. Northeast Operations	Project Dog, Inc.	Hawkeye Elecnor Group
MEC Power Group		

Bids were received from McDonald Electric Corp and Powerline Contractors, Inc.

The bid was publicly opened and read aloud at 11:00 a.m. July 14, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

The bid was reviewed, analyzed and evaluated by staff and recommended to the General Manager.

Move that bid 2017-08 for Bus Insulation at Substation 5 be awarded to Powerline Contractors, Inc. as the lowest responsible and eligible bidder on the recommendation of the General Manager.

<u>Item (desc.)</u>	<u>Total Cost</u>
a. straight time	\$25,754.00
b. overtime	\$31,578.00
	<hr/>
	\$57,332.00

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

The FY17 Operating Budget will be charged for the re-insulation of the bus work.

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

Coleen O'Brien

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

Hamid Jaffari

A handwritten signature in cursive script, appearing to read "Nick D'Alleva".

Nick D'Alleva

**Bus Insulation at Substation 5
IFB 2017-08**

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>
Powerline Contractors, Inc.							
a. Straight time	\$25,754.00	yes	yes	yes	yes	no	yes
b. Overtime	\$31,578.00						
	<u>\$57,332.00</u>						
McDonald Electric Corp.							
a. Straight time	\$53,430.00	yes	yes	yes	yes	no	yes
b. Overtime	\$66,000.00						
	<u>\$119,430.00</u>						

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

June-16

	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 3500 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	\$109.40	\$190.18	\$134.08	\$968.89	\$187.29	\$4,546.48	\$738,287.26
PER KWH CHARGE	\$0.14586	\$0.12679	\$0.13408	\$0.13272	\$0.17342	\$0.12990	\$0.10732
NATIONAL GRID							
TOTAL BILL	\$132.87	\$266.91	\$177.15	\$1,240.45	\$178.15	\$5,006.92	\$1,369,293.51
PER KWH CHARGE	\$0.17716	\$0.17794	\$0.17715	\$0.16993	\$0.16495	\$0.14305	\$0.19904
% DIFFERENCE	21.45%	40.34%	32.12%	28.03%	-4.88%	10.13%	85.47%
EVERSOURCE(NSTAR)							
TOTAL BILL	\$160.77	\$308.69	\$212.21	\$1,450.70	\$233.72	\$6,735.05	\$1,089,647.12
PER KWH CHARGE	\$0.21435	\$0.20579	\$0.21221	\$0.19873	\$0.21641	\$0.19243	\$0.15839
% DIFFERENCE	46.95%	62.31%	58.27%	49.73%	24.79%	48.14%	47.59%
PEABODY MUNICIPAL LIGHT PLANT							
TOTAL BILL	\$92.34	\$178.32	\$121.00	\$979.47	\$155.08	\$4,839.43	\$663,878.58
PER KWH CHARGE	\$0.12313	\$0.11888	\$0.12100	\$0.13417	\$0.14360	\$0.13827	\$0.09650
% DIFFERENCE	-15.59%	-6.24%	-9.75%	1.09%	-17.20%	6.44%	-10.08%
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	-9.75%	6.04%	-0.99%	-0.97%	-10.07%	4.76%	9.33%
WAKEFIELD MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$122.99	\$228.42	\$154.38	\$1,166.29	\$186.28	\$5,473.08	\$921,561.30
PER KWH CHARGE	\$0.16398	\$0.15228	\$0.15438	\$0.15977	\$0.17249	\$0.15637	\$0.13396
% DIFFERENCE	12.42%	20.11%	15.14%	20.37%	-0.54%	20.38%	24.82%

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

July-16

	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	\$114.26	\$197.04	\$139.38	\$1,013.50	\$200.14	\$4,709.60	\$757,070.59
PER KWH CHARGE	\$0.15234	\$0.13136	\$0.13938	\$0.13884	\$0.18531	\$0.13456	\$0.11005
NATIONAL GRID							
TOTAL BILL	\$132.87	\$266.91	\$177.15	\$1,240.45	\$178.15	\$4,919.42	\$1,369,293.51
PER KWH CHARGE	\$0.17716	\$0.17794	\$0.17715	\$0.16993	\$0.16495	\$0.14055	\$0.19904
% DIFFERENCE	16.29%	35.46%	27.10%	22.39%	-10.99%	4.46%	80.87%
EVERSOURCE(NSTAR)							
TOTAL BILL	\$141.00	\$269.15	\$185.85	\$1,490.50	\$206.30	\$7,655.11	\$1,136,772.38
PER KWH CHARGE	\$0.18799	\$0.17943	\$0.18585	\$0.20418	\$0.19102	\$0.21872	\$0.16524
% DIFFERENCE	23.40%	36.60%	33.34%	47.06%	3.08%	62.54%	50.15%
PEABODY MUNICIPAL LIGHT PLANT							
TOTAL BILL	\$91.88	\$177.36	\$120.37	\$979.25	\$155.05	\$4,838.38	\$663,672.19
PER KWH CHARGE	\$0.12250	\$0.11824	\$0.12037	\$0.13414	\$0.14357	\$0.13824	\$0.09647
% DIFFERENCE	-19.59%	-9.99%	-13.64%	-3.38%	-22.53%	2.73%	-12.34%
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	-13.58%	2.35%	-4.76%	-5.33%	-15.84%	1.13%	6.62%
WAKEFIELD MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$122.99	\$228.42	\$154.38	\$1,166.29	\$186.28	\$5,473.08	\$921,561.30
PER KWH CHARGE	\$0.16398	\$0.15228	\$0.15438	\$0.15977	\$0.17249	\$0.15637	\$0.13396
% DIFFERENCE	7.64%	15.93%	10.76%	15.07%	-6.92%	16.21%	21.73%

Jeanne Foti

From: Jeanne Foti
Sent: Thursday, July 21, 2016 11:49 AM
To: RMLD Board Members Group
Subject: Account Payable and Payroll Questions

Good morning.

In an effort to save paper, the following timeframes had no Account Payable and Payroll questions.

Account Payable Warrant – No Questions

June 24, July 1, July 8 and July 15 .

Payroll – No Questions

June 27 and July 11.

This e-mail will be printed for the Board Packet for the RMLD Board meeting on July 28, 2016.

Jeanne Foti
Reading Municipal Light Department
Executive Assistant
230 Ash Street
Reading, MA 01867

781-942-6434 Phone
781-942-2409 Fax

Please consider the environment before printing this e-mail.