

**READING MUNICIPAL  
LIGHT DEPARTMENT**

**BOARD  
OF  
COMMISSIONERS**

**REGULAR SESSION**

**OCTOBER 29, 2015**

READING MUNICIPAL LIGHT DEPARTMENT  
BOARD OF COMMISSIONERS MEETING

230 Ash Street  
Reading, MA 01867  
October 29, 2015  
7:30 p.m.

1. Call Meeting to Order
2. Opening Remarks
3. Introductions
4. Public Comment
  - RMLD Citizens' Advisory Board
  - Liaisons to RMLD Board
  - Public Comment
5. Presentation (Attachment 1) ACTION ITEM
  - a. Presentation of Fiscal Year 2015 Audit  
Melanson Heath & PC – Karen Snow and Zackary Fentross
6. Report of the Committee (Attachment 2) ACTION ITEMS
  - a. Audit Committee – Commissioner Pacino
  - b. Policy Committee Meeting – Commissioner Pacino
    - i. RMLD Policy 11 Revision 2 Summer Employees  
  
Note: The Policy Committee voted to remove this policy at its meeting on October 20, 2015.
    - ii. RMLD Policy 12 Revision 2 Board Documents Dissemination
  - c. General Manager Committee – Chairman O'Rourke
    - i. Review of RMLD General Manager
7. Approval of Board Minutes (Attachment 3) ACTION ITEMS

June 12, 2014, November 6, 2014, January 29, 2015, March 26, 2015, May 14, 2015
8. General Manager's Report
9. Power Supply Report – August and September 2015 – Ms. Parenteau (Attachment 4)
10. Engineering and Operations Report – August and September 2015 – Mr. Jaffari (Attachment 5)
11. Financial Update – Mr. Fournier
12. MGL Chapter 30B Bid (Attachment 6) ACTION ITEM
  - a. IFB 2016-03 - Remediation, Transportation, and Disposal of Hazardous Waste  
Suggested Motion:  
Move that bid 2016-03 for Remediation, Transportation, and Disposal of Hazardous Waste be awarded to ENPRO for a three year period ending November 30, 2018 for an estimated cost of \$150,000 as the lowest qualified bidder on the recommendation of the General Manager.
13. General Discussion

**BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED**  
E-Mail responses to Account Payable/Payroll Questions  
Rate Comparisons, October 2015

**RMLD Board Meetings**

Thursday, December 10, 2015

**Town of Reading – Subsequent Town Meeting**

Town of Reading – Subsequent Town Meeting – November 9, 2015

**Policy Committee Meeting**

To Be Determined.

**CAB Meeting**

Wednesday, November 18, 2015

**14. Executive Session**

**ACTION ITEM**

**Suggested Motion:**

Move that the Board go into Executive Session to approve the Executive Session meeting minutes of June 12, 2014 and January 29, 2015, discuss strategy with respect to collective bargaining, and return to Regular Session for the sole purpose of adjournment.

**15. Adjournment**

**ACTION ITEM**

**Suggested Motion:**

Move to adjourn the Regular Session.

PRESENTATION  
ATTACHMENT 1

**TOWN OF READING, MASSACHUSETTS  
READING MUNICIPAL LIGHT DEPARTMENT**

**Annual Financial Statements**

**For the Year Ended June 30, 2015**

**DRAFT**

Reading Municipal Light Department

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## INDEPENDENT AUDITORS' REPORT

To the Municipal Light Board  
Town of Reading Municipal Light Department

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the business-type activities and the aggregate remaining fund information of the Town of Reading Municipal Light Department ("the Department") (an enterprise fund of the Town of Reading, Massachusetts), as of and for the year ended June 30, 2015 and the related notes to the financial statements, which collectively comprise the Department's basic financial statements as listed in the Table of Contents.

### **Management's Responsibility for the Financial Statements**

The Department's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditor's Responsibility**

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies

used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

## Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate remaining fund information of the Town of Reading Municipal Light Department as of June 30, 2015, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## Report on Summarized Comparative Information

We have previously audited the Department's fiscal year 2014 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 2, 2014. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2014 is consistent, in all material respects, with the audited financial statements from which it has been derived.

## Other Matters

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Schedule of Funding Progress, Schedule of Proportionate Share of the Net Pension Liability, and Schedule of Contributions be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the *Governmental Accounting Standards Board*, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with evidence sufficient to express an opinion or provide any assurance.

\_\_\_\_\_, 2015



## MANAGEMENT'S DISCUSSION AND ANALYSIS

Within this section of the Town of Reading Municipal Light Department's ("the Department") annual financial report, management provides a narrative discussion and analysis of the Department's financial activities for the year ended June 30, 2015. The Department's performance is discussed and analyzed within the context of the accompanying financial statements and disclosures following this section.

### A. OVERVIEW OF THE FINANCIAL STATEMENTS

The basic financial statements include (1) the Proprietary Fund Statements of Net Position, (2) the Proprietary Fund Statements of Revenues, Expenses and Changes in Net Position, (3) the Proprietary Fund Statements of Cash Flows, (4) the Fiduciary Funds Statements of Fiduciary Net Position, (5) the Fiduciary Funds Statements of Changes in Fiduciary Net Position, and (6) Notes to Financial Statements.

The Proprietary Fund Statements of Net Position is designed to indicate our financial position at a specific point in time. At June 30, 2015, it shows our net worth of \$101,445,083 which comprises \$69,916,349 invested in capital assets, \$5,434,308 restricted for depreciation fund, and \$26,094,426 unrestricted.

The Proprietary Fund Statements of Revenues, Expenses and Changes in Net Position summarize our operating results and reveal how much, if any, of a profit was earned for the year. As discussed in more detail below, our net profit for the year ended June 30, 2015 was \$3,241,276.

The Proprietary Fund Statements of Cash Flows provide information about cash receipts, cash payments, investing, and financing activities during the accounting period. A review of our Proprietary Fund Statements of Cash Flows indicates that cash receipts from operating activities adequately covered our operating expenses in fiscal year 2015.

The following is a summary of the Department's financial data for the current and prior fiscal years.

#### Summary of Net Position

	<u>2015</u>	<u>2014</u>
Current assets	\$ 23,184,226	\$ 21,584,528
Noncurrent assets	93,572,180	90,733,116
Deferred outflows of resources	<u>1,547,815</u>	<u>-</u>
Total assets and deferred outflows of resources	<u>\$ 118,304,221</u>	<u>\$ 112,317,644</u>
Current liabilities	\$ 9,330,904	\$ 7,721,376
Noncurrent liabilities	<u>7,528,234</u>	<u>2,722,934</u>
Total liabilities	16,859,138	10,444,310

(continued)

(continued)

Net position:		
Net investment in capital assets	69,916,349	70,194,105
Restricted for depreciation fund	5,434,308	4,130,585
Unrestricted	26,094,426	27,548,644
Total net position	101,445,083	101,873,334
Total liabilities and net position	\$ 118,304,221	\$ 112,317,644

#### Summary of Changes in Net Position

	2015	2014
Operating revenues	\$ 85,005,786	\$ 84,364,480
Operating expenses	(80,359,819)	(79,294,372)
Operating income	4,645,967	5,070,108
Non-operating revenues (expenses)	(1,404,691)	(1,513,953)
Change in net position	3,241,276	3,556,155
Beginning net position, as restated	98,203,807	98,317,179
Ending net position	\$ 101,445,083	\$ 101,873,334

As discussed in Note 21, the proprietary fund's fiscal year 2015 beginning net position has been restated to reflect the Department's implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27*. However, the proprietary fund's comparative information for fiscal year 2014 has not been restated.

#### **B. FINANCIAL HIGHLIGHTS**

Electric sales (net of discounts) were \$83,985,195 in fiscal year 2015, an increase of 5.4% from the prior year. In fiscal year 2015, kilowatt hours sold increased by 0.2% to 689,722,742, compared to 688,104,698 in fiscal year 2014. In fiscal year 2015, customers were charged \$1,047,590 in purchase power fuel charge adjustments, compared to charges of \$1,523,208 in fiscal year 2014.

In fiscal year 2015, the Department restructured its rates and began billing customers purchase power capacity and transmission costs separately from the base rate. As a result of this restructuring, customer bills no longer include a purchase power adjustment. In fiscal year 2015, customers were credited purchase power capacity and transmission adjustments of \$(26,999).

Operating expenses totaled \$80,359,819 in fiscal year 2015, an overall increase of 1.3% from fiscal year 2014. The largest portion of this total, \$61,073,227, was for purchase power costs. Other operating expenses included \$14,029,399 for general operating and maintenance costs, \$1,395,728 for voluntary payments to Towns, and depreciation expense of \$3,861,465. In fiscal year 2015, the depreciation rate was 3.0%.

In fiscal year 2015, the Department contributed \$1,500,000 to the Reading Municipal Light Department Employees' Retirement Trust ("Pension Trust") and the Pension Trust contributed \$1,401,638 to the Town of Reading Contributory Retirement System on behalf of the Department's employees.

In fiscal year 2015, the Department contributed \$345,382 to the Other Post-Employment Benefits Trust ("OPEB Trust"), which was equal to its actuarially determined liability at June 30, 2015. As a result, the Department had no unfunded OPEB liability at June 30, 2015. Additional information on the Department's OPEB contributions can be found in Note 16 on pages 21-24 of this report.

### **C. CAPITAL ASSET AND DEBT ADMINISTRATION**

**Capital assets.** Total investment in land at year end amounted to \$1,265,842; there was no change from the prior year. Total investment in depreciable capital assets at year-end amounted to \$68,650,507 (net of accumulated depreciation), a decrease of \$(277,756) from the prior year. This investment in depreciable capital assets includes structures and improvements, equipment and furnishings, and infrastructure assets.

**Debt and other long-term liabilities.** At the end of the current fiscal year, the Department had no outstanding bonded debt.

Additional information on capital assets and other long-term liabilities can be found in the Notes to Financial Statements.

### **REQUESTS FOR INFORMATION**

This financial report is designed to provide a general overview of the Town of Reading Municipal Light Department's finances for all those with an interest in the Department's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Accounting/Business Manager  
Town of Reading Municipal Light Department  
230 Ash Street  
Reading, Massachusetts 01867

TOWN OF READING, MASSACHUSETTS  
MUNICIPAL LIGHT DEPARTMENT

BUSINESS-TYPE PROPRIETARY FUND  
STATEMENTS OF NET POSITION

JUNE 30, 2015 AND 2014

	<u>2015</u>	<u>2014</u>
<b>ASSETS</b>		
Current:		
Unrestricted cash and short-term investments	\$ 13,151,862	\$ 11,533,212
Receivables, net of allowance for uncollectable	7,314,059	7,871,050
Prepaid expenses	1,137,898	772,766
Inventory	<u>1,580,407</u>	<u>1,407,500</u>
Total current assets	23,184,226	21,584,528
Noncurrent:		
Restricted cash and short-term investments	22,344,776	19,219,111
Restricted investments	1,284,061	1,292,906
Investment in associated companies	26,994	26,994
Land	1,265,842	1,265,842
Capital assets, net of accumulated depreciation	<u>68,650,507</u>	<u>68,928,263</u>
Total noncurrent assets	93,572,180	90,733,116
<b>DEFERRED OUTFLOWS OF RESOURCES</b>	<u>1,547,815</u>	<u>-</u>
<b>TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES</b>	<u>118,304,221</u>	<u>112,317,644</u>
<b>LIABILITIES</b>		
Current:		
Accounts payable	5,097,838	4,407,535
Accrued liabilities	585,104	592,810
Customer deposits	846,361	749,900
Customer advances for construction	889,774	400,656
Due to Pension Trust	1,500,000	1,374,538
Due to OPEB Trust	345,382	-
Current portion of long-term liabilities:		
Accrued employee compensated absences	<u>66,445</u>	<u>195,937</u>
Total current liabilities	9,330,904	7,721,376
Noncurrent:		
Accrued employee compensated absences	3,004,043	2,722,934
Net pension liability	<u>4,524,191</u>	<u>-</u>
Total noncurrent liabilities	7,528,234	2,722,934
<b>TOTAL LIABILITIES</b>	16,859,138	10,444,310
<b>NET POSITION</b>		
Net investment in capital assets	69,916,349	70,194,105
Restricted for depreciation fund	5,434,308	4,130,585
Unrestricted	<u>26,094,426</u>	<u>27,548,644</u>
<b>TOTAL NET POSITION</b>	<u>\$ 101,445,083</u>	<u>\$ 101,873,334</u>

The accompanying notes are an integral part of these financial statements.

TOWN OF READING, MASSACHUSETTS  
MUNICIPAL LIGHT DEPARTMENT

BUSINESS-TYPE PROPRIETARY FUND  
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

FOR THE YEARS ENDED JUNE 30, 2015 AND 2014

	<u>2015</u>	<u>2014</u>
<b>Operating Revenues:</b>		
Electric sales, net of discounts of \$2,953,502 and \$4,475,920 respectively	\$ 83,985,195	\$ 79,689,061
Purchase power adjustments:		
Fuel charge adjustment	1,047,590	1,523,208
Capacity and transmission adjustment	(26,999)	3,152,211
Total Operating Revenues	<u>85,005,786</u>	<u>84,364,480</u>
<b>Operating Expenses:</b>		
Purchase power	61,073,227	60,823,626
Operating Maintenance	11,606,195	11,002,998
Maintenance	2,423,204	2,290,843
Voluntary payments to towns	1,395,728	1,397,270
Depreciation	3,861,465	3,779,635
Total Operating Expenses	<u>80,359,819</u>	<u>79,294,372</u>
Operating Income	4,645,967	5,070,108
<b>Nonoperating Revenues (Expenses):</b>		
Interest income	122,693	120,832
MMWEC surplus	212,689	391,726
Intergovernmental grants	62,500	-
Contributions in aid of construction	64,474	24,117
Return on investment to Town of Reading	(2,332,863)	(2,301,221)
Loss on disposal of capital assets	(58,296)	(114,960)
Other	524,112	365,553
Total Nonoperating Revenues (Expenses), Net	<u>(1,404,691)</u>	<u>(1,513,953)</u>
Change in Net Position	3,241,276	3,556,155
Net Position at Beginning of Year, as restated	<u>98,203,807</u>	<u>98,317,179</u>
Net Position at End of Year	<u>\$ 101,445,083</u>	<u>\$ 101,873,334</u>

The accompanying notes are an integral part of these financial statements.

TOWN OF READING, MASSACHUSETTS  
MUNICIPAL LIGHT DEPARTMENT

BUSINESS-TYPE PROPRIETARY FUND  
STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED JUNE 30, 2015 AND 2014

	<u>2015</u>	<u>2014</u>
<b><u>Cash Flows From Operating Activities:</u></b>		
Receipts from customers and users	\$ 84,638,647	\$ 80,249,266
Payments to vendors and employees	(76,424,486)	(74,778,752)
Customer purchase power adjustments	<u>1,020,591</u>	<u>4,675,419</u>
Net Cash Provided By (Used For) Operating Activities	9,234,752	10,145,933
<b><u>Cash Flows From Noncapital Financing Activities:</u></b>		
Return on investment to Town of Reading	(2,332,863)	(2,301,221)
MMWEC surplus	212,689	391,726
Other	<u>524,112</u>	<u>365,553</u>
Net Cash Provided By (Used For) Noncapital Financing Activities	(1,596,062)	(1,543,942)
<b><u>Cash Flows From Capital and Related Financing Activities:</u></b>		
Acquisition and construction of capital assets	(3,642,005)	(3,894,282)
Contributions in aid of construction	553,592	19,619
Intergovernmental revenues	<u>62,500</u>	<u>-</u>
Net Cash Provided By (Used For) Capital and Related Financing Activities	(3,025,913)	(3,874,663)
<b><u>Cash Flows From Investing Activities:</u></b>		
Investment income	122,693	120,832
(Increase) decrease in restricted cash and investments	<u>(3,116,820)</u>	<u>(2,466,799)</u>
Net Cash Provided By (Used For) Investing Activities	(2,994,127)	(2,345,967)
Net Change in Unrestricted Cash and Short-Term Investments	1,618,650	2,381,361
Unrestricted Cash and Short-Term Investments, Beginning of Year	<u>11,533,212</u>	<u>9,151,851</u>
Unrestricted Cash and Short-Term Investments, End of Year	<u>\$ 13,151,862</u>	<u>\$ 11,533,212</u>
<b><u>Reconciliation of Operating Income to Net Cash:</u></b>		
Operating income	\$ 4,645,967	\$ 5,070,108
Adjustments to reconcile operating income to net cash provided by (used for) operating activities:		
Depreciation expense	3,861,465	3,779,635
(Increase) decrease in:		
Accounts receivable	556,991	510,327
Prepaid and other assets	(365,132)	(81,321)
Inventory	(172,907)	161,530
Accounts payable and accrued liabilities	834,214	(718,762)
Due to pension trust	125,462	1,374,538
Due to other postemployment benefits trust	345,382	-
Net pension liability	(519,874)	-
Other	<u>(76,816)</u>	<u>49,878</u>
Net Cash Provided By (Used For) Operating Activities	<u>\$ 9,234,752</u>	<u>\$ 10,145,933</u>

The accompanying notes are an integral part of these financial statements.

TOWN OF READING, MASSACHUSETTS  
MUNICIPAL LIGHT DEPARTMENT

FIDUCIARY FUNDS  
STATEMENTS OF FIDUCIARY NET POSITION

JUNE 30, 2015 AND 2014

	Pension Trust		OPEB Trust	
	<u>2015</u>	<u>2014</u>	<u>2015</u>	<u>2014</u>
<b><u>ASSETS</u></b>				
Cash and short-term investments	\$ 2,666,772	\$ 2,632,367	\$ 1,857,738	\$ 1,846,042
Investments	1,284,061	1,292,906	-	-
Due from proprietary fund	<u>1,500,000</u>	<u>1,374,538</u>	<u>345,382</u>	<u>-</u>
<b>TOTAL ASSETS</b>	<u>5,450,833</u>	<u>5,299,811</u>	<u>2,203,120</u>	<u>1,846,042</u>
<b><u>NET POSITION</u></b>				
Total net position held in trust	<u>\$ 5,450,833</u>	<u>\$ 5,299,811</u>	<u>\$ 2,203,120</u>	<u>\$ 1,846,042</u>

The accompanying notes are an integral part of these financial statements.

TOWN OF READING, MASSACHUSETTS  
MUNICIPAL LIGHT DEPARTMENT

FIDUCIARY FUNDS  
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEARS ENDED JUNE 30, 2015 AND 2014

	Pension Trust		OPEB Trust	
	<u>2015</u>	<u>2014</u>	<u>2015</u>	<u>2014</u>
<b>Additions:</b>				
Contributions from Reading Municipal Light Department	\$ 1,500,000	\$ 1,374,538	\$ 345,382	\$ 343,095
Investment income and change in fair value	<u>52,660</u>	<u>74,220</u>	<u>11,696</u>	<u>7,436</u>
Total additions	1,552,660	1,448,758	357,078	350,531
<b>Deductions:</b>				
Paid to Reading Contributory Retirement System	<u>1,401,638</u>	<u>1,346,039</u>	<u>-</u>	<u>-</u>
Total deductions	1,401,638	1,346,039	-	-
Increase in net position	151,022	102,719	357,078	350,531
<b>Net position:</b>				
Net Position, Beginning of Year	<u>5,299,811</u>	<u>5,197,092</u>	<u>1,846,042</u>	<u>1,495,511</u>
Net Position, End of Year	<u>\$ 5,450,833</u>	<u>\$ 5,299,811</u>	<u>\$ 2,203,120</u>	<u>\$ 1,846,042</u>

The accompanying notes are an integral part of these financial statements.



## Town of Reading, Massachusetts Municipal Light Department

### Notes to Financial Statements

#### 1. Summary of Significant Accounting Policies

The significant accounting policies of the Town of Reading Municipal Light Department ("the Department") (an enterprise fund of the Town of Reading, Massachusetts) are as follows:

- A. Business Activity - The Department purchases electricity for distribution to more than 25,000 customers within the towns of Reading, North Reading, Wilmington, and Lynnfield.
- B. Regulation and Basis of Accounting - Under Massachusetts General Laws, the Department's electric rates are set by the Municipal Light Board. Electric rates, excluding the purchase power fuel charge and the purchase power capacity and transmission charge, cannot be changed more than once every three months. Rate schedules are filed with the Massachusetts Department of Public Utilities (DPU). While the DPU exercises general supervisory authority over the Department, the Department's rates are not subject to DPU approval. The Department's policy is to prepare its financial statements in conformity with generally accepted accounting principles.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the Department's proprietary fund are charges to customers for electric sales and services. Operating expenses for the Department's proprietary fund include the cost of sales and services, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

- C. Concentrations - The Department operates within the electric utility industry. In 1998, the Commonwealth of Massachusetts enacted energy deregulation legislation that restructured the Commonwealth's electricity industry to foster competition and promote reduced electric rates. Energy deregulation created a separation between the supply and delivery portions of electricity service and enabled consumers to purchase their energy from a retail supplier of their choice. Municipal utilities are not currently subject to this legislation.
- D. Retirement Trust - The Reading Municipal Light Department Employees' Retirement Trust (the "Pension Trust") was established by the Reading

Municipal Light Board on December 30, 1966, pursuant to Chapter 64 of the General Laws of the Commonwealth of Massachusetts.

The Pension Trust constitutes the principal instrument of a plan established by the Municipal Light Board to fund the Department's annual required contribution to the Town of Reading Contributory Retirement System (the System), a cost sharing, multi-employer public employee retirement system.

- E. Other Post-Employment Benefits Trust - The Other Post-Employment Benefits Liability Trust Fund (the "OPEB Trust") was established by the Reading Municipal Light Board pursuant to Chapter 32B, Section 20 of the General Laws of the Commonwealth of Massachusetts.

The OPEB Trust constitutes the principal instrument of a plan established by the Municipal Light Board to fund the Department's annual actuarially determined OPEB contribution for future retirees.

- F. Revenues - Revenues are based on rates established by the Department and filed with the DPU. Revenues from sales of electricity are recorded on the basis of bills rendered from monthly meter readings taken on a cycle basis and are stated net of discounts. Recognition is given to the amount of sales to customers which are unbilled at the end of the fiscal period.

- G. Cash and Short-term Investments - For the purposes of the Statements of Cash Flows, the Department considers unrestricted cash on deposit with the Town Treasurer to be cash or short-term investments. For purposes of the Statements of Net Position, both the proprietary funds and fiduciary funds consider unrestricted and restricted investments with original maturities of three months or less to be short-term investments.

- H. Investments - State and local statutes place certain limitations on the nature of deposits and investments available. Deposits in any financial institution may not exceed certain levels within the financial institution. Non-fiduciary fund investments can be made in securities issued or unconditionally guaranteed by the U.S. Government or agencies that have a maturity of one year or less from the date of purchase and repurchase agreements guaranteed by such securities with maturity dates of no more than 90 days from date of purchase.

Investments for the Department and the Pension Trust consist of domestic and foreign fixed income bonds which the Department intends to hold to maturity. These investments are reported at fair market value in the proprietary fund and fiduciary fund financial statements.

- I. Inventory - Inventory consists of parts and accessories purchased for use in the utility business for construction, operation, and maintenance pur-

poses and is stated at average cost. Meters and transformers are capitalized when purchased.

- J. Capital Assets and Depreciation - Capital assets, which include property, plant, equipment, and utility plant infrastructure, are recorded at historical cost or estimated historical cost when purchased or constructed. Donated capital assets are recorded at estimated fair market value at the date of the donation.

The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend asset lives are not capitalized.

Major outlays for capital assets and improvements are capitalized as they are acquired or constructed. Interest incurred during the construction phase of proprietary fund capital assets is included as part of the capitalized value of the constructed asset. When capital assets are retired, the cost of the retired asset, less accumulated depreciation, salvage value and any cash proceeds, is charged to the Department's unrestricted net position.

Massachusetts General Laws require utility plant in service to be depreciated at a minimum annual rate of 3%. To change this rate, the Department must obtain approval from the DPU. Changes in annual depreciation rates may be made for financial factors relating to cash flow for plant expansion, rather than engineering factors relating to estimates of useful lives.

- K. Accrued Compensated Absences - Employee vacation leave is vested annually but may only be carried forward to the succeeding year with supervisor approval and, if appropriate, within the terms of the applicable Department policy or union contract. Generally, sick leave may accumulate according to union and Department contracts and policy, and is paid upon normal termination at the current rate of pay. The Department's policy is to recognize vacation costs at the time payments are made. The Department records accumulated, unused, vested sick pay as a liability. The amount recorded is the amount to be paid upon normal termination at the current rate of pay.

- L. Long-Term Obligations - The proprietary fund financial statements report long-term debt and other long-term obligations as liabilities in the Statements of Net Position.

- M. Use of Estimates - The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures for contingent assets and liabilities at the date of the financial statements, and the reported amounts of the revenues and expenses during the fiscal year. Actual results could vary from estimates that were used.

N. Rate of Return - The Department's rates must be set such that earnings attributable to electric operations do not exceed eight percent of the net cost of plant. The Department's audited financial statements are prepared in accordance with auditing standards generally accepted in the United States of America. To determine the net income subject to the rate of return limitations, the Department performs the following calculation. Using the net income per the audited financial statements, the return on investment to the Town of Reading is added back, the fuel charge adjustment is added or deducted, and miscellaneous debits/credits (i.e., gain/loss on disposal of fixed assets, etc.) are added or deducted, leaving an adjusted net income figure for rate of return purposes. Investment interest income and bond principal payments are then deducted from this figure to determine the net income subject to the rate of return. The net income subject to the rate of return is then subtracted from the allowable eight percent rate of return, which is calculated by adding the book value of net plant and the investment in associated companies less the contributions in aid of construction multiplied by eight percent. From this calculation, the Municipal Light Board will determine what cash transfers need to be made at the end of the fiscal year.

O. Comparative Financial Information - The Department's financial statements include certain prior-year comparative information. Such information does not include sufficient detail to constitute a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the Department's financial statements for the year ended June 30, 2014, from which the summarized information was derived.

## **2. Cash and Investments**

Total cash and investments as of June 30, 2015 are classified in the accompanying financial statements as follows:

### Proprietary Fund:

Unrestricted cash and short-term investments	\$ 13,151,862
Restricted cash and short-term investments	22,344,776
Restricted investments	1,284,061

### Fiduciary Funds:

Cash and short-term investments - Pension Trust	2,666,772
Cash and short-term investments - OPEB Trust	1,857,738
Investments - Pension Trust	<u>1,284,061</u>
Total cash and investments	<u>\$ 42,589,270</u>

Total cash and investments at June 30, 2015 consist of the following:

Cash on hand	\$ 3,000
Deposits with financial institutions	<u>42,586,270</u>
Total cash and investments	<u>\$ 42,589,270</u>

### Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that the fair value of an investment will be adversely affected by changes in market interest rates. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The Department manages its exposure to interest rate risk by purchasing a combination of shorter term and longer term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time as necessary to provide the cash flow and liquidity needed for operations.

As of June 30, 2015, the Department (including the Pension Trust and OPEB Trust) held cash and short-term investments in pooled investments with the Massachusetts Municipal Depository Trust (MMDT), FDIC-insured savings accounts, and 90-day FDIC-insured bank certificates of deposit. Because of their immediate liquidity and/or short-term maturity, these funds are classified as cash and short-term investments in the accompanying financial statements and are not considered to be exposed to significant interest rate risk.

As of June 30, 2015, the Department and Pension Trust held investments in domestic and foreign fixed income bonds with varying maturity dates as follows:

	<u>Proprietary Fund</u>	<u>Fiduciary Funds</u>	
	<u>Restricted Investments</u>	<u>Pension Trust</u>	<u>Maturity Date</u>
<u>Corporate bonds</u>			
AT&T Inc	\$ 207,764	\$ 207,764	12/01/22
General Electric Cap Corp	206,035	206,035	01/09/23
Wells Fargo & Co	208,048	208,048	08/15/23
Rabobank Nederland Bank	249,043	249,043	11/09/22
Teva Pharmaceut Fin BV	207,707	207,707	12/18/22
BNP Paribas	<u>205,464</u>	<u>205,464</u>	03/03/23
Total	<u>\$ 1,284,061</u>	<u>\$ 1,284,061</u>	

### Disclosures Relating to Credit Risk

Generally, credit risk is the risk that the issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assigning of a rating by a nationally recognized statistical rating organization. As

of June 30, 2015, the Department and Pension Trust held investments in domestic and foreign fixed income bonds with varying ratings as follows:

<u>Investment Type</u>	<u>Proprietary</u>	<u>Fiduciary</u>	<u>Moody's</u>
	<u>Fund</u>	<u>Funds</u>	
	<u>Restricted</u>	<u>Pension</u>	<u>Rating</u>
	<u>Investments</u>	<u>Trust</u>	
Corporate bonds:			
AT&T Inc	\$ 207,764	\$ 207,764	BAA1
General Electric Cap Corp	206,035	206,035	A1
Wells Fargo & Co	208,048	208,048	A3
Rabobank Nederland Bank	249,043	249,043	A3
Teva Pharmaceut Fin BV	207,707	207,707	A3
BNP Paribas	205,464	205,464	A1
Total	<u>\$ 1,284,061</u>	<u>\$ 1,284,061</u>	

### Concentration of Credit Risk

The Department follows the Town of Reading's investment policy, which does not limit the amount that can be invested in any one issuer beyond that stipulated by Massachusetts General Laws. At June 30, 2015, the Department and Pension Trust investments were held in domestic and foreign fixed income bonds, as detailed in the sections above. Five of the bonds each individually represent approximately 16% of the Department's and System's total investments, while the investment in Rabobank Nederland Bank represents approximately 20%.

### Custodial Credit Risk

Custodial Credit Risk for *deposits* is the risk that, in the event of the failure of a depository financial institution, the Department will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, the Department will not be able to recover the value of its investments or collateral securities that are in the possession of another party. Massachusetts General Laws, Chapter 44, Section 55, limits deposits "in a bank or trust company or banking company to an amount not exceeding sixty per cent of the capital and surplus of such bank or trust company or banking company, unless satisfactory security is given to it by such bank or trust company or banking company for such excess." The Department follows the Massachusetts statute as written, as well as the Town of Reading's deposit policy for custodial credit risk.

As of June 30, 2015, none of the Department's (including Pension Trust and OPEB Trust) cash and short-term investments was exposed to custodial credit risk.

As of June 30, 2015, none of the Department or Pension Trust investments were exposed to custodial credit risk because the related securities are registered in the Department's name.

### 3. Restricted Cash and Investments

The Department's proprietary fund restricted cash and investment balances represent the following reserves:

	6/30/15		6/30/14	
	Cash	Investments	Cash	Investments
Depreciation fund	\$ 5,434,308	\$ -	\$ 4,130,585	\$ -
Construction fund	1,400,000	-	1,000,000	-
Deferred fuel reserve	5,180,285	-	4,132,695	-
Deferred energy conservation reserve	584,606	-	457,261	-
Rate stabilization	6,771,634	-	6,723,797	-
Reserve for uncollectible accounts	200,000	-	200,000	-
Sick leave benefits	1,777,582	1,284,061	1,674,873	1,292,906
Hazardous waste fund	150,000	-	150,000	-
Customer deposits	846,861	-	749,900	-
<b>Total</b>	<b>\$ 22,344,776</b>	<b>\$ 1,284,061</b>	<b>\$ 19,219,111</b>	<b>\$ 1,292,906</b>

The Department maintains the following reserves:

- Depreciation fund - The Department is normally required to reserve 3.0% of capital assets each year to fund capital improvements.
- Construction fund - This represents additional funds set aside to fund capital expenditures.
- Deferred fuel reserve - The Department transfers the difference between the customers' monthly fuel charge adjustment and actual fuel costs into this account to be used in the event of a sudden increase in fuel costs.
- Deferred energy conservation reserve - This account is used to reserve monies collected from a special energy charge added to customer bills. Customers who undertake measures to conserve and improve energy efficiency can apply for rebates that are paid from this account.
- Rate stabilization - This represents amounts set aside to help stabilize cost increases resulting from fluctuations in purchase power costs.
- Reserve for uncollectible accounts - This account was set up to offset a portion of the Department's bad debt reserve.
- Sick leave benefits - This account is used to offset the Department's actuarially determined compensated absence liability.

- Hazardous waste fund -This reserve was set up by the Board of Commissioners to cover the Department's insurance deductible in the event of a major hazardous materials incident.
- Customer deposits - Customer deposits that are held in escrow.

#### 4. Accounts Receivable

Accounts receivable consists of the following at June 30, 2015:

Customer Accounts:		
Billed	\$ 1,947,170	
Less allowances:		
Uncollectible accounts	(200,000)	
Sales discounts	<u>(86,174)</u>	
Total billed		1,660,996
Unbilled, net		<u>5,166,350</u>
Total customer accounts		6,827,346
Other Accounts:		
Merchandise sales	150,805	
MMWEC surplus	212,689	
Intergovernmental grants	103,886	
Liens and other	<u>19,333</u>	
Total other accounts		<u>486,713</u>
Total net receivables		<u>\$ 7,314,059</u>

#### 5. Prepaid Expenses

Prepaid expenses consist of the following:

Insurance and other	\$ 292,268
Purchase power	294,455
NYPA prepayment fund	307,573
WC Fuel - Watson	<u>243,602</u>
Total	<u>\$ 1,137,898</u>

#### 6. Inventory

Inventory is comprised of supplies and materials at June 30, 2015, and is valued using the average cost method.



## 7. Investment in Associated Companies

Under agreements with the New England Hydro-Transmission Electric Company, Inc. (NEH) and the New England Hydro-Transmission Corporation (NHH), the Department has made the following advances to fund its equity requirements for the Hydro-Quebec Phase II interconnection. The Department is carrying its investment at cost, reduced by shares repurchased. The Department's equity position in the Project is less than one-half of one percent.

Investment in associated companies consists of the following, at June 30, 2015:

New England Hydro-Transmission (NEH & NHH)      \$ 26,994

## 8. Capital Assets

The following is a summary of fiscal year 2015 activity in capital assets (in thousands):

	Beginning Balance	Increases	Decreases	Ending Balance
<b>Business-Type Activities:</b>				
Capital assets, being depreciated:				
Structures and improvements	\$ 14,183	\$ 363	\$ -	\$ 14,546
Equipment and furnishings	31,787	309	(371)	31,725
Infrastructure	82,739	2,970	(487)	85,222
Total capital assets, being depreciated	128,709	3,642	(858)	131,493
Less accumulated depreciation for:				
Structures and improvements	(8,136)	(389)	-	(8,525)
Equipment and furnishings	(19,490)	(971)	371	(20,090)
Infrastructure	(32,155)	(2,502)	429	(34,228)
Total accumulated depreciation	(59,781)	(3,862)	800	(62,843)
Total capital assets, being depreciated, net	68,928	(220)	(58)	68,650
Capital assets, not being depreciated:				
Land	1,266	-	-	1,266
Total capital assets, not being depreciated	1,266	-	-	1,266
Capital assets, net	<u>\$ 70,194</u>	<u>\$ (220)</u>	<u>\$ (58)</u>	<u>\$ 69,916</u>

## 9. Deferred Outflows of Resources

Deferred outflows of resources represent the Department's consumption of net position that is applicable to future reporting periods. Deferred outflows of resources have a positive effect on net position, similar to assets.

The following is a summary of deferred outflow of resources balances as of June 30, 2015:

	Proprietary <u>Fund</u>
Net difference between projected and actual investment earnings on pension plan	\$ 47,815
Pension plan contributions subsequent to the measurement date	<u>1,500,000</u>
Total	<u>\$ 1,547,815</u>

**10. Accounts Payable**

Accounts payable represent fiscal 2015 expenses that were paid after June 30, 2015.

**11. Accrued Liabilities**

Accrued liabilities consist of the following at June 30, 2015:

Accrued payroll	\$ 356,436
Accrued sales tax	192,345
Other	<u>36,323</u>
Total	<u>\$ 585,104</u>

**12. Customer Deposits**

This balance represents deposits received from customers that are held in escrow.

**13. Customer Advances for Construction**

This balance represents deposits received from vendors in advance for work to be performed by the Department. The Department recognizes these deposits as revenue after the work has been completed.

**14. Accrued Employee Compensated Absences**

Department employees are granted sick leave in varying amounts. Upon retirement, normal termination, or death, employees are compensated for unused sick leave (subject to certain limitations) at their then current rates of pay.

**15. Restricted Net Position**

The proprietary fund financial statements report restricted net position when external constraints are placed on net position. Specifically, restricted net position represents depreciation fund reserves, which are restricted for future capital costs.

**16. Post-Employment Health Care and Life Insurance Benefits**

**Other Post-Employment Benefits**

The Department follows GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions*. Statement No. 45 requires governments to account for other post-employment benefits (OPEB), primarily healthcare, on an accrual basis rather than on a pay-as-you-go basis. The effect is the recognition of an actuarially required contribution as an expense on the proprietary fund Statements of Revenues, Expenses, and Changes in Net Position when a future retiree earns their post-employment benefits, rather than when they use them. To the extent that an entity does not fund their actuarially required contribution, a post-employment benefit liability is recognized on the proprietary fund Statements of Net Position over time

**A. Plan Description**

In addition to providing the pension benefits described in Note 17, the Department provides post-employment health and life insurance benefits to retired employees through the Town of Reading's participation in the Massachusetts Interlocal Insurance Association (MIIA) Health Benefits Trust. Benefits, benefit levels, employee contributions and employer contributions are governed by Chapter 32 of the Massachusetts General Laws. As of June 30, 2014, the actuarial valuation measurement date, approximately 87 retirees and 51 active employees meet the eligibility requirements. The plan does not issue a separate financial report.

**B. Benefits Provided**

The Department provides post-employment medical, prescription drug, and life insurance benefits to all eligible retirees and their surviving spouses. All active employees who retire from the Department and meet the appropriate criteria are eligible to receive these benefits.

**C. Funding Policy**

As of the June 30, 2014, the actuarial valuation measurement date, retirees are required to contribute 29% of the cost of the medical and prescription drug plan, as determined by the MIIA Health Benefits Trust. Retirees also contribute 50% of the premium for a \$5,000 life insurance benefit. The

Department contributes the remainder of the medical, prescription drug, and life insurance plan costs on a pay-as-you-go basis.

*D. Annual OPEB Costs and Net OPEB Obligation*

The Department's fiscal 2015 annual OPEB expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost per year and amortize the unfunded actuarial liability over a remaining period of sixteen years.

The following table shows the components of the Department's annual OPEB cost for the year ending June 30, 2015, the amount actually contributed to the plan, and the change in the Department's net OPEB obligation based on an actuarial valuation as of June 30, 2014.

Annual Required Contribution (ARC)	\$ 540,456
Interest on net OPEB obligation	218,069
Annual OPEB cost	758,525
Projected benefit payments	(413,143)
Increase in net OPEB obligation	345,382
Net OPEB obligation - beginning of year	-
Contributions to OPEB Trust	(345,382)
(1) Net OPEB obligation - end of year	<u>\$ -</u>

(1) See Part E for additional information

The Department's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for fiscal year 2015 and the two preceding fiscal years were as follows:

Fiscal Year Ended	Annual OPEB Cost	Percentage of OPEB Cost Contributed	Net OPEB Obligation
2015	\$ 758,525	100.00%	\$ -
2014	\$ 768,378	100.00%	\$ -
2013	\$ 604,987	100.00%	\$ -

E. Funded Status and Funding Progress

The funded status of the plan as of June 30, 2014, the most recent actuarial valuation measurement date was as follows:

Actuarial accrued liability (AAL)	\$ 7,726,667
Actuarial value of plan assets	<u>1,846,042</u>
Unfunded actuarial accrued liability (UAAL)	<u>\$ 5,880,625</u>
Funded ratio (actuarial value of plan assets/AAL)	23.89%
Covered payroll (active plan members)	N/A
UAAL as a percentage of covered payroll	N/A

In 2010, the Department's Municipal Light Board voted to accept the provisions of Chapter 32B §20 of Massachusetts General Laws and create an *Other Post-Employment Benefits Liability Trust Fund* as a mechanism to set aside monies to fund its OPEB liability. In 2013, the Commissioners voted to create an OPEB trust instrument in alignment with the Town of Reading. In fiscal year 2015, the Department contributed \$345,382 to this trust, which was equal to all of its actuarially determined annual contributions through June 30, 2015. The assets and net position of this trust are reported in the Department's Fiduciary Funds Statements of Fiduciary Net Position.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability.

F. Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the plan as understood by the Department and the plan members and include the types of benefits provided at the time of each actuarial valuation and the historical pattern of sharing of benefit costs between the Department and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the June 30, 2014 actuarial valuation, the Projected Unit Credit actuarial cost method was used. The Department's actuarial value of plan assets was \$1,846,042. The actuarial assumptions included a 7.75% investment rate of return and an initial annual health care cost trend rate of 8.0% which decreases by 0.5% for six years to an ultimate level of 5.0% per year. The amortization costs for the initial UAAL is a level percentage of payroll amortization, with amortization payments increasing at 2.5% per year for a remaining period of 16 years.

## 17. Reading Contributory Retirement System

The Department follows the provisions of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27*, with respect to the employees' retirement funds.

### A. Plan Description

Substantially all employees of the Department are members of the Town of Reading Contributory Retirement System (the System), a cost sharing, multiple-employer public employee retirement system (PERS). Eligible employees must participate in the System. The pension plan provides pension benefits, deferred allowances, and death and disability benefits. Chapter 32 of the Massachusetts General Laws establishes the authority of the System, as well as contribution percentages and benefits paid. The System Retirement Board does not have the authority to amend benefit provisions. Additional information is disclosed in the System's annual financial reports, which are publically available from the System's administrative offices located at Reading Town Hall, 16 Lowell Street, Reading, Massachusetts, 01867.

### B. Benefits Provided

The System provides for retirement allowance benefits up to a maximum of 80% of a member's highest three-year average annual rate of regular compensation. Benefit payments are based upon a member's age, length of creditable service, level of compensation and group classification. Members become vested after 10 years of creditable service. A retirement allowance may be received upon reaching age 65 or upon attaining 20 years of service. The plan also provides for early retirement at age 55 if the participant (1) has a record of 10 years of creditable service, (2) was on the Department payroll on January 1, 1978, (3) voluntarily left Department employment on or after that date, and (4) left accumulated annuity deductions in the fund. A retirement allowance consists of two parts: an annuity and a pension. A member's accumulated total deductions and a portion of the interest they generate constitute the annuity. The difference between the total retirement allowance and the annuity is the pension. The average retirement benefit is approximately 80-85% pension and 15-20% annuity.

Per Chapter 176 of the Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100 percent, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement.

Employees who resign from service and who are not eligible to receive a retirement allowance or are under the age of 55 are entitled to request a refund of their accumulated total deductions. In addition, depending upon the number of years of creditable service, such employees are entitled to receive zero, fifty, or one hundred percent of the regular interest which has accrued upon those deductions. However, effective July 1, 2010, members voluntarily withdrawing with less than 10 years of service get credited interest each year at a rate of 3% and do not forfeit any interest previously earned on contributions.

C. Contributions

Participants contribute a set percentage of their gross regular compensation annually. Employee contribution percentages are specified in Chapter 32 of the Massachusetts General Laws. The employee's individual contribution percentage is determined by their date of entry into the system. In addition, all employees hired after January 1, 1979 contribute an additional 2% on all gross regular compensation over the rate of \$30,000 per year. The percentages are as follows:

Before January 1, 1975	5%
January 1, 1975 - December 31, 1983	7%
January 1, 1984 - June 30, 1996	8%
Beginning July 1, 1996	9%

Employers are required to contribute at actuarially determined rates as accepted by the Public Employee Retirement Administration Commission (PERAC).

The Department's contribution to the System for the year ended June 30, 2015 was \$1,401,638, which was equal to its annual required contribution.

D. Summary of Significant Accounting Policies

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the System and additions to/deductions from System's fiduciary net position have been determined on the same basis as they are reported by System. For this purpose, benefit payments (including refunds of employee contribu-

tions) are recognized when due and payable in accordance with benefit terms. Investments are reported at fair value.

E. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2015, the Department reported a liability of \$4,524,191 for its proportionate share of the System's net pension liability. The net pension liability was measured as of December 31, 2014, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of July 1, 2013 rolled forward to December 31, 2014. The Department's proportion of the net pension liability was based on an actuarially determined projection of the Department's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers. At December 31, 2014, the Department's proportion was 28.25%.

Town of Reading Municipal Light Department Employees' Retirement Trust ("Pension Trust"): The Department has established an irrevocable trust for the purpose of currently funding its annual required contribution to the Town of Reading Contributory Retirement System (RCRS). Annual contributions to the trust are actuarially determined to be the net normal cost for funding the Department's liability for pension benefits for covered employees, and both the principal and income of the trust is restricted for the exclusive benefit of Department employees and their beneficiaries. This Pension Trust is reported as a fiduciary fund type in the Department's basic financial statements.

As noted in the first paragraph of this section, the Department's proportionate share of the RCRS net pension liability was determined by an actuarial valuation as of July 1, 2013 rolled forward to December 31, 2014. However, the actuarial valuation does not take into account the fiduciary net position of the Department's Pension Trust at December 31, 2014 (the measurement date). Accordingly, the following reconciliation is provided:

	<u>2015</u>
Net pension liability, per actuarial valuation	\$ 8,464,663
Pension Trust Net Position	(5,450,833)
Pension Trust contributions subsequent to the net pension liability measurement date (reported as deferred outflows of resources in the proprietary fund Statements of Net Position)	1,500,000
Pension Trust investment income and fair value changes subsequent to the net pension liability measurement date	<u>10,361</u>
Net pension liability, as reported on the proprietary fund Statements of Net Position	<u>\$ 4,524,191</u>



For the year ended June 30, 2015, the Department recognized pension expense of \$833,949. In addition, the Department reported deferred outflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>
Net difference between projected and actual earnings on pension plan investments	\$ 47,815
Contributions subsequent to the measurement date	<u>1,500,000</u>
Total	<u>\$ 1,547,815</u>

Deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date will be recognized as a reduction of the Department's net pension liability in the year ended June 30, 2016.

Amounts reported as deferred outflows of resources related to pensions will be recognized in the Department's pension expense as follows:

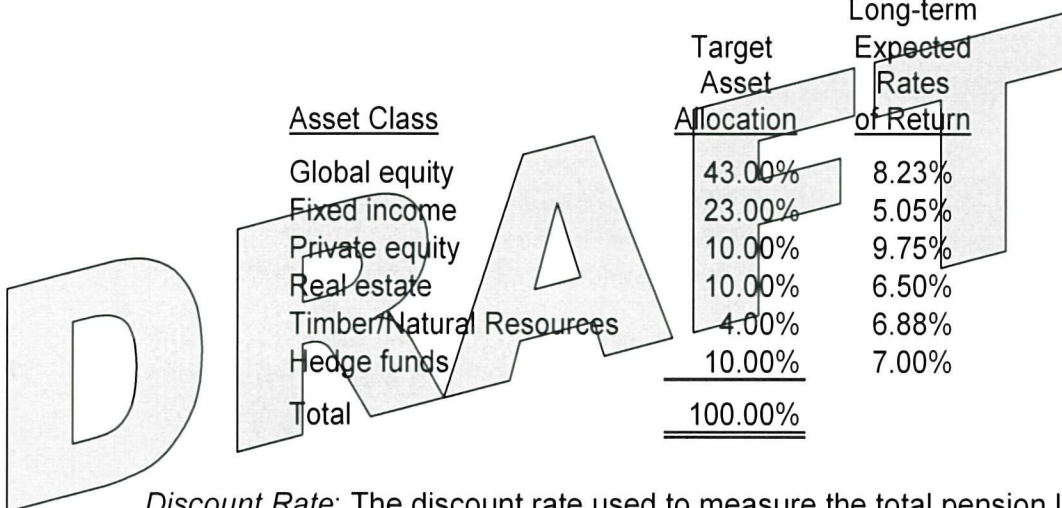
Year ended June 30.		
2016		\$ 1,511,954
2017		11,954
2018		11,954
2019		<u>11,953</u>
Total		<u>\$ 1,547,815</u>

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of July 1, 2013, rolled forward to the measurement date of December 31, 2014 using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.75% per year
Salary increases	Based on years of service, 7.00% - 4.75% for Group 1 members and 8.00% - 5.25% for Group 4 members
Investment rate of return	7.75%, net of pension plan investment expense, including inflation

Mortality rates were based on the RP-2000 Mortality Table projected to 2012 with Scale AA. For disabled lives, the mortality rates were based on the RP-2000 Mortality Table set forward five years.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2014 are summarized in the following table:



<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-term Expected Rates of Return</u>
Global equity	43.00%	8.23%
Fixed income	23.00%	5.05%
Private equity	10.00%	9.75%
Real estate	10.00%	6.50%
Timber/Natural Resources	4.00%	6.88%
Hedge funds	10.00%	7.00%
<b>Total</b>	<b>100.00%</b>	

Discount Rate: The discount rate used to measure the total pension liability was 7.75%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that contributions from participating employers will be made in accordance with Sections 22D and 22F of Chapter 32 of the Massachusetts General Laws. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Department's proportionate share of the net pension liability to changes in the discount rate: The following table presents the Department's proportionate share of the net pension liability (asset) calculated using the current discount rate of 7.75%, as well as what the Department's proportionate share of the net pension liability (asset) would

be if it were calculated using a discount rate that is 1 percentage-point lower (6.75%) or 1 percentage-point higher (8.75%) than the current rate:

Fiscal Year Ended	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)
06/30/15	\$ 7,521,554	\$ 4,524,191	\$ (1,116,986)

Pension plan fiduciary net position: Detailed information about the pension plan's fiduciary net position is available in the separately issued System financial report.

**18. Participation in Massachusetts Municipal Wholesale Electric Company**

The Town of Reading, acting through its Light Department, is a Participant in certain Projects of the Massachusetts Municipal Wholesale Electric Company (MMWEC).

MMWEC is a public corporation and a political subdivision of the Commonwealth of Massachusetts, created as a means to develop a bulk power supply for its Members and other utilities. MMWEC is authorized to construct, own, or purchase ownership interests in, and to issue revenue bonds to finance, electric facilities (Projects). MMWEC has acquired ownership interests in electric facilities operated by other entities and also owns and operates its own electric facilities. MMWEC sells all of the capability (Project Capability) of each of its Projects to its Members and other utilities (Project Participants) under Power Sales Agreements (PSAs). Among other things, the PSAs require each Project Participant to pay its pro rata share of MMWEC's costs related to the Project, which costs include debt service on the revenue bonds issued by MMWEC to finance the Project, plus 10% of MMWEC's debt service to be paid into a Reserve and Contingency Fund. In addition, should a Project Participant fail to make any payment when due, other Project Participants of that Project may be required to increase (step-up) their payments and correspondingly their Participant's share of that Project's Project Capability to an additional amount not to exceed 25% of their original Participant's share of that Project's Project Capability. Project Participants have covenanted to fix, revise, and collect rates at least sufficient to meet their obligations under the PSAs.

MMWEC has eight Projects. MMWEC originally financed all eight Projects through the issuance of a multiple series of revenue bonds under a General Bond Resolution adopted by MMWEC in 1976 (GBR). Security for these bonds included a pledge of the revenues derived by MMWEC from all its Project PSAs, without regard to Project or series of bonds. In 2001, through

a refinancing of all its outstanding bonds, MMWEC amended and restated its GBR to eliminate this "joint-pledge" of revenues. In refinancing its debt, MMWEC issued a separate issue of bonds for each of the eight Projects, which are payable solely from, and secured solely by, the revenues derived from the Project to which such issue relates plus available funds pledged under the Amended and Restated GBR with respect to the bonds of such issue. The MMWEC revenues derived from each Project are used solely to provide for the payment of the bonds of any bond issue relating to such Project and to pay MMWEC's cost of owning and operating such Project and are not used to provide for the payment of the bonds of any bond issue relating to any other Project.

MMWEC operates the Stony Brook Intermediate Project and the Stony Brook Peaking Project, both fossil-fueled power plants. MMWEC has a 22.7 MW interest in the W. F. Wyman Unit No. 4 plant, owned and operated by subsidiaries of Florida Power & Light and a 4.8% ownership interest in the Millstone Unit 3 nuclear unit operated by Dominion Nuclear Connecticut, Inc. (DNCI), a subsidiary of Dominion Resources, Inc. DNCI has stated its intention to file an application with the Nuclear Regulatory Commission (NRC) for an extension of the Millstone Unit 3 operating license, which currently will expire in 2025. DNCI has not yet filed its application with the NRC.

MMWEC has an 11.6% ownership interest in the Seabrook Station nuclear generating unit, which represents a substantial portion of its plant investment and financing program. On November 1, 2002, an indirect subsidiary of FPL Group Inc., FPL Energy Seabrook, LLC purchased an approximate 88% share in the Seabrook nuclear plant from seven other owners. MMWEC is now one of three, minority non-operating owners of Seabrook Station.

Pursuant to the PSAs, the MMWEC Seabrook and Millstone Project Participants are liable for their proportionate share of the costs associated with decommissioning the plants, which is being funded through monthly Project billings. The Project Participants are also liable for their proportionate share of the uninsured costs of a nuclear incident that might be imposed under the Price-Anderson Act (Act). By its terms, the Act expired in August 2002. Congress is currently considering extending the Act.

In November 1997, the Commonwealth of Massachusetts enacted legislation effective March 1, 1998 to restructure the electric utility industry. MMWEC and the municipal light departments, including the Massachusetts Project Participants, are not specifically subject to this legislation. However, it is management's belief that industry restructuring and customer choice promulgated by the legislation will have an effect on MMWEC and the Participants' operations.

The Reading Municipal Light Department has entered into PSAs and Power Purchase Agreements (PPAs) with MMWEC. Under both the PSAs and PPAs, the Department is required to make certain payments to MMWEC

payable solely from Department revenues. Under the PSAs, each Participant is unconditionally obligated to make payments due to MMWEC whether or not the Project(s) is completed or operating and notwithstanding the suspension or interruption of the output of the Project(s).

MMWEC is involved in various legal actions. In the opinion of management, the outcome of such litigation or claims will not have a material adverse effect on the financial position of the company.

After the July 1, 2015 principal payment, total capital expenditures amounted to \$1,682,341,000, of which \$125,343,000 represents the amount associated with the Department's Project Capability. MMWEC's debt outstanding for the Projects from Power Supply System Revenue Bonds totals \$167,110,000, of which \$6,373,000 is associated with the Department's share of Project Capability. After the July 1, 2015 principal payment, MMWEC's total future debt service requirement on outstanding bonds issued for the Projects is \$121,353,000, of which \$4,362,000 is anticipated to be billed to the Department in the future.

The aggregate amount of the Department's required payments under the PSAs and PPAs, exclusive of the Reserve and Contingency Fund billings, to MMWEC at June 30, 2015 and estimated for future years is shown below.

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	<u>Annual Costs</u>
For years ended June 30, 2016	\$ 2,700,000
2017	1,472,000
2018	<u>190,000</u>
Total	<u>\$ 4,362,000</u>

In addition, under the PSAs, the Department is required to pay to MMWEC its share of the Operation and Maintenance (O& M) costs of the Projects in which it participates. The Department's total O& M costs including debt service under the PSAs were \$12,475,000 and \$14,021,000 for the years ended June 30, 2015 and 2014, respectively.

**19. Renewable Energy Certificates**

In 2003, the Massachusetts Department of Energy and Environmental Affairs adopted the Massachusetts Renewable Energy Portfolio Standard (RPS), a regulation that requires Investor Owned Utilities (IOUs) to purchase mandated amounts of energy generated by renewable resources (Green Energy) as a percentage of their overall electricity sales. The Massachusetts RPS applies only to IOUs, so the Department is currently exempt from this mandate.

Energy suppliers meet their annual RPS obligations by acquiring a sufficient quantity of RPS-qualified renewable energy certificates (RECs) that are created and recorded at the New England Power Pool (NEPOOL) Generation Information System (GIS). Suppliers can purchase RECs from electricity generators or from other utilities that have acquired RECs.

As part of its ongoing commitment to Green Energy, the Department has entered into Purchase Power Agreements (PPAs) with Swift River Hydro LLC and Concord Steam Corporation to purchase power generated from renewable energy resources. These PPAs include the Department taking title to RECs, which certify that the energy produced was the product of a renewable resource. Because the Department is exempt from the RPS provisions, it has the option of holding these RECs until they expire or selling them through the NEPOOL GIS.

Information regarding the Department's fiscal year 2015 REC activity and balances is as follows:

REC Sales During Fiscal 2015

	<u>Certificates</u>	<u>Unit Price</u>	<u>Amount</u>
MA Class II	1,032	\$ 25.50	\$ 26,316
MA Class I	1,324	52.00	68,848
RI New	398	44.00	17,512
CT Class I	5,702	52.00	296,504
MA Class II	371	25.00	9,275
MA Class I	624	47.50	29,640
RI New	120	47.50	5,700
CT Class I	4,452	47.50	211,470
<b>Total</b>	<u>14,023</u>		<u>\$ 665,265</u> <sup>(1)</sup>

(1) Sale proceeds netted against fiscal year 2015 purchased power fuel charge

REC Holdings at June 30, 2015

	<u>Banked Certificates</u>	<u>Projected Certificates</u>	<u>Total Certificates</u>	<u>Estimated Value</u>
MA Class I & II	-	1,550	1,550	\$ 74,400
CT Class I	-	5,435	5,435	260,880
<b>Total</b>	<u>-</u>	<u>6,985</u>	<u>6,985</u>	<u>\$ 335,280</u>

Because there is no formal accounting guidance under GAAP or IFRS for RECs and the Department does not have a formal policy for the future disposition of RECs, the estimated fair value of the Department's REC holdings at

June 30, 2015 are not recognized as an asset on the proprietary fund Statements of Net Position.

**20. Leases**

Related Party Transaction - Property Sub-Lease

The Department is the lessor of facilities that are currently sub-leased to the Reading Town Employees Federal Credit Union. The original sub-lease agreement commenced in December 2000 and was extended by various amendments through November 30, 2015. Following is the future minimum rental income to be received by the Department under the terms of this lease for the year ending June 30:

2016	\$ <u>4,084</u>
Total	\$ <u><u>4,084</u></u>

Operating Lease - Warehouse

The Department is the lessee of a warehouse facility owned by JCM Real Estate Trust. The original lease agreement for this facility commenced in December 1998 and was extended by various amendments through May 31, 2016. Under the terms of the most recent lease amendment, the Department has the option to extend the lease for an additional 24 months until May 31, 2018. Following is the future minimum rental expense to be paid by the Department for the year ending June 30:

2016	\$ <u>147,902</u>
Total	\$ <u><u>147,902</u></u>

**21. Beginning Net Position Restatement**

In fiscal year 2015, the Department implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27*. As a result of this implementation, the beginning (July 1, 2014) net position of the Department's proprietary fund has been restated as follows:

	<u>Business-Type Activities</u>
	Proprietary Fund
As previously reported	\$ 101,873,334
GASB 68 Implementation	<u>(3,669,527)</u>
As restated	<u><u>\$ 98,203,807</u></u>

**TOWN OF READING, MASSACHUSETTS, MUNICIPAL LIGHT DEPARTMENT**  
**SCHEDULE OF FUNDING PROGRESS**  
**REQUIRED SUPPLEMENTARY INFORMATION**

**June 30, 2015**  
**(Unaudited)**

**Other Post-Employment Benefits**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percent- age of Covered Payroll [(b-a)/c]
06/30/14	\$ 1,846,042	\$ 7,726,667	\$ 5,880,625	23.89%	N/A	N/A
06/30/13	\$ 1,495,511	\$ 7,588,993	\$ 6,093,482	19.71%	N/A	N/A
06/30/11	\$ 1,167,161	\$ 8,643,438	\$ 7,476,277	13.50%	N/A	N/A
06/30/08	\$ -	\$ 8,085,388	\$ 8,085,388	0.00%	N/A	N/A

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See Independent Auditors' Report.



TOWN OF READING, MASSACHUSETTS, MUNICIPAL LIGHT DEPARTMENT

SCHEDULE OF PROPORTIONATE SHARE  
OF THE NET PENSION LIABILITY  
REQUIRED SUPPLEMENTARY INFORMATION

JUNE 30, 2015  
(Unaudited)

<u>Reading Contributory Retirement System:</u>	<u>2015</u>
Proportion of the net pension liability (asset)	28.25%
Proportionate share of the net pension liability	\$ 4,524,191
Covered-employee payroll	\$ 5,908,693
Proportionate share of the net pension liability (asset) as a percentage of its covered-employee payroll	76.57%
Plan fiduciary net position as a percentage of the total pension liability	79.89%

*Schedules are intended to show information for 10 years. Additional years will be displayed as they become available*

See Independent Auditors' Report.

TOWN OF READING, MASSACHUSETTS, MUNICIPAL LIGHT DEPARTMENT

SCHEDULE OF CONTRIBUTIONS  
 REQUIRED SUPPLEMENTARY INFORMATION

JUNE 30, 2015  
 (Unaudited)

<u>Reading Contributory Retirement System:</u>	<u>2015</u>
Contractually required contributions for the current fiscal year	\$ 1,401,638
Actual contributions for the current fiscal year in relation to the contractually required contributions	<u>1,401,638</u>
Contribution deficiency (excess)	<u>\$ -</u>
Covered-employee payroll	\$ 5,908,693
Contributions as a percentage of covered-employee payroll	23.72%

*Schedules are intended to show information for 10 years. Additional years will be displayed as they become available*

See Independent Auditors' Report.

REPORT OF THE COMMITTEE  
ATTACHMENT 2

**RMLD Policy No. 12**  
**READING MUNICIPAL LIGHT BOARD DOCUMENTS DISSEMINATION**

REVISION No. 2

Commission Vote/Effective Date \_\_\_\_\_

\_\_\_\_\_  
General Manager/Date

\_\_\_\_\_  
Next Review Date

**I. APPLICABILITY:**

This policy governs the dissemination of Reading Municipal Light Department ("RMLD") Board documents prior to, during, and after Board meetings. For purposes of this policy, Board documents encompass written recommendations or proposals to the Board by the RMLD General Manager or designated staff, proposed budgets, other draft documents requiring or seeking the Board's approval, meeting agendas, meeting minutes, and other documents submitted to the Board for its consideration.

**II. RESPONSIBILITIES:**

A. RMLD Board

Responsible for periodic review of this policy and review of executive session minutes and materials.

B. General Manager

Responsible for assisting the Board regarding the implementation and consistent application of this policy, and the determination of whether a Board document may be withheld from disclosure to members of the public under applicable law.

**III. DISSEMINATION PRIOR TO BOARD MEETING:**

A. Purpose. This policy is necessary to ensure that documents submitted to the Board are not mistaken for Board-approved policy, procedures, or positions prior to consideration and adoption by the Board.

B. General Policy. All documents submitted to the Board, whether such document expressly requests or requires action by the RMLD Board or is submitted in support of such request, shall not be distributed to anyone other than a legally elected Board member, the General Manager or other applicable RMLD managers, employees, consultants or attorneys prior to a properly established Board meeting, unless such documents constitute public records as defined by M.G.L. c. 4, § 7 (clause twenty-sixth).

C. Deliberative Process Exemption. Documents exempt from disclosure under M.G.L. c. 4, § 7 (clause twenty-sixth)(d) – the "Deliberative Process Exemption" - shall not be distributed to anyone other than the Board, RMLD staff or agents, until the Board takes action with respect to the policy matter under consideration or such deliberative process with respect to such matter otherwise has been concluded. Such documents include inter-agency and intra-agency memoranda and letters relating to policy positions being developed by the RMLD Board, such as draft policies, documents relating to pending or threatened litigation or contract negotiations, incomplete budgets or financial proposals, and other matters requiring Board approval. Reasonably completed factual studies or reports in which Board policy decisions may be based constitute public records and are subject to disclosure pursuant to a public records request.

### III. DISSEMINATION PRIOR TO BOARD MEETING:

- D. Identification of Draft Documents. To avoid giving the mistaken impression that a proposed policy, position, or procedure or other document presented to the Board has been approved by the Board, all draft documents presented to the Board for review and consideration shall be marked "Draft" or with some other appropriate legend indicating that the document may not be in final form, even if such document constitutes a public record subject to disclosure prior to the Board meeting.
- E. Agendas. The RMLD meeting agenda may be freely distributed prior to a Board meeting to any member of the public who requests a copy. Prior to the RMLD Board Chair's approval of the agenda, the agenda shall be marked "draft." The agenda once approved by the RMLD Board Chair will be posted to the RMLD's website for public viewing. The agenda may be amended as may be required by the Open Meeting Law. Any agenda that is amended after it is posted to the RMLD website shall be marked as "amended."

### IV. DISTRIBUTION OR INSPECTION OF DOCUMENTS AT THE BOARD MEETING.

- A. Documents Considered in Open Session. Unless otherwise exempt under the open meeting law, all documents considered by the Board in open session may be freely distributed to any member of the public who attends the Board meeting. In general, materials or other exhibits used by RMLD in an open meeting must also be made available to the public within 10 days of a request. The Board, in its discretion, may make such materials available to the public at the Board meeting.
- B. Exemptions. There are two personnel-related exemptions to the open session records disclosure requirement: (1) materials (other than those that were created by the RMLD Board for the purpose of the evaluation) used in a performance evaluation of an individual bearing on his professional competence, and (2) materials (other than any résumé submitted by an applicant, which is subject to disclosure) used in deliberations about employment or appointment of individuals, including applications and supporting materials. Documents created by members of the Board for the purpose of performing an evaluation are subject to disclosure. This requirement applies to both individual evaluations and evaluation compilations, provided the documents were created by members of the Board for the purpose of the evaluation.
- C. Confidential and Other Non-Public Documents. Documents and materials considered in executive session or other confidential or non-public documents submitted to the Board shall not be available for public inspection or dissemination at the Board meeting.

### V. DISSEMINATION OF EXECUTIVE SESSION MINUTES AND DOCUMENTS FOLLOWING BOARD MEETINGS.

- A. Release of Materials Submitted to the Board Following the Board Meeting. The disclosure of Board documents, including minutes of open sessions, shall be governed by applicable public records and open meeting laws.
- B. Executive Session Minutes and Materials.
  - 1. Availability and Confidentiality Obligations. Executive session minutes of Board meetings and related documents are available to all members of the Board and designated RMLD staff. All Board members and RMLD employees shall be bound to maintain their confidentiality until such minutes and/or related materials are released for disclosure as provided in Section V.B.3.
  - 2. Legal Requirements. Executive session minutes will be reviewed and released in accordance with the open meeting law, M.G.L. c. 30A, § 22 and the public records and open meeting exemptions in M.G.L. c. 164, § 47D and as provided herein.

**V. DISSEMINATION OF EXECUTIVE SESSION MINUTES AND DOCUMENTS FOLLOWING BOARD MEETINGS.**

**B. Executive Session Minutes and Materials.**

**3. Quarterly Review Procedures.**

- a. The Chair and the Secretary of the Board will review approved executive session minutes in their entirety and related materials that are still in confidential status on a minimum of a quarterly basis (no later each January 15, April 15, July 15, October 15) and in response to a public records request for such minutes to determine if continued non-disclosure is warranted under M.G.L. c. 30A, § 22. In conducting the review, the Chair and the Secretary shall consider whether:

- (1) the executive session was held in compliance with M.G.L. c. 30A, § 21;
- (2) publication of the minutes or materials would defeat the lawful purposes of the executive session;
- (3) the minutes or materials include information protected by the attorney-client privilege;
- (4) the information or materials are subject to one or more of the exemptions under the public records law, M.G.L. c. 4, § 7 (clause twenty-sixth) or M.G.L. c. 164, § 47D;
- (5) the RMLD Board has voted not to disclose such information (to the extent that the executive session was held to consider RMLD's competitively sensitive information which was entitled to confidentiality under M.G.L. c. 164, § 47D); and
- (6) the minutes or materials are entitled to confidentiality as personnel information as set forth in M.G.L. c. 30A, § 22(e).

- b. The Chair and the Secretary shall announce the findings of their quarterly review at the next Board meeting following the completion of such review. Such announcement shall be included in the minutes of that meeting. The Chair and the Secretary shall make a recommendation to the members of the Board to release for publication those minutes or portions of minutes and related materials in which continued confidential treatment is not warranted under M.G.L. c. 30A, § 22. The procedure and timeframe for conducting and voting on reviews in response to a request for executive session minutes are set forth in Section V.B.4.

- c. Executive session minutes, or portions thereof, will be released only by an affirmative majority vote of at least three (3) members of the Board.

4. Procedures upon Request for Executive Session Minutes or Materials. All requests for unreleased executive session minutes will be forwarded to the Chair of the Board immediately following receipt and shall be placed on the next available Board meeting agenda for resolution. If the minutes have not been previously subject to a quarterly review, the Chair and the Secretary shall review the minutes as provided in Section V.B.3 prior to the next Board meeting, if possible. The Chair and the Secretary shall present the findings on whether continued confidentiality is warranted to the Board and the Board shall take a vote on whether to release the minutes or portions thereof at its next regularly scheduled meeting following the request or within 30 days, whichever occurs first. Notwithstanding the foregoing, upon request by any person to inspect or copy the minutes of an executive session or any portion thereof, the Chair or his/her designee, on behalf of the Board, shall respond to the request within 10 days following receipt and shall release any such non-exempt minutes or portions thereof in which the Board previously voted to release.

APPROVAL OF BOARD MINUTES  
ATTACHMENT 3

**Reading Municipal Light Board of Commissioners**  
**Regular Session**  
**230 Ash Street**  
**Reading, MA 01867**  
**June 12, 2014**

**Start Time of Regular Session: 7:33 p.m.**

**End Time of Regular Session: 9:25 p.m.**

**Commissioners:**

**John Stempeck, Commissioner**

**Robert Soli, Commissioner**

**Thomas O'Rourke, Commissioner**

**Philip B. Pacino, Vice Chair, Secretary**

**David Talbot, Chairman**

**Staff:**

**Coleen O'Brien, General Manager**

**Hamid Jaffari, Director of E&O**

**Patricia Mellino, Operational Assistant**

**Bob Fournier, Accounting/Business Manager**

**Jane Parenteau, Director of Integrated Resources**

**Priscilla Gottwald, Community Relations Manager**

**Citizens' Advisory Board:**

**David Nelson**

**Public:**

**None Present**

**Call Meeting to Order**

Chairman Stempeck called the meeting to order and stated that the meeting was being videotaped, it is live in Reading only.

Chairman Stempeck welcomed David Nelson Citizens' Advisory Board (CAB) member.

**Opening Remarks**

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

**Presentation**

**Actuarial Report – Larry Stone, Stone Consulting, Inc.**

Mr. Stone reported that he had prepared an actuarial evaluation as of January 1, 2014 for the Reading Municipal Light Department Trust. The RMLD Trust acts as an investment vehicle which combined with money that is in the Reading Retirement Trust to pay benefits for current employees and future retirees of the RMLD. Mr. Stone stated that one major result was that there was a very good asset return of the money that was invested in equities in the Reading Retirement system with good rates of return over the years. This has significantly lowered the contribution requirement. Mr. Stone said that it was previously estimated to be \$1.7 million where now it is estimated to be between \$1.3 million to \$1.4 million. There is about \$36.7 million allocated in the Reading Retirement system for the benefits of the RMLD people and the RMLD has a trust fund that has almost \$3.9 million for a combination of just over \$40.5 million to pay for those benefits.

Mr. Stone reported that there are a number of assumptions used to derive this. One is the interest rate used to calculate how assets are expected to perform in the future and how you discount future benefits out to the current day. In the past a 7% retirement interest rate assumption has been used. Mr. Stone said that he is recommending that the rate be raised to 7.25% this year based on the fact that the Reading Retirement system which represents over 90% of the assets is expected to earn approximately 7.75% over the long-term. This assumes that the RMLD's assets will probably return 2.5% to 4% per year. Mr. Stone said that this may sound like it is not invested well, but it really is. It reflects a different type of asset. The RMLD's monies are in fixed income and the main goal is not to have an extraordinarily high rate of return but to have preservation of capital. By using a combination of the two we are able to have a discount rate of between 7.25% to about 7.3%. Mr. Stone stated that either way this lowers the cost by reflecting that instead of 7% you are going to earn 7.25% on your return. You contribute less money and more of the money will come from investment return. Mr. Stone said that they are recommending a Generational Mortality assumption. This reflects the fact that people are living longer. If someone now at the age of 65 will live 18-19 years on average, but someone who is currently 25, when they are 65, they will live 24-25 years. We are adopting a methodology called Generational Mortality which would reflect that in each date of birth and each year of birth would get their own separate mortality table reflecting how long people will live. This is costly because this is the time that you are paying benefits for. Mr. Stone stated that to do these two things will somewhat offset the change in the discount rate which decreases the value of the future benefits by \$1.7 million.



#### **Actuarial Report – Larry Stone, Stone Consulting, Inc.**

The change in mortality increases the present value of future benefits by \$2.4 million. Overall you pay for it over time at \$50,000 per year relative to the full contribution. It isn't that much we are just budgeting and the cost of the plan is really the benefits that are paid from it.

Mr. Stone's recommendation is to use that combination which gives you a cost for Fiscal Year 2014 of \$1,374,538. Mr. Stone reported that Pension Reform for employees hired after April 1, 2012 have had their benefits significantly cut back. Those who were able to retire with the full percentage at the age of 65 will now have to wait until 67. At one point people were able to retire at the age of 55 with the full benefit but now it is at age 67. They have also cut back any subsidies on early retirement and some other rules. Mr. Stone said that taking that into account and assuming how it will affect people has decreased the present value of future benefits by \$127,000 which has also contributed to the lower contribution.

Chairman Stempeck asked if we go through this work effort every two years. Mr. Stone replied yes, you make assumptions and look at it each time to see what has changed.

#### **Report of the Budget Committee – Commissioner Soli**

Mr. Soli reported that the Budget Committee met this evening.

Mr. Soli made a motion seconded by Mr. O'Rourke that the RMLD Board of Commissioners accept the Pension Trust Actuarial Valuation as of January 1, 2014 from Stone Consulting, Inc.

**Motion carried 5:0:0.**

Mr. Soli made a motion seconded by Mr. Talbot that the RMLD Board of Commissioners authorize the General Manager to deposit \$1,374,538 into the RMLD's Pension Trust Fund.

**Motion carried 5:0:0.**

#### **Approval of RMLD rates to be filed effective July 1, 2014**

Chairman Stempeck stated that the recommended motions for the Cost of Service Study were reviewed at the last meeting and then were submitted to the CAB for review. Mr. Pacino asked if there would be multiple motions or one motion that included all. Chairman Stempeck asked if the motion on the handout covers all the motions. Ms. Parenteau replied that these motions are what the CAB voted on and they were provided to the Board in the event that you should vote on similar motions. The last motion that was handed out is reflective of the rates that incorporate all of these changes. Chairman Stempeck said that they would read one combined motion. Mr. Pacino asked that the chart become part of the motion.

Mr. Pacino made a motion seconded by Mr. O'Rourke that the Reading Municipal Light Department Board of Commissioners approve the adoption of the rates MDPU numbers #236, 237, 238, 239, 240, 241, 242, 243, 244, 245 dated to be effective July 1, 2014 on the recommendation of the General Manager.

**Motion carried 4:1:0. Mr. Soli voted against.**

RATE	TARIFF #
Purchase Power Capacity and Transmission Charge	MDPU #236
Residential Schedule A	MDPU #237
Residential Schedule RW	MDPU #238
Residential Time-of-Use Schedule A2	MDPU #239
Commercial Schedule C	MDPU #240
Industrial Time-of-Use Schedule I	MDPU #241
School Schedule SCH	MDPU #242
Private Lighting Schedule D	MDPU #243
Cooperative Resale Schedule G	MDPU #244
Municipal Street Lighting Formula	MDPU #245

#### **Report of Board Committees – Vice Chair Pacino**

##### **Town of Reading Charter Review Committee**

Mr. Pacino reported that the Charter Review Committee had met several times and are pretty much at the end of any substantial changes that are going to be made to the Charter. The committee is next scheduled to meet on June 16 and then June 30 to finalize the changes. Mr. Pacino asked that Counsel review the Charter for the changes that have been made to make sure that there are not any conflicts. Mr. Pacino said that he could then bring any concerns to the Committee's attention at the June 30 meeting. Mr. Pacino stated that the changes could be found on the Town of Reading's website. Chairman Stempeck asked offhand if there were any items that would interest the RMLD.

### **Report of Board Committees – Vice Chair Pacino**

#### **Town of Reading Charter Review Committee**

Mr. Pacino replied that he did not see any changes that are of a concern and reiterated that Counsel should review it and recommended that the Board also take a look at it to see what changes are being made.

#### **Town of Reading Audit Committee – Vice Chair Pacino**

Mr. Pacino reported that the Town of Reading Audit Committee met and the Melanson Heath annual audit was accepted. Mr. Pacino said that there were questions on the town's end of year cut off and that there were instances where state funded money involved with projects such as with road repair that the contractors were exceeding the actual value of the bid. Mr. Pacino stated that the concern was that if the cost of the bid was exceeded by 20% you would have to get approval prior to doing the work. Mr. Pacino reported that the Town Accountant is taking steps to correct this. Chairman Stempeck asked if the issue was that they had gone over budget by more than 20% or if the cause was that the original estimate was too low. Mr. Pacino replied that it was additional money from the state to pay for repairing the roads. Mr. Talbot asked how this ties into the RMLD. Mr. Pacino replied he was not sure if the RMLD was affected by this 20% rule or not. Chairman Stempeck asked if the RMLD sees federal money. Mr. Pacino replied that in the past there have been reimbursements for storms through FEMA. Ms. O'Brien stated that there could be state funding for certain projects at the RMLD and will look into it. Mr. Pacino noted that for federal money there is an additional audit requirement.

#### **Approval of the Board Minutes February 27, 2014**

Mr. Pacino made a motion seconded by Mr. Soli that the RMLD Board of Commissioners approve the Regular Session meeting minutes of February 27, 2014 as presented.

**Motion carried 3:0:2. Mr. O'Rourke and Mr. Talbot abstained.**

### **General Manager's Report – Ms. O'Brien – General Manager**

#### **Northeast Public Power Association Conference Attendance, August 24-27, Sea Crest Beach Hotel, Falmouth, MA.**

Ms. O'Brien asked to request the attendance of the Board of Commissioners and the Citizens' Advisory Board to join her as well as for their approval for overnight travel to the New England Public Power Association Conference this year August 24-27, Falmouth, MA. Seminars will include discussion on Leadership for Board members, Financial Behavioral Strategies, Federal Energy Policy Updates and the Natural Gas Impact on Electricity in this General Region.

Mr. Pacino made a motion seconded by Mr. Soli that the RMLD Board of Commissioners to authorize the General Manager's overnight travel to the NEPPA Conference.

**Motion carried 5:0:0.**

Chairman Stempeck stated that this conference is extremely worthwhile. Ms. O'Brien said that she will have Ms. Foti send all the pertinent information to the Board and CAB members. Mr. Pacino commented for those who are attending to book early for onsite accommodations.

Ms. O'Brien asked Ms. Gottwald, Public Relations Manager to speak on RMLD's communications effort.

Ms. Gottwald reported that they have been working on an updated email list as the best means to communicate to the RMLD's customers all at once. Ms. Gottwald stated that the RMLD is going to host a live cable broadcast Wednesday, June 25, 2014 at 7 pm. in order to prepare its customers for the new look of the bill. Additional discussion will include the changes in the prompt payment discount, the new low income rate, new unbundled format and all will speak to the Responsible Communications Campaign that the RMLD is initiating in order to reach customers regarding outages, peak usage and energy conservation appeals. The RMLD is looking to have the capability to email and text customers by mass electronics.

Ms. Gottwald reported that customers and local cable stations will be notified when there are peak updates from ISO. The school superintendents of the four towns have been contacted, Reading and North Reading will allow the RMLD to use the school's parent email list for notification and the RMLD is still waiting to hear from Lynnfield and Wilmington.

Ms. Gottwald said there is a contest from June 15 - September 15 to attract customers to sign up for paperless billing and/or auto pay. Those who sign up for paperless billing and/or auto pay are automatically entered to win an iPod Nano, customers that sign up for both will be entered twice. Ms. Gottwald reported that the RMLD is working on a master customer contact list and has approximately 13,000 customer email addresses. Ms. Gottwald stated that on the registration form customers are given the option of how they would like to be contacted and that cellphone numbers are needed in order to text the information.

**General Manager's Report – Ms. O'Brien – General Manager**

Ms. Gottwald said another way the RMLD is cutting down on paper is that this year's annual report will be in web design for those who would like to print it and the RMLD will save the expense of printing 400 copies.

Ms. Gottwald reported that on Saturday, June 14 the RMLD will participate in Friends and Family Day at Birch Meadow and at the Annual Fall Street Faire on September 7. Ms. Gottwald stated that planning for the Historical Calendar and the T-Shirt Contest are in the early stages.

Ms. O'Brien said that our slogan as part of our responsive communication is "Get Greener", everyone is already going green the RMLD is going to get greener. As part of the paperless effort of the RMLD, the Annual Report Ms. Gottwald spoke of was correct, but for some of the Town Meeting we may be required to supply them with paper copies of the financial pages that will go to the actual Town Meeting which is in accordance with the Town Charter. Ms. O'Brien stated in addition to that she is encouraging that the Board packets be digitally sent and viewed on own personal laptop or there can be further discussion on electronic devices for viewing. The assembling of the Board packets is time consuming, costly and would like to move forward being better for the environment it is part of that "Get Greener".

Mr. O'Rourke stated that he and Ms. Gottwald spoke recently about the importance of the communications process and said that this is a great response to what you are doing and asked in terms of outages does the RMLD have the ability to send out text messages as well as email messages, could this be a vehicle to notify people if there is going to be an outage or if there is an outage. Ms. Gottwald replied that the RMLD does have a master email list and are trying to do exactly that.

Mr. O'Rourke asked if the RMLD participates in the school systems or a reverse 911 like the police if you want to send a broadcast. Ms. Gottwald replied that they are in communication with the towns about the reverse 911 to see if reaching the peak demand fits the criteria for using this tool.

Mr. O'Rourke asked if the RMLD would have its own system or would we use someone else's system. Ms. O'Brien replied that integrating a voice recognition system similar to a reverse 911 and to have the capability to send out messages for isolated area outages is part of the long term plan. In the interim to address this year's peak or any operating procedure that comes from the ISO such as a power caution or warning, if we do not conserve enough or if they do not gain enough megawatt savings to stabilize the electric grid in New England they could go to a voltage reduction and then lastly a rolling blackout. Ms. O'Brien stated this is something that we do not want to go to, but now that Salem Harbor is shut down we do not know how quickly the ISO can escalate. If the system is starting to escalate and then all of a sudden you loose Millstone or Seabrook it can very quickly go to that operating.

Ms. O'Brien said that when we speak to the towns about the reverse 911 in order to use it the right way the RMLD would have to meet the category of emergency. Ms. O'Brien stated that she is meeting with the towns over the next week or so to discuss with the Fire Chief's as to whether or not our criteria would qualify. Appeals might not be considered an emergency the RMLD is still in parallel working on our own system. If we were to appeal to lower the usage then it very quickly goes to a blackout then someone might think that is an emergency but that is for towns to decide.

Mr. O'Rourke asked if the value of it was preventing the emergency. Ms. O'Brien replied yes it is preventing the emergency but they do not want to use the system for that means. Ms. O'Brien said that they are going to discuss it a bit more and that they are going to make their decision based on what the RMLD really intends to use it for.

Mr. Talbot wanted say great job, the mass communication task that the Department is taking on is not easy to do and anything that we can do to relay the message on to friends, neighbors and civic groups is all good. Mr. Talbot asked if there was strategy to reach the ten biggest customers. Mr. O'Brien replied that there are other programs that the Integrated Resources group is working on as well with the larger customers to help shave the peak or to conserve during any ISO mandated operation. The RMLD wants to conserve on the peak, every megawatt that we save is about \$37,000 right now and will double next year. That is conservation for money which is coincident with the stabilization of the generators in the area, so the peak is coincident with actual power cautions then you are talking about a mandate and not about just saving money to keep our rate low, you are talking about electrical stability. Ms. O'Brien said that they are two different things but tied together.

Mr. Talbot said that when the school sends out a message everything goes off in his house because the school has every means of reaching them and if that system is being leveraged for the RMLD it would be terrific. Ms. Gottwald asked when Mr. Talbot gave his information to the school did you give your cell phone. Mr. Talbot replied that they asked how you like would to be contacted and was given multiple choices of which you could choose all of them.

**General Manager's Report – Ms. O'Brien – General Manager**

Mr. Soli said that he saw the rate package for the first time tonight, the Commercial C-Rate has a distribution demand and distribution energy charge and the Industrial Time-of-Use has a distribution charge but did not see a distribution energy charge and asked if that was correct. Ms. Parenteau replied that was correct based on the Cost of Service Study conducted by Mr. Seavey from PLM there were sufficient funds collected within the main component to equate to the distribution demand charges and there was no distribution energy component. There will be just an on and off peak component for the purchase power cost.

Mr. Soli asked if at some point the Board will see this. Ms. Parenteau replied that the Board will be able to see the write up in the Cost of Service.

**Power Supply Report – April 2014 – Ms. Parenteau**

Ms. Parenteau reported that the RMLD's load for April was approximately 52.5 million kWh, which is a 0.3% increase from April 2013. RMLD's energy cost was approximately \$2.46 million, equivalent to \$.047 per kilowatt-hour. Ms. Parenteau stated that the Fuel Charge adjustment was \$.06 per kilowatt-hour for April and the RMLD sales totaled 53.5 million kilowatt hours, as a result the RMLD over collected by approximately \$653,000 resulting in a Deferred Fuel Cash Reserve balance of a little under \$900,000. The May and June Fuel Charge was set at \$.065 with a Deferred Fuel Cash Reserve projected to have a year-end fiscal year balance of approximately \$2.2 million.

The RMLD purchased 17.5% of its energy requirements from the ISO New England Spot Market at the average cost of approximately \$55 per megawatt hour.

RMLD's peak demand for April was 89 megawatts which occurred on April 7 at 8:00 pm with the temperature at fifty degrees, last year the peak was 91 megawatts which occurred on April 2 at 8:00 pm with a temperature of thirty-five degrees. The monthly capacity requirement was 215 megawatts with the total capacity cost of \$1.32 million which is equivalent to \$6.14 a kilowatt month. Capacity and energy costs were approximately \$.0722 cents per kilowatt hour with 16.4% of the energy purchased from hydro generation.

The RMLD has received approximately 7,728 RECs from Purchase Power Agreements for the calendar year 2014 first quarter as of the day of the report the estimated market value is approximately \$266,000.

Ms. Parenteau reported that the RMLD's total transmission costs for the month of April were \$884,000 which is approximately a 1% decrease from March 2014.

In March and April the RMLD processed four commercial rebates totaling \$50,000 bringing the fiscal year total to \$252,000. The RMLD calculates the capacity savings to be approximately 909 kilowatts and the energy savings to be approximately 2,500 megawatt hours. On the residential side the RMLD calculates 200 kilowatts of capacity savings and 104 megawatt hours of energy savings. To date the RMLD has processed 996 residential rebates totaling \$66,000 and 326 RMLD residential customers have received energy audits totaling \$65,200.

Mr. Talbot asked how many people were applying for solar and has this been going up in years. Ms. Parenteau replied that the DOER had just approved their Phase II SREC Program and RMLD is now seeing an increase in the number of calls from people inquiring about the state's incentives both on residential and commercial.

Mr. Talbot asked how many projects are actually being applied for and installed. Ms. Parenteau replied that currently we have approximately twenty-five combined residential and commercial solar installations. Within the RMLD service territory we do not allow third party vendors to come in and lease solar systems to our customers because that would open us up to deregulation where they would actually be selling our customers kilowatt hours. If that was to occur then other suppliers could come and take our larger commercial customers which would be detrimental to our overall rates that is why it is necessary for our customers to purchase the system and that sometimes is cost prohibitive.

Mr. Talbot asked where we are with the school buildings putting up PV (Photovoltaic). Ms. Parenteau replied that she recently received a call from Wilmington, CAB member Dennis Kelly and explained to him how the RMLD could set up a program and potentially sign a PPA and the town could receive the solar. Mr. Kelly was going to take that information back to his committees. Ms. Parenteau reiterated that the SREC-II program just came out in April and customers could not make any decisions without the details of SREC II. Going forward because the value of SREC is part of the cost to fund the projects interest it may pick up now that it has been approved.

Mr. Talbot asked if there were any schools or municipal buildings in the four towns that have Photovoltaic. Ms. Parenteau replied not to her knowledge. Mr. Talbot said that it is probably economical to do if done right.

### **Power Supply Report – April 2014 – Ms. Parenteau**

Ms. Parenteau stated that the cost of solar is coming down, however, it is not economical without the SREC revenue and that is why it was necessary for the state to revise the phase II program.

Mr. O'Rourke asked Ms. Parenteau how many rebates so far year to date have been processed. Ms. Parenteau replied for residential 996 and for commercial approximately 20.

Mr. O'Rourke asked if there were one or two particular items driving the rebates. Ms. Parenteau replied that on the commercial side it varies. There are a lot of technical HVAC upgrades where those studies take quite a while to perform and by the time the commercial customer installs them and the RMLD verifies the savings it is a long lead time process from the time that they apply to the time the RMLD initiates the rebate.

Ms. Parenteau reported that the RMLD is working with both the Towns of Wilmington and North Reading both are building new high schools and both are going towards the LEED certification and RMLD is working towards rebates with those projects.

Mr. O'Rourke asked about the residential side. Ms. Parenteau replied that those need to be revisited and that currently there is a vacant position within her department. Those rebates are primarily for refrigerators, air conditioning units, dishwashers and the list goes on.

Mr. O'Rourke asked what the cycle time was for the consumer. Ms. Parenteau replied that is a pretty quick turnaround when the customer files the application and provides the proper paperwork Customer Service then processes the rebate at two to four weeks maximum.

### **Engineering & Operations Report – April 2014 – Mr. Jaffari**

Mr. Jaffari stated that he will be reporting on three categories, System Projects, Station Upgrades and SCADA Projects.

Mr. Jaffari reported that System Project 101 – 5W9 Reconductoring – Wildwood Street 25% complete, Project 102 – 4W4 Reconductoring delayed until FY16, Project 103 – Upgrading Old Lynnfield Center URDs (Trog Hawley) – Partial Carryover is complete, Project 104 – Upgrading Old Lynnfield Center URDs (Cook's Farm) 5% complete, Project 105 – 4W5 – 4W6 Tie 10% complete, Project 106 – URD Upgrades – All Towns on-going, and Project 107 – Stepdown Area Upgrades – All Towns on-going.

Station Upgrades include Project 108 – Relay Replacement Project – Gaw Station (Partial Carryover) delayed to FY15, Project 109 – Gaw Station 35 kv Potential Transformer (PT) Replacement, Project 10 – Station 3 – Replacement of Service Cutouts, Projects 108, 109, and 110 all have been delayed waiting for a UPG to complete performing maintenance and testing of all equipment a substations 3, 4, and 5. Once all substations are tested we can set a baseline followed by setting priorities and developing a cycling program thereafter.

Other projects: Project 111 – Station 4 – Getaway Replacement – 4W13 is complete, Project 125 – Station 5 – Getaway Replacements 5W9 and 5W10 – was idle during March and April. SCADA Project 130 – RTU Replacement – Station 3 is delayed until FY15 pending completion of substation maintenance.

Mr. Jaffari reported that in March and April the new Customer Service Connections for Commercial/Industrial customers including new service connections, upgrades, and service replacement projects were North Reading Middle and High Schools, and Target in Wilmington. For the months of March and April, the total cost for new Customer Service installations for Residential Customers including new or upgraded overhead and underground services year to date was \$1.45 million.

With regards to proactive maintenance program: Mr. Jaffari stated that Porcelain cutouts changed out in the month of March totaled four and April totaled three. Cutouts installed new or replaced because of damage were approximately twenty-three (23) in March and thirteen (13) in April.

Mr. Jaffari reported on the three reliability indices that the RMLD tracks. SAIDI (System Interruption Duration Index) year to date 2014 is at 6.03 and is lower than the Regional Average of 62.35 and National Average of 85.75. SAIFI (System Average Interruption Frequency) year to date 2014 is at 0.16 and is lower than the Regional Average of 0.55 and National Average of 0.83. CAIDI (Customer Average Interruption Duration Index) year to date 2014 is at 37.72 and is lower than the Regional Average of 105.77 and the National Average of 83.00.

Mr. Jaffari stated that the 2010-2014 Outage Causes Types chart provides a guideline for RMLD to focus on implementing appropriate maintenance plan for its overhead/underground lines and substations.

### **Engineering & Operations Report – April 2014 – Mr. Jaffari**

Chairman Stempeck asked if there was any way to capture how much of an impact that each one of these outage causes has as well as to corresponding to major outages. Mr. Jaffari replied that the largest number of outages is caused by trees and animal contacts. Both Trees and animal contacts cause major outages for longer durations. The RMLD has intensified its program for protecting the system from wildlife there are still areas that are exposed no matter what you do.

### **Financial Report – April 2014 – Mr. Fournier**

Mr. Fournier presented the April Financial Report which represents the first ten months of fiscal year 2014; the positive change in Net Assets of \$987,101, decreasing the year to date Net Loss to \$372,542.

Year to date budgeted Net Income was approximately \$2.9 million with the resulting Net Income being under budget by approximately \$3.3 million. Actual year to day fuel expenses exceeded fuel revenues by about \$1.7 million.

Year to date base revenues were under budget by \$1.2 million or about 3%, actual base revenues were \$38.9 million compared to the budgeted amount of \$40.1 million.

Year to date purchased power base expenses were over budget by \$156,103 or about .65%, actual purchased power base costs were \$24 million compared to the budgeted amount of \$23.9 million.

Year to date operating and maintenance (O&M) expenses combined were under budget by \$273,736 or 2.56%, actual O&M expenses were \$10.4 million compared to the budgeted amount of \$10.7 million. Depreciation expense and voluntary payments to the Towns were on budget.

Operating Fund was at \$12.2 million, Capital Fund \$3.9 million, Rate Stabilization Fund \$6.7 million, Deferred Fuel Fund \$893,586 and the Energy Conservation Fund at \$435,713.

Year to date kilowatt hour sales were 584,377,258 kilowatt hours sold which is 8.3 million kilowatt hours or 1.41% behind last year's actual figure.

Mr. Fournier stated that the auditors will be in on June 18 and 19 to perform preliminary testing and at the end of the month the RMLD staff will perform the physical count in the warehouse and on the trucks. The audit is scheduled for the week of August 18.

Mr. Fournier reported that there was a correction to the written amount on the report and that cumulatively the five divisions came in under budget by \$270,000 or 1.6%.

Chairman Stempeck asked in terms of being under budget, net income and revenue that these will be captured in the rate increase moving forward. Mr. Fournier replied that as of July 1 the new rates will be going through and the fuel revenue charge being \$.065 in May and June should help to offset the variance between the fuel expense and fuel revenue sales.

### **Reorganization of the RMLD Board of Commissioners**

Chairman Stempeck asked for nominations.

#### **Chairman**

Mr. Stempeck nominated Mr. Talbot for Chairman seconded by Mr. Soli.

Mr. Stempeck made a motion to close nominations seconded by Mr. Soli.

**Motion carried 5:0:0.**

Mr. Talbot thanked the Board and stated that he would work hard to do his best.

#### **Vice Chair**

Mr. Stempeck nominated Mr. Pacino for Vice Chair seconded by Mr. Soli.

Mr. Pacino made a motion to close nominations seconded by Mr. Soli.

**Motion carried 5:0:0.**

#### **Secretary**

This will be performed monthly on a rotating basis by commission members.

### **Reorganization of the RMLD Board of Commissioners**

Chairman Talbot asked what the Board wanted to do with all the committees. Mr. Pacino replied that in the past Board members would express interest in being on a committee. Chairman Talbot asked if the Board should think about this and then bring it back to the next meeting. Chairman Talbot stated that there are a lot of committees and some of which have not done a lot over the past year and asked if they were ready to do this right now. Mr. Stempeck replied that there are actually four committees listed so maybe they could get a pro forma of a listing of who would like to serve on which committees and then either move it to the next meeting, table it, vote on it or take care of it here. The assignments for Accounts Payable and Payroll are on a rotation and pretty straight forward.

Chairman Talbot asked who would like to be on the Audit Committee. Mr. Pacino replied that he would like to stay on the Audit Committee with his training and background as did Mr. Soli.

Chairman Talbot commented that he would prefer not to have a Public Relations Committee and that the RMLD is now on track. Chairman Talbot asked if there was a difference of opinion. Ms. O'Brien stated that she tries to convey at the meetings every program or change that would improve, benefit or impact the RMLD. Ms. O'Brien said that if the Board is satisfied with feedback and communication efforts that she is providing then would agree with the Board that the Public Relations Committee can be done away with.

Chairman Talbot asked if there was interest in the Budget Committee. Messrs. Stempeck, O'Rourke and Soli replied that they would like to serve on that committee. Mr. Soli stated that Mr. Stempeck would make a good Chairman for that committee.

Chairman Talbot asked if there was a need for the Policy Committee. Mr. Stempeck suggested that the Policy Committee be extended until they see what the Town has recommended to make sure that they are in line. Mr. Stempeck stated that there needs to be one addition to the policy and that is the steps that the Board must go through in order for the RMLD to do a rate increase. That was something that was lacking and felt that he was not totally prepared for that and it needs to be formalized, just the process. Ms. O'Brien stated that there has not been a follow-up Policy Committee meeting since they met last fall to discuss the separation of the Governance Policies versus the Operational Policies. There was not a mechanism of where to put the Operational Policies so they all became Board Policies for example, Operational Policies include Drug and Alcohol or how we operate the SCADA Systems. Ms. O'Brien said that they need to be separated and at the last meeting provided the Policy Committee a list of all the policies and recommendations of which policies should go where. Ms. O'Brien stated that she would like to see this committee remain for that reason and after the policies have been separated there would no longer be a need for the committee. Messrs. Stempeck and O'Rourke said that they would like to serve on the Policy Committee and Mr. Pacino stated that he would like to continue as Chair.

### **RMLD Board of Commissioners Committees and Assignments**

#### **Audit (Including Town of Reading Audit)**

Phillip Pacino, Robert Soli

#### **Public Relations Committee - Eliminate**

#### **Budget Committee**

Chair; John Stempeck, Thomas O'Rourke, Robert Soli

#### **Policy Committee**

Chair; Phillip Pacino, John Stempeck, Thomas O'Rourke

#### **Assignments**

##### **Accounts Payable**

Thomas O'Rourke – July  
David Talbot – August  
Robert Soli – September  
Phillip Pacino – October  
Thomas O'Rourke – November  
John Stempeck – December  
David Talbot – January  
John Stempeck – February  
Phillip Pacino – March  
Thomas O'Rourke – April  
Robert Soli, (First Back up)

#### **Assignments**

##### **Payroll – Four Month Rotation**

Phillip Pacino, August – November  
David Talbot, December – March  
Thomas O'Rourke, April – July  
Robert Soli, (First Back up)

Regular Session Meeting Minutes  
June 12, 2014

### **RMLD Board of Commissioners Committees and Assignments**

Mr. Talbot made a motion seconded by Mr. Stempeck to accept the RMLD Board of Commissioners Committees and Assignments.

**Motion carried 5:0:0.**

Chairman Talbot asked if there was a need to always sign off on the payroll every two weeks. Do we still need to do this one of us has to sign off on it every two weeks or could it be something where if we wanted to review it we could. Mr. Stempeck replied it was his thought that this was a requirement. Mr. Pacino stated that one of the Board members signs it. Mr. Stempeck said that the signing of the payables has been reduced from three people to one which was a major step forward. Chairman Talbot stated that it is good to have the review but was questioning the value that might be added.

Mr. O'Rourke asked if there had been any issues in the last few years. Mr. Pacino replied that the Department answers the Commission member's questions right away. Mr. Stempeck suggested that it is done by exception, if there is an employee that has an exception such as vacation or is sick, salary or bonus anything that might be involved that a commission member would have to review and accept it otherwise the payroll looks the same every two weeks and trusts the Department to be in charge of what they are doing with their employees.

Mr. O'Rourke asked that the exceptions be clarified where there could be quite a few. Mr. Fournier replied that Mr. Kazanjian does provide an exception sheet with the bi-weekly payroll. Mr. Fournier said that it was his understanding that the town wants to see a Commissioner's signature on it. Mr. Pacino stated that he wants to give the appearance that the Board is actually looking over somebody's shoulder.

Mr. Stempeck suggested to the Chairman that the Board think about this and bring it up at the next meeting. Mr. Soli suggested that instead of three people on four month rotation have four people on three month rotation. Chairman Talbot stated that they would leave things the way that they are and as they are reorganizing to question some of the assignments and whether or not they still need to do them. Ms. O'Brien said that she would have Mr. Fournier check into the legality of the signature and report back at the next meeting.

Mr. O'Rourke asked the staff of the RMLD if this task was viewed as a help or a hindrance in paying RMLD employees and payables. Does this signature process help or hurt the effective operation of the RMLD. Mr. Fournier replied that is was more of a requirement or legality issue. Mr. O'Rourke said putting that aside if we have the decision to do it or not it. Mr. Fournier said that any payable that was questionable would be caught during the approval process because of all the required signatures prior to the Commissioners signing off on it. Mr. O'Rourke asked what the biggest regular sized payable is. Ms. O'Brien replied power bills.

Mr. Pacino said the process is to let the Department know that the Board is actually watching over somebody's shoulder. In one of the past administrations there were some issues. Mr. O'Rourke stated that the payables are probably more effective than the payroll. Chairman Talbot said then we are leaving it as it is.

### **General Discussion**

Mr. Soli stated that he will be moving and that by September or there about the RMLD Board of Commissioners will have a vacant seat.

### **Board Material Available but not discussed**

#### **RMLD Board Meetings**

**Thursday, July 24, 2014**

**Thursday, September 25, 2014**

#### **Citizens' Advisory Board Meeting**

**Wednesday, August 13, 2014**

### **Executive Session**

At 9:03 Mr. Pacino made a motion seconded by Mr. Soli that the RMLD Board go into Executive Session to approve the Executive Session meeting minutes of February 27, 2014 and to discuss mediation and union negotiations update, and return to Regular Session for the sole purpose of adjournment.

**Motion carried by a polling of the Board.**

Mr. Stempeck; Aye, Mr. O'Rourke; Aye, Mr. Soli; Aye, Mr. Pacino; Aye, and Chairman Talbot, Aye.

**Motion carried 5:0:0.**



Regular Session Meeting Minutes  
June 12, 2014

**Adjournment**

At 9:25 p.m. Mr. Pacino made a motion seconded by Mr. Talbot that the RMLD Board of Commissioners move to adjourn the Regular Session.

**Motion carried 5:0:0.**

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

Phillip Pacino, Secretary  
RMLD Board of Commissioners

**Reading Municipal Light Board of Commissioners**

**Regular Session**  
230 Ash Street  
Reading, MA 01867  
November 6, 2014

**Start Time of Regular Session: 7:42 p.m.**

**End Time of Regular Session: 9:15 p.m.**

**Commissioners:**

**David Talbot, Chairman**

**Philip B. Pacino, Vice Chair- Secretary Pro Tem**

**John Stempeck, Commissioner**

**Thomas O'Rourke, Commissioner**

**Staff:**

**Coleen O'Brien, General Manager**

**Beth Ellen Antonio, Human Resources Manager**

**Jeanne Foti, Executive Assistant**

**Hamid Jaffari, Director of Engineering and Operations**

**Jane Parenteau, Integrated Resources Manager**

**William Seldon, Senior Energy Analyst**

**Guest:**

**Patricia Cruz, Senior Project Manager, Leidos**

**Steve Rupp, Vice President Energy Consulting, Leidos**

**Ken McNeill, Vice President, Booth & Associates**

**Town of Reading Board of Selectmen Liaison:**

**Marsie West**

**Call Meeting to Order**

Chairman Talbot called the meeting to order and stated that the meeting was being videotaped; it is live in Reading only.

**Opening Remarks**

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

**Introductions**

Chairman Talbot acknowledged Town of Reading Board of Selectwoman, Marsie West. The Citizens' Advisory Board representative slated to attend this meeting had a family emergency that came up, therefore was unable to attend. Chairman Talbot welcomed Patricia Cruz, Senior Project Manager and Steve Rupp, Vice President Energy Consulting from Leidos presenting the organizational study as well as Ken McNeill, Vice President, Booth & Associates presenting the reliability study.

Vice Chair Pacino will be the Secretary this evening.

**Public Comment**

There was no public comment.

**Presentation**

**Kick Off Presentation for Organizational and Reliability Study (Attachment 1)**

**Patty Cruz, Senior Project Manager, Leidos – Organizational Study and Steve Rupp, Vice President Energy Consulting**

Ms. Cruz stated she will serve as the project manager for the organizational assessment and Mr. Rupp will be the project liaison for the project. The presentation included the scope of work, how it will be accomplished and the payment schedule. They look forward to working with the team. Ms. Cruz reported that interviews with RMLD staff begin tomorrow. Ms. Cruz anticipates that the report will be ready in February.

Mr. Stempeck asked Ms. Cruz if she would be looking at other municipals, as opposed to investor owned businesses, because the data base must have different comparisons of scales with such factors as the number of customers, revenue, generation and the fact that RMLD does not generate. Ms. Cruz responded, yes. Ms. Cruz noted that it is one of the key components and there are ratios that they will have for the best practices of benchmarking; which is different for generating utility or if it is for non generating utility. Ms. Cruz stated that the other aspect is that we have the industry standards, for instance, we receive data for the American Public Power Association there is that level. Then we talk about what the other utilities are doing, making it more regional because it is different than having a utility here than when talking about a utility in Texas.

Mr. Stempeck commend that he assumes some of Leidos' data is not from external sources, but done with others so there is an internal data base. Ms. Cruz responded, yes, they have an internal data base.

Mr. Stempeck asked if Ms. Cruz plans on interviewing the RMLD Board. Ms. Cruz answered, it is a good question, currently it is not in the scope at the moment. Since it has been brought up it is something that has been done before in several instances in order to get that guidance and insight as to how the Board sees the utility and where the Board sees where the utility going.

## **Presentation**

### **Kick Off Presentation for Organizational and Reliability Study (Attachment 1)**

**Patty Cruz, Senior Project Manager, Leidos – Organizational Study and Steve Rupp, Vice President Energy Consulting**

Mr. Stempeck asked if the Board would be agreeable to be interviewed. The RMLD Board members were all in agreement.

Mr. Stempeck stated that he did not see the finding recommendations relative what needs to be changed and the potential cost associated with that. Ms. Cruz stated that as part of the finding recommendations throughout the organizational study recommendations will be initial draft recommendations. In the final report, after the draft has already been looked at, her team will be able to finalize the findings and recommendations. The findings are the background, i.e., why we think it is important, then the recommendations are based on that and what is clarified.

Ms. Cruz stated that she would suggest interviewing the Board members individually. However, asked if there was a preference, whether the Board would prefer a collective interview. Mr. Stempeck suggested individual interviews, all Board members were in agreement.

Chairman Talbot stated that in terms of strategic direction, he understands that the utility industry is under significant pressures by distributive generation and that local distributive generation is becoming a lot more economical. Therefore, when RMLD is in the business of buying and selling electricity, we are going to be hurting in the coming decades with new technologies coming in with the rise in cost of transmission. Chairman Talbot asked will Leidos suggest whether RMLD should go into generation, if so, you will suggest whether the RMLD has the organizational capacity to build and operate generation. Ms. Cruz responded that ever since she started working in the utility industry there has always been unprecedented and the continuous change that never stops. Ms. Cruz stated that when Leidos looked at the organizational assessment they have to consider that these are the trends and the aspects that are impacting the industry. During conversations Ms. Cruz had today, there is a strategic plan that was defined in 2008, but she does not believe that one captures where the utility is now so Leidos will look at what the utility has in place at that strategic destination and if distribution generation is totally not in the picture that will be one thing recommended that must be kept in mind.

Chairman Talbot asked if RMLD will have to work off this six year old strategic plan. Mr. Cruz responded, no. This is where we start. We have had this conversation and highlighted in four different aspects, one of them is Customer Service. The Customer Service Satisfactory Survey tends to be something that utilities and municipal utilities focus. That is one aspect but when we start getting into where you are building this utility, it is centered upon the Reliability Study, as well. What will this twenty year plan look like, is there something that is missing from what we know is an industry practice from an industry trend we will bring that to the table. Chairman Talbot stated that is a good general answer, but he was wondering about generation specifically, the economics of it and when the organization is prepared to go into generation. Chairman Talbot commented that he would assume since Leidos has studied many other utilities, including municipals, they might know who successfully did this after not having been in this business for fifty to eighty years. What RMLD has not done in ninety years is generated electricity because it didn't make sense economically, but that is changing, stating that is what he most concerned about.

Mr. Stempeck stated that RMLD also has to balance the charge for being the low cost provider for all of the towns that surround RMLD. It is easy to do with NStar who raises their rates by 37%, but it must be followed with general market trends because of the cost of electricity, it may not be so easy. These current trends that are difficult that RMLD is trying to wrestle with. Mr. Rupp stated that we would like to be all things to all people all the time, when we go through these exercises there are a million questions that need to be answered and we probably cannot get to all of them. The issue of whether this organization is prepared to go into distributive generation or deal with increase distributive generation. It will be looked at a high level, this requires an integrated resource plan, and a strategic plan in order to really get into those answers. You need to understand your strategy, what your position is and how you'll be prepared to do that. We can tell you whether your organization is ready to address those issues, but we are not going to do an IRP and we are not going to do a strategic plan in this study. Ms. Cruz stated that, defining whether you get into generation that is a different analysis. Mr. Stempeck asked whether Leidos have teams that can do that. Ms. Cruz answered, absolutely.

Mr. O'Rourke had a question about the benchmarking stating, is it a combination of quantitative and qualitative reporting. On the benchmarking, with respect to some matrix that you have on the database is it industry average, best in class and does it cut that way and then sharp against RMLD's position. Ms. Cruz answered, yes. Leidos has the operating ratio, labor products productivity, retail customer per circuit file and those are the type of benchmarks that we trial and we go out for. Also, there are industry publications where we obtain that information from their annual reports and budgets. Other times we request assistance from the utilities, a connection is made in whatever utility we are trying to benchmark against to get the data. Ms. Cruz added that for an incentive, the benchmarking is set up the utility will receive a copy of the report, but it is much more high level as well as always confidential.

Ms. Cruz explained that utilities are named Utility A, Utility B, Utility C. Leidos informs Reading which of the utilities they comprise in this, but name specific for industry average. The information is displayed in a bar graph with an industry average with a commentary from Leidos.

## **Presentation**

### **Kick Off Presentation for Organizational and Reliability Study (Attachment 1)**

#### **Patty Cruz, Senior Project Manager, Leidos – Organizational Study and Steve Rupp, Vice President Energy Consulting**

Mr. O'Rourke stated that sounds like Leidos actually goes out and does real time benchmarking as opposed to drawing into your database. Ms. Cruz agreed. Ms. Cruz explained that it also depends on what they are going to benchmark and he parameters that are of interest to Reading. What impacts that availability is also the region, for the Northeast do we have what you need, if not we do have to go back to get those numbers.

Mr. O'Rourke asked relative to the benchmarking is the scope numbers-wise fifteen or fifty utilities. Ms. Cruz stated that for benchmarking they use six to eight utilities for comparison because of the level of effort in designing the survey, sending it to them, and getting information back.

Mr. O'Rourke clarified besides that how many do you utilities do you have in your company database. Mr. Rupp answered that the company's experience is that for this assessment, an organizational assessment, the first time through the statistical quantitative benchmarking that Mr. O'Rourke is alluding to is not very valuable to your managers in terms of identifying areas of high performance and areas where performance needs attention. Leidos tries to narrow it down to six to eight utilities to provide you with more insight of how your performance compares in order that we can help you really understand what is similar between you and these six utilities, what differs and how to get information out of that comparison that your managers can use to understand where they stand. Mr. Rupp commented that as you put benchmarking to work as a management tool over time and you begin to track key performance indicators that are benchmarked and for our sampling can more valuable to you, we wouldn't recommend that at this outset and that is not how we propose to work.

Mr. O'Rourke stated that it just strikes him as being small universe of companies to look at. Mr. Rupp stated that you do get the benefit of a larger sampling out of the American Public Power Association (APPA) indices that we do include in the benchmarking therefore you do get a taste of a broader sampling. Mr. O'Rourke then stated that out of the six to eight are pretty well matched to RMLD. Mr. Rupp stated that those utilities will be picked together with RMLD.

Mr. O'Rourke asked, at the recommendations and findings stage, is it often primarily the strategic consultants, or do you do perform much of implementation. When you have the report is it a hand-off to Ms. O'Brien and the team to say, here is what we recommend and go implement or is it likely that you engage with clients, how does that works. Ms. Cruz responded that she likes the implementation part. It has been her experience that we can put together a really good plan and work with the utility, but the utility has a full time job. When we run in to support with implementation we define the process in order that the implementation happens. Ms. Cruz explained that it has been her experience that to make implementation happen, they put together a core planning team. This team works together to provide the recommendation, and how do we move forward with that. There is a strategy that is defined to make sure implementation happens. We usually are invited to tell us what is wrong and define our findings and recommendations. Frequently, we are told that we will handle it the implementation and it is less of the time when the utility invites us back to make sure we get it implemented, but it does happen.

Mr. Rupp stated that just to make sure you understand where we come from we are utility engineers, utility financial experts and utility generation experts with management consultant capabilities. We are not management consultants that have some knowledge of your business; our subject matter experts have worked for the utilities and have been in business for a long time so we have come at it thinking in a way the utility does and really trying to affect positive changes.

Chairman Talbot stated that he likes Mr. Rupp thoughts about physical space and how physical layout can impact how teams work and don't interact it is that is really interesting that you are going to include that. Ms. Cruz stated that it has been her experience that it is not only how the organizational is structured, but also the physical structure that determines behavior. Many times she hears well you know my team is working with other employees that are too far away it starts impacting communications, even with all the virtual communications like e-mail and chats it still impacts so we will be looking at all that.

Mr. O'Rourke stated that as a follow up to his comment does Leidos implement, do you ever experiment with gain sharing concepts is that from a company's utility point of view they may be interested in getting help in implementing because that is always hard to run the organization with new changes. Companies sometimes may want more of a guarantee that if we bring in the experts that we will get some define return on investments so kind of a gain sharing concept.

Ms. Cruz responded that stated she has never done that. Mr. Rupp stated, that just does not happen in this industry, he pointed out that in thirty years, the idea of public/private power partnerships work in some models. He has never seen it applied in the context of organizational improvement and the challenge is that if we were to be involved intimately throughout implementation and this was an engagement that went out throughout a period of time and we had some influence, you could reasonably expect that we should be closely associated with the end result, but we are not.

## **Presentation**

### **Kick Off Presentation for Organizational and Reliability Study (Attachment 1)**

#### **Patty Cruz, Senior Project Manager, Leidos – Organizational Study and Steve Rupp, Vice President Energy Consulting**

Mr. Rupp stated that we analyze, we take our experience based on working with your people and working with other utilities then we provide really good actual recommendations that we've develop with your management team to effect the change that you want. Then they are responsible for the end result. We are certainly happy to help, but we are not in control of it enough to even entertain the idea that somehow trying to share the end results. The best motivator that we have, as Mr. Rupp stated, is that we have to be effective for you, we don't want to do this project then leave. We would like to have a relationship with you, we would like to become a trusted advisor, we would like to be involved and engaged during the implementation, that is our incentive, to do a good job, maintain our reputation and have you think of us first.

Mr. O'Rourke asked Ms. O'Brien if RMLD has the presentation and the project schedule. Ms. O'Brien stated that the project schedule can be e-mail to the commissioners.

### **Ken McNeill, Vice President, Booth & Associates – Reliability Study (Attachment 2)**

#### **Mr. McNeill presented the scope of the Reliability Study for the RMLD.**

Mr. McNeill stated that he is the Project Manager at Booth & Associates and has been charged with the electrical system reliability report. Booth has extensive project work with rural electric coops and municipal electric systems. The presentation included the scope of work, how it will be accomplished and the payment schedule. The project approach with one of the most important functions is to complete the system condition assessment. Each member of the team has in excess of twenty years of experience in the industry. Staff and management will be interviewed.

In his discussions in the past couple of days with RMLD staff, he found there was a lack of an arc hazard assessment study and based on National Electric Safety Code, it mandates that those studies be in place by January 1, 2009. There is a compliance issue there, but to create a valid flash arc assessment for all available fault currents on all ports on the system. To get those calculated you need a system model this roles back to the GIS system, it needs to be complete and accurate. All the elements are related. The GIS has to be fully functional and operating. This initial analysis, the GIS will be an important cog of the operation of the system. An evaluation of the GIS system will be in the report as well as what elements are required and collected at one time. It relates to an outage management system even relates back to pole attachment agreements, transformer loading management system (provides information on age and condition of facilities) to generate reports and work orders. This enables you to be proactive in the area of aged and deteriorating equipment.

Mr. Stempeck stated that the system model sounds great. He then asked if this was something that gets left behind or something that can be used here by employees and be trained, or is this something that you do and use then it becomes proprietary. Mr. McNeill stated that the staff here has WindMil Switch Analysis Software, his firm uses and 99% of their clients use WindMil. This is the first pass through just to get an initial analysis we won't have to create that from old school way. We have been working with Mr. Jaffari's staff to get the basic information we need to get a baseline model that we can analyze each line station, each circuit, with a circuit loading and again our first recommendations are likely going to be to get the GIS System updated. That way we can get all the detail in down to the transformers on each phase and once that is established have that uploaded directly into WindMil in a real time model and at that point we will make recommendations about training the staff and making sure RMLD will have that on-site as long as the GIS System is kept up-to-date. The GIS System is going to be the simple focus for all this; as long as that is kept updated RMLD will always have the ability to roll that GIS right into a brand new window model and RMLD will always have it as long as you need.

Chairman Talbot asked how thorough the GIS System is right now, how complete is it right now. Mr. McNeill answered that Booth just prepared the data request several weeks ago and it is part of that data request, we requested the GIS shape files that RMLD has right now and the distribution team has already uploaded that and are going through that right now so when they get here they will have an idea exactly where it stands at this point and be able to make some type of recommendations after they discuss it with the RMLD staff or whether to recommend an update to the existing system or whether it will be just start back to get all the data fields you want to collect and go out and do a wholesale collection of data so RMLD will have 100% confidence in the data.

Mr. McNeill can understand if there is not 100% confidence left in the data that is in the existing GIS at this point and it will be the determination whether that could be effectively updated to get RMLD to that 100% confidence level whether it be just a start at point one and gather all the fields of data you collect while you are out there.

Mr. McNeill's understanding is not all pole attachments may have been collected. That has always been a big issue with pole rentals, pole attachments, pole ownership as he has learned in the past few days is a concern that there is mixed ownership of poles in the area. A lot of that data can be generated, calculated down to the age of the transformer, the age of the poles, you can do queries on every pole that is over sixty years old so you can go out and test those to see if they are in need of replacement and those are safety issues and that type of thing.

**Ken McNeill, Vice President, Booth & Associates – Reliability Study (Attachment 2)**

**Mr. McNeill presented the scope of the Reliability Study for the RMLD.**

Chairman Talbot stated that on a high level, this sort of data has not been collected and double checked at the Department in the past, is that a fair statement. Ms. O'Brien answered, it is a fair statement to say that we are probably going to start from scratch.

Chairman Talbot stated that historically the organization has not been run in a way that we had good data on our system, our assets are aged; the assets and things are accurate and things are there that people need, we don't have that now. There is a lot of work to do and it is interesting that this did not make good before.

Mr. McNeill said that with this GIS System as we start putting the plan together as far as implementation around various elements of the company you will find the GIS System will touch engineering and touch the financials because if you have a good record of facilities with age and depreciation to get accurate plant values of your system. Chairman Talbot stated that he totally understands why it is important, he is just trying to get a sense of how bad it is now and the major thing is that as you go forward we would love to hear from you about, maybe it isn't that bad, but it sounds like it is bad because it has been derelict for a number of years, if not decades.

Mr. Jaffari said that there has been information missing on the GIS database, the transformer information its phasing, the size of the wires is basically in need for modeling of the system as well as the age of the equipment and what is up there we need to do a complete survey pole by pole the entire system to capture exactly what we have to determine the current situation for model.

Chairman Talbot stated that this is obviously foundational to what this Department is supposed to be doing, how we can run better and save money to avoid problems, so he can just say for myself he is happy we have some professionalized problem in another direction at this moment. Going forward we will be having a locked down understanding of our system he is very glad this is underway.

Mr. McNeill stated that he won't make rash statements since he has only been here for two days, but that is one of those things that will be the crux, very important to have meetings internally, again, to see what data could be effective for different areas of the company. If there is an initial data collection from the start that whoever is out in the field collecting this data has every piece of information and every view, every attribute that has been collected at that time for efficiency purposes.

Chairman Talbot stated that he does not have any big expectations, but his hope is that in the next several years we can start look at the fiber question in a possible revenue of modernization of opportunities done in a careful way. Does Booth have experience with actual business models in this area or at least saying, here is your capacity and here is what other munis have done. Mr. McNeill responded Booth has an extensive amount of experience installing fiber and designing fiber loops in Maryland. Mr. McNeill explained that we do have experience in fiber, in our financial services group that is one thing they will bring to the table is many opportunities/options that they are aware of, can be explored as well as programs, because we do have clients that do have fiber loops.

Chairman Talbot asked, when you explained options, are you talking about data services. Mr. McNeill responded, yes, they have some experience in those areas. In our report we would say, this may be an area you want to explore or this may be an area you want to stay away from because in our experience they have not worked, etc. Chairman Talbot stated there are a number in Massachusetts that have fiber has worked and it is all a question of doing it in a targeted and careful ways. Mr. McNeill then stated, it will be more of a 10,000 foot look and the primary focus will be having the capacity to have bring back the data.

Chairman Talbot stated that the data piece is only going to be more important. He knows that Ms. O'Brien has mentioned in the past regardless of any notions of going into the data business is that intelligent meters could be on every house and down the road that you would have a fine grain demand response that goes maybe even beyond what we are originating today. Maybe this is decades in the future It would be good to know that we would have enough capacity to handle any kind of scenario for grid management down the road. Mr. McNeill suggested putting together essentially a road map, a long range road map that goes out twenty years in five year increments. Down the road we may have some of those things in the plan for future consideration because some of these programs would be long term implementation.

Chairman Talbot added that some people are buying the nest thermostats and in the past they didn't have that internet control technology before now, hundreds of thousands of customers may have these kinds of gadgets. Chairman Talbot stated that it is the future to have this kind of data driven optimization and it would be great to know that we have that ability.

Mr. O'Rourke stated that the Board appreciates the work that is going to be done from both groups. Mr. O'Rourke has a logistics/implementation question these kinds of initiatives typically can be a little invasive because there are interviews with the need for staff to go in and out of the organization with you. Mr. O'Rourke commented that it sounds like both groups are doing some sharing of information which is helpful to that end, but what expectations might be in the next several months around how invasive it will be in terms of the day-to-day operation of RMLD. It is obviously something that has to happen, but because we are doing two of these studies in parallel it makes it a sort of a multiple-cave affect, it is not easy to access.

**Ken McNeill, Vice President, Booth & Associates – Reliability Study (Attachment 2)**

**Mr. McNeill presented the scope of the Reliability Study for the RMLD.**

Mr. O'Rourke commented it is more a question around should we expect some productivity issues because if everybody is being interviewed or being escorted around the substations, there are fewer resources.

Mr. McNeill responded that the members of the Booth team will be less invasive as possible and they have contacts for escorts from the substation group and for the distribution group, they are charged to the schedule with their contact point and time. Again, with substation we will have to have escorts to go through the stations and with the distributions as long as we have maps that are relatively geographic in nature he does not anticipate needing escorts full time for the whole week they are here. Mr. McNeill explained that David Huffstetler who is head of the T&D group at Booth, would be expected to have some questions and spend at last one or one and a half days in-house with the GIS. Mr. O'Rourke commented that it is a necessary process, but wanted to hear about Ms. Cruz' process.

Ms. Cruz stated that her group has identified RMLD staff they want to interview and there is a list. Then there are touch points with staff comes if we need additional information. She has observed that whenever there is an organizational assessment it tends to create friction, nervousness within the utility therefore there is an impact on the cultural level. The communication being very clear as to why we are doing this has to be said up front, has to be continuously reinforced. Mr. O'Rourke commented that he was in agreement. Mr. O'Rourke stated that, the Board fully supports this but again, because there are two studies it adds to the complexity and the timing of November, December and people take vacation during that time. Mr. Rupp stated that since RMLD is flexible with their expectations in terms of scheduling, Leidos can also be flexible especially given the priorities that get in the way, such as storm restoration and bad weather. It is better for us to stay away and let the schedule slide because that is the reality of the world we work in and if RMLD is flexible in that regard, we are flexible in that regard. Otherwise, we are trying to get in and get out and minimize the duration and destruction.

**Report of the Committees**

**Town of Reading – Charter Review – Vice Chair Pacino**

**An update will be provided on the status of where the Charter Review Committee is in the process.**

Mr. Pacino reported that the Charter Review Committee is winding down. There have been some changes, but the wrong version was on the town's website which has been corrected. The deleted paragraph that was covered by state law and the paragraph that the Board defines the manager terms and employment are the only changes made at this point. The RMLD legal counsel suggested that we have a contrary legal opinion from the Town of Reading legal counsel. Mr. Pacino stated that he has shared this with Chairman Talbot and Ms. O'Brien to be reviewed by RMLD legal counsel. Mr. Pacino suggested that the Board could meet with the Town of Reading Board of Selectmen this could be discussed, to find middle ground between the two legal counsels. There is a conflict between the two legal counsels. Chairman Talbot added that a joint meeting on a number of topics is a great idea.

Mr. O'Rourke clarified as it stands now this is being reviewed by counsel and we have up to date the changes, but are there more changes being contemplated. Mr. Pacino reported that there will be no more changes contemplated that will affect the RMLD. Mr. Pacino said that the timetable that this will be going to a Town Meeting in January. The next meeting is scheduled for November 24 with the background material being written and a couple of meetings in late December. Mr. O'Rourke asked that Mr. Pacino circulate the latest version. Mr. O'Rourke asked if each of the respective counsels are looking at the same piece of information. Mr. Pacino said that he shared the RMLD's legal information with the Town of Reading legal counsel which they have a different interpretation which has been passed to the Department. Mr. Pacino stated that it would be helpful to for the Board to meet with the Board of Selectmen because there is a disconnect. Mr. O'Rourke asked if there is a next step. Chairman Talbot asked Ms. West how a joint meeting of the RMLD Board and Board of Selectmen can take place. Ms. West suggested that Chairman Talbot work through Bob LaLecheur to set a joint meeting. Chairman Talbot asked Ms. West if she had anything to add. Ms. West stated that she is the liaison for the Board of Selectmen to the RMLD Board of Commissioners.

**General Manager Review Committee – Commissioner Stempeck**

Mr. Stempeck reported that the General Manager Review Committee met before this meeting. The intent of the meeting was to review the criteria which historically evaluated the performance of the General Manager at the RMLD.

Mr. Stempeck noted that some of the criteria was updated and changed. The full Board was in attendance at this meeting. Each commission member will fill out the evaluation form and the results will be tallied then make a recommendation on the General Manager compensation. Mr. Stempeck commented that we are out of date, per the General Manager's contract and the compensation will be retro back to the contract date.

Mr. Stempeck said that many items were accomplished in a year's time. When you add up the cost savings associated with the changes and accomplishments it is a savings in excess of \$300,000. The level of change that needed to happen and the significant amount of that being legal. It is reflective of what has been accomplished. The recommendation is that the changes to the review document be incorporated and bring those changes to the next meeting.

## **Report of the Committees**

### **General Manager Review Committee – Commissioner Stempeck**

Chairman Talbot added that Ms. O'Brien has been focused on granular things. So much of the basic data collection and maintenance to the grid has not been done. Chairman Talbot commented that Ms. O'Brien is an engineer and are lucky to have her. It is simple to put into a simple sound bite the things she has been doing. Chairman Talbot said that he would come in to sign the account payable warrant with the labor legal bills have declining immensely.

Ms. O'Brien stated that the labor legal fees were looked at and going to another legal counsel that had similar credentials at a little less than half the cost, and working groups were created in all the unions to mitigate grievances. When she started there were eight union grievances and four arbitrations, which represents an \$80,000 cost savings and another \$90,000 with the elimination of grievances. Every single arbitration and grievance was eliminated. The costs were alleviated by having the working group meetings. Ms. O'Brien explained that the Career Development Plans were created and have been used in NEPPA and APPA, by doing this in house saved \$60,000. Restructuring the line operations to two man crews and developing an apprentice program saved \$30,000 to \$50,000. Every single request for proposals that is written in-house saves approximately \$50,000 to \$100,000 apiece. Ms. O'Brien explained that since Mr. Jaffari has come on board we have written the tree trimming, reliability and the organizational study documents. There have been seven or eight RFP's that have been done over the last year. Ms. O'Brien noted that ninety percent of RMLD employees have been added to drug and alcohol testing including management. Ms. O'Brien noted that the testing will result in a slight increase in cost because we have to pay them, however, from a safety standpoint that is priceless. Chairman Talbot asked what was nonexistent in terms of mandatory. Ms. O'Brien responded there was CDL Alcohol and Drug Testing which is mandated by the Department of Transportation. Typically in a utility there is a lot of more employees that have safety sensitive positions that do not drive CDL's with a gross vehicle weight over a certain number of pounds. Ms. O'Brien noted that it is the technicians and engineers are also subjected to high voltage and safety sensitive equipment, the majority are now part of the testing program, accomplished by the working group discussions. Chairman Talbot wanted to thank Ms. O'Brien and the employees for those changes. It goes back to the good granular management in order that these changes can be made. Ms. O'Brien added other cost savings measures included a system road map integration linking the GIS with outage management to develop a roadmap, Mr. McNeill of Booth & Associates will be creating another road map for an independent review. The master site facilities plan garnered savings. Ms. O'Brien pointed out that she and Mr. Jaffari by creating the Technical Services group, to implement a preventive maintenance program group that saved \$200,000. This new group involves existing RMLD employees with the development of a journeymen tech program. Each substation will have three year cyclic testing performed in house. The point of the consultants is that we have roadmaps of what has to be done. From a safety or core business aspect for maintenance had to be put place in immediately with a lot of change. Chairman Talbot asked if the \$300,000 is accurate. Ms. O'Brien commented that the \$300,000 is reflective of the maintenance program savings. Chairman Talbot said that the truck vehicle handled by middle management, the RMLD has been taken care, the trucks are back and the policy has been corrected.

Mr. Pacino stated that he is excited the direction is going from reactive to proactive. Mr. Stempeck added that we could be the role model for the rest of the community in terms of being proactive. Mr. Stempeck said that what happened at the RMLD was addressed and others should address them as well.

Ms. O'Brien added that she has had senior staff meetings, division meetings and companywide meeting to discuss the organizational and reliability study. The RMLD wants to have the appropriate amount of employees, skilled to do the job and meet the future especially with sales being flat. It is very important that the RMLD has the right organizational structure. Ms. O'Brien said that the wages need to be accurate in order that we maintain the third lowest rate in the state. Staff will be guided on this. Mr. O'Rourke said that is good to have communications it is an effort to improve not an effort for cost reductions.

### **General Manager's Report – Ms. O'Brien – General Manager Preliminary Budget Projection for Fiscal Year 2016**

Ms. O'Brien informed the Board that this time of the year, commercial and municipals ask for power costs for fiscal year 2016 budgets. Ms. O'Brien commented that she met with Integrated Resources to make sure the six year financial budget plan and the forecasted projections for power supply were in line. Ms. O'Brien stated that an e-mail was sent to Bob LaLecheur and this was discussed in a Town of Reading staff meeting this morning, there is a three to five percent increase in power supply. Ms. O'Brien mentioned at this time we are not projecting any base rate increase for fiscal year 2016, however, Ms. O'Brien pointed out that the RMLD was down three percent in sales most likely weather related because the summer was not hot, this is being continuously monitored.

Ms. O'Brien said that as she will be doing a presentation to each of the respective Board of Selectmen and will inform them of the three to five percent power supply increase which is a pass through. There is some volatility which will be analyzed monthly and if there is any change they will be notified as soon as possible. The transmission and capacity costs will be increasing significantly in 2017 and 2018. They all have copies of the six year plan. Mr. Stempeck added that NSTAR announced that they will be having a 37% increase in which he is a customer in another location.



**General Manager's Report – Ms. O'Brien – General Manager  
Preliminary Budget Projection for Fiscal Year 2016**

Chairman Talbot asked why NSTAR's increase is so significant. Ms. O'Brien responded that NSTAR does not procure long term contracts because they are deregulated and secure new contracts every six months. They project ahead then reconcile for any losses. It could be that they under collected over the past six months. Also, they have to pay their share of transmission and capacity.

**General Discussion**

Mr. Pacino asked if the open vacancy has been addressed and would like the Department to look into this. Ms. O'Brien said that she will look into this.

On another matter, in the absence of CAB member Dave Mancuso, Ms. O'Brien reported that the CAB at their last meeting gave her policies, these have been included in the legal scrubbing. Ms. O'Brien said that she would like a Policy Committee meeting for RMLD Policies 9 and 19. The Board will try to have a Policy Committee meeting before the next Board meeting if possible.

**RMLD Board Meetings**

**Wednesday, November 12, 2014**

**Thursday, December 11, 2014**

**Citizens' Advisory Board Meeting**

**Wednesday, November 19, 2014**

Mr. Pacino will cover this meeting.

**Executive Session**

Although, Executive Session was posted there was none.

**Adjournment**

At 9:15 p.m. Mr. Pacino made a motion seconded by Mr. O'Rourke 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.

Philip B. Pacino, Secretary Pro Tem  
RMLD Board of Commissioners

**Reading Municipal Light Board of Commissioners**  
**Regular Session**  
**230 Ash Street**  
**Reading, MA 01867**  
**January 29, 2015**

**Start Time of Regular Session: 7:32 p.m.**  
**End Time of Regular Session: 9:40 p.m.**

**Commissioners:**

**David Talbot, Chairman**  
**John Stempeck, Commissioner**

**Philip B. Pacino, Vice Chair, Secretary**  
**Thomas O'Rourke, Commissioner**

**Staff:**

**Coleen O'Brien, General Manager – Absent**  
**Bob Fournier, Accounting/Business Manager**  
**Jane Parenteau, Integrated Resources Manager**

**Hamid Jaffari, Director of Engineering and Operations**  
**Jeanne Foti, Executive Assistant**

**Citizens' Advisory Board (CAB):**

**Dave Nelson, Vice Chair**

**Climate Advisory Committee:**

**Ron D'Addario, Member**  
**Michael Scola, Associate Member**

**Call Meeting to Order**

Chairman Talbot called the meeting to order and stated that the meeting was being videotaped; it is live in Reading only.

**Opening Remarks**

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

**Introductions**

Chairman Talbot acknowledged CAB Member Dave Nelson and Climate Advisory Committee members Ron D'Addario and Michael Scola.

Chairman Talbot reported that Vice Chair Pacino will be the Secretary for this evening's meeting.

**Public Comment**

There was none.

**Report of the Chairman**

**Update on Vacancy RMLD Board**

Chairman Talbot reported that there is one candidate for the vacancy of the RMLD Board. Chairman Talbot stated that the meeting where the candidate would have been considered and presumably appointed had been cancelled due to the snow. The consideration will be taken up again next week.

**Photovoltaic Discussion – Establishing a process for local siting**

Chairman Talbot reported that the RMLD would like to move forward in the community to investigate how to do portable tanks, solar power to the extent possible in the district. This is something that Ms. O'Brien and Ms. Parenteau have been working on. Chairman Talbot stated that his understanding is that one of the key considerations going forward is that you need to have a site and only then you can really crunch the numbers to see what models could work. Chairman Talbot said that he only wanted to put that out there, that this is something that only the Board had discussed and perhaps getting citizen input could help find sites that could be town, state or DOT land, right-of ways, MBTA right-of-ways anything goes. Chairman Talbot stated that we may need help identifying what could be a possible site.

Ms. O'Brien asked Ms. Parenteau to give an update on some of the customers and towns that the RMLD is working with for photovoltaics. Ms. Parenteau reported that in the past the RMLD had actively worked with the town of Reading when Mary DeLai was employed with the town as well as the Town Manager and Planning Department. Ms. Parenteau stated that she was recently contacted by Jessie Wilson of the Reading Community Planning and Development Department and will be meeting with the area Metropolitan Area Planning Commission. Ms. Parenteau said that they went out with an RFP for a solar developer which was recently awarded to Blueway. A meeting will be scheduled to look at the sites that were reviewed previously to determine if the economics is there. Ms. Parenteau reported that one of the problems with siting some of the solar for municipals is that the RMLD's rates are really lower than that of an Investor Owned Utility which make the economics that much more difficult.

**Photovoltaic Discussion – Establishing a process for local siting**

They are going to look to see if there are any creative ways to do that, additionally we have been meeting with various developers exploring options to take the RMLD's existing Green Choice Program and to put something tangible within the service system. Ms. Parenteau said ideally we would like four sites in the towns that the RMLD serves and are trying to develop the economics of how do you site the photovoltaic, how do you set up the program so customers can sign up for this and they can actually receive the credit with either an initial capital investment or something at a monthly basis to offset the credit. Ms. Parenteau stated that they are working on those factors and have met with four or five developers going back and forth and it always comes down to do we have a site that is available.

Ms. Parenteau reported that with the current SREC Program the value of those SRECs are determined by the type of site. The DOER does not want land being occupied for this so that has less or no value. We are looking at carports, rooftops, brownfields which are all viable candidates and are very limited as well within the RMLD's service territory. Ms. Parenteau stated that there are a lot of factors that go into this and they are trying to work and develop those programs. Ms. Parenteau said if anyone has any ideas that they are glad to work with them.

Chairman Talbot asked where the school department was with this right now. Ms. Parenteau replied that they met and looked at various buildings within the town of Reading. The MAPC had to go out for a second bid because that actual developer had defaulted. Ms. Parenteau said that a lot of the buildings had roof issues in terms of the age of the roof or the way it is facing. Ms. Parenteau reported that at the last meeting they were looking at the hockey rink, but they had not gotten very far and believes that they are going to follow up with the town to investigate further.

Chairman Talbot asked what input from the public if any would we need, what leg work do we need done that we do not have the capacity to do to help find sites. Chairman Talbot said the notions that he has had the DOT and MBTA right-of-ways that go through our towns, there could be land at the margins, there is also the big box stores, a huge parking lot at Jordan's and Home Depot there is a lot of space out there. Chairman Talbot asked if this is something that they would have to do themselves or could we put something together that would be mutually beneficial. Ms. Parenteau replied that it would have to be a win, win situation for everyone and would have to something that would fit within RMLD's structure. Ms. Parenteau stated that you have to develop a program that customers are willing to participate in, if we have something tangible than that is one step better than having a Green Choice Program where they are supporting renewable projects that may not be located in our area. Ms. Parenteau said that cost and site are really the two main factors that we need to look at. Chairman Talbot asked then you can't look at cost unless you have sites. Ms. Parenteau replied, correct.

Chairman Talbot asked if we need sites what the process for finding them would be. Commissioner Stempeck asked if wetlands were off limits because the town of Reading has a huge amount of wetlands. Ms. Parenteau replied that she is not an expert in that field.

Chairman Talbot said that informally there are some gentlemen attending the meeting who have an interest in this issue and asked if this was one topic that they could follow up with offline and then asked Ron D'Addario of the Climate Advisory Committee to speak. Mr. D'Addario introduced himself as the temporary Chair of the Climate Committee in the absence of Dave Williams. Michael Scola introduced himself as a town resident and as someone who volunteers his time with the Climate Advisory Committee. Mr. Scola stated that some of the topics the group has decided to go for was the MBTA Commuter Rail station in town maybe with a solar canopy. Mr. Scola said that he had some submittals for solar canopies that he had received at a DOER convention in Boston. Mr. Scola has also identified approximately nineteen exterior lights at the library project which was just awarded to Griffin Electric and asked at a meeting if he could go forward with a substitution request. Mr. Scola reported that he had a company out of Florida draft a plan of the land of the library as to whether it would be a go or not and that there were some possibilities. Mr. Scola said what was talked about earlier about the ice rink and the right-of-ways at the train station that there are a lot of linear feet that is south facing that they have some ideas that the Board may be interested in.

Chairman Talbot wondered if it would be sensible for inquiries to be made with MBTA or DOT about that land that Mr. Stempeck was mentioning and bring it back to the Department at the next meeting or the one after that. Chairman Talbot stated that this has to be something where every couple of months we can check in, keep it going offline and then bring it into the meeting. A process for asking about different areas that to our common sense could be used for this purpose. Mr. D'Addario said that this is something that the Climate Committee is excited to help and that a lot of times while doing these projects their group has not been utilized that well by the town. Mr. D'Addario stated that they have expertise looking for a place where they can have an impact and if the group could be a help to Ms. Parenteau to check out the wetland situation and what is possible or working on the MBTA right-of-way. Mr. D'Addario mentioned that it would be good to meet to understand the situation better. Mr. D'Addario reported that they were a little involved with the study group that came and one of the recommendations was the solar farm. Mr. D'Addario said that his group would welcome the opportunity to work with the RMLD and make something happen.

### **Photovoltaic Discussion – Establishing a process for local siting**

Chairman Talbot stated that he would defer to the General Manager on process and just wanted to bring this up and if there is a role for members of the public to interface with staff it is really up to Ms. O'Brien and would move it offline from here.

Chairman Talbot asked Ms. Parenteau that with everything he is reading, the prices are dropping at an exponential rate, we know that our transmission costs are rising, peak costs a lot so when the economics now are close or not there, ten years out does that change to the point where the RMLD could do this directly. Chairman Talbot asked is it possible to do that analysis where if we procured and subcontracted the construction we actually own generation again. Ms. Parenteau replied, that she and Mr. Jaffari are looking at that as well and are going to Middleborough next week to look at distributive generation. Ms. Parenteau said that they will be presenting options to the full Commission for voting in terms of Capital Projects to include return on investments and those types of factors so the Board can make those decisions based on the numbers that they have.

Mr. Stempeck mentioned that one of his clients is out in Shirley, MA and there are acres of PV panels. Ms. Parenteau said that location is really specific and right now the DOER is shying away from the ground mount because it is taking up a lot of space. Ms. Parenteau stated that they really want you to look at rooftop canopies so things of that nature have more value, it is based on where we are located and we are working with a lot of our commercial customers to maybe lease space. There are opportunities, but again you have to delve into the numbers and make sure that it makes sense as an opportunity for the light department and our customers as well.

Chairman Talbot asked that long term and as the numbers get better and private parties are doing it themselves as they are now, the more that happens the more it erodes our revenue. Ms. Parenteau replied that it has to be put into the model when we make those investments we have to recover those monies and the only way for the RMLD to recover those monies is through our rates. There is a rate impact associated with all those things, solar is one of those things where as a system we are peaking four or five o'clock in the afternoon so when you put up a megawatt worth of solar for peak you are getting about 250 kilowatts worth of reduction. Ms. Parenteau said that this is an option taking the portfolio approach where we do not put all of our eggs in one basket. We are looking at a peak demand reduction program, distributive generation, solar and battery storage, which are definitely some interesting things going on.

Mr. Stempeck said to Mr. D'Addario's point if individuals were allowed to invest in a project that would certainly help with the economics, they would get a return on investment on an individual level as well as the four towns. Ms. Parenteau stated that she would be happy to attend one of their meetings to work out the logistics and noted that RMLD employee Laurie Ann Sylvia is a member of the Climate Committee and is a very good conduit for sharing what goes on. Mr. D'Addario praised Ms. Sylvia for her help and professionalizing the committee with her administrative capabilities and her contacts and that she is a huge asset.

Chairman Talbot thanked Mr. D'Addario.

### **Update On LED Streetlight Replacement Program**

Ms. O'Brien reported that all the pilot locations have been completed and have met with all of the towns. Ms. O'Brien stated that all of the town managers are happy with the locations that were selected, with minimal feedback. There has been some directional adjustments where some of the lights may have been tipped a bit, but not very many. Ms. O'Brien said that in this pilot program we will continue to take comments and what we are doing with other lights is that we are still buying bulbs not the heads. If the bulb burns out it will be replaced until we get to the point where there is a vote to go forward with the LED Conversion Program which is tied in with the grant that the RMLD received. The RMLD will then go out for an RFP using lighting standards that generally utilities use for streetlights and it depends on the type of surface, the width of the road, and whether or not it is residential or commercial area. Just as the original streetlights were put up every 150 feet, correlating with pole placements while completing this conversion anything that falls out of the standard for illuminating a list will be sent to the town for them to make the decision. We can tell them what the standards are but if they want extra lights or not that many lights that liability is with them.

Ms. O'Brien stated that North Reading still owes the RMLD a list of streetlights that were specifically shut off and the RMLD needs to know whether or not they will be replaced with LEDs or if we are taking them down altogether. There really has not been any complaints for the most part people and the police like them, it is a successful program thus far.

Chairman Talbot stated that the backdrop to this is that he had asked Ms. O'Brien and Mr. Jaffari about a couple of instances where lights were directly across the street from each other and did we really need to have both of them. This is an opportunity to take away a light if it is not needed, it saves the RMLD \$500 and saves the town the expense of the electricity.

Mr. Nelson asked if someone wanted to respond as to what they think of the lights there is a Gmail link on the website. Ms. O'Brien replied, yes. Ms. O'Brien said that the RMLD does not want to make any assumptions as to what lights are kept.

### **Update On LED Streetlight Replacement Program**

Chairman Talbot stated that the perfect example is right here on Ash Street. Right across the street there are two streetlights about twenty feet away from each other and does not understand how that could be.

Mr. Pacino stated that we make sure that if we take a light out that we are not endangering the public safety. Chairman Talbot said that all we are doing is letting the town know do you really want to have lights every 150 feet or all in this one spot or across the street which is anomalous to the rest of the street. Mr. Pacino stated that many years ago we did get a request that certain lights be turned off in town and that the Department did have verification with the town to do that and someone here on Main Street where there was a tragic accident and we all got sued. Chairman Talbot said that was a different issue, shutting off one that was up there in sequence, he was talking about alerting the town when there is two next to each other that does not conform to any standard.

### **Charter Review Changes**

Nothing at this time.

### **Approval of Board Minutes**

#### **July 24, 2014**

Mr. Pacino made a motion seconded by Mr. Stempeck to approve the Regular Session meeting minutes of July 24, 2014 as presented.

**Motion carried 4:0:0.**

#### **September 17, 2014**

Mr. Pacino made a motion seconded by Mr. Stempeck to approve the Regular Session meeting minutes of September 17, 2014 as presented.

**Motion carried 4:0:0.**

### **General Manager's Report – Ms. O'Brien – General Manager**

#### **Update on Organizational and Reliability Study**

Ms. O'Brien reported that on January 8, the RMLD held the annual T-Shirt Award Ceremony three out of the four commission members were in attendance. The children were very excited to describe their t-shirts that represented electric safety and electric conservation. Ms. O'Brien said that it was a fun night and Mr. Pacino the longest running attendee at twenty years, the kids were very happy and the awards will help the school's art programs.

Ms. O'Brien reported that on January 21, she and Mr. Jaffari attended a MAPPO meeting on surplus property disposition that was presented by the Inspector General's Office where we brought some of our questions and it was a very well attended and informative meeting.

Ms. O'Brien reported that on February 2, she is meeting with the new Town Administrator, James Boudreau in the Town of Lynnfield.

On February 9, Leidos who is doing our Organizational Study will be coming back to the RMLD for two days to discuss the current situational report which is in draft form. Mr. Jaffari reported that the Reliability Study is ongoing. Booth & Associates assessing the current situation and the firm has been asking for data on the lines, substations, status of the system. The big ticket item will be designing an appropriate foundation for the smart grid, which depends on accuracy of GIS information. Currently, they are performing the gap analysis to develop the right model. The GIS database is incomplete and inaccurate. We are working together trying to build the template and model that is right for RMLD. Mr. Jaffari stated that among the three options like ArcFM, MultiSpeak, and Milsoft we are trying to pick the best fit without going to a major expense. Something that can be usable by all other interfaces. Mr. Jaffari reported that this process is going well and he is pleased with the findings and recommendations that they are going to bring forward and he is looking forward to the recommendations that the RMLD can use. Mr. Jaffari said that they had also talked about the need for a new substation in Wilmington that will be recommended for construction in 2018, 2019 & 2020. In the year 2018 we will start the search for the land, property, and permitting, 2019 for purchasing the equipment (i.e. transformers and switchgears) and 2020 for commissioning.

Chairman Talbot asked if they are indicating on the GIS exactly where the existing streetlights are. Mr. Jaffari replied, that he has asked them to give us the list of the primary attributes and the secondary attributes. The primary attributes are the ones that we need immediately, such as Milsoft for the engineering models. The secondary attributes are the ones for maintenance, data, record keeping, including the streetlights, the age of the poles, how many anchors, pole attachments and stuff like that, which are not being used in a general databases for interface with the other technological Sub systems we will be using. Mr. Jaffari stated they will come in handy for statistical reasons and follow up maintenance.

**General Manager's Report – Ms. O'Brien – General Manager  
Update on Organizational and Reliability Study**

Chairman Talbot asked if the streetlights were in the GIS right now. Mr. Jaffari replied, that unfortunately the database has not been kept up-to-date and we do not trust the data. However, having said that he would guess that maybe 50% to 60% of the street light information is there. We asked Booth & Associates to inspect GIS data and look at what is there, what's not there and what we need to add. They are in the investigation phase trying to pick the right template with required attributes.

Chairman Talbot asked that when they aren't being replaced, can you hit a button and get the GPS coordinates. Mr. Jaffari replied, yes and you will be able to see the picture of every pole as well. Mr. Jaffari stated that they have already investigated to see what the best approach to collect all data. They will recommend to whether it would be best to build on to what we already have or start the data collection from the beginning. Mr. Jaffari said that based on discussion held with the experts the best approach would be to start collecting data from scratch. Quotes have been received coming in between \$400,000 to \$600,000 to collect data in the entire system. Mr. Jaffari reported that this is money well to be spent because GIS data is the basis for engineering analysis, which can eliminate the need for hiring consultants in the future as well as developing the foundation for the future distribution automation, demand response, distributive generation, photovoltaic system, and outage management system. All of these subsystems will be operating from the SCADA.

Ms. O'Brien stated that some of the data was collected a while ago but then there was a lack of keeping it up to date and then some of the data to make it filled in was default data. Now you have a combination of what's as built, what's not as built, so what Mr. Jaffari is talking about is that the attributes of the lines where you are doing voltage drop calculations based on the wire sizes is one and then you have all the other attributes like the pole attachments which are other layers of what you would use in an analysis. Ms. O'Brien said that it gets to the point where so much has changed from when they first started collecting the data that you do not know what is real, default, or missing. Ms. O'Brien reported that we will collect the streetlight data again when we go out to each pole, the age, height, anchors just soup to nuts on every pole. That is GPS latitude and longitude, then overlay it over the Assessor's map and that is the start of the layered map. Mr. Jaffari stated that they are also going to take a picture of every pole to have it in the database. Ms. O'Brien stated that you click on it and will be able to see a picture of the pole. Mr. Jaffari reported that this will be done for identification purposes. The Department has created two processes in order to keep data up-to-date moving forward. The first process is the data collection of all assets we have out there now and the second process is keeping the GIS updated moving forward so that we do not have to go back and do this five years down the road. Mr. Jaffari said that any new construction that is being designed is supposed to have a GIS drawing attached to the work order. Any changes made out in the field once implemented will be marked up as built drawing, which will be brought back to the GIS analyst to update the database. This way the RMLD will not fall behind. Mr. Jaffari stated that keeping this information updated will be an ongoing process to make sure that we have reliable data and this does not happen again.

Mr. Stempeck commended the RMLD for performance during the recent mega storm Juno, as he understands response was ready but the reliability seems to have been built in. This makes it so obvious that nothing happens and is so difficult to get to that point. It takes a lot of investment to make it that obvious with the tree trimming, the poles and eliminating snow. Ms. O'Brien said that she would like to thank the state, the driving ban really helped with pole hits which are a big part of storm damage.

Mr. O'Rourke thanked Ms. Foti for providing support during the storm making sure the staff had food to eat and all the support for all that she does. All Commission members thanked Ms. Foti as well. Mr. Jaffari thanked all staff for being well prepared and ready to hit the roads if it was necessary.

Mr. O'Rourke asked if there was a process and timeline for the Organizational and Reliability Studies to come before the Board. Ms. O'Brien replied that will take place later in March and that right now we are reviewing and making sure that they have captured all the changes. Mr. O'Rourke asked if they were coming in February. Ms. O'Brien replied yes, to discuss the current situation and that the current situation isn't necessarily the recommendation it is what you have and then the next step will be what you need to do and that we are approaching the first step right now. Mr. O'Rourke asked if in March or April they would see the report. Ms. O'Brien replied that the storm has put this process about a week behind and that were supposed to be here this week and it has been put off until February 9.

Ms. O'Brien reported that the RMLD will give a presentation to the Board at the next meeting on the Peak Demand Reduction Program where on January 22 the RMLD put on their first customer invited Peak Demand Reduction presentation with a total of sixteen customers in attendance, this was a lunch and learn workshop. Ms. O'Brien stated that Tom Ollila did a fantastic job as the RMLD's Peak Demand Reduction Program and Energy Efficient representative, there were also representatives from Tangent. Ms. O'Brien said that this is where we give the customer incentive for curtailing and helping the RMLD with our peak. Ms. O'Brien asked Ms. Parenteau to give a brief synopsis of what occurred during the workshop and said that at the next meeting have Tom Ollila give a brief slide presentation.

**General Manager's Report – Ms. O'Brien – General Manager**

Ms. Parenteau reported that they have been working on this Peak Demand Reduction Program since June 2014 where they have developed a marketing side to the program where they go out to visit the customer. They currently have over twenty customers who have signed up for this voluntary program where customers get notification on a monthly basis when the RMLD is approaching a transmission or system peak. Ms. Parenteau stated that the system peak occurs during the summer time while transmission peaks occur every month. The notification is via email with a two hour window where they are asked to do some low reduction programs. There are some measure and verification tools that the RMLD is currently utilizing, the customers have access to a dashboard where they can actually see the reduction graphically on their site which has been very well received. Ms. Parenteau said that the hope of this program is that we share the savings with the customer, the customer keeps fifty percent of the savings on a monthly basis during the transmission and capacity peak. As transmission and capacity is significantly projected to increase in the upcoming years the RMLD finds this to be a very important program for the customer to get their feet wet and achieve some savings. Ms. Parenteau stated that the RMLD also receives fifty percent of the savings and this benefits all of the customers. Ms. Parenteau reported that the towns have been approached where North Reading and Reading have signed up, Wilmington is a little busy right now with their new high school coming online but is hopeful to get them on board. The RMLD is starting with the large customers and will then gear this down to the smaller customers as well as the residential customers. Ms. O'Brien asked if this program will be offered quarterly. Ms. Parenteau replied yes, this will be a quarterly program and in addition there will be video tapes in hopes to update the video on the RMLD website for employees, Board members and customers to get a feel for what the program entails. Ms. Parenteau said that they are trying to make this program seamless with ease of implementation so even if you raise that thermostat a few degrees for one half hour instead of one full hour you will still get some reduction. Ms. O'Brien thanked Ms. Parenteau and her group for a great job.

**Power Supply Report – December 2014 – Ms. Parenteau (Attachment 1)**

Ms. Parenteau reported that RMLD's load for December was approximately 59 million kilowatt hours, which is approximately a 3% decrease compared to last December. RMLD's energy costs for the month was approximately \$2.75 million, equivalent to around \$0.047 per kilowatt hour.

The December Fuel Charge Adjustment was set at \$0.05 per kilowatt hour and as a result, RMLD under collected by approximately \$82,000 resulting in the Deferred Fuel Cash Reserve balance of \$5.8 million dollars.

RMLD purchased 10% of its energy requirement on the ISO spot market at an average cost of \$26.32 per megawatt hour. On the capacity side, RMLD's peak demand for December occurred on December 8 at 109 megawatts. This compares to last December's peak at 116 megawatts. The monthly requirement for capacity was set at 209 megawatts and total capacity dollars for the month of was \$1.4 million, which is equivalent to approximately \$7 per kilowatt month. RMLD's December capacity and energy average costs were approximately \$.07 also for the month of and December 14.2% of RMLD's energy was purchased from hydro generation.

As of December 2014, RMLD had received 16,513 Renewable Energy Certificates (RECs) with the current estimated market value of approximately \$980,000.

RMLD's cost for transmission for the month of December came in at about \$812,000 which is a 13% increase from November 2014.

RMLD processed one hundred sixty-eight residential rebates totaling \$9,000. Additionally, thirty-one residential customers received energy audits at a cost of \$6,200.00. The projected energy reduction on the residential side year-to-date is 156 kilowatts for capacity and about 99 megawatt hours. On the commercial side ten commercial rebates were processed for approximately \$72,000. The projected capacity reduction on the commercial side is 239 kilowatts and 608 megawatt hours for both residential and commercial.

Ms. Parenteau reported that the \$250,000 LED grant awarded by the DOER will be received over the next 1.5 years, \$125,000 will be geared towards the new LED streetlights and the balance will be split between the commercial and residential customers. The sum of \$75,000 has been earmarked for the commercial side focusing on interior and exterior LED upgrades, \$50,000 has been earmarked for the residential side where the RMLD is working with a vendor to upload an RMLD online store to make LED light bulbs available to customers at a discounted value. The administrative cost for the online store access is just under \$5,000 and hopes to have \$45,000 worth of reduction in cost for the residential customers.

**Engineering and Operations Update – December 2014 – Mr. Jaffari (Attachment 2)**

Mr. Jaffari reported on the December capital improvement projects, construction projects, new customer service connections, special projects and routine construction.

Mr. Jaffari stated that the Routine Construction project category is \$980,383 year-to-date in the month of December.

**Engineering and Operations Update – December 2014 – Mr. Jaffari (Attachment 2)**

Mr. Jaffari reported on the Maintenance Programs, which each plays a major role in the system reliability. These programs are:

**Aged/overloaded Transformer Replacement Program:** we are making progress in replacing the aged padmounts and overhead transformers upgrade.

**Pole Testing Program system-wide:** Last year RMLD tested 645 poles of RMLD owned poles, which 390 passed, 233 failed of which 21 have been replaced to date and 14 transfers have been completed to date. Approximately 22 poles were condemned and all 22 were replaced immediately.

**13kV and 35kV feeders quarterly inspections for the month of December:** No problems were found.

**Newly instituted Manhole Inspection Program:** under this program, RMLD's underground assets will be checked to make sure they are safe and secure. Though the program has not yet taken off, fifty of 1,225 identified system wide manholes have been inspected at 4% complete to date.

**Porcelain Replacement Programs:** This is an on-going program and there are 317 porcelain cutouts remaining to be replaced which brings the program at 88% complete to date.

**Substations monthly Infrared Scan Program:** This is a great program because it identifies any possible potential failure of parts and devices at our substations as well as the major industrial parks in our system. For the month of December: UPG has completed testing 95% of our breakers, transformers and relays in all three substations. Thus far there are only two more breakers left to do. We are waiting on some parts for these two breakers before they can be tested and then this program will be 100% complete.

Mr. Jaffari reported that there are other maintenance programs such as the Step-down Area Upgrades which is on hold due to inclement weather conditions.

Mr. Jaffari reported on the double poles situation to date: There are 424 double poles system wide in NJUNS database of which 41 are in RMLD's database waiting for transfer and the rest are in the Comcast or Verizon cue to be transferred so they can be removed. The RMLD through the new program continuously checks the status of these poles.

**System Reliability Report:**

Mr. Jaffari reported on the System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency (SAIFI) and the Customer Average Interruption Index (CAIDI) stating that the RMLD is well below the national and regional average for SAIDI and CAIDI but the SAIFI is slightly above the regional average for 2014. This is due to unusually high number of vehicle accidents that we experienced in 2014.

Mr. Jaffari reported on the causes of outages for the month of December, 30% were equipment failure, 20% were wildlife and trees were about 32%. Mr. Jaffari is hopeful that with the new tree trimming program that has started this year these numbers will go down. Mr. Jaffari stated that Mayer Tree services is doing an exceptional job, they will also be providing the RMLD with IVM plan by March which will be presented to all the communities tree wardens to start the eight foot cut.

**Financial Report – December 2014 – Mr. Fournier (Attachment 3)**

Mr. Fournier presented the December Financial Report which represents the first six months of fiscal year 2015. The month of December change in Net Assets resulted in a net loss of \$121,000 which decreased in the year to date Net Income approximately a little over \$3 million.

Year to date budgeted Net Income was approximately \$3.9 million with the resulting Net Income being under budget by approximately \$843,000 million or 21%. Actual year to date Fuel Revenues exceeded Fuel Expenses by about \$1.6 million.

Year to date Base Revenues were under budget by \$202,000 or 1.8%. Actual Base Revenues were \$11 million compared to the budgeted amount of \$11.2 million.

Year to date Purchased Power Base expenses were over budget by \$200,000 or 1.4%. Actual Purchased Power Base costs were \$14.8 million compared to the budgeted amount of \$14.6 million.

Year to date Operating and Maintenance (O&M) expenses combined were under budget by \$610 or .01%. The actual O&M expenses were \$7.1 million. Depreciation expense and voluntary payments to the towns were on budget.



**Financial Report – December 2014 – Mr. Fournier (Attachment 3)**

Operating Fund was at \$10.5 million, Capital Fund Balance is at \$5.6 million, Rate Stabilization Fund \$6.7 million, Deferred Fuel Fund a little over \$5.8 million and the Energy Conservation Fund at \$525,000.

Year to date kilowatt hour sales were \$356 million kilowatt hours sold which is 5.7 million kilowatt hours or about a little more than 1.6% behind last year's actual figures.

Mr. Fournier reported that cumulatively the five divisions came in under budget by \$22,000 or .21%.

Mr. Fournier reported that starting next month the RMLD will begin the Capital and Operating Budget season and since this is the close of the calendar year will be starting the DPU report which will be due on March 31.

Mr. Stempeck asked about being under the budget in terms of base revenues which seems to be a continuing trend and said that there was talk about this earlier to see if there was any way to get this in a graphic perspective so we could see a trend analysis. Mr. Stempeck said that this would be helpful for the commissioners in terms of understanding where it is headed. Chairman Talbot stated that would be great at least once a month to get a couple of years in projection. Mr. Fournier replied that he has started the process.

**M.G.L. Chapter 30B Bids (Attachment 4)**

**IFB 2015-12 Line Truck Chassis Inspection, Preventative Maintenance and Repairs**

Mr. Pacino made a motion seconded by Mr. Stempeck that bid 2015-12 for Line Truck Chassis Inspection, Preventative Maintenance and Repairs be awarded to Taylor & Lloyd, Inc. for \$100,192.30 as the lowest qualified and responsive bidder on the recommendation of the General Manager. (This is a 3-year contract.)

**Motion carried 4:0:0.**

Mr. Jaffari explained that this is for the heavy truck factory recommended maintenance, repairs and DOT inspections. The last time it went out for bid was 2012-2014 at \$106,517. This bid is well within the range.

**RFP 2015-16 RF Mesh AMI System**

Mr. Pacino made a motion seconded by Mr. O'Rourke that RFP 2015-16 for an RF Mesh AMI System be awarded to Eaton's Cooper Power Systems, as the most advantageous, responsive and responsible bidder for a total cost of \$199,936.20 on the recommendation of the General Manager.

**Motion carried 4:0:0.**

Mr. Jaffari stated that this is the solution that we have been searching for to be able to read the 65-70 commercial meters known as the Club 500. These are the meters that Itron does not have an easy solution for them. Currently, we cannot read these meters remotely and as a result we started searching for a practical solution so we can get the data back to the Cogsdale system. The best solution and best bang for our buck is the RF Mesh AMI fixed two way network system, which is the 900 MHz radio system and can handle both our metering needs as well as our future distribution automation which we intend to implement. Mr. Jaffari reported the new system can read the Itron meters after changing a electronic module inside. This system is meter independent which means we do not have to purchase any particular meter brand. Mr. Jaffari reported that this system is compatible with a wide range of meters including the Itron meters, which its technology is obsolete and no longer will be supported by Itron. RMLD can migrate to this system where the technology is newer, up-to-date and it is able to move the RMLD into the future.

Ms. O'Brien stated that when she first arrived at the RMLD and said what was purchased here was a non AMI rather an AMR two way system and she put a hold on the 500 Club project because there was no point in putting in a non-two way communication. Ms. O'Brien commended Mr. Jaffari on an excellent job coming up with an AMI system for the 500 Club that we can also change out the module on the AMR's at certain locations at the end of the lines to get that two way communication in addition to the thirty to forty meters that the fixed network could not reach all in one package.

Mr. Jaffari said that this was a team work effort involving IRD, Engineering, and MIS departments. Mr. Jaffari reported another feature this system offers is that it can read the end-of-line voltage, which the existing Itron system cannot read. Anytime switching is done especially in the future with the outage management system being able to read end-of-line voltage is critical. Mr. Jaffari stated that anytime that you transfer the load you want to know how the last customer on the line is doing and making sure they are receiving the proper voltage.

Mr. Stempeck asked if they read phase as well. Mr. Jaffari replied, yes they do with the end result being better load management.

**M.G.L. Chapter 30B Bids (Attachment 4)  
IFB 2015-17 Sicame Connectors**

Mr. Pacino made a motion seconded by Mr. O'Rourke that bid 2015-17 for Sicame Connectors be awarded to WESCO as the lowest responsive and responsible qualified bidder for a total cost of \$67,950.00 on the recommendation of the General Manager.

**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, January**

**RMLD Board Meetings**

**Thursday, February 26, 2015**

**Thursday, March 26, 2015**

**CAB Meetings**

**Wednesday, February 11, 2015**

**Wednesday, April 15, 2015 – Budget Meeting**

**Wednesday, April 22, 2015 – Budget Meeting**

**Executive Session**

At 8:45 p.m. Mr. Pacino made a motion seconded by Mr. Stempeck that the Board go into Executive Session to approve the Executive Session meeting minutes of July 24, 2014 and September 17, 2014, Chapter 164, Section 47D exemption from public records and open meeting requirements in certain instances.

**Chairman Talbot called for a poll of the vote:**

Mr. Pacino, Aye; Chairman Talbot, Aye; Mr. Stempeck, Aye; and Mr. O'Rourke, Aye.

**Motion carried 4:0:0.**

**Adjournment**

At 9:40 pm Mr. Pacino made a motion seconded by Mr. Stempeck 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.

Philip B. Pacino, Secretary Pro Tem  
RMLD Board of Commissioners

**Reading Municipal Light Board of Commissioners**  
**Regular Session**  
**230 Ash Street**  
**Reading, MA 01867**  
**March 26, 2015**

**Start Time of Regular Session: 7:32 p.m.**  
**End Time of Regular Session: 8:07 p.m.**

**Commissioners:**

**David Talbot, Chairman**  
**John Stempeck, Commissioner**  
**Dave Hennessy, Commissioner - Absent**

**Philip B. Pacino, Vice Chair - Secretary Pro Tem**  
**Thomas O'Rourke, Commissioner**

**Staff:**

**Jane Parenteau, Integrated Resources Director**  
**Robert Fournier, Accounting/Business Manager**

**Jeanne Foti, Executive Assistant**  
**William Seldon, Assist. Director of Integrated Resources**

**Citizens' Advisory Board (CAB):**

**Dennis Kelley, Member**

**Call Meeting to Order**

Chairman Talbot called the meeting to order and stated that the meeting was being videotaped; it is live in Reading only.

**Opening Remarks**

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

**Introductions**

Chairman Talbot reported that Dave Hennessy is unable to attend the meeting due to a work commitment.

Vice Chair Pacino will be the Secretary this evening.

Chairman Talbot recognized CAB Member Dennis Kelley from Wilmington.

**Public Comment**

There was no public comment.

**Report of the Chairman**

**April 1 – Economic Development Meeting – Reading Senior Center – 6:30 pm**

Chairman Talbot reported that the Economic Development meeting with the Metropolitan Area Planning Council is scheduled to meet on April 1, 2015 at the Reading Senior Center, 6:30 p.m. Chairman Talbot plans to attend along with Mr. Stempeck, Ms. O'Brien and Ms. Parenteau. RMLD can be a key part of economic development with its low electric rates.

Chairman Talbot stated that Ms. Parenteau is Acting General Manager during Ms. O'Brien's absence. There is some progress on the process to identify sites for community solar. Chairman Talbot asked Ms. Parenteau to provide an update.

Ms. Parenteau stated that after the January Board meeting, in which members of the Reading Climate Advisory Committee attended, Mr. Ollila from the Integrated Resources Department met with the committee members as a whole. They agreed to form an Ad Hoc Committee for Community Shared Solar. The Ad Hoc Committee has met twice since, members of that committee include Ms. Gina Snyder, Ms. Joan Boller and Mr. Mike Scola. Their next meeting is scheduled for Monday, March 30, 2015 at the RMLD offices, 7:00 p.m. In addition, Mr. Ollila has met with Ms. Jessie Wilson from the Town of Reading Community and Planning Division. Ms. Wilson has agreed to be part of that committee and plans to solicit any other interest from the Town of Reading. In addition, RMLD is developing a press release indicating the progress with renewables being made with the hope of migrating from RMLD's Green Choice Program to include renewable projects into RMLD's portfolio, and the next step is to provide solar which is tangible within each of the four towns. The RMLD is working on the business model with Reading, however the intent is to eventually have community solar in all of the towns that RMLD serves.

Chairman Talbot asked if community solar is just for the municipal buildings or is RMLD looking for an industrial land site. Ms. Parenteau explained that RMLD's first goal is for the program to access municipal availability. If that is not feasible, then RMLD will look at other sites.

### **Report of the Chairman**

#### **April 1 – Economic Development Meeting – Reading Senior Center – 6:30 pm**

Ms. Parenteau stated that as the program expands, depending upon the demand if there are commercial customers that are really interested, RMLD will look at those types of sites.

Chairman Talbot stated that as he understands, there is a private company that would like to add to RMLD's fiber optic network in the district. RMLD would build it and they would use it. Chairman Talbot said that it is a good idea for the RMLD Board to discuss this at a Policy Committee meeting. The committee needs to look at when the Commissioners should be involved in making decisions and setting strategy on this part of RMLD's business. Over the past fifteen years, there have been fiber optic contracts that were signed however, were not brought to the RMLD Board's attention.

Ms. Parenteau stated that there is a Policy Committee meeting already scheduled for April 23, 2015. Ms. Foti stated that she will include this as part of the agenda.

### **Report of the Committee – Vice Chair Pacino**

#### **Policy Committee**

Mr. Pacino stated that the Policy Committee met, reviewed the Surplus Property Policy which was referred for more scrubbing at this point.

Chairman Talbot stated that he received an e-mail from Mr. Mark Dockser from FINCOM that indicated that the first phase of their project is completed and they liked the Policy changes RMLD made. He is still waiting for the final word from Mr. Dockser. More discussion can take place more formally at the next RMLD Board meeting.

### **General Manager's Report – Ms. Parenteau for the General Manager**

#### **Update on Organizational and Reliability Study**

Ms. Parenteau stated that on the Organizational and Reliability Studies she had conversations with both Ms. O'Brien and Mr. Jaffari. Ms. Parenteau reported that the Organizational and Reliability Studies will be completed within the next two to three weeks. This would be the end of March or beginning of April. Ms. Parenteau said that Ms. Foti is in the process of scheduling a meeting for the presentation directly from both, Leidos and Booth and Associates, for the RMLD Board of Commissioners in May. Ms. Parenteau explained the time frame of May is due to Town Meeting scheduled for the last week in April.

Chairman Talbot asked when their final reports are due to be complete. Ms. Parenteau stated that the last week in March or the first week in April.

Chairman Talbot asked if the report submitted will be reviewed one more time by the Board of Commissioners before it is actually final or is this the last version. Ms. Parenteau stated that when Ms. O'Brien returns on Monday she will check on that and have an e-mail sent to the Board.

Mr. O'Rourke stated that his guess is this is probably their first report and then Board will have an opportunity to review it before the final report.

### **Power Supply Report – February 2015– Mr. Seldon (Attachment 1)**

Mr. Seldon reported on the Power Supply for February 2015, noting at the last Board meeting, Chairman Talbot requested information on kilowatt hour sales. Historically, over the past four or five years RMLD has been in a decline. As result of this request, Mr. Seldon has a report of documented kilowatt hour purchases as they were reported in DPU reports since the year 2000. He is working on updating the data in the Cogsdale system in order to provide the breakdown of sales by customer class which will provide more informative data further down the road, but has this report for the Board to review in the meantime. Mr. Seldon pointed out that RMLD had been on a steady growth pattern until year 2008. In 2009, decreased significantly which could be due to weather, these are not weather normalized kilowatt hours reported in the DPU report. Chairman Talbot asked if the numbers are for the year. Mr. Seldon responded they are annual numbers. Mr. Stempeck added that these are annual numbers, but it is an expanded scale. Mr. Seldon explained that the base actually starts around 685 and peaks around 765. That is why the chart shows such a dramatic dip, but it is not as dramatic as it looks although still significant, about a 6% drop in what came through RMLD's metering at the stations, but then it increased back up the following year. Since then it has been on the downward swing. What Mr. Seldon wants to key in on is the Cogsdale information which they can try to expand on where the reductions actually are happening. Are the reductions in the commercial sector, is it all in residential or is it spread between both. Mr. Stempeck said that energy conservation efforts are probably embedded in there. Mr. Seldon said that is correct.

### **Power Supply Report – February 2015 – Mr. Seldon (Attachment 1)**

Mr. Seldon stated that once the weather spikes or reductions in weather are taken out then the focus will be to figure out if it is the economy or is it the conservation, the answer will probably be a little of both. Chairman Talbot clarified that the lowest kilowatt hours purchased that occurred in 2009. Mr. Seldon concurred. Chairman Talbot added that is an indication of the economy.

Mr. Seldon stated that February 2015 it was all about the cold. The average mean temperature for Reading which RMLD tracks internally, was 25.7 degrees in 2014 and in 2015 it was down to 16.2 degrees thus there is a drop in the mean temperature of 9.5 degrees. Chairman Talbot asked how the lower temperature reflects in sales. Mr. Seldon said that at the last Board meeting that evening in February, RMLD was at the point that we sold for the entire month of February, therefore sales are up a bit.

Mr. Seldon stated that when comparing all the resources between February 2014 and February 2015, what actually produced more kilowatt hours, were the hydro projects and the Stony Brook Intermediate unit. The hydro disparity was due to an outage out of one of the hydro units. There was a significant increase in the kilowatt hour output from the hydro projects, but they are not as large a percentage of the portfolio. The Stony Brook Intermediate Plant increased from 7.8% in 2014 to over 12% in 2015, thus was picking up the kilowatt hours RMLD required. This report shows a comparative of 2014 and 2015 the output from the Intermediate Plant.

Mr. Stempeck asked what is the significance of Stony Brook is it less or more expensive than RMLD's power supply portfolio? Mr. Seldon stated that Stony Brook is a swing unit in RMLD's portfolio and this report represents what Stony Brook is intended to do for RMLD's power supply portfolio. When the region needs kilowatts that is when Stony Brook makes money, this graph is a good representation that demonstrates exactly what the Stony Brook Power Plant does for our portfolio.

Mr. Stempeck clarified, represented in the previous chart, the cost for Stony Brook is approximately \$173 per megawatt hour, which is pretty high, it represents fiscally the third highest. Mr. Seldon explained that is why RMLD only wants to see it running when the locational marginal prices is higher than that, Stony Brook is filling in lower dollar kilowatt hours for our mix.

Mr. Seldon reported that the overall energy cost for RMLD was up slightly higher between 2014 and 2015. This was due to the fact that there was greater output. The locational marginal prices for 2015 are actually lower than they were for 2014. This is found on Table 4 where it shows the cost for power of the Intermediate Plant and the ISO Interchange. The numbers are lower for the ISO Interchange in 2015 than they are for 2014.

Chairman Talbot commented on the first slide noting it would good to have that with the zero at the xy axis although it will be much more subtle to see the zero at the bottom. He has been reading reports from the Energy Information Administration that stated there is flat kilowatts, but peaks are actually going up relative to average consumption. Twenty years ago the peak was fifty percent higher than the average day in New England, now it is at seventy percent or eighty percent above the average day. Ms. Parenteau stated that can all be incorporated in the report. The information can be broken out to look at the peaks in relationship to the energy.

Chairman Talbot stated that would be good, but the trends are going upward. The reason is that the base power consumers are using is actually getting more efficient with lighting, refrigeration, etc. However, with the climate, on a hot day there is only so much more efficiency that can be achieved, however, the peaks are getting worse. The point of it would be that it shows the value of RMLD's future plans. The smart technologies that Mr. Jaffari addressed at the last meeting are only going to increase, it will be important to think about that and be able to explain it to the community. However expensive it appears to be, it will only be more valuable over time.

Mr. Stempeck asked if the Board could have the charts in the Board packets. Ms. Parenteau stated that is the plan, but unfortunately due to the timing of the month and when purchase power settled we could not achieve it in February. RMLD will include all the charts in with the packet material, it is just the timing issue for this month.

Chairman Talbot asked Mr. Seldon to send him an e-mail with the raw data and thanked him for the presentation.

### **RFP- Wholesale Power Supply 2016-2019**

Mr. Seldon apologized for the information relative to the Power Supply RFP for the Wholesale Power for 2015 that was presented at the CAB meeting however, did not make the Board packets. Mr. Seldon explained that the outline is very similar to what was presented at the November CAB and RMLB meetings last year. Mr. Seldon stated that RMLD is trying to be early in order to take advantage of the attractive pricing this year and that is why it is being presented tonight.

**Power Supply Report – February 2015 – Mr. Seldon (Attachment 1)**

**RFP- Wholesale Power Supply 2016-2019**

Mr. Pacino made a motion seconded by Mr. Stempeck 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 2016 through 2019 and in amounts not to exceed 31 megawatts in 2016, 29 megawatts in 2017, 27 megawatts in 2018, and 25 megawatts in 2019, as presented by the Director of Integrated Resources and on the recommendation of the RMLD Citizens' Advisory Board and the General Manager.

**Motion carried 4:0:0.**

**Engineering and Operations Report – February 2015 – Mr. Price (Attachment 2)**

Ms. Parenteau stated that since Mr. Jaffari is on vacation, Mr. Peter Price was going to present this report. However, he had a conflict and was unable to attend the meeting. Ms. Parenteau will speak to some of the highlights. If there are any specific questions she will refer them to Mr. Price and respond back to the Board.

Ms. Parenteau reported that the projects are accelerating, however, the weather had an impact in February. On the capital side, there was not much spending on those projects. The System Average Interruption Duration Index (SAIDI), System Average Information Frequency Index (SAIFI) and Customer Average Interruption Duration Index (CAIDI) are all below the regional and national averages. For the month of February, RMLD managed the storms very well. There were eight area outages: five equipment related, two vehicles and one caused by a tree. Ms. Parenteau stated that if the Board has any specific questions with the capital projects she will get the answers for them.

**Financial Report – February 2015 – Mr. Fournier (Attachment 3)**

Mr. Fournier reported on the February 2015 Financials which represent the first eight months of the fiscal year. The actual month represented a Net Loss of \$81,000.00 which decreased the year to date Net Income to \$2.74 million. Mr. Fournier stated that budgeted at this time is \$1.5 million dollars which resulted in Net Income of over budget \$1.3 million. With the \$2.74 million in Net Income, the actual year to date Fuel Revenues exceeded Fuel Expenses by \$300,000. Purchase Power Capacity and Transmission Revenues have exceeded the expenses by \$700,000. The two pass through amounts came in higher therefore, in four more months we should get that as close as possible for our best guesstimate \$2.7 million appears robust, but there is \$1 million of that is not in sync.

Mr. Fournier then explained the revenues stating the year to date Base Revenues are under budget by \$200,000.00. Actual Base Revenues were \$14.8 million compared to the budgeted amount of \$15 million. Mr. Fournier stated that the Base Revenues were reforecasted in late fall decreasing it by \$350,000. For the first eight months we are actually doing a little better than our reforecasting by \$120,000.00.

Mr. Fournier stated that year to date Purchase Power Base Expense is over budget \$365,000 or 1.9%. Actual Purchase Power Base cost came in at \$19.5 million compared to the budgeted amount of \$19.2 million. On the Operating and Maintenance side, Mr. Fournier reported that expenses combined were over budget by \$93,000 or 1%. The actual Operating and Maintenance expenses came in at \$9.5 million compared to the budgeted of about \$9.4 million.

Looking at the graph, the budget was reforecasted with the Operating, Maintenance, Depreciation and Town Payment expenses all coming in flat. The results for the first eight months was \$85,000 higher in expenses compared to the reforecasted amount. The reforecasted amount was in line with the budget amount. Costs are being held down as much as possible. On the cash side, Mr. Fournier reported that the Operating Fund is a healthy \$12 million, the Capital Fund balance is \$5.7 million, the Rate Stabilization Fund \$6.7 million, Deferred Fuel at \$4.4 million and the Energy Conservation Fund \$566,000.

Mr. Fournier stated that on the general information side due to the cold month in February, actual kilowatts sales year to date \$4.76 million which is \$1million ahead of last year's actual figure. March's preliminary numbers look like they will be coming in lower than last year's March's actual, but after the first eight months we are caught up. On the budget side, Mr. Fournier reported that the five divisions were over budget by \$65,000. Mr. Fournier also reported that we are finalizing the capital and operating budgets which will be presented next month.

Mr. Pacino clarified that the budget is at \$2.7 million, now that is over budget and asked Mr. Fournier if that is over budget for the year to date or once the fiscal year is ended at the end of June. Mr. Fournier stated that the goal is to come in at around \$2.5 million in order to get it close to seven or eight percent rate of return. With adjusted Net Income, it is at \$1.7 million, we may have to cut some expenses in last four months. Depending if the weather cooperates, we should come close.

**M.G.L. Chapter 30 B Bid (Attachment 4)**

**IFB 2015-19 Walk-In Van**

Ms. Parenteau reported that this bid is for a walk-in van for Technical Services that will be used as a mobile testing truck. Ms. Parenteau explained much of the maintenance work at the substation was formally outsourced.

Ms. Parenteau stated that the intention now with Mr. Jaffari's maintenance programs is to have a personnel from the RMLD trained to perform this work internally. This van will allow them to transport AC/DC test equipment, oil containment, hazmat equipment to the various substations. There were two bidders. Included in the bid is a trade in of Truck #48 and both bidders had the exact same trade in value with Boston Freightliners as the lowest qualified and responsive bidder.

Chairman Talbot asked what purchasing this vehicle will bring for in house savings. Ms. Parenteau stated that she will get those numbers for the Board, noting this van is a capital budget item for 2015 which was for \$150,000 and the bid came in lower than budgeted.

Mr. Pacino made a motion seconded by Mr. Stempeck that bid 2015-19 for one Walk-In Van be awarded to Boston Freightliner for \$139,802.00 as the lowest, qualified and responsive bidder on the recommendation of the General Manager.  
**Motion carried 4:0:0.**

**BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED**

**E-Mail responses to Account Payable/Payroll Questions**

**Rate Comparisons, March**

**RMLD Board Meetings**

**Thursday, May 14, 2015 – To include Fiscal Year 2016 Budget, 6:30 p.m. start time**

**Thursday, May 28, 2015 – To include Fiscal Year 2016 Budget, 6:30 p.m. start time**

**RMLD Board Committee Meetings**

**Thursday, April 23, 2015**

**CAB Meetings**

**Wednesday, April 15, 2015 – Budget Meeting – Wilmington**

**Wednesday, April 22, 2015 – Budget Meeting – RMLD**

**Adjournment**

At 8:07 p.m. Mr. Pacino made a motion seconded by Mr. O'Rourke 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.

Philip B. Pacino, Secretary Pro Tem  
RMLD Board of Commissioners

**Reading Municipal Light Board of Commissioners**  
**Regular Session**  
**230 Ash Street**  
**Reading, MA 01867**  
**May 14, 2015**

**Start Time of Regular Session: 6:38 p.m.**  
**End Time of Regular Session: 9:55 p.m.**

**Commissioners:**

<b>Thomas O'Rourke, Chairman</b>	<b>David Talbot, Vice Chair</b>
<b>Philip Pacino, Commissioner</b>	<b>John Stempeck, Commissioner</b>
<b>Dave Hennessy, Commissioner, Secretary Pro Tem</b>	

**Staff:**

<b>Coleen O'Brien, General Manager</b>	<b>Jeanne Foti, Executive Assistant</b>
<b>Robert Fournier, Accounting/Business Manager</b>	<b>Hamid Jaffari, Director of Engineering and Operations</b>
<b>Jane Parenteau, Integrated Resources Director</b>	<b>Mark Uvanni, MIS Manager</b>

**Guests:**

**Steve Rupp, Vice President, Engineering Solutions, Leidos**  
**Ken McNeil, Operations Manager, Booth & Associates**  
**Joan Boegel, Climate Advisory Committee**  
**Gina Snyder, Climate Advisory Committee**

**Citizens' Advisory Board (CAB):**

**Dave Nelson, Vice Chair**

**Call Meeting to Order**

Chairman Talbot called the meeting to order and stated that the meeting was being videotaped; it is live in Reading only.

**Opening Remarks**

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

**Introductions**

Commissioner Hennessy will be the Secretary this evening. Chairman Talbot recognized Citizens' Advisory Board member Dave Nelson.

Chairman Talbot polled to see if there was any public comment, there was none. Ms. O'Brien stated that members of the Climate Action Committee were going to be present later in the meeting. Chairman Talbot will open up discussion at that point.

**Review of RMLD's Fiscal Year 2016 Capital Budget (Attachment 1)**

Ms. O'Brien reported both, the Capital and the Expense Budgets were presented to the Citizen's Advisory Board (CAB) and received approval for recommendation to the Board. This evening the Capital Budget will be presented. Ms. O'Brien reminded the Board that from last year RMLD has changed the budget into a six year plan including Fiscal Year (FY) 2015 budget and year to date out to FY 2020. FY 2017 through FY 2020 are illustrative to provide the Board an idea of the projects that are planned out. Ms. O'Brien pointed out that the RMLD had the preliminary results of the Reliability Study. Ms. O'Brien indicated that the results had already been incorporated in the budget. At this point, Ms. O'Brien turned the budget presentation over to the staff.

Mr. Jaffari stated that in the FY 2016 Capital Budget, the results of the recently completed Organizational and Reliability Study were incorporated.

Mr. Jaffari reported in regard to the FY 2016 Capital Budget, the following capital expenditures are also recommended by Booth & Associates in the Reliability Study: Substation 4 Switchgear Breaker Replacement \$508,000, Distributed Generation \$2.164 million with anticipation of this occurring at Substation 3 because there is a gas available. The gas line can be configured onto the corner of the property through a bus to the breaker. The Substation Equipment Upgrade at Substation 4 and 5 costing \$254,000. GIS Upgrade is \$420,000 the Request For Proposal (RFP) for that project is out and is due back by May 19 with approximately ten to twelve vendors who have sent in proposals. Stepdown Upgrades, which need to be converted from 4KV to 13.8 KV which will decrease system losses by replacing old equipment and increase plant value. The Transformers/Capacitors, \$668,000 these are the ones that will be upgrade as part of the transformer load management program, the age related or load related. Mr. Jaffari reminded the Board there have been a few transformer oil leaks in the past that is a sign of transformer deterioration due to age.



### **Review of RMLD's Fiscal Year 2016 Capital Budget (Attachment 1)**

Mr. Jaffari continued noting RMLD needs to install more cap banks that can be controlled from the SCADA. Currently, the capacitors, during the peak time, are manually being operated, with having the SCADA this will automate the process, as the load increases during the peak. These capacitor banks would be automatically programmed to come on which improves the power factor by decreasing kbar losses.

The following are capital projects: LED Streetlight upgrade is a three year program that costs \$3.6 million, the HVAC System Upgrade is for 230 Ash Street building and will cost \$600,000. Currently, the Request For Proposal (RFP) is being evaluated and the recommendation will be presented to the Board next month. URD upgrades are \$340,000. These includes Cooks Farm in Lynnfield and others that our underground system contractor currently working on. In the Routine Construction category the RMLD generally spends approximately \$1 million annually on the commercial and residential. Rolling Stock Program is budgeted at \$448,000, which consists of trucks, forklifts and the spreader. Mr. Jaffari stated that the AMI/Metering System (500 Club) will cost \$219,000, for approximately sixty meters because RMLD to get information out of those meters that we are not capable of reading. The RFP which was awarded to Cooper Eaton System, which is the most advanced AMI system providing a true two-way Fixed RF mesh networking. Using Eaton AMI, the metering information can come back to the SCADA system that can help fault detection & isolation operation. RMLD is in the pilot phase of this program with everything going well. MIS is budgeted for \$451,000, which includes software and servers. Mr. Jaffari noted that he and Mr. Uvanni worked jointly on the technology road map to ensure there is no redundant spending cross departmentally. IRD includes EVSE, Data Loggers and Efficiency Meter is budgeted for \$60,000. Other projects (Facility Site Plan, Lowell Street Project, West Street, and Fiber Optics) are budgeted for \$2.014 million. These projects are Lowell Street, URD constructions, and the Department of Transportation, Commonwealth of Massachusetts funded projects like West St upgrade in Reading. The fiber optic loop needs more nodes for distributive automation projects. It is a great asset because fiber is the best communication backbone for the distribution automation system.

Mr. Jaffari stated that the total Fiscal Year 2016 capital projects come in at \$10.59 million. Most of the items in the budget are maintenance related with old items being taken down with new being put up that will increase the plant value.

Ms. O'Brien asked Mr. Jaffari about the capital project transfers from last year off the \$10.5 million that was approved by the CAB, what is the amount. Mr. Jaffari responded that the carryover is approximately \$2.5 to \$3.0 million. Mr. Jaffari reported that the HVAC, LED, URD and West Street were carry overs from last year. Mr. Jaffari reported that of the \$7 million that \$2.1 includes distributed generation. Capacity and transmission costs will be tripling in 2017 this is a way for the RMLD to mitigate some of the expenses which are passed onto our customers and Ms. Parenteau will elaborate more on this issue.

Chairman Talbot asked if that piece of it will be presented later during the meeting. Mr. Jaffari confirmed that it will be presented in more detail.

Mr. Jaffari discussed the new Tree Trimming Program as of January 2015. Integrated Vegetation Management (IVM). The IVM document is out and has been given to the tree wardens as well as the DPW Directors of each community. Mr. Jaffari stated that he had the first meeting with North Reading DPW Director and Tree Warden. We also met with each community, Town Manager and the Board of Selectmen, informing them that RMLD would like to go to the eight foot cut as soon as the IVM is out and will be delivered to them. Now RMLD is in compliance with Massachusetts Law Chapter 87 for IVM. The RMLD did not have an official IVM Plan prior to this implementation and are in compliance. Mr. Jaffari reported on the underground crews under the current contract effective September 1, 2015, with Fisbach & Moore will not be renewed. RMLD expects augmenting crews to handle all the underground splicing, terminations and making the elbows. In absence of the contractor beginning on September 1, the RMLD will take the underground work back. Mr. Jaffari explained that the contract currently states that RMLD is contractually obligated to give crews eight hours of overtime on Saturdays because the contractors are working on our system. As a result of this transition, mandatory overtime connected with the underground contractor will go away. However, that does not mean the overtime will be cut down totally because there is substantial maintenance that needs to be performed in order to get caught up. Also, part of the overtime on Saturdays and Sundays are subsidized by the contractors for the fiber installation or the jobs that the customers are required to shut down on holidays, therefore, not all overtime will be charged to RMLD costs. Mr. Jaffari stated that RMLD uses the pole software in house. In the past, the RMLD farmed out engineering services for circuit designs now RMLD has software, for a great investment of \$14K, guarantees RMLD will be within the code, National Electric Safety Code. This software is interactive and is a very good tool to have for the design. It makes sure RMLD meets all the clearances for public safety and employee safety sake. Now every engineer has access to this software, for any type of design, pole upgrades, any change taking place first it will be performed on the software to make sure it is good engineering practice before it goes out to construction. Mr. Jaffari added this is another costs saving RMLD will have in place because it eliminates engineering firms.

Mr. Jaffari said that the Substation Testing and Maintenance Program is in the works. RMLD has spent \$150,000 on the substations in order that equipment could be tested which has been completed. Now we have the list of what needs to be fixed with almost 70% of those findings are fixed.

### **Review of RMLD's Fiscal Year 2016 Capital Budget (Attachment 1)**

Mr. Jaffari stated that a breaker that needed to be replaced, the eight bushings of the transformers at Station 4 - 115kV/5kV transformers that the bushings were bad which were on the verge of failure were replaced, the breakers were replaced, but some minor things still need to be repaired.

Mr. Jaffari noted that the RMLD purchased a state of the art testing device from Omicron. The new Tech Services Group is receiving training from Omicron. In the future Tech Services will be perform those tests with the exception of 115kV which represents a cost savings. RMLD does not have testing equipment for the 115kV because it is expensive specialty equipment therefore, it is more effective to have professional testing vendors.

Mr. Jaffari said that RMLD is using the NJUNS software that allows for better tracking that Verizon as well as Comcast also utilize this software. When RMLD is installing a pole and needs a transfer it automatically goes into the other party's database, showing when they need their transfer, which will make these timelier. Mr. Jaffari pointed out that RMLD will see an increase in number of double poles throughout the system because of all the system upgrades that is needed for the maintenance. In light of the pole testing program 30% of poles that were tested failed. RMLD has replaced all poles identified as condemned to make sure it is safe, however, there are more that need to be replaced.

Mr. Stempeck stated that with the pole testing program he noticed that in the data that two thirds of the poles are owned by Verizon, is RMLD is testing their poles, as well? Mr. Jaffari stated no, not right now, that is a recommendations that Booth & Associates made. RMLD will have to meet with Verizon to work on the joint agreement as well as talking to them about the testing of their poles. Mr. Jaffari stated that his recommendation would be to test them even if they are not spending the money to do that. This must be discussed with Verizon first because it is their set area. It is Verizon's obligation, by law, to inspect 10% of the poles. RMLD will entertain the idea and will come up with a mutual agreement. Mr. Jaffari stated that the poles that are found in the field that are failing RMLD will give Verizon the list. In fact, RMLD has already tested 17 of their poles, 10 failed after receiving the report from RMLD Verizon has already replaced those poles. Mr. Jaffari stated that due to their liability they would embrace it and have it done. Mr. Jaffari and Ms. O'Brien are working with Verizon.

Ms. O'Brien stated that there are states where Verizon has gotten out of the pole business and it is unclear about what is happening with Massachusetts because there is legislature under the DPU that gets a little sticky with Verizon. Ms. O'Brien commented that RMLD will be meeting with Verizon on the pole testing, pole replacement and transfers. RMLD does not know what the other companies, such as Frontier, that are buying out Verizon are doing, it could be a big issue in this area. Ms. O'Brien stated that if there are 13,000 poles with 2/3 of those poles are Verizon's, RMLD may need digger derricks and manpower to replace poles for transfers that is something RMLD needs to know. Mr. Pacino stated that for many years there has been discussion on buying the poles from Verizon. It has never been successful.

Ms. O'Brien pointed out that Booth & Associates is at the RMLD training employees on the National Safety Code Training, which entails loading and guying on the pole. In some instances, out in the field, when a pole has been hit Verizon has come in and actually chopped down their wire and did not replace it, that is another issue. Ms. O'Brien stated that she wants to discuss with Verizon some of their equipment/wires on the pole just leaving and abandoning in place because it would affect RMLD's loading and guying.

Mr. Jaffari reported on the Purchasing Power savings, in such areas such as distributed generation at Substation 3, implementing a Demand Side Management Program as well as a small Demand Response/Peak Shaving Program in which Ms. Parenteau will speak to. This will be implemented once the sixty meters are upgraded are replaced.

Mr. Jaffari reported on Engineering & Operations pointing out that Booth & Associates investigated and endorsed all the newly developed programs such as: the Maintenance Programs, the Field Optimization Plans, System Automation Plan, System Planning and Designing Methods, NEC Codes Enforcement Method, System Design Tools, Training Programs and Safety Program, all the programs. The Reliability Study recommendations will be presented by Ken McNeil from Booth & Associates since these are all the major recommendations that they made. The Organizational Study, the deficiencies and recommendations will be presented by Steve Rupp from Leidos in more detail.

### **Distributed Generation Cost Benefit Comparison**

Ms. Parenteau stated that since distributed generation was a large ticket item within the Capital Budget, three different technologies were looked at in terms of their strengths and weaknesses. One thing that is important to mention is that all of these technologies are very good, our approach has historically been the portfolio approach. In time, as prices have come down it is RMLD's hope that we can incorporate all of these into the portfolio, which in fact we have some of those items. In reviewing national gas fueled distributed generation and compared it with battery storage, energy storage and a solar pv canopy, which is really comparing apples and oranges. However, we wanted to give the Board some analytical cost benefits to look at this in terms of information and voting on the Capital Budget. The way we looked at this is we took \$2 million and checked what that would buy us across these three different technologies.

### **Distributed Generation Cost Benefit Comparison**

Ms. Parenteau pointed out that there is \$2.1 million dollars which is the amount that is in the Capital Budget for the natural gas distributive generation that would obtain approximately two megawatts of off peak power that we would be able to curtail both for the capacity and the transmission peak.

Ms. Parenteau explained that for \$2.1 million for battery storage we would get about one megawatt which would have a capacity value of .8 and then for a solar canopy system \$2.1 million gets approximately 750 kilowatts if you look at that in terms of peak demand, because from a capacity standpoint, we usually peak between 3:00 p.m. to 5:00 p.m. with the solar maximizing around 10:00 a.m. to 2:00 p.m. there would be some degradation in terms of the amount of peak value that we would be able to obtain from a solar system. We took a conservative approach because we do not want to overestimate any savings. We assumed a debt service of about 3.5% if we were to finance this over a ten year period of time over time in each of these scenarios, included some interest in as well as the payback of the principal amounts. When you look through the numbers over an annual basis the expenses of the three scenarios were about \$500,000 for the DG (natural gas), about \$300,000 for the battery storage and about \$252,000 for the solar.

For the potential income we looked at capacity credits, transmission credits and if we were to run this for economic and LMP or energy savings that would arrive at some additional dollars. On the solar side, the SRECs is really what generates it, those are solar renewable energy certificates and that market is regulated by the state and what we have is a pricing over a ten year period for that piece. The net cash value for those three scenarios for a ten year period is: the distributive gas unit it was about \$4.2 million, battery storage was about \$731,000, and about \$414,000 for the solar canopy. Ms. Parenteau stated that we wanted to provide the relative impact on the residential customers because as we all know Purchase Power is a pass through, whatever our costs are we pass that to our consumers. If we are able to implement some of these things we could reduce that cost we are passing though because as a utility RMLD is unable to earn any revenue on it.

Mr. Stempeck asked, in terms of the net cash value is it a cash flow over ten years. Ms. Parenteau answered, yes it is based on an assumption of 4% of the net present value. Mr. Stempeck asked if there was there any residual life. Ms. Parenteau stated they looked at the ten year period only because that was the finance period that RMLD assumes, but there is residual life after that period.

Mr. Stempeck asked about the battery storage, is that for a conventional battery. Ms. Parenteau stated that it would be a utility size, but RMLD would like to do a pilot with that we can get some of those on the solar system in order to get a sense of the advantages/disadvantages for the consumer and for the utility to do an analysis.

Chairman Talbot asked about where these unit are housed. Mr. Jaffari responded that Southern California Edison is building a plant based on that. Chairman Talbot asked if you are going to test a lithium ion battery. Mr. Jaffari said that the RMLD are planning to start with the small packet, lithium ion.

Mr. Stempeck asked if each one of the technologies provides positive net cash value. Ms. Parenteau responded that is correct. Mr. Stempeck stated that they are all liable. Ms. Parenteau agreed noting that it is just a matter of how we base those into a long term plan. Mr. Jaffari added that the return on investment on gas generators is four to five years, with the solar it is approximately ten years and the battery is also the same. It is a matter of what makes sense for now is distributed generation starting with two megawatts then next thing is solar at Station 3 and also some local pilot programs.

Mr. Stempeck stated that the compelling feature of the gas generator would prove to be it is a proven technology that has been around for a long time. Ms. Parenteau stated that in hand with that we are doing demand response because our customers signed up. The advantage over an actual generator is that RMLD would have control, we can make appeals out there which we plan on doing and we have customers signed up. Again, it is trying to get a little bit of everything, when that peak period comes we show a decrease in our megawatts.

Chairman Talbot stated that as batteries go down that is a blessing because they are more likely to get cheaper when everybody has them. In ten to twenty years the economy has changed all that cheap power at night is not cheap anymore because everybody is soaking it up in their cars and in their home batteries has anybody projected that? There will be a lot more electric cars coming out. Mr. Jaffari responded that RMLD will wait to see how the technology changes within the next ten years. Our goal is to do whatever makes sense.

Chairman Talbot asked is it correct that we have about 300 electric water meters and 400 electric water heaters to switch? Ms. Parenteau answered that it is about 250 and three hundred 300.

Chairman Talbot asked how many are there in the district, if a couple thousand. Ms. Parenteau answered yes, that is correct and it was stated in GDS Study back in 2008 that there was about 2,000 to 4,000. Chairman Talbot stated that there is about 90% electric water heaters they are getting about \$20.00 per month.

### **Distributed Generation Cost Benefit Comparison**

Ms. Parenteau stated that there is an advantage of being on electric hot water heaters to allow us to shut it off for two hours per day and the credit for that is approximately \$100 per year. Chairman Talbot stated that if people knew about it they would take the \$100 annually, it would be nice to hit the other 90%. Chairman Talbot clarified that if all three thousand on this program, what would that buy the RMLD? Ms. Parenteau stated that it is estimated that the customers on the hot water rate we had a few years that were shut off during the peak was about 500kW.

Chairman Talbot stated that 250 customers are on the electric hot water heater rate, if another 1,000 customers are on this rate the RMLD would save two megawatts right there. For 1,000 customers to have water heaters what is it in terms of cost? Mr. Jaffari replied that the labor takes about two to three hours, at an hourly rate of \$150 for a cost of \$300 to \$450 installed.

Chairman Talbot pointed out that for the cost of \$100,000 if more customers were aware of this program the RMLD could obtain 2 megawatts of peak shaving. This is where the RMLD needs the outreach and where customers could help us. Ms. Parenteau stated that the nice thing about the hot water is it goes unnoticed for the customer.

Mr. Jaffari added that the good news is with the new AMI System RMLD will be able to assist demand response programs. It would all be through the SCADA triggered by load. So as the load goes up it will automatically be activated.

Chairman Talbot asked if RMLD has the ability to see who has electric water heaters by the power consumption signature because they may click on when they are getting a lot of juice at once and come up with a list. Mr. Uvanni asked how would RMLD know it was hot water, it could be something else at a house? Chairman Talbot stated that the technology does exist. Mr. Uvanni stated that the technology does exist, but the customer would need to have a smart hot water heater in order to determine being connected to a wireless internet, generally speaking.

Chairman Talbot stated that if RMLD watched the load within the course of an hour or two and when the hot water heater kicks on it is such a big jump it is almost certainly going to be a hot water heater. Chairman Talbot asked if there is a way to know now. Mr. Uvanni replied, yes there is because technically we do hourly reads, we could measure a level of consumption by the hour.

Mr. Stempeck stated that he thinks it is a good idea for an outreach perspective and maybe take the next step and ask the Board of Commissioners and CAB should convert their hot water heaters.

Chairman Talbot stated that it is well worth infer existing electric water heaters from the RMLD reads, there are different vendors and software out there. If we can have a short list and then we have a job for community outreach to call these customers.

Mr. Pacino pointed out that the CAB approved the Fiscal Year 2016 Capital Budget 4:0:1, Mr. Nelson was absent.

Mr. Pacino made a motion seconded by Mr. O'Rourke that the RMLD Board of Commissioners approve Fiscal Year 2016 Capital Budget dated March 25, 2015 in the amount of \$10,596,000 as presented.

**Motion carried: 5:0:0.**

### **Report of the Chairman of the Board – Chairman Talbot – Broadband Study Committee**

Chairman Talbot explained that the motion would make a suggestion to possibly be followed by the formation of a committee to study if there is a model that makes sense for an internet offering by the RMLD. There are twelve municipalities in the state that have done some business. The right way to do this is incrementally by identifying a specific target. The opportunities such as Taunton seized was when a commercial park they have been making revenue off of that for fifteen years. You can be the service provider for your own municipality. The utility can look at what municipalities are spending today on leased lines, internet and look to see if you can offer a better price. A study can be compiled to look at the service and guaranteed revenues and potential savings to the taxpayer. A study committee is needed to start this. It has to be all four towns that look at this. The motion is a suggestion that this can be done. He spoke to the Town Manager and the Town Charter permits the Board to form committees. The proper way to form this is to sit down with the CAB. Defining who would be on the committee needs to be done. The first task is to identify what you have for fiber, the RMLD has and Town of Reading has fiber. What do the other communities that RMLD serves has, it is a holistic approach. The second thing to look at is what are the schools and town halls spending for telecom services, can we do it ourselves. Holyoke with their first approximation is saving approximately \$200,000 annually over a ten year period that is \$2,000,000.

Mr. Stempeck said that he is in favor of this four communities working at one time. Four communities can have more of an impact. Is it going to be separate from the RMLD, is there an issue with the utility being involved, the arm's length. Chairman Talbot said that it is a good suggestion. The next step would be work with the CAB. As long as it is being done with recommendations for opportunity brought to us.

**Report of the Chairman of the Board – Chairman Talbot – Broadband Study Committee**

Mr. O'Rourke said that this is appropriate, the arm's length issue can be addressed by who is the chairman and appointed not RMLD and CAB. Chairman Talbot said that it should not be RMLD or CAB members, but experts within the community.

Mr. O'Rourke asked Mr. Nelson if the CAB is interested in looking into this. Mr. Nelson said that is good to at least start the conversation.

Mr. Stempeck made a motion seconded by Mr. Pacino that the RMLD Board of Commissioners suggests that a four-town Broadband Study Committee be investigated and if appropriate be formed, with input from RMLD Citizens' Advisory Board and the four Boards of Selectmen, to investigate potential municipal and school savings, economic development opportunities as well as other market needs that could be served by a RMLD Internet or telecom offering or other.

**Motion carried: 5:0:0.**

Note: Dave Talbot was Chairman up to this point in the meeting.

**Reorganization of RMLD Board of Commissioners (Attachment 2)**

Mr. Stempeck made a seconded by Mr. Talbot to nominate Mr. O'Rourke for Chairman of the RMLD Board of Commissioners.

**Motion carried 5:0:0.**

Chairman O'Rourke was honored for the opportunity.

Mr. Stempeck made a motion seconded by Mr. Pacino to nominate Mr. Talbot for Vice Chairman of the RMLD Board of Commissioners.

**Motion carried 5:0:0.**

**Committee Reorganization**

**Audit Committee**

Mr. Pacino will remain on the Audit Committee with Mr. Pacino being appointed to the Town of Reading Audit Committee. Mr. Hennessy volunteered to be on the Audit Committee.

**Budget Committee**

Ms. Foti suggested eliminating this Committee considering the RMLD Board of Commissioners all vote on the budget, anyway. All Commissioners agreed to eliminate the Budget Committee.

**Policy Committee**

Mr. Pacino, Mr. O'Rourke and Mr. Stempeck will make up the Policy Committee.

**Account Payables and Payroll**

Ms. Foti suggested where Mr. Soli filled in, it will now be Mr. Hennessy with Mr. Pacino as first backup. All the commission members were in agreement.

Mr. Stempeck made a motion seconded by Mr. Pacino to approve all the Committee changes and assignments.

**Motion carried: 5:0:0.**

**Presentation – Organizational – Mr. Steve Rupp, Vice Present, Engineering Solutions, Leidos (Attachment 2)**

Chairman O'Rourke welcomed Mr. Rupp, who will present the Organizational Study results.

Mr. Rupp started the presentation by pointing out that the utility industry is undergoing through profound changes. He has spent a lot of time with the agencies that focus on public power such as American Public Power Association, Light Public Power Council, and Northeast Public Power Association in addition to agencies across the country. Mr. Rupp stated that the type of categories he thinks about when referencing profound changes are aging infrastructure which is a national problem involving all elements of infrastructure from roads to wet infrastructure to electrical infrastructure. We are a country that has grown relatively fast and have not been as responsible as we could have been in keeping up with the infrastructure. Now we talk about the paying price as we look forward to challenges the next generations will face, how they will come up with the money, how they will come up with the resources to build up their streets, highways, sewers and water treatment delivery systems. Mr. Rupp also commented on the talent, the human resources it takes to operate these enterprises, the average age in this organization is in the high forties with the average years in service is over twenty years.

This is not Google, this is not Apple, this is not Microsoft, this is not what the contemporary companies; to attract bright young minds, it is tough to find people, hard to keep people and it will get worse as we look forward to time. We really need to think about career solutions to dealing with talent challenge.

**Presentation – Organizational – Mr. Steve Rupp, Vice Present, Engineering Solutions, Leidos (Attachment 2)**

Mr. Rupp said that we need to rethink about what is our role as an enterprise as an organization to manage talent and how hard should we be working to recruit, to develop and to retain. Technology has become pervasive in this industry. Mr. Rupp stated that he likes to think technology really should not be thought about anymore as the computer on the desk or the iPhone in the pocket. It has really more become part of the infrastructure itself. It is in the equipment that installed at the substations and devices installed in people's homes. On poles we use to operate by control over at the distribution system.

Mr. Rupp said that if it is infrastructure it needs to be planned, operated and maintained. That is a real change in the way utilities are thinking. Distributed resources this infrastructure was built to deliver energy from centralized power plants through transmission and distribution systems to homes and that is changing. Now we are being asked to operate a two way distribution grid. Mr. Rupp stated that it was not designed for that, it was never intended to do these things.

As previously discussed, the upcoming potential for the home battery energy storage that will change the landscape. It will be more interesting with solar being put on your home that charges up the batteries. At night there will be excess power flowing back into the distribution system which was never designed to do that.

There are markets that are changing dramatically again; originally we had a nice monopoly here we built power plants, shared in building power plants, provided electricity for the customers, set them a bill, they sent us a payment and the relationship goes on, but the markets are changing dramatically. The Demand Response is becoming a commodity which will be treated just like generations participating in the market.

When we discuss the ability to operate your resident's electric hot water heaters to turn them off to shave peak demand, the markets are will treat that like turning on generations, we have prices to associated with it and this will be incorporated into your portfolio. It is very complex and fast it is different from the way we will have always done business.

Mr. Rupp stated that consumption is on the decline. He was at a presentation two weeks ago in Carlsbad, California with the Municipal Utilities Associates Tom Henner, presented a graph from Intel Resource Institute that showed the first time in history the relationship between gross national product capita and energy consumption per capita has changed. Now we are producing more per capita GNP with less energy per capita, it has never been that way. It is a real result in the investments made in energy efficiency, conservation and distributed generation. Mr. Rupp stated the challenge for RMLD and the other utilities is in order to make that sustainable to make it work you need to have a rate structure that allows that decline in revenue without going into your fixed operating costs. If you cannot recover a fixed cost operating the utility from that revenue stream, the utility cannot survive. Today, every kilowatt hour the customer reduces their consumption a little bit of that, a little slice of that, is your fixed operating cost that you are not getting that revenue from. The RMLD is making strides to change that to make those corrections a little bit in the last rate redesign, but you have to pay more attention to that as the distributed generation becomes prevalent in the service territory.

Mr. Rupp said that to cherish retirements the investments to be made in centralized coal and nuclear were great when power was almost too cheap bare nuclear and very inexpensive to coal plants. Regulation, legislation and political agendas have changed that landscape greatly as coal plants are dropping off and nuclear power plants are not too far behind them. Mr. Rupp doubts we will see nuclear or coal completely gone, but it will significantly reduce replaced by natural gas and renewable resources. In this particular area there is not enough natural gas capacity to serve the demand. There is not enough pipe line to deliver gas to generation resources in the area, as a result prices are getting more dramatic that is another real threat. When all that is stacked up that is a lot to think about for this utility to survive going forward. The RMLD asked us to come in with questions in mind, but what we need to do to make the utility, in terms of its organization and structure, to survive through these kinds of changes. Mr. Rupp explained that his company looked at four main components of the operation, we performed a current situation analysis as we sat down and interviewed nearly half of the staff, all senior managers, talked about these challenges, what working, what is not working in order to obtain a good idea of the current state of the utility.

We performed a benchmarking study to look at across twenty plus metrics on how RMLD compared to its peers in the regionally as well as nationally. Some of the electric utilities benchmarked were Peabody, Taunton, Danvers, Holyoke, APPA and NEPPA to compare how RMLD measured up and we will share those results with you. Mr. Rupp stated that an abbreviated compensation benchmark compensation survey by looking at some critical positions in the utility and how RMLD compares to the market, is there an answer in there that might help you understand what is needed to be done in order to address the retention where there have been issues.

Mr. Rupp noted they also looked at the overall effectiveness of the organization and how the management team is working together, is work getting done that is budgeted for, those kinds of issues.

We performed a best practices review looking at twenty five best practices that we believe are important for a utility, provided an assessment about how we think RMLD is doing and made some recommendations. As a result, we had fifty two recommendations prioritized and put into a schedule as a conclusion to the report and what we think RMLD team needs to look at and decide what they want to take on in order to move forward.

**Presentation – Organizational Study – Mr. Steve Rupp, Vice Present, Engineering Solutions, Leidos (Attachment 2)**

Highlights of the current situation analysis:

- The utility is definitely in a state of transition with a lot of work to be performed.
- There is new management that has been here nearly two years that is highly in-tuned to the challenges the industry is facing, highly in-tuned to this utility needs to do to be prepared and is looking for the right solution to be able to successfully manage the change that needs to happen to get through it. Mr. Rupp stated that there are some great success stories about what has been accomplished in this time period, there is a lot more that remains to be done.
- The RMLD performed a Cost of Service Study resulting in a rate redesign was undertaken in 2013 with some initial changes have gone into effect there are some other rate changes that are coming in the near future, those are excellent moves at what a utility should do.
- One of the nice values of public power is that RMLD has local control; has the ability to make those kinds of critical changes to the business and that gets reflective as to how the financial community looks at RMLD in terms of investment grading RMLD get when it is time to go out to borrow money to replace aging infrastructure, RMLD gets rewarded for that local control, it is a huge value. RMLD does not answer to shareholders that live outside the service territory, your shareholders are your neighbors and the community that reflects their values, their priorities and needs, they may not always agree with you, but they get you. That is something in which you all should be very proud.
- RMLD has made improvement in the procurement process some of by design and some out of necessity which were important strides.
- Improvements in financial reporting which has to do with contemporary idea of unbundling the rates in order that the RMLD can look at the cost of service from the generation transmission distribution side in order to manage the business against those unbundled characteristics. That means having to change the financial reporting to be able to look at that to compare a budget and actual performance based on those unbundled categories and RMLD is making very good progress.
- A lot of work is starting to the Career Development Plans that is in recognition of the need to be able focus on the talent that RMLD has here because it is hard to recruit people, not a lot of people interested in coming in to this industry. It is difficult to attract them, the number one priority should be keeping people we have and helping them move along in their careers which means putting together plans for training, making clear to them what the expectations to be able to advance and RMLD is making great strides in this area.
- Current efforts to improve internal communications have been well made and a reflection of that is that we had an all-hands meeting where Mr. Ken McNeil from Booth & Associates and Mr. Rupp had an opportunity to gather and present the same briefing to anyone who is willing to attend and there was a full house. There were some tough questions asked and basically people are beginning to understand, appreciate what lies ahead. Soon we should see who will be onboard and want to part of the solution or not that is the next step. Mr. Rupp stated there were great questions today from the Community Relations Manager noting that he overlooked the communications elements of the study's results and she called me to task, had great dialog. We discussed how important communication is both out facing the customers and the community RMLD serves as well as inward. Some of the old command control structures that were here and that is very typical of this industry, small utilities, very strong manager, very well structured silos and communication was always from one silo or manager down to the next silo and where it needs to go. A lot of utilities grew up that way, tough to survive, but we are facing the need to not operate that we see those silos coming down and that is the very important progress.
- Mr. Jaffari is working very hard on a technology roadmap and we review that they are very much on the right track. Again, there are opportunities to do more and road mapping is a strategic plan, it is not a destination it is a journey. This is the kind of thing that technology changes quickly and RMLD must continually look at your assumptions, choices and decisions, firm them. When they do not make sense make an adjustment going in one direction and see a lot of support. We have seen a lot of that happen here and that is terrific.

**Presentation – Organizational Study – Mr. Steve Rupp, Vice Present, Engineering Solutions, Leidos (Attachment 2)**

Highlights of the current situation analysis:

- Getting on top of the maintenance a lot of time has been spent in trying to figure how to prioritize and where to focus in looking at the maintenance of the infrastructure. RMLD has had some strong signals from the infrastructure itself about what to pay attention to, transformers begin to leak and fail which is a good sign that we need to pay attention.
- Become more proactive and less reactive in taking care of those maintenance plans that are in the budgets that were presented. You should feel confident that your utility is doing the right thing and focused in the right direction.
- The current Human Resource processes is here and in our opinion have not caught up with where they need to be to face the challenge that RMLD has coming ahead. This type of HR structure that is in place now worked well twenty years ago, but it needs to change. People are not fighting to come to work here, its difficult to find people it is important to think creatively and put more energy into recruiting. Many of the people that are here are very far along in their careers and it is getting to that point where RMLD is at risk of how to keep these valuable assets motivated and excited about embracing the challenges that must be solved when they may not be here in another three to four years, that is not an easy task. You have to try to find some way to get value out of the last two to three percent somebody's time and investment if you are going to build a new company.
- Mr. Rupp commented that they have seen signs of that taking place. Succession planning is starting, there is a lot of work to do around succession planning still, RMLD is vulnerable in a lot of areas where there are key people have been in positions in a long time. If they were to leave tomorrow there will be a big gap to fill and RMLD is not prepare for it. That is a priority. Mr. Rupp continued noting the current Organizational Structure is less efficient with the utility. The current organization is the legacy was built out of necessity, it is a reflection of decisions that were made to solve problems with the least amount of pain. For example, people that could not work together as constructively as they might otherwise that problem was solved by putting them in different parts of the organization that solved that particular interpersonal problem. This perhaps was not the best thing for the utility to do in the long run. This must be looked at and plan what is the best organization structure for the what we have to do going forward, figure out how we are going to transition there and get beyond decision that were made in the past.
- There are a lot of opportunities for the leadership team, by leadership team here, anybody who is a supervisor and manager and above. Lots of opportunities to really work on what leadership means, what are the responsibilities of leadership that go beyond just being able to check off the tasks that are on the to do list every day, mentor it, team building, coaching, decision making, prioritizing, time management, these are kinds of things that are good qualities in an effective leader. Mr. Rupp suggested that creativity is another important attribute and that is something that cannot be taught you have to more nurture it and try to find those people that are creative and help them gain positions where they can make up for those that maybe are not as creative. Those kinds of opportunities exist and we have ideas improve that in the organization.

Mr. Rupp stated that is the current situation analysis. Mr. Rupp provided a brief overview of the benchmarking. It is hard to summarize this when you have seen the report there are fifty slides on this, a lot of detailed information that requires some thought and consideration. We have tried to put it all in perspective and try to raise it up to right level. Mr. Rupp noted that in most of the benchmarks the utility is performing well. He put an asterisk by some of the things that need to be looked at very carefully particularly the last two, the distribution operating and maintenance expenditures per circuit mile. Generally speaking, when those numbers are lower it could be a sign of efficiency that RMLD is not wasting money, but if not spending enough money the results could be misinterpreted. The net metric may be better than the average, it may not be a good thing it can be warning sign. RMLD is in the middle in terms of financial performance and that is improving due to the adjustments that have begun to be made to deal with declining kilowatt sales. Mr. Rupp stated that based on the rate changes that were made RMLD will probably see some improvement in the operating income and the operating ratio which might be moving back toward the average. Mr. Rupp recommends reviewing these benchmarks at least once a year. A strategic plan can incorporate the benchmarks.

Mr. Stempeck asked that on a quantitative basis on performance measures is there any reason we cannot add this to the same quarterly of the dashboard that we have talked about or do a monthly dashboard or every six months? Mr. Fournier replied that it can be done. Mr. Rupp added that he cautions to pick the right ones if you are going to look at it that frequently particularly things like and operating and maintenance expense. If you set a quarterly goal then it could be measured against quarterly progress, but generally it is annual. Mr. Stempeck stated he wonders if the data could be generated from the metrics. Mr. Rupp answered that many utilities look at that on a regular basis, but particularly things like the operating income and financial statistics that represent performance on a monthly or quarterly basis. It is very common for utilities to report those and put them on a chart that is presented to the Board. Such items as reliability outages statistics is reported, power costs, etc., are reported to the boards.



**Presentation – Organizational Study – Mr. Steve Rupp, Vice Present, Engineering Solutions, Leidos (Attachment 2)**

Chairman O'Rourke stated that Mr. Stempeck's point is good and in a high level on a regular basis on an annual matrix. Chairman O'Rourke asked that relative to the per customer matrix and asked whether attempt to normalize since not all customers are created equal? Mr. Rupp replied that it is done in the narrative.

For example, if the comparisons per customers are done against Holyoke (the one that is much smaller than RMLD) the dominator drives their numbers up, their values are skewed by RMLD's, there would need notes for a reminder that there are differences in their utility, don't try to mathematically normalize it. Mr. Rupp said that they stick with the APPA methods then we do not have to explain our approach if we conform to what the industry is doing.

Chairman O'Rourke stated that what he meant was there may be some huge commercial advisors that are here in Reading that is a customer and Board members are customers, it is a service level benchmarking on customer service, it probably is true that the amount of service required for those are different noting that he just wanted to factor it in to our grand scheme of things. Mr. Rupp explained that it does not mathematically, but it does a qualitative assessment if there is an interpretative results.

Mr. Rupp then noted they looked at the salary comparisons of selected positions and there is room to improve in some areas that may be a little over the market than others. In general the salary and compensation are not limiting factors for RMLD in terms of the ability to retain, there is a good program here. The bigger challenges are getting people are just not interested in getting into this business and investments that need to be made for the stem programs and working with community colleges to developed interest. RMLD is also competing against National Grid and the other larger players who recruit, they go out to colleges and recruit. They also have internships for students. There are a lot of tools out there to look at. Chairman O'Rourke stated that that his company which is an industrial specialty manufacturer has the same challenges. They found in recruiting strategies is to focus on their company has a huge environmental impact due to the use of their products, environmental friendly aspects because that has raised interest in their company for some out of college applicants because they are conscious of energy, the environment, etc. Mr. Rupp agreed noting that the recruiting strategies are out of date and recruiting today the same way as ten to twenty years ago does not work.

Mr. Rupp stated that he looked at approximately twenty-five best practices categories and the typical quality that we think of about best practices. The RMLD could set the standard in some areas in terms of what the IT Department has done, it is very impressive and sets the bar. RMLD has the luxury of having an IT Department in this organization because in many municipals IT Departments like this are over at the town and it is a shared resource serving public safety, they are serving public works and the utility gets a slice of their time.

Having best practices, competitively prices services is all a good thing. RMLD is still limited in the 2008 Strategic Plan, which stated RMLD wanted to be the low cost provider that is not a sustainable strategy. The RMLD needs to be look at to decide whether to invest and update the 2008 Strategic Plan. RMLD needs to be competitive, needs to be fair, but it costs the organization, it costs the unit price to be the low cost provider especially to sustain this over a long period of time. Being a low cost provider is a market infant strategy and is not a market survival strategy unless you are able to be creative and RMLD is paying a price and trying to catch up in some areas.

The resource efficiency and conservation side, RMLD are doing an excellent job and the demand response in the public power space is not really widespread yet, but is growing. There is a many programs for customers, but work needs to be done in the outreach and marketing those programs, but there is a wide selection to look.

On the other end of the spectrum there are some areas that RMLD is behind the curve. RMLD needs to invest time and energy that is the work force development, organizational effectiveness, leadership development for management, and project management. We talked about most of those issues although RMLD has some exciting themes to work management Mr. Uvanni and Mr. Jaffari are working on, automating the service and work order process and pulling information out of the field to learn where it is needed. RMLD is at the beginning of that journey, but moving in the right direction.

Project management there is a lot of room to improve. With project management it is important to be sure the work is getting completed. There are many reasons why that may not be happening, but we can always do better. Not everybody can be a project manager, but there are some that are very good it. What Mr. Rupp sees some utilities do that are struggling in that regard is go out and hire people who are really good project managers, give them a portfolio of work who are not subject matter experts, electrical distribution engineers, they are really good project managers. They will own a project and they will pull in the resources that is need to get that one done that is a strategy you may use. As RMLD gets the opportunity to hire new people hiring people with a project management professional certification is an important. He is encouraging the RMLD to put that into job descriptions and prove that kind of training for your employees to help them improve their project management skills. There are areas RMLD is doing very well such as GIS, safety, risk management and energy planning.

Mr. Rupp stated that some of the key areas such as work force developmental involves forecasting the future work force needs and in this meeting the Board approved a \$10.5 million budget, but none of you asked how many people is it going to take to get that work done and will we have enough.

**Presentation – Organizational Study – Mr. Steve Rupp, Vice Present, Engineering Solutions, Leidos (Attachment 2)**

Mr. Rupp noted the short fall in understanding the work force needs going forward is the succession plan for key positions as we discussed there are many employees that are nearing the end of their careers. These employees carry a large amount of responsibility for the enterprise. There is nobody yet to back them up if they leave. Mr. Rupp pointed that Ms. O'Brien and her team are working on succession plans but there is still a lot to be done in that area.

Mr. Stempeck asked if Mr. Rupp has done work in the succession plan area and noted that in private industry many times the senior managers are in charge finding their successor and developing them is part of their reward within the compensation system. Mr. Rupp replied that he has done work in succession planning. However, RMLD is encumbered by a couple of things the civil service structure does not promote that, most of the workforce is part of a collective bargaining unit therefore succession planning is prescribed by the next person with the number years of service as the successor. They take care of that from a math problem, but it does not solve getting the work done problem, it does not mean the person is succeeded by the right one. What we do in succession planning is help develop succession plans by identifying successors, help develop the redevelopment plans for those people to get them on the right track. Mr. Rupp stated that the most the job descriptions that RMLD have are out of date, they do not reflect the challenges going forward, and they do not impress the work force that you are trying to attract. The study encourages RMLD to invest in updating those to prepare.

Chairman O'Rourke asked if that was a challenge in benchmarking the compensation since the position descriptions were outdated, but maybe having the interviews help clarify what employees do. Mr. Rupp answered, yes, Leidos had to make sure they had to put in a lot of thought when comparing the right positions in the other enterprises to be sure they had the right things. Leidos did not delve into the position descriptions to see if they were appropriate. Most of the other utilities are in the same position facing the same challenges.

Mr. Rupp pointed out that consistent performance appraisal process is one of the issues here because of the collective bargaining unit agreements that were struck, designed with the incremental increases that are prescribed to you. Less emphasis has been on performance appraisal then the mechanics are getting it done, you need to make sure you understand how important that is to RMLD and put the right level of effort into getting it done. For new people coming in not having a meaningful performance appraisal system is probably the reason they will not stay, if they do not get the feedback and see a path forward to understand what they can do, it will be difficult to keep their attention, it is less important for somebody who is much further along in their career.

Mr. Stempeck asked Mr. Rupp that to think about all you have done for other utilities is there one that stands out in your mind something that RMLD could copy? Mr. Rupp answered, yes, they do it brazenly every time we engage and see something that is working very well that sets the bar for our customer, share it, you can do it amongst yourselves and there are lots of examples out there. Mr. Stempeck said that perhaps later, you can point us to one or two of them as a model. Mr. Rupp explained that it is not a lack of data that is the challenge, it is more representative of what you are working on and take advantage. Chairman O'Rourke said that based on the presentation it speaks to pay for performance structurally it is not tough because of way things are structure. Mr. Rupp added that it is a trend in the utility industry. Ms. O'Brien pointed out that she changed the lineworker and technical services group for performance based step raises. The next challenge is middle management. Mr. Rupp added that accelerating recruiting efforts is really important. Mr. Rupp commented that as far organizational effectiveness some of the changes have been made. Mr. Rupp said that they are recommending the Engineering and Operations Division, Accounting would be Finance/and Accounting Division broader, process improvement and project management. What the RMLD has now is standard. Some of the things in the Engineering and Operations has been moved to Accounting/Finance in order they work on the grid assets. They are proposing a fourth division Customer Service will be focused on where the rest of the world is heading. Municipal are in the Stone Age when it comes to customer service compared to the private sector. It is up to Ms. O'Brien and her team to decide of where the RMLD is today and how to get there. Let's get away from working from people problem as to what is best for the utility.

Mr. Rupp said that communications is always a big deal especially when you trying break down silos. Mr. Rupp stated that it needs to be planned out and make commitments to what communication to do, how frequently, what is the content, who is the audience, how to measure the effectiveness and take it on as a serious business function not as just another thing that gets done.

Mr. Rupp stated that if RMLD is going to make changes to improve the organization and it cannot be quantified that improvement RMLD is probably not going to understand how successful you are. There are some tools to set the benchmark. RMLD will need to go through and survey an instrument to try an establish the difference between what an individual's values are in terms of a number of difference measures that you can come up with, whether its ethics, honesty, accountability, etc., and how the individual sees the organization. When there is a big gap between how an individual sees themselves and how that individuals sees the organization, that is a cultural entropy, which is unorganized energy that is sitting there waiting to do something and it is generally not something that is good, its goes to negative places within the enterprise. Mr. Rupp noted that if RMLD can minimize that cultural entropy, people move into a place where they are more willing to accept change, they are more trusting and they are willing to take more personal risk possibly signing up to take on a task, a tactic or a strategy to make improvements, it is the direction RMLD wants to go.

Mr. Rupp noted that this instrument gives you some measurements where the culture values lie. Over time allows you to take that survey every year or every other year to see if you are making progress towards where you want to go.

**Presentation – Organizational Study – Mr. Steve Rupp, Vice Present, Engineering Solutions, Leidos (Attachment 2)**

Mr. Rupp stated that Leidos has the same thing as an employee survey with an anonymous serving process where Leidos would design the survey with RMLD to come up with the issues that they think are the most important to get a metric back on satisfaction, longevity, what is important to you; there is a whole list of questions. You come back and look at the results. It may give results such as 30% of employees are very satisfied, 30% are somewhat satisfied and 40% of employees are not satisfied at all.

Mr. Rupp continued, RMLD could say the goal is to reduce the number of unsatisfied employees to 20% in two years. The RMLD implements some changes, makes corrections and comes back in two years later and redo the survey to see how RMLD is doing. That is just one example and Mr. Rupp stated that is an important thing to think about.

Leadership development, Mr. Rupp stated before RMLD invests in significant organizational changes Leidos thinks RMLD needs to take a good look at the leadership teams. This goes at least from the General Manager to the Directors and the Directors' direct reports at a minimum is the right level to look at. The leadership assessment is much like the cultural values assessments is much more focused and detailed. It reflects how an individual sees themselves and then you select fifteen or twenty individuals that are impacted by that figure and they provide their input. Now you get to see how managers and supervisors are viewed by their subordinates and understands the Euterpe between how that managers sees themselves and how employees see that manager. You look for the limiting factors that may be overcome to allow that manager to be more of an effective leader or to understand where you can't set expectations that are beyond that leader's ability. It is really important to know that as you think about what you might do in terms of the-organization.

Chairman O'Rourke asked Mr. Rupp if that is similar to a 360. Mr. Rupp answered, yes, it is the Barrett Learning Center version of a 360 which is done by a third party. Leidos does not perform this because we hope to have a relationship with the organization that allows them to get value out of the investment that you paid in getting here. Getting to that level of detail with individual leaders in the organization could lead to a compromise their trust they would bring an independent expert in and they would do that part. Then Leidos would come back and provide an opinion. The woman that we use is very effective and has magical ability to be very forthright and clear with some of the worst cases she had to deliver. Mr. Rupp stated that he already talked about management, leadership and training converging element plans. A lot of focus is on technical skills and other kinds of things that provide improvement and management leadership skills training has been discussed. Team building to build trust would be good. Then we crossed additional edge particularly in an environment where the worry is succession planning the idea of giving managers an opportunity to spend time in their colleagues' shoes in other parts of the organization is a good idea even if it is one week. Mr. Rupp stated that project management recommendations were talked about this at length. RMLD needs some project management policies and procedures, better training, hire some project manager experts and establish expectations of those that have project manager responsibilities. Mr. Rupp commented that RMLD are the Flintstones when it comes to work management like a lot of utilities, there are still paper timesheets, time lapse when the entire work is done, feedback about whether that work was done well. Utilities that are implementing modern work management systems there are a lot of solutions available working with them with utilities accounting structure for FERC accounting, the way work accounts are set up, the way work orders are opened and managed - it automates that process, it makes information more useful to those trying to make decisions or trying to forecast future work force needs, etc. Business processes need to be documented there only a few documented.

Mr. Stempeck stated that sometimes that is a function of the skills for an organization in terms of what level technology you want to implement, it is always a cross between paper based, systems and modern technology whether its mobile based or computer. He assumes that his assessment would go beyond needing that type of management technology. Mr. Rupp stated RMLD is scratching the surface of it now, there is no work management automation here at all, a little bit. The people that need it the most see it and they are working on it. The work management solutions that are being worked on will improve the success of meter reading upgrade project that is coming down the pipe line that is something that could expand. The real parts to make it work and one of the hardest things is try to get away from the idea to go out and buy a system that is customized for the organization. Once that is done trying to keep it up to date becomes almost impossible. There is constant customization it is easier to retune your business processes to fit a tool that can help adjustments will need to be made as things are done differently. The ability to manage what you have is important. Getting the right thing to done timely. Leidos provide fifty two recommendations and prioritized it over 3 ½ year limitation schedule and this the first step in this prioritization. Ms. O'Brien and her team will look at this and decide what they want to do first, second, etc., but the road map is there.

Chairman O'Rourke asked Mr. Rupp from a Board perspective if there is anything recommendations from the Board's perspective that should be done short of supporting the General Manager and the team and is there anything the Board can do. Mr. Rupp stated that their assessment is that the Board has made some really smart decisions about who they have brought on to run the utility and trust the decision you have made. Mr. Rupp said that not to make it too complex or pick the wrong metrics it will fail. If you decide to move forward into a strategic process and helping set a vision that the utility can work to is very important. Mr. Rupp suggested the APPA National Conference in which there are workshops for commission members in which addresses strategic plans.

Chairman O'Rourke thanked Mr. Rupp and his team stating the study has been very thorough analysis and provides a roadmap for going forward. Mr. Rupp thanked the Board.

### **Future of Climate Committee**

Chairman O'Rourke acknowledged Joan Boegel and Gina Snyder from the Climate Action Committee. The background is need to discuss the future of the committee. Mr. Talbot said that he spoke to the Town Manager, about this and next Tuesday the Reading Board of Selectmen will be meeting with the Climate Action Committee (CAC) what the future will be because the CAC is slated to finish on June 30. Mr. Talbot said that the town needs the voice of the CAC, the emission reduction strategy and sustainable strategy. Mr. Talbot hopes this committee continues. Earlier stated in this meeting if the RMLD can if we communicate with a thousand people for water heaters two megawatts can be shaved off RMLD's demand. Chairman O'Rourke said that he supports the great work the committee does.

Ms. Snyder thanked the Board for letting them come up earlier on the agenda. The CAC has worked in Reading for over ten years. One of the first initiatives was with greenhouse gases and the RMLD was extremely helpful. RMLD is a wonderful partner when it involves electricity and energy efficiency. The biggest emission was from transportation and have done a lot in that area. Sustainability, recycling, Green Sense column in the newspaper as well as school outreach. Ms. Snyder said that they would like to work with the RMLD to form a committee to focus on electricity. The CAC said that she is working with Mr. Ollila on the community solar program which is outgrowth of the local energy plan. Mr. Stempeck asked if other towns have similar interest. Ms. Snyder replied with the new town administrator in North Reading. Chairman O'Rourke said that the RMLD serves four towns. Ms. Snyder said that have had workshops with other towns.

Mr. Talbot said that the CAC will advocate to be a committee still under the Board of Selectmen. Ms. Snyder commented that she is in agreement. Mr. Pacino said that the Board of Selectmen should support the continuance of this committee in order that they can do their work and the committee take this message to the selectmen. The Board was in agreement.

### **Presentation – Reliability Study – Ken McNeil, Operations Manager, Booth & Associates (Attachment 3)**

Mr. McNeil began his presentation on the Reliability Study noting that this study touched on more than just the electrical side; it involved every aspect of the electrical system. During the field assessment Mr. John Sidebottom, from our substation and protective coordination department, examined the substation facilities. Mr. William Parish and Mr. David Hufstaf spent a week to examine as much of the system, pointing out any observations relative to NESC compliance, aging condition of the facilities and how construction standards and processes that are employed by the utility, how they measure up to the standard utility practice. In general, most of the substations were in relatively good condition, there were general maintenance issues that need to be addresses and we have a long list of recommendations. A few of the situations that need to be addressed with the highest priority in most cases it was the condition of the fencing around the substations because they must meet the code as far as height, the wiring around the top and the grounding. Some of the fencing area were not grounded which can pose a safety risk to the public as well as employees. Substation 4 especially had a lot of vegetation trees overgrowing although those are just typical things that need to be addressees. Also, at Substation 4 it was found that the neighbors on either side of the substation had a pile of wood cord put up against the fence that is not a good situation. Animals tend to hide in the wood piles and snakes can do real damage when they crawl in the substation. In some parts of the substations there were erosion issues and a lot of these are easy to take care of with some gravel, but basically just general maintenance.

Mr. McNeil stated that the bigger pieces of equipment, especially at Substation 4 and Substation 5, there were concerns about overall age and condition about the transformer situation. In conjunction with the time we were working, Mr. Jaffari had another group come in testing the equipment. It was our recommendation, to continue monitoring these older transformers. There were other issues with the planning side which Mr. McNeil stated he would address with Substation 4 and Substation 5, but in the recommendations in time a replacement of all these transformers and breakers at least if the condition does not dictate transformer 4 and 5 to be replaced, monitor age and monitor condition. In a long range planning aspect at least when these transformers get into the forty five to fifty year old range there needs to be a place in a long range budget to plan for those replacements.

Relative to the distribution side, one of the deficiencies found were the lack of a specific construction standards; the system varies in ages, there may be some areas that were constructed sixty plus years, forty plus years, and some new construction.

There is a variety of pole top assembly those types of things, a myriad staff, based on the interviews, with at least manufacturers standards for their construction practices, recently have implemented National Grid and APPA standards have been added. Mr. McNeil stated that he recommends that a set of construction standards specific to RMLD because there are situations out in the field where there are multiple circuits on one pole line that a generic construction standard will not address.

It goes back to the succession, RMLD has it standards, the designer specific standards which will allow the subsequent employee a standard to follow for design and build. Mr. McNeil noted that with the design standards not only are there construction standards the RMLD is trying to implement new design standards. In the past, based on our observations, that a lot of construction has been done by "rule of thumb" engineering and, "this is the way we have always done it". If you are hanging this size wire you use this size pole, there were no engineering calculations that backed this. One of the recommendations was to implement a set design procedures for proper pole sizes, proper guy standards, equipment sizing and again a construction guideline.

**Presentation – Reliability Study – Ken McNeil, Operations Manager, Booth & Associates (Attachment 3)**

Mr. McNeil stated that this way everybody is on the same page. We ensure with our designs that we are meeting the National Electric Safety Code Standards. One of the benefits of doing this is to be in compliance and limiting liabilities, there are accidents on poles that do not meet standards. Mr. McNeil stated that another deficiency that we recommend taking another look at the joint use agreement, if this has been alluded to earlier in this meeting that the current agreement was executed in January 1, 1980. It does not address many critical issues of engineering and construction maintenance standards that were agreed upon between the two entities. When RMLD gets into implementing their own design standards that meets the code. Then to have a third party, such as Verizon, come along and attach to that pole without proper notification, proper re-engineering of that pole to make sure the calculations RMLD did to make sure that pole is the right size for strength requirements, that Verizon does not come in and overload that pole creating a code violation and equipment clearance for substation poles, opening RMLD up to a liability. Mr. McNeil stated that is one thing that is missing from the current standard, another item is the inventory attachments, knowing where they are attached to RMLD poles, knowing whether RMLD is attached to their poles. It is unclear about the rental agreements, but there is a value of each attachment, you want to ensure that everybody understand what these agreements are, on the same page about the number of attachments and what the value of that space of the pole is.

Mr. Hennessy asked if by “value” Mr. McNeil means a financial value of the space of the pole. Mr. McNeil replied, yes. In most the utilities they work with down south the power company owns all the poles. Third parties that come in attach pay for that space on the pole. Mr. McNeil continued with liability issues stating that when RMLD attaches to pole that Verizon owns, two thirds of the poles that RMLD is attached to have “Verizon” on it. RMLD must be aware of the loading and not creating a liability or clearance issues when attaching to that pole. Thus, RMLD would want to do the engineering minimal construction standards that they understand that RMLD will build this pole line to NESC Standards. Part of that is notification of attachment because once you design that line you want to know if anybody else attaches and changes those conditions on that pole.

Mr. McNeil stated that relative to the current Pole Inspection Program only addressed the RMLD owned poles, but his recommendation is that program be negotiated and expanded into that area. The reasoning is that two thirds of the poles that RMLD is responsible for potentially being held liable for there needs to be inspection processes, the current program has been set for one year now. There has been a thirty percent failure rate on the poles that RMLD has control. Based on their observations when they were in the Wilmington area where Verizon owns the poles is that the poles appear to be older in that area and a smaller class. You could likely expect that failure rate continue or increase in that particular area.

Mr. McNeil stated that on the Maintenance Programs they were looking at transformers age and condition, although there have been some programs implemented recently on the operations and maintenance to actually come out on a cyclical basis to perform tests on the transformers. These are the major pieces of equipment, major investment on the system and it is important to monitor those to make sure they are not starting to have gas or water forming inside the transformers or something that would lead to a failure. The Pole Inspection Program another recently implemented program with the central poles that should be sustained. The Grounding Program is very important because some of the observations that were made during just the routine field visits were the copper pole box coming down to the ground rods are broken are some poles, transformers are seen broken, ground connections and the substation fencing missing or cracking. It is a critical part of system operations from a safety issue. Mr. McNeil noted even if new breakers and relays to deaden the line when the fault occurs, but they count on a strong grounding program. Vegetation Management just recently went through a three year cycle; trees are the number cause of outages even with the covered cable and conductors, it is heavily treed in this area. The vegetation management saves RMLD from a lot of momentary outages because from trees brushing into lines, but those trees get brushed and rub on the line can degrade that outer insulator around the cable, moisture gets inside the cable and that is the enemy of the life of that cable. Mr. Stempeck asked how the grounds were broken, stress fractures. Mr. McNeil replied that most likely it is from people cutting their lawns.

Mr. McNeil stated that one area found lacking is a long range system plan, typically systems are expanded on a ten to twenty year period, in order to get a directional as to where you want to take the system. From those long range planning a development of short term capital improvement plans that are based on that long range philosophy. The critical hold establishing a planning program is to establish a design criteria, how much do we want to load the substation transformers, how much do we want to load distribution circuits, the delivery voltage and how you want to operate your system provides a roadmap of when you analyze your electrical system on what type of improvements that should be added and what priorities should be added. Developing a system model is underway, will be part of the GIS Update and the software will be able to load the GIS information into the Omni Software, load the customer information into the modeling software, there will be a real time as built model with real time loading and will give you peak conditions as well as knowledge of present system conditions for voltage compared to AMI reads.

With the SCADA System Upgrade and the AMI, RMLD will be able to get substation and transformer loading data, distribution circuit loading data that can be used based on five to ten year history for projections. Thus, having a good long range plan and referring back these projections when performing the short term projections saves money in the long run. Mr. McNeil stated that they created basic model and conducted a voltage capacity analysis using the model and projected loading with a loss during 2014 of 3.7% for a utility this size those numbers are in good range. Although, system losses are the same as system reliability, you want the numbers as low as possible. Substation transformer loading and contingency loading is something that needs to be addressed. Catastrophic failure of one transformer is a rare occurrence, but you want to analyze those positions and know where you fall.

**Presentation – Organizational Study – Mr. Steve Rupp, Vice Present, Engineering Solutions, Leidos (Attachment 3)**

Mr. McNeil said that circuit getaway loading is one major issue that the RMLD needs to look at. Eight or nine circuits are currently loaded above the one hundred percent of the D/d rated capacity. Eighteen circuits are loaded above sixty percent above the D/d rated capacity. Mr. McNeil commented that in load shifting based on these factors mentioned can attribute to reliability with the underground duct with slices failing and elbows failing due to the heat buildup.

Mr. McNeil stated that one of the major projects that he recommends is to identify the loads under the Wilmington area, a large portion of this utility's load is centered in that area. There is a large high frequency load center sitting adjacent to a transmission line. The recommendation is years three through five it will be multi-year process to construct that station, is to propose a new Wilmington substation in that area. This will relieve the loading on the transformers as well as the circuits.

Mr. McNeil stated that one of the questions asked in the RFP was if RMLD is spending enough on O&M, what should RMLD be spending on O&M, which is an open ended questions. Mr. McNeil explained that typically you look at the life of the facilities, manufacturers have life for equipment, depreciation schedule with a thirty to thirty three year depreciation life. Although we know there are facilities that will last longer. Using a forty year window logically you are looking at rebuilding your system every forty years through operations and maintenance. You should be spending at least 2.5% percent of the net plant value on system upgrades or operations and maintenance projects just to keep pace with the loss of life with these facilities. From Booth & Associates observations looking at approximately at the median twenty years of age, a twenty year window, we estimate that the blended average life or age of the system is in excess of that twenty years, it may be accelerating ahead of that 2.5% each year.

Mr. Talbot noted there is some extensive programs that Ms. O'Brien and Mr. Jaffari have outlined to the Board, do you feel that what has been sketched out is covering a lot of this? Mr. McNeil answered, yes, these programs are all implemented. Mr. Talbot asked what needs to be done that has not been implemented. Mr. O'Neil added the expansion of the grounding program, implementation of a detailed coordination study, expand the use of protective devices with reclosers. Mr. McNeil said that they have had discussions that all the programs are industry standards.

Chairman O'Rourke commented that a piece of this is validation, an independent opinion to confirm we are doing the right thing. That is in itself is very important. Chairman O'Rourke pointed out with the Organizational Study there are areas that need to be targeted going forward. Chairman O'Rourke used seventy percent stay the course and thirty percent of accelerated programs. Mr. McNeil pointed out as you implement these design standards, pole guy and sizing in conjunction with the pole program many poles have been replaced. It provides an opportunity to implement these standards. Chairman O'Rourke commented much of this involves standardizing versus being reactive. Mr. McNeil said that with the long range analysis there were no major line loading issues that needed wholesale replacement due to the capacity of the lines. Mr. Talbot said that the Board needs to know abstracted one level higher.

Mr. McNeil commented that the CAIDI and SAIFI numbers are below the regional and national average. With the age and condition what is of concern is the degradation and liability. On the safety side, there was the lack of a formal ARC Flash Program. RMLD employees do have the personal protective equipment, but in the interim the ARC Flash analysis has been completed. Booth & Associates supplied technical engineering with the new requirements for engineering and design there will be expanded job responsibilities and training will be available. Mr. McNeil said that the goal is to get minimal of five engineers up to the system engineers.

Mr. McNeil said that the fiber loop and dark fiber were discussed in the study. There are avenues for expanding the grid modernization program with fiber. The RMLD leases the dark fiber. Mr. McNeil said that the study suggest that a comprehensive, realistic study and business plan is developed outside of the core business for fiber.

Mr. Pacino wanted to know what an ARC flash is. Mr. McNeil explained that current wants to continue on a path when you break that path it wants to follow that path, if you open a switch it draws an arc with that comes, heat, pressure, combustion which can cause significant damage. The ARC Flash Study calculates the potential of that energy at different points on the system relative to your location to the blast, magnitude, how quick protective devices work. The study was performed on the system at critical points, that they have the proper protective equipment on which is an NESC, PPE and OSHA requirement.

Mr. Stempeck liked the fact that many of the recommendations were incorporated into the budget. Chairman O'Rourke thanked Mr. McNeil.

**Report of the Committee– Vice Chair Pacino - Policy Committee (Attachment 4)**

**RMLD's Surplus Material Policy 2, Revision 5 and RMLD's Procurement Policy 9, Revision 4**

Mr. Pacino stated these policies were discussed at the last Policy Committee meeting with suggested changes.

Mr. Pacino made a motion seconded by Mr. Stempeck that the RMLD Board of Commissioners adopt the RMLD's Surplus Material Policy 2, Revision 5 and the RMLD's Procurement Policy 9, Revision 4.

**Motion carried 5:0:0.**

**Report of the Committee– Vice Chair Pacino - Policy Committee (Attachment 4)**

**Fiber Optic Update**

Mr. Pacino stated the Policy Committee discussed the fiber optic network, it was decided a presentation be made to the Board. A presentation on RMLD's fiber will presented at RMLD Board meeting on May 28, 2015.

**Audit Committee**

Mr. Pacino reported on the Town of Reading Audit Committee that met on Wednesday, May 13, 2015, noting they met on the Fiscal Year June 30, 2014 audit, the Melanson and Heath audit. The audit is basically they break the audit down into two categories, the general fund (operations of the Town), and the priority funds (light and water department). There was nothing that came out of this relative to the RMLD at this point and no concerns were raised. One of issues raised was the revolving funds, which was also raised at the Town Meeting, the auditors believe that not all costs are being allocated properly against the some of the revolving fund. Their recommendation is that the Town look into that. The topic came up about the School Committee, it is believed that some of the reserve funds have anywhere between twelve and twenty four months' worth of revenue in them, going forward. That is potentially some of the reserve and the revolving funds of the Town may be over funded. The new business manager of the School Committee and the Town Accountant are working out this particular issue. The Audit Committee made a recommendation that the Town of Reading Finance Committee look into this situation and follow up on this.

Mr. Pacino noted that the Chairman of the Audit Committee is also the Chairman of the Finance Committee basically in terms of the procurement Phase I is complete and everything was taken care of and that was an investigation about the trucks. There is Phase II now going on where a questionnaires have been sent out to all the Town Departments asking what their procurement is and they are waiting to get those questionnaires back then will decide where they will go from this point. Ms. O'Brien pointed out that the RMLD has sent in the forms. The Audit Committee voted to accept the audit and the management letter addressing the revolving fund issue. They also voted to authorize the audit for this year.

**General Manager**

**Report on RMLD's Surplus Property**

Ms. O'Brien reported that the surplus property based on the policy there is nothing in the sustainable category to report, however, in the March auction of the JOJ Kane in Worcester the trucks were sold, two at \$7,000 and one at \$9,000 that takes into consideration the commissions and the appraisals.

**2015 Northeast Public Power Association (NEPPA) Annual Conference August 23 to August 26, 2015**

**Mount Washington Resort, Bretton Woods, New Hampshire**

Mr. Pacino made a motion seconded by Mr. Stempeck to authorize the General Manger to attend the 2015 Northeast Public Power Association (NEPPA) Annual Conference August 23 to August 26, 2015.

**Motion carried: 5:0:0.**

**MGL Chapter 30B Bid (Attachment 5)**

**IFB 2015-24 for One (1) Digger Derrick with Trade-In**

Ms. O'Brien noted the trade in was an older Digger Derrick and the amount for the trade in was \$3,500.

Mr. Stempeck made a motion seconded by Mr. Pacino that bid 2015-24 for one Digger Derrick be awarded to James A. Kiley Co. for \$253,550.00 as the lowest, qualified and responsive bidder on the recommendation of the General Manager

**Motion carried 5:0:0.**

**Power Supply Report – March 2015– Ms. Parenteau (Attachment 6)**

Deferred until RMLD Board meeting May 28, 2015.

**Engineering and Operations Report – March 2015 – Mr. Jaffari (Attachment7)**

Deferred until RMLD Board meeting May 28, 2015.

**Financial Report – March 2015 – Mr. Fournier (Attachment 8)**

Deferred until RMLD Board meeting May 28, 2015.

**BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED**

**E-Mail responses to Account Payable/Payroll Questions**

**RMLD Board Meetings**

**Thursday, May 28, 2015, Thursday, June 25, 2015. Thursday, July 30, 2015**

**Policy Committee Meeting**

**Tuesday, June 2, 2015**

**CAB Meeting**

**Wednesday, May 20, 2015**

**Adjournment**

At 9:55 p.m. Mr. Stempeck made a motion seconded by Mr. Talbot to adjourn the Regular Session.

**Motion carried 5:0:0.**

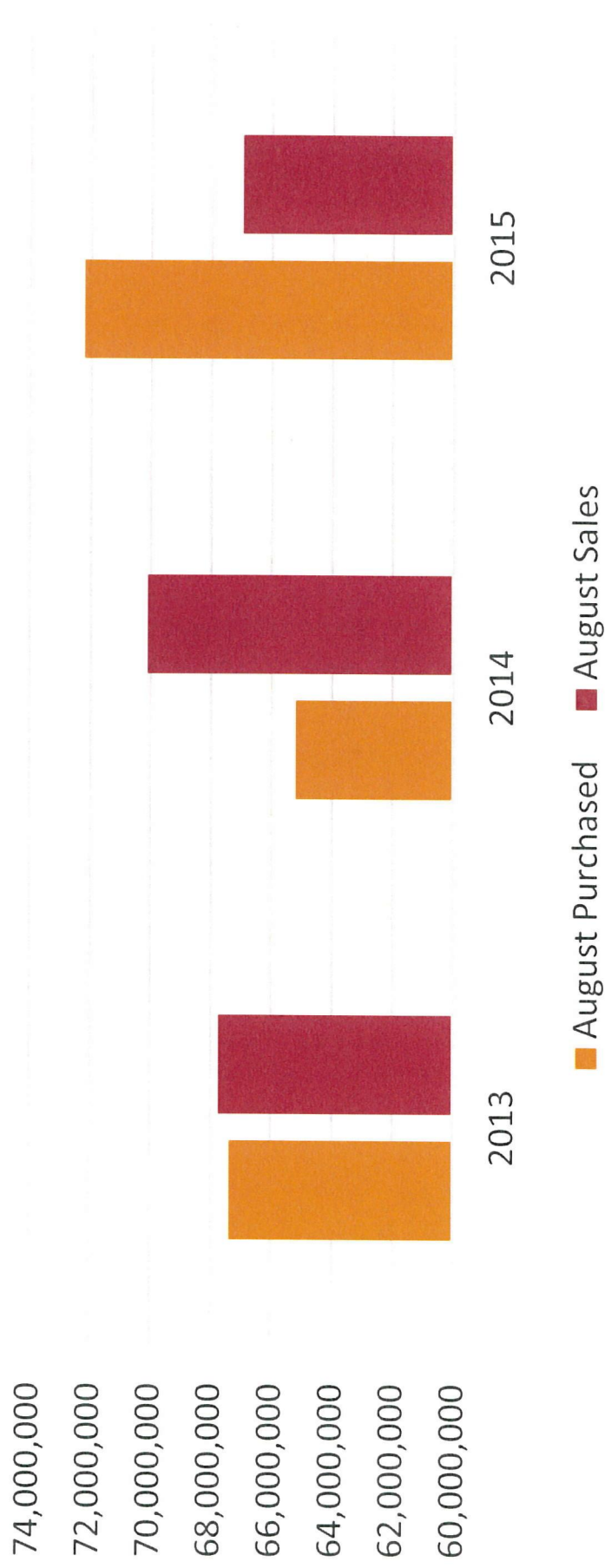
A true copy of the RMLD Board of Commissioners minutes  
As approved by a majority of the Commission.

David Hennessy, Secretary Pro Tem  
RMLD Board of Commissioners

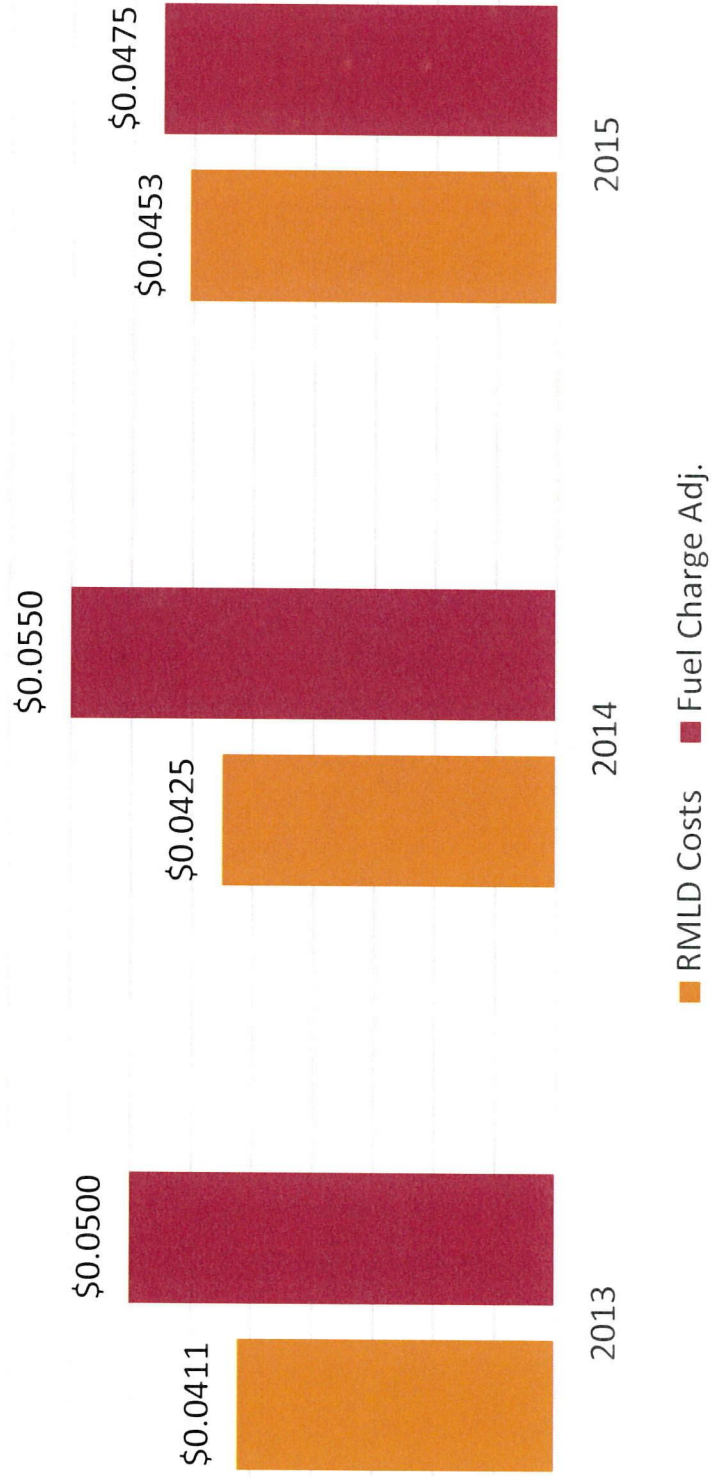


POWER SUPPLY REPORT  
ATTACHMENT 4

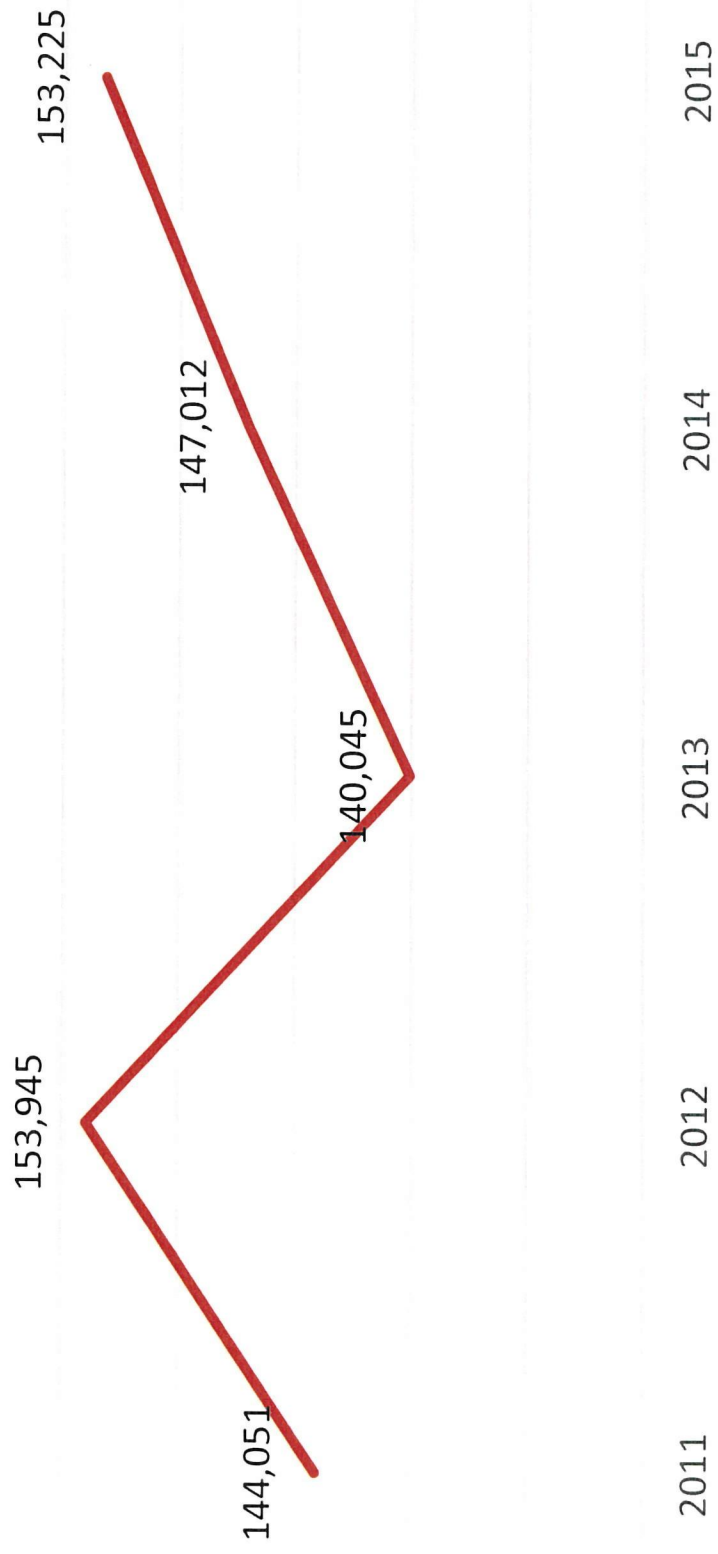
# Energy Purchased vs. Sales August 2013-2015



# RMLD Energy Costs vs. FCA August 2013 - 2015



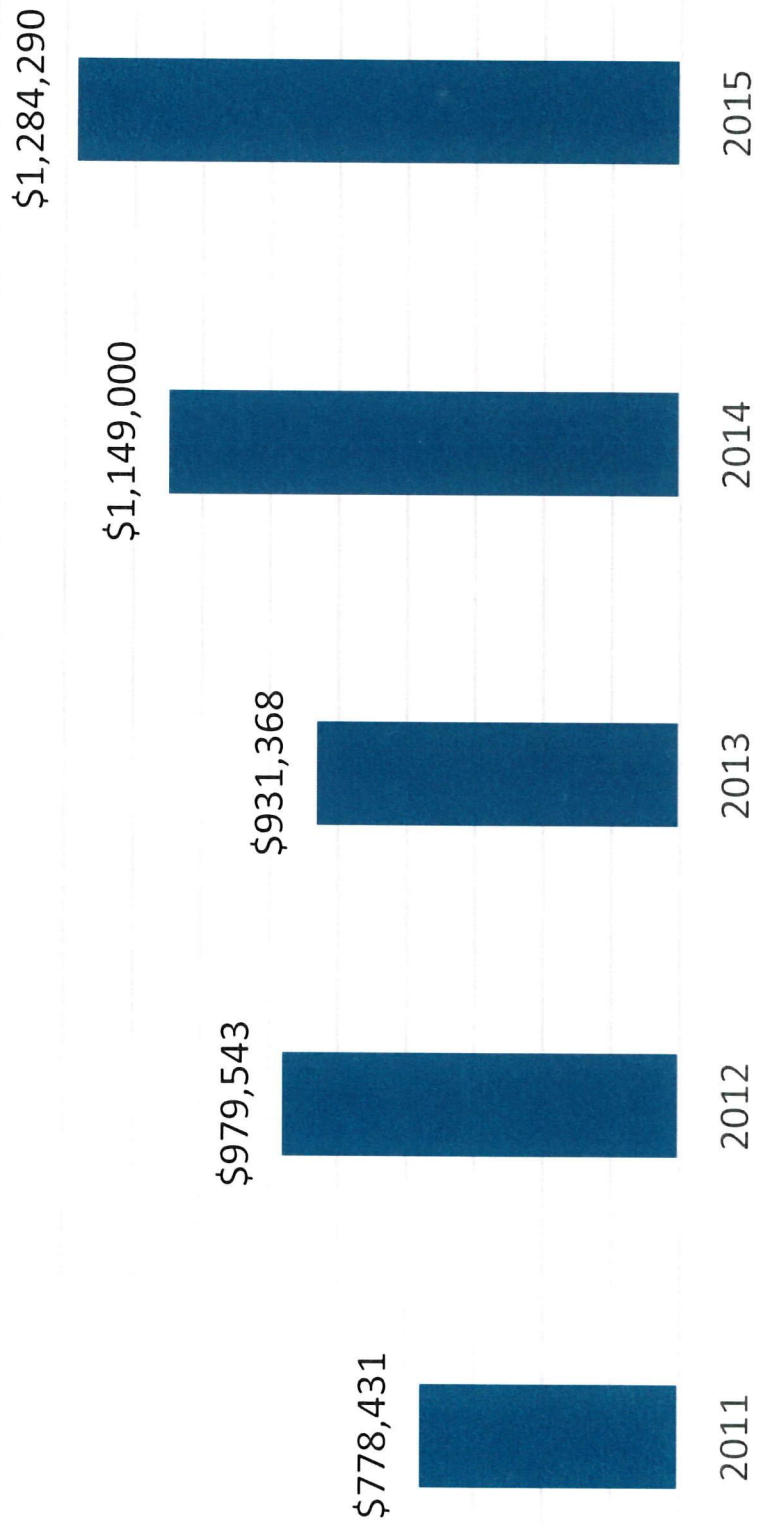
# Historical Peak Demand (kW) August



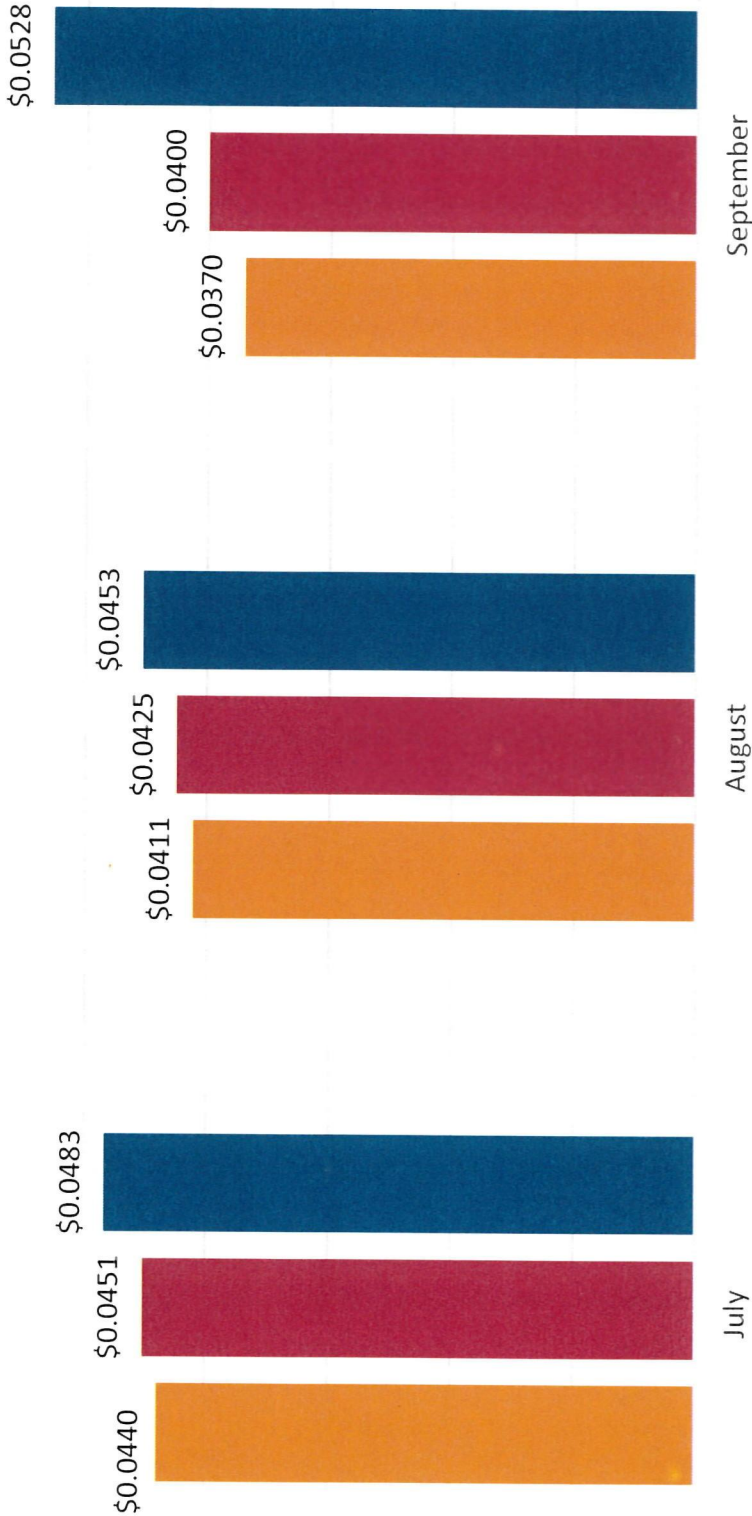
**Historical Peak Demand (kW)  
September**





# Historical RMLD Transmission Costs September



# RMLD's Historical Energy Costs July - September 2013-2015



2013 2014 2015

To: Coleen O'Brien  
 From:  Maureen McHugh, Jane Parenteau   
 Date: October 16, 2015  
 Subject: Purchase Power Summary – August, 2015

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of August, 2015.

**ENERGY**

The RMLD's total metered load for the month was 72,269,508 kWh, which is a 9.81% increase from the August, 2014 figures.

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

**Table 1**

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy	Total \$ Costs	\$ as a %
Millstone #3	3,655,672	\$6.71	5.06%	\$24,530	0.75%
Seabrook	5,881,958	\$6.69	8.15%	\$39,327	1.20%
Stonybrook Intermediate	8,868,164	\$28.75	12.28%	\$254,948	7.80%
Shell Energy	15,642,000	\$71.12	21.66%	\$1,112,512	34.03%
NextEra	11,516,000	\$58.77	15.95%	\$676,836	20.70%
NYPA	2,255,288	\$4.92	3.12%	\$11,096	0.34%
ISO Interchange	(306,639)	\$0.00	-0.42%	-\$2,890	-0.09%
NEMA Congestion	0	\$0.00	0.00%	-\$62,871	-1.92%
Coop Resales	16,575	\$133.42	0.02%	\$2,211	0.07%
BP Energy	12,159,600	\$47.73	16.84%	\$580,378	17.75%
Hydro Projects*	515,524	\$103.10	0.71%	\$53,151	1.63%
Braintree Watson Unit	589,086	\$50.32	0.82%	\$29,643	0.91%
Saddleback Wind	218,511	\$79.53	0.30%	\$17,378	0.53%
Exelon	11,144,400	\$46.98	15.44%	\$523,519	16.01%
Stonybrook Peaking	44,341	\$221.49	0.06%	\$9,821	0.30%
Monthly Total	72,200,480	\$45.28	100.00%	\$3,269,589	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 August, 2015.

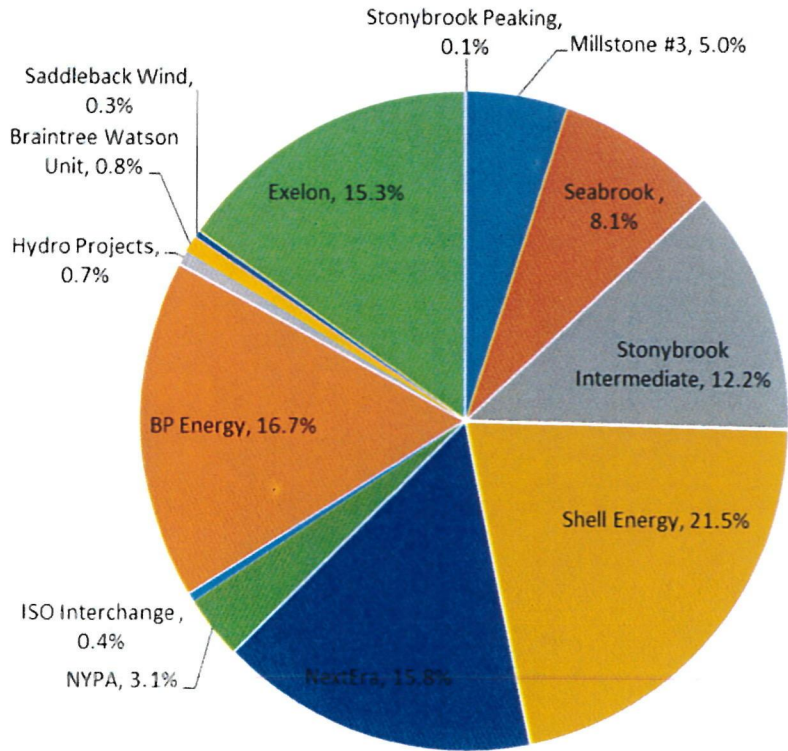
**Table 2**

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP *	900,218	\$21.23	1.24%
Settlement			
RT Net Energy **	-1,206,857	-\$15.49	-1.66%
Settlement			
ISO Interchange (subtotal)	(306,639)	-\$9.42	-0.42%

\* Independent System Operator Day-Ahead Locational Marginal Price

\*\* Real Time Net Energy

**AUGUST 2015 ENERGY BY RESOURCE**



## CAPACITY

The RMLD hit a demand of 153,225 kW, which occurred on August 17, at 5 pm. The RMLD's monthly UCAP requirement for August, 2015 was 222,880 kW.

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

**Table 3**

Source	Amount (kW)	Cost (\$/kW-month)	Total Cost \$	% of Total Cost
Millstone #3	4,950	34.62	\$171,369	9.94%
Seabrook	7,910	39.34	\$311,205	18.05%
Stonybrook Peaking	24,981	2.05	\$51,090	2.96%
Stonybrook CC	42,925	7.78	\$333,978	19.37%
NYPA	4,019	4.19	\$16,834	0.98%
Hydro Quebec	0	0	\$17,478	1.01%
Nextera	60,000	5.90	\$354,000	20.54%
Braintree Watson Unit	10,520	29.18	\$306,975	17.81%
ISO-NE Supply Auction	65,573	2.45	\$160,924	9.34%
Hydro Projects	2,002	0.00	\$0	0.00%
<b>Total</b>	<b>222,880</b>	<b>\$7.73</b>	<b>\$1,723,853</b>	<b>100.00%</b>

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

**Table 4**

Resource	Energy	Capacity	Total cost	% of Total Cost	Amt of Energy (kWh)	Cost of Power (\$/kWh)
Millstone #3	\$24,530	\$171,369	\$195,899	3.92%	3,655,672	0.0536
Seabrook	\$39,327	\$311,205	\$350,532	7.02%	5,881,958	0.0596
Stonybrook Intermediate	\$254,948	\$333,978	\$588,926	11.79%	8,868,164	0.0664
Hydro Quebec	\$0	\$17,478	\$17,478	0.35%	-	0.0000
Shell Energy	\$1,112,512	\$0	\$1,112,512	22.28%	15,642,000	0.0711
NextEra	\$676,836	\$354,000	\$1,030,836	20.64%	11,516,000	0.0895
* NYPA	\$11,096	\$16,834	\$27,930	0.56%	2,255,288	0.0124
ISO Interchange	-\$2,890	\$160,924	\$158,034	3.16%	306,639	0.5154
Nema Congestion	-\$62,871	\$0	-\$62,871	-1.26%	-	0.0000
BP Energy	\$580,378	\$0	\$580,378	11.62%	12,159,600	0.0477
* Hydro Projects	\$53,151	\$0	\$53,151	1.06%	515,524	0.1031
Braintree Watson Unit	\$29,643	\$306,975	\$336,618	6.74%	589,086	0.5714
* Saddleback Wind	\$17,378	\$0	\$17,378	0.35%	218,511	0.0795
Coop Resales	\$2,211	\$0	\$2,211	0.04%	16,575	0.1334
Exelon Energy	\$523,519	\$0	\$523,519	10.48%	11,144,400	0.0470
Stonybrook Peaking	\$9,821	\$51,090	\$60,911	1.22%	44,341	1.3737
Monthly Total	\$3,269,589	\$1,723,853	\$4,993,442	100.00%	72,813,758	0.0686
<b>* Renewable Resources</b>					<b>4.11%</b>	

## RENEWABLE ENERGY CERTIFICATES (RECs)

Table 5 shows the amount of banked and projected RECs for the Swift River Hydro Projects through August 2015, as well as their estimated market value.

**Table 5**  
**RECs Summary**  
**Period - January 2015 - August 2015**

	Banked RECs	Projected RECs	Total RECs	Est. Dollars
Woronoco	836	1,514	2,350	\$101,050
Pepperell	1,939	1,985	3,924	\$168,732
Indian River	817	1,455	2,272	\$97,696
Turners Falls	132	1,052	1,184	\$0
Saddleback	1087	1,138	2,225	\$95,675
Jericho	0	0	0	\$0
<b>Sub total</b>	<b>4,811</b>	<b>7,144</b>	<b>11,955</b>	<b>\$463,153</b>
RECs Sold			0	\$0
<b>Grand Total</b>	<b>4,811</b>	<b>7,144</b>	<b>11,955</b>	<b>\$463,153</b>

## TRANSMISSION

The RMLD's total transmission costs for the month of August, 2015 were \$1,309,072. This is increase of 10.85% from the July transmission cost of \$1,180,976. In August, 2014 the transmission costs were \$1,264,244.

**Table 6**

	Current Month	Last Month	Last Year
Peak Demand (kW)	153,225	156,283	147,012
Energy (kWh)	72,813,758	72,163,068	65,186,052
Energy (\$)	\$3,269,589	\$3,486,210	\$2,768,364
Capacity (\$)	\$1,723,853	\$1,536,212	\$1,414,711
Transmission(\$)	\$1,309,072	\$1,180,976	\$1,264,244
Total	\$6,302,514	\$6,203,397	\$5,447,319

**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/kW	Cost Benefit
	Total to date	25,966	102,495,709	\$ 2,557,553		5,550,957		\$ 1,732,385	\$ 1.59	\$ 5,334.73	\$ 6,376,125
	Current	73	608,761	\$ 10,071	\$ 11.45	36,526	\$ 0.06	\$ 49,650	\$ 0.22	\$ 738.75	\$ (129,898)
<b>Residential</b>											
	Total to date	4,513	3,642,362	\$ 787,845		329,349		\$ 718,531	\$ 0.20	\$ 159.22	\$ 398,663
	Current	25	24,798	\$ 3,407	\$ 11.45	1,488	\$ 0.06	\$ 11,770	\$ 5.27	\$ 5,274.42	\$ (125,900)
<b>Total</b>											
	Total to date	30,479	106,138,071	\$ 3,020,981		5,740,107		\$ 2,846,612	\$ 0.03	\$ 93.40	\$ 5,914,476
	Current	98	633,559	\$ 13,479	\$ 11.45	38,014	\$ 0.06	\$ 61,420	\$ 0.59	\$ 3,778.83	\$ (319,203)

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

Table 8		Washing Machine		Refrigerator		Dishwasher		Dehumidifier		Central A/C		Window A/C		Thermostat		Audits		Renewable		Air Source Heat Pump		HP Water Heater		Fan	
Year	QTY	Dollars	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	\$ 2,350	55	\$ 2,750	7	\$ 175	17	\$ 1,700	10	\$ 250	23	\$ 230	107	\$ 14,940										
2009	406	\$ 20,300	\$ 12,950	235	\$ 11,750	40	\$ 1,000	41	\$ 4,100	50	\$ 1,250	114	\$ 1,140	107	\$ 14,940										
2010	519	\$ 25,950	\$ 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	\$ 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	\$ 17,700	289	\$ 14,450	38	\$ 950	44	\$ 4,400	56	\$ 1,400	105	\$ 1,050	219	\$ 32,731			3	\$ 14,000						
2013	285	\$ 14,250	\$ 16,800	311	\$ 15,550	29	\$ 725	24	\$ 2,400	54	\$ 1,350	57	\$ 570	375	\$ 75,000			3	\$ 15,000						
2014	322	\$ 16,100	\$ 16,650	298	\$ 14,900	27	\$ 675	38	\$ 3,800	76	\$ 1,900	83	\$ 1,245	363	\$ 72,600			4	\$ 17,250						
2015	257	\$ 12,850	\$ 12,800	261	\$ 13,050	26	\$ 650	27	\$ 2,700	36	\$ 900	41	\$ 615	314	\$ 62,800			7	\$ 19,000						
2016	59	\$ 2,950	\$ 2,900	65	\$ 3,250	16	\$ 400	11	\$ 1,100	10	\$ 250	14	\$ 210	0	\$ -			0	\$ -						
Total	2698	\$ 134,900	\$ 119,850	2209	\$ 110,450	267	\$ 6,675	323	\$ 32,300	406	\$ 10,150	682	\$ 7,510	1729	\$ 308,931			27	\$ 103,950						

To: Coleen O'Brien

From:  Maureen McHugh, Jane Parenteau 

Date: October 22, 2015

Subject: Purchase Power Summary – September, 2015

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of September, 2015.

### ENERGY

The RMLD's total metered load for the month was 62,521,903 kWh, which is a 6.04% increase from the September, 2014 figures.

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

**Table 1**

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy	Total \$ Costs	\$ as a %
Millstone #3	3,531,210	\$6.71	5.62%	\$23,694	0.72%
Seabrook	5,225,265	\$6.69	8.31%	\$34,937	1.06%
Stonybrook Intermediate	3,723,083	\$53.89	5.92%	\$200,653	6.08%
Shell Energy	10,166,400	\$69.84	16.17%	\$709,979	21.50%
NextEra	8,314,000	\$53.02	13.23%	\$440,792	13.35%
NYP&A	2,109,323	\$4.92	3.36%	\$10,378	0.31%
ISO Interchange	9,623,685	\$68.00	15.31%	\$654,413	19.82%
NEMA Congestion	0	\$0.00	0.00%	\$291,038	8.81%
Coop Resales	22,131	\$149.36	0.04%	\$3,305	0.10%
BP Energy	9,516,000	\$47.73	15.14%	\$454,199	13.75%
Hydro Projects*	346,814	\$83.51	0.55%	\$28,963	0.88%
Braintree Watson Unit	637,672	\$60.25	1.01%	\$38,418	1.16%
Saddleback Wind	628,046	\$90.25	1.00%	\$56,682	1.72%
Exelon	8,986,400	\$39.47	14.29%	\$354,689	10.74%
Stonybrook Peaking	34,201	\$0.00	0.05%	\$0	0.00%
Monthly Total	62,864,230	\$52.53	100.00%	\$3,302,140	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 September, 2015.

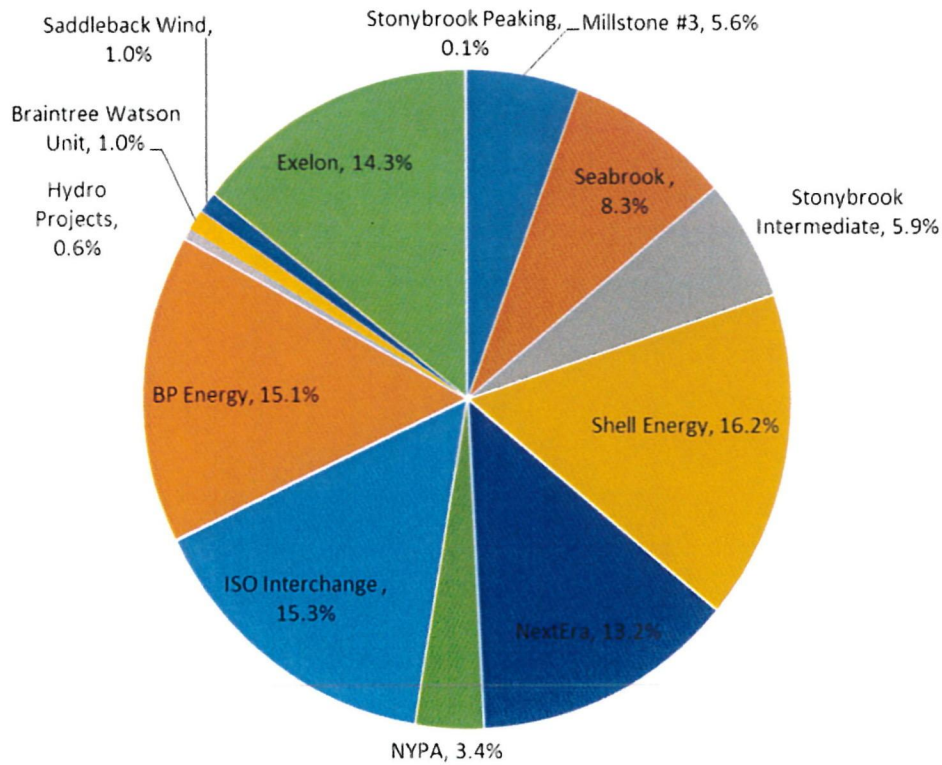
**Table 2**

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP *	11,120,774	\$56.33	17.78%
Settlement			
RT Net Energy **	-1,497,089	\$23.68	-2.39%
Settlement			
ISO Interchange (subtotal)	9,623,685	\$68.00	15.39%

\* Independent System Operator Day-Ahead Locational Marginal Price

\*\* Real Time Net Energy

**SEPTEMBER 2015 ENERGY BY RESOURCE**



## CAPACITY

The RMLD hit a demand of 154,933 kW, which occurred on September 9, at 4 pm. The RMLD's monthly UCAP requirement for September, 2015 was 222,873 kW.

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

**Table 3**

Source	Amount (kW)	Cost (\$/kW-month)	Total Cost \$	% of Total Cost
Millstone #3	4,950	34.80	\$172,261	12.78%
Seabrook	7,910	39.34	\$311,208	23.08%
Stonybrook Peaking	24,981	2.01	\$50,166	3.72%
Stonybrook CC	42,925	7.77	\$333,608	24.75%
NYPA	4,019	4.19	\$16,834	1.25%
Hydro Quebec	0	0	\$19,152	1.42%
Nextera	60,000	5.90	\$354,000	26.26%
Braintree Watson Unit	10,520	-8.52	-\$89,646	-6.65%
ISO-NE Supply Auction	65,566	2.75	\$180,514	13.39%
Hydro Projects	2,002	0.00	\$0	0.00%
<b>Total</b>	<b>222,873</b>	<b>\$6.04</b>	<b>\$1,348,097</b>	<b>100.00%</b>

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	\$23,694	\$172,261	\$195,956	4.22%	3,531,210	0.0555
Seabrook	\$34,937	\$311,208	\$346,144	7.45%	5,225,265	0.0662
Stonybrook Intermediate	\$200,653	\$333,608	\$534,261	11.49%	3,723,083	0.1435
Hydro Quebec	\$0	\$19,152	\$19,152	0.41%	-	0.0000
Shell Energy	\$709,979	\$0	\$709,979	15.27%	10,166,400	0.0698
NextEra	\$440,792	\$354,000	\$794,792	17.10%	8,314,000	0.0956
* NYPA	\$10,378	\$16,834	\$27,212	0.59%	2,109,323	0.0129
ISO Interchange	\$654,413	\$180,514	\$834,927	17.96%	9,623,685	0.0868
Nema Congestion	\$291,038	\$0	\$291,038	6.26%	-	0.0000
BP Energy	\$454,199	\$0	\$454,199	9.77%	9,516,000	0.0477
* Hydro Projects	\$28,963	-\$1,305	\$27,658	0.59%	346,814	0.0798
Braintree Watson Unit	\$38,418	-\$89,646	-\$51,229	-1.10%	637,672	-0.0803
* Saddleback Wind	\$56,682	\$0	\$56,682	1.22%	628,046	0.0903
Coop Resales	\$3,305	\$0	\$3,305	0.07%	22,131	0.1494
Exelon Energy	\$354,689	\$0	\$354,689	7.63%	8,986,400	0.0395
Stonybrook Peaking	\$0	\$50,166	\$50,166	1.08%	34,201	1.4668
Monthly Total	\$3,302,140	\$1,346,792	\$4,648,932	100.00%	62,864,230	0.0740
* Renewable Resources						<b>4.91%</b>

## RENEWABLE ENERGY CERTIFICATES (RECs)

Table 5 shows the amount of banked and projected RECs for the Swift River Hydro Projects through September 2015, as well as their estimated market value.

**Table 5**  
**RECs Summary**  
**Period - January 2015 - September 2015**

	<b>Banked RECs</b>	<b>Projected RECs</b>	<b>Total RECs</b>	<b>Est. Dollars</b>
Woronoco	836	1,514	2,350	\$101,050
Pepperell	1,939	2,038	3,977	\$171,011
Indian River	817	1,504	2,321	\$99,803
Turners Falls	132	1,056	1,188	\$0
Saddleback	1087	1,452	2,539	\$109,177
Jericho	0	0	0	\$0
<b>Sub total</b>	<b>4,811</b>	<b>7,564</b>	<b>12,375</b>	<b>\$481,041</b>
RECs Sold			0	\$0
<b>Grand Total</b>	<b>4,811</b>	<b>7,564</b>	<b>12,375</b>	<b>\$481,041</b>

## TRANSMISSION

The RMLD's total transmission costs for the month of September, 2015 were \$1,284,290. This is a decrease of 1.89% from the August transmission cost of \$1,309,072. In September, 2014 the transmission costs were \$1,149,000.

**Table 6**

	<b>Current Month</b>	<b>Last Month</b>	<b>Last Year</b>
Peak Demand (kW)	154,933	153,225	150,405
Energy (kWh)	62,550,094	72,200,480	58,968,269
Energy (\$)	\$3,302,140	\$3,269,589	\$2,358,566
Capacity (\$)	\$1,346,792	\$1,723,853	\$1,419,977
Transmission(\$)	\$1,284,290	\$1,309,072	\$1,149,000
Total	\$5,933,222	\$6,302,514	\$4,927,542



**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)	\$/kW	\$/kWh	Rebate	Cost Benefit
Total to date	FY07-15	25,966	102,495,709	\$ 2,557,553	5,550,957	\$ 1,732,385	\$ 6,376,125
Current	FY16	73	608,761	\$11.45	36,526	\$ 49,650	\$ (129,898)
<b>Residential</b>							
Total to date	FY07-15	4,513	3,642,362	\$ 787,845	329,349	\$ 718,531	\$ 398,663
Current	FY16	25	24,798	\$ 3,407	1,488	\$ 11,770	\$ (125,900)
<b>Total</b>							
Total to date	FY07-15	30,479	106,138,071	\$ 3,020,981	5,740,107	\$ 2,846,612	\$ 5,914,476
Current	FY16	98	633,559	\$ 13,479	38,014	\$ 61,420	\$ (319,203)

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

Table 8		Washing Machine		Refrigerator		Dishwasher		Dehumidifier		Central A/C		Window A/C		Thermostat		Audits		Renewable		Air Source Heat Pump		HP Water Heater		Fan	
Year	QTY	Dollars	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	\$ 2,350	55	\$ 2,750	7	\$ 175	17	\$ 1,700	10	\$ 250	23	\$ 14,940	107	\$ 14,940										
2009	406	\$ 20,300	\$ 12,950	235	\$ 11,750	40	\$ 1,000	41	\$ 4,100	50	\$ 1,250	114	\$ 14,940	107	\$ 14,940										
2010	519	\$ 25,950	\$ 18,550	382	\$ 19,100	37	\$ 925	64	\$ 6,400	49	\$ 1,225	127	\$ 8,960	64	\$ 8,960	6	\$ 20,700								
2011	425	\$ 21,250	\$ 19,150	313	\$ 15,650	47	\$ 1,175	57	\$ 5,700	65	\$ 1,625	118	\$ 26,960	180	\$ 26,960	4	\$ 18,000								
2012	339	\$ 16,950	\$ 17,700	289	\$ 14,450	38	\$ 950	44	\$ 4,400	56	\$ 1,400	105	\$ 32,731	219	\$ 32,731	3	\$ 14,000								
2013	285	\$ 14,250	\$ 16,800	311	\$ 15,550	29	\$ 725	24	\$ 2,400	54	\$ 1,350	57	\$ 75,000	375	\$ 75,000	3	\$ 15,000								
2014	322	\$ 16,100	\$ 16,650	298	\$ 14,900	27	\$ 675	38	\$ 3,800	76	\$ 1,900	83	\$ 72,600	363	\$ 72,600	4	\$ 17,250								
2015	257	\$ 12,850	\$ 12,800	261	\$ 13,050	26	\$ 650	27	\$ 2,700	36	\$ 900	41	\$ 62,800	314	\$ 62,800	7	\$ 19,000								
2016	59	\$ 2,950	\$ 2,900	65	\$ 3,250	16	\$ 400	11	\$ 1,100	10	\$ 250	14	\$ 210	0	\$ 0	0	\$ 0								
Total	2698	\$ 134,900	\$ 119,850	2209	\$ 110,450	267	\$ 6,675	323	\$ 32,300	406	\$ 10,150	682	\$ 308,931	1729	\$ 308,931	27	\$ 103,950	70	\$ 7,000	36	\$ 9,000	19	\$ 190		

ENGINEERING AND OPERATIONS  
REPORT  
ATTACHMENT 5



# Engineering & Operations Report

October 29, 2015, RMLD Board of Commissioners Meeting

August and September 2015 Reporting Period

Hamid Jaffari, Director of Engineering & Operations

# Capital Improvement Projects

## ► Construction Projects

- Pole Line Upgrade – Lowell Street Wilmington – 82% complete
- Upgrade Old Lynnfield Center URDs (Cook's Farm) – 75% complete
- 4W5-4W6 Tie – Reading – 5% complete
- West Street – Force Account, Reading – 95% complete

## ► Special Projects/Capital Purchases

- LED Street Light Conversion – 672 of 2,450 (FY16) installed as of 10/11/15

## ► Routine Construction

August: \$116,575      September: \$141,727      YTD: \$368,276

# Routine Maintenance

## ► Transformer Replacement

Pad mount 13.21%      Overhead 10.54%

## ► Pole Inspection

123 poles have been replaced      67 of 123 transfers have been completed

## ► Double Poles

Total # of Double Poles: 502      Pending RMLD Transfer: 52  
Lynfield – 41    Reading – 135      North Reading – 127      Wilmington – 199

## ► Visual Inspection of OH Lines

Inspected circuits 5W8, 5W9, 5W5, 4W10, 5W4, 4W28, 4W5, 4W6, 3W8, 3W18, 4W13

# Routine Maintenance (continued)

## ➤ Manhole Inspection

Pending

## ➤ Porcelain Cutout Replacements

90% complete    270 remaining to be replaced

## ➤ Tree Trimming

August: 288 spans

September: 320 spans

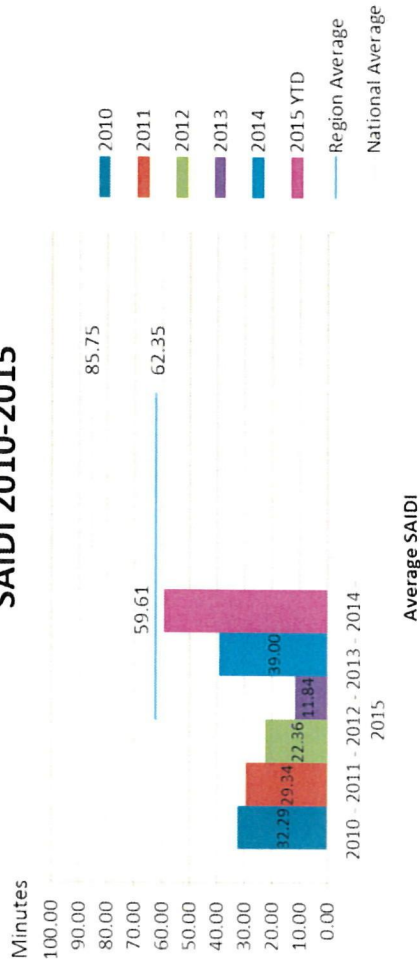
YTD: 925 spans

## ➤ Substation Maintenance

Infrared Scanning – August and September complete - no hot spots found

# Reliability exceeds regional and local indices . . .

**SAIDI 2010-2015**



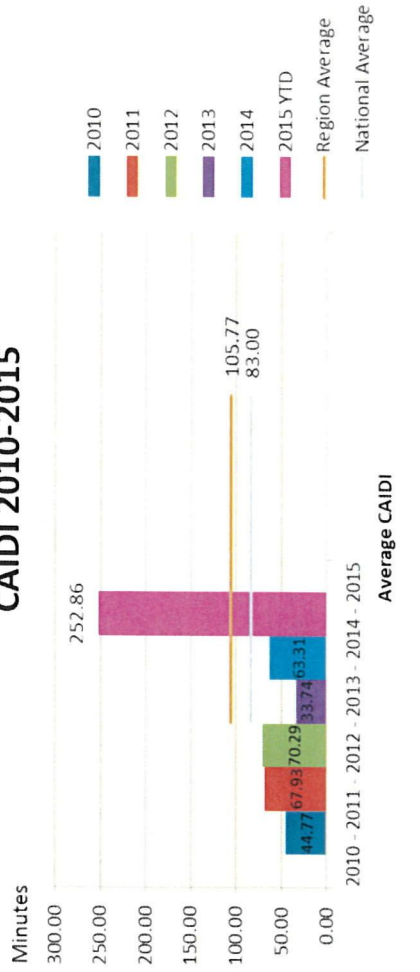
$$SAIDI \text{ (Minutes)} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customers Served}}$$

**Average SAIDI**

Minutes

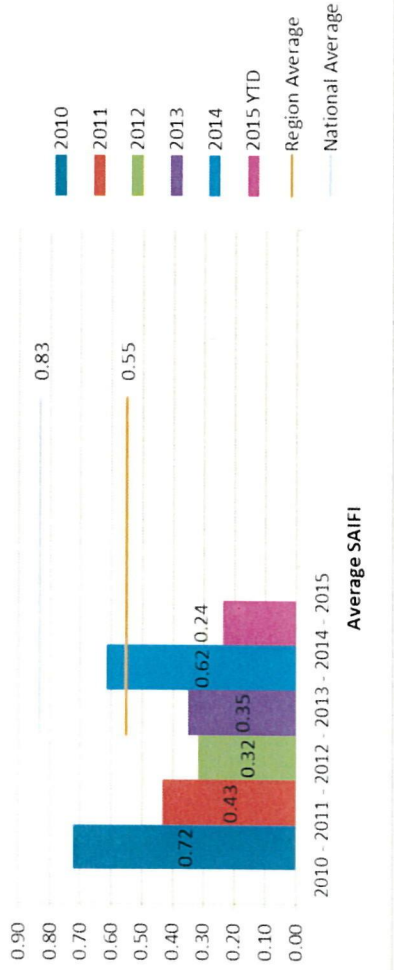
$$CAIDI \text{ (Minutes)} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customers Interruptions}}$$

**CAIDI 2010-2015**



**Average CAIDI**

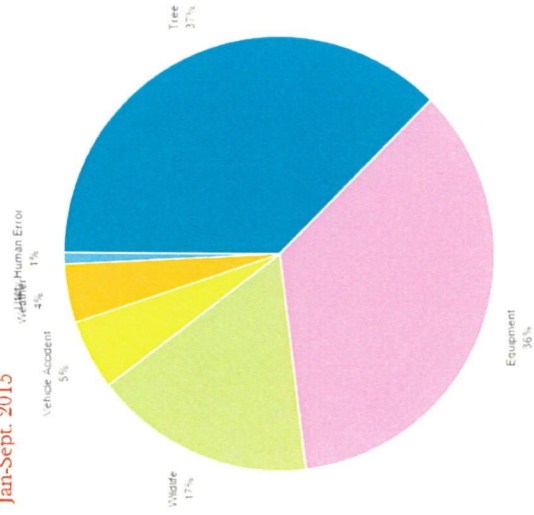
## SAIFI 2010-2015



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

## Outages Causes Calendar YTD (from eReliability website)

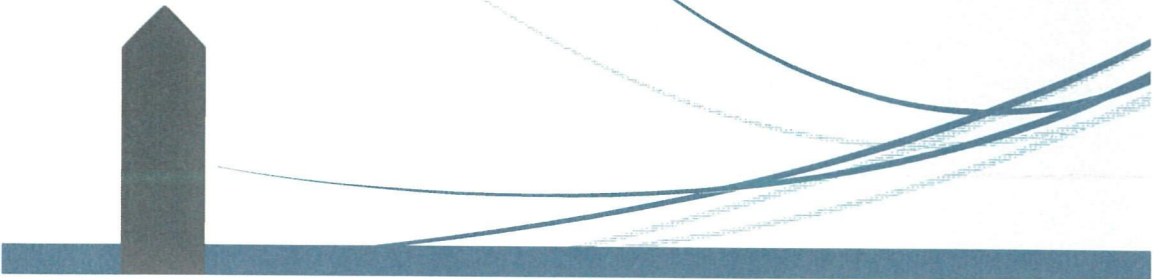
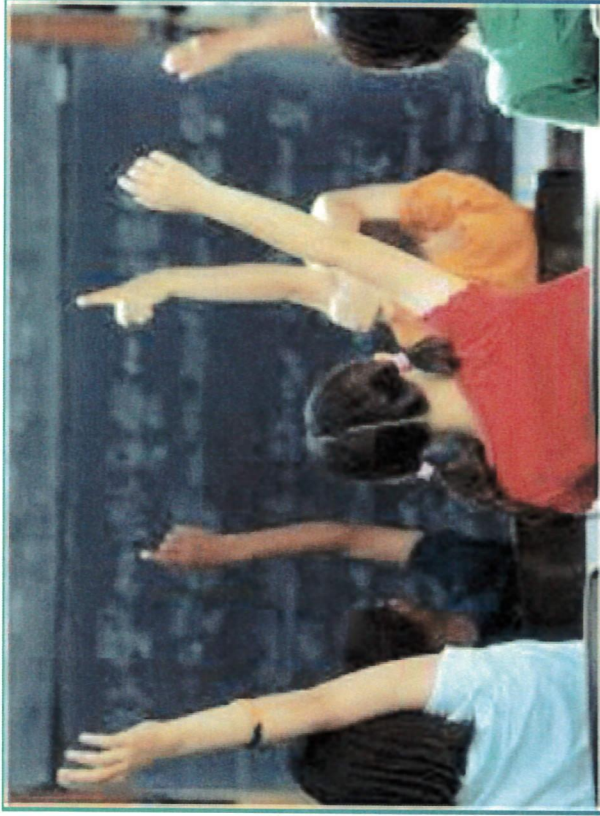
Jan-Sept. 2015



Outage Cause	Count
Tree	43
Equipment	41
Wildlife	19
Vehicle Accident	6
Weather	5
Utility-Human Error	1
<b>Total</b>	<b>115</b>



# Questions ?



# READING MUNICIPAL LIGHT DEPARTMENT

## Engineering and Operations Monthly Report

August 2015

### CAPITAL IMPROVEMENTS

<b>Construction Projects:</b>		<b>% Complete Status</b>	<b>Month</b>	<b>YTD</b>
102	Pole Line Upgrade - Lowell Street, Wilmington	82%	\$23,611	\$37,964
104	Upgrade Old Lynnfield Center URDs (Cook's Farm)	75%	\$12,435	\$42,884
105	4W5-4W6 Tie	5%	\$8,001	\$8,001
106	URD Upgrades – All Towns	On-going	\$777	\$777
107	Stepdown Area Upgrades – All Towns	On-going	\$1,390	\$1,390
212	West Street – Force Account, Reading	95%	\$51,111	\$95,351
<b>New Customer Service Connections:</b>				
113	Service Installations – Residential: This item includes new or upgraded overhead and underground services.	On-going	\$8,589	\$23,041
<b>Special Projects/Capital Purchases:</b>				
116	Transformers & Capacitors	n/a	\$26,150	\$26,150
117	Meter Purchases/500 Club Mesh Network	Pilot 100%	\$2,387	\$2,387
131	LED Street Light Conversion	13%	\$44,362	\$59,632

<b>Routine Construction</b>	<b>Aug</b>	<b>YTD</b>
Pole Setting/Transfers	35,079	56,483
Overhead/Underground	34,066	65,945
Projects Assigned as Required <ul style="list-style-type: none"> <li>• Main Street (area upgrade), North Reading</li> <li>• McDonald Road Conversion, Wilmington</li> <li>• Tecomet, Ballardvale Street, Wilmington</li> <li>• Killiam School, Reading</li> </ul>	11,347	32,389
Pole Damage/Knockdowns <ul style="list-style-type: none"> <li>• Work was done to repair or replace two (2) poles</li> </ul>	412	9,431
Station Group	0	0
Hazmat/Oil Spills	0	0
Porcelain Cutout Replacement Program	804	2,060
Lighting (Street Light Connections)	241	512
Storm Trouble	17,912	17,912
Underground Subdivisions (new construction) <ul style="list-style-type: none"> <li>• Pebble Cove, Lynnfield</li> <li>• Rahnden Terrace, North Reading</li> </ul>	3,703	7,704
Animal Guard Installation	0	484
Miscellaneous Capital Costs	13,012	33,629
<b>TOTAL:</b>	<u>\$ 116,575</u>	<u>\$ 226,550</u>

---

## MAINTENANCE PROGRAMS

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### Aged/Overloaded Transformer Replacement through August 2015

#### Padmount:

Single-Phase: 13.31% replaced (of those over 20 years old)

Three-Phase: 8.97% replaced (of those over 20 years old)

#### Overhead:

Single-Phase: 11.31% replaced (of those over 20 years old)

Three-Phase: 3.89% replaced (of those over 20 years old)

---

### Pole Testing System-wide (600-1,000 poles/year) (as of 10/20/15)

Year-one inspection complete: 645 poles tested (~10%)

- 390 silver tag (PASSED)
- 191\* red tag (FAILED): **101 have been replaced**
- 22 double red tag (CONDEMNED): **22 have been replaced**

**67 of 123 transfers have been completed**

\*42 red tag (failed) poles were reevaluated and removed from the list.

---

### Double Poles (as of 10/9/15)

Total # of Double Poles: 502

Pending RMLD Transfer: 52

Lynnfield - 41

Reading - 135

North Reading – 127

Wilmington – 199

---

### 13.8kV/35kV Feeders – Quarterly Inspections

As part of the feeder gathering project for the reliability project

7/1/15-present: 5W8, 5W9, 5W5, 4W10, 5W4, 4W28, 4W5, 4W6, 3W8, 3W18, 4W13

---

### Manhole Inspections

*Pending.*

---

### Porcelain Cutout Replacements (with Polymer)

As of August 31, 2015, there are 273 remaining porcelain cutouts to be replaced. 90% complete.

---

### Tree Trimming

288 spans were completed in August. YTD thru August – 605 spans have been complete.

---

### Substations:

#### Infrared Scanning (Monthly)

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Station 3 Scanning complete through August – no hot spots found

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Station 4 Scanning complete through August – no hot spots found

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Station 5 Scanning complete through August – no hot spots found

---

#### Substation Maintenance Program

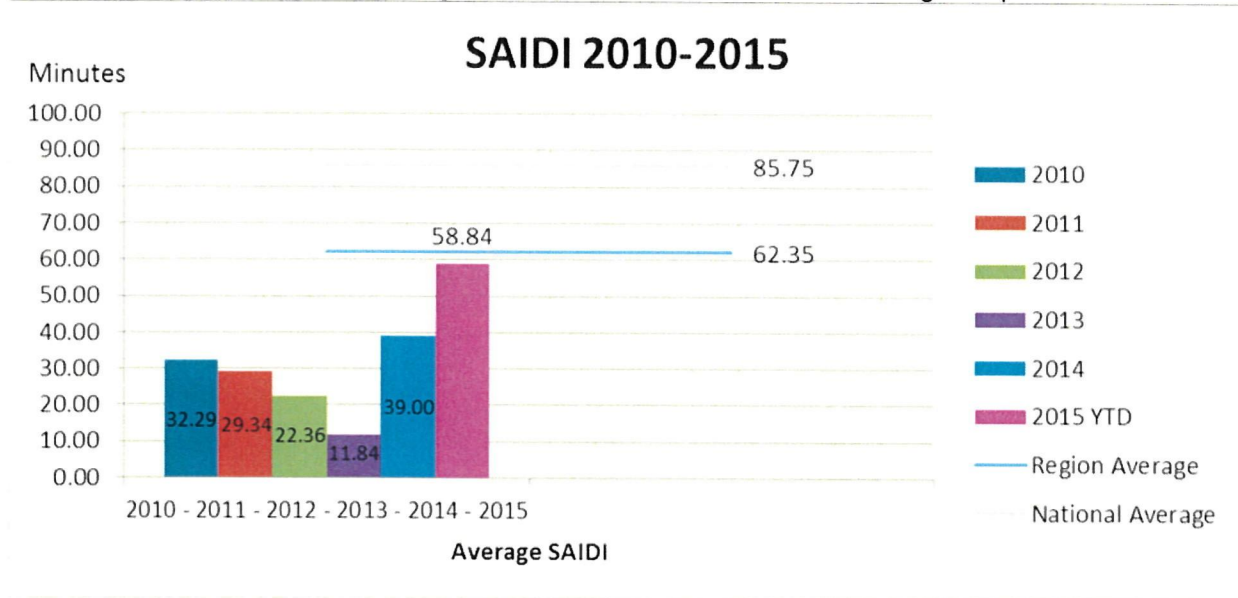
- *Inspection of all three stations by UPG complete.*
-

## SYSTEM RELIABILITY

Key industry standard metrics have been identified to enable the RMLD to measure and track system reliability.

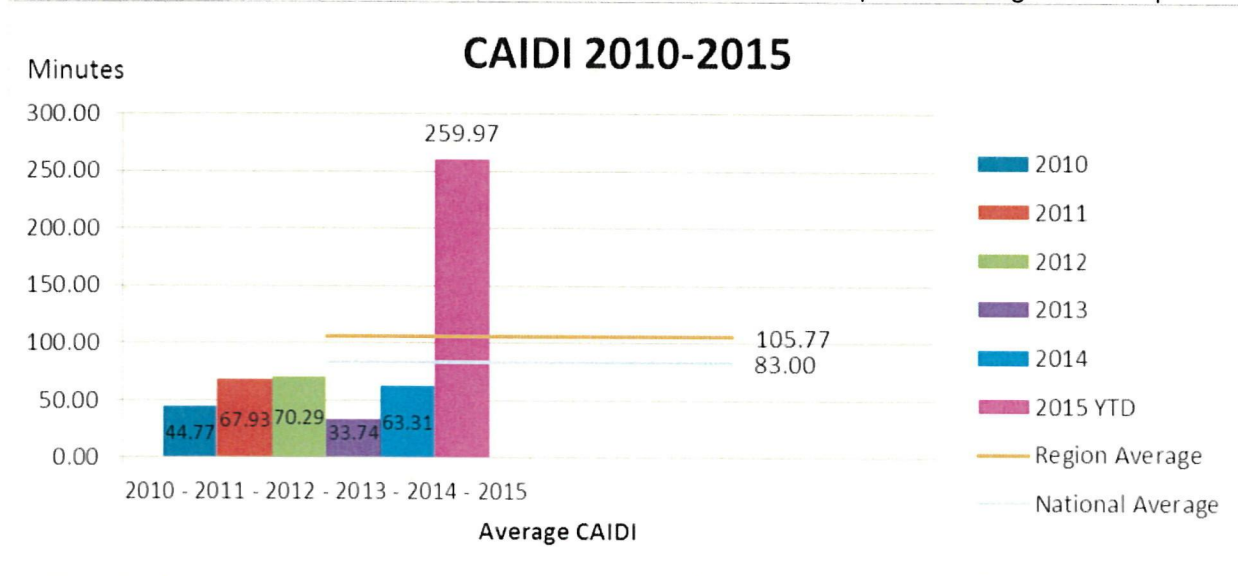
**SAIDI (System Average Interruption Duration Index)** is defined as the average interruption duration (in minutes) for customers served by the utility system during a specific time period.

SAIDI = the sum of all customer interruption durations within the specified time frame ÷ by the average number of customers served during that period.



**CAIDI (Customer Average Interruption Duration Index)** is defined as the average duration (in minutes) of an interruption experienced by customers during a specific time frame.

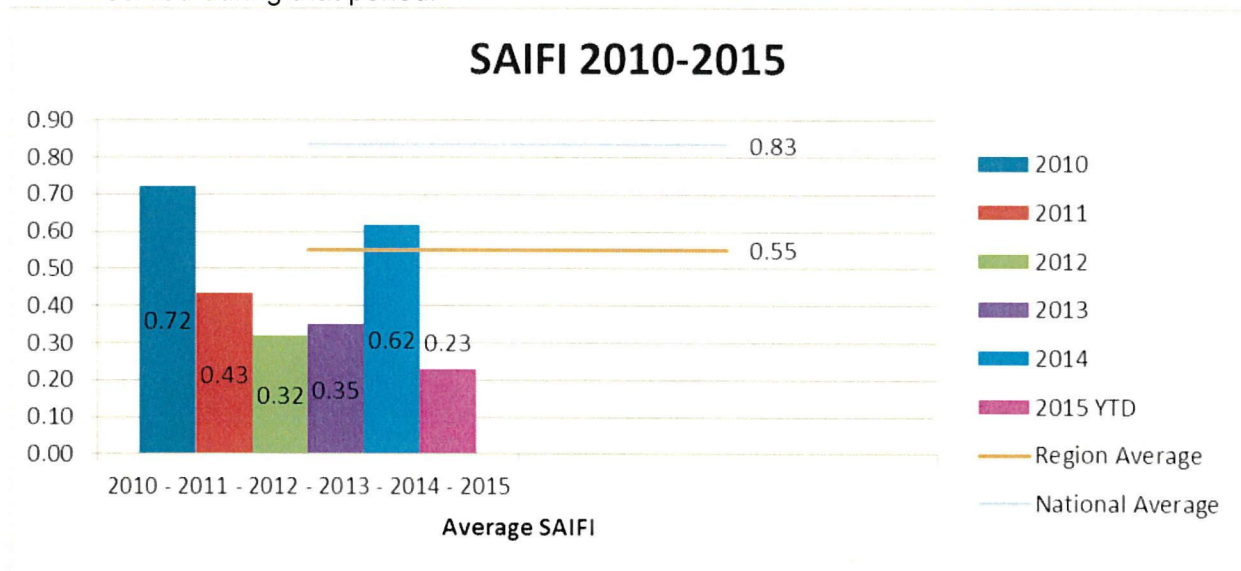
CAIDI = the sum of all customer interruption durations during that time period ÷ the number of customers that experienced one or more interruptions during that time period.



This metric reflects the average customer experience (minutes of duration) during an outage.

**SAIFI (System Average Interruption Frequency)** is defined as the average number of instances a customer on the utility system will experience an interruption during a specific time period.

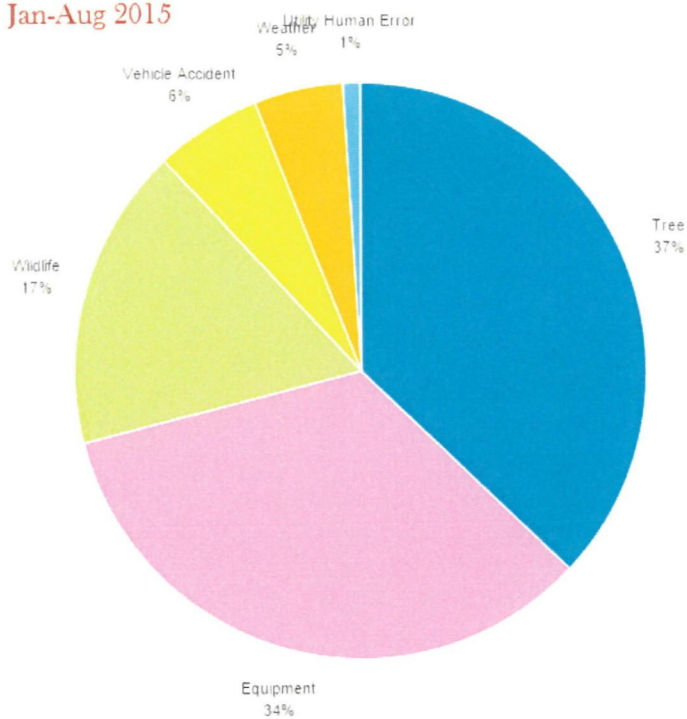
SAIFI = the total number of customer interruptions ÷ average number of customers served during that period.



**Note:** Since SAIDI, SAIFI and CAIDI are sustained interruption indices; only outages lasting longer than one minute are included in the calculations.

# Outages Causes Calendar YTD (from eReliability website)

Jan-Aug 2015



Outage Cause	Count
Tree	37
Equipment	34
Wildlife	17
Vehicle Accident	6
Weather	5
Utility Human Error	1
<b>Total</b>	<b>100</b>

# READING MUNICIPAL LIGHT DEPARTMENT

## Engineering and Operations Monthly Report

September 2015

### **CAPITAL IMPROVEMENTS**

<b>Construction Projects:</b>		<b>% Complete Status</b>	<b>Month</b>	<b>YTD</b>
102	Pole Line Upgrade - Lowell Street, Wilmington	82%	\$35,770	\$73,734
104	Upgrade Old Lynnfield Center URDs (Cook's Farm)	75%	\$20,195	\$63,078
105	4W5-4W6 Tie	5%	\$612	\$8,613
106	URD Upgrades – All Towns	On-going	\$518	\$1,295
107	Stepdown Area Upgrades – All Towns	On-going	\$772	\$2,162
212	West Street – Force Account, Reading	95%	\$37,348	\$132,699
<b>New Customer Service Connections:</b>				
113	Service Installations – Residential: This item includes new or upgraded overhead and underground services.	On-going	\$9,384	\$32,424
<b>Special Projects/Capital Purchases:</b>				
116	Transformers & Capacitors	n/a	\$113,057	\$139,207
131	LED Street Light Conversion	13%	\$51,868	\$111,500



<b>Routine Construction</b>	<b>Sep</b>	<b>YTD</b>
Pole Setting/Transfers	23,252	79,735
Overhead/Underground	23,417	89,362
Projects Assigned as Required <ul style="list-style-type: none"> <li>• Tecomet, Ballardvale Street, Wilmington</li> <li>• Main Street (area upgrade), North Reading</li> <li>• Killiam School, Reading</li> <li>• Solar Project, Ballardvale, Wilmington</li> <li>• Artis Living, Main Street, Reading</li> <li>• Jacquith Road, Wilmington</li> <li>• Charles Street (area upgrade), North Reading</li> </ul>	39,943	72,332
Pole Damage/Knockdowns	0	9,431
Station Group	0	0
Hazmat/Oil Spills	0	0
Porcelain Cutout Replacement Program	1,204	3,265
Lighting (Street Light Connections)	2,083	2,595
Storm Trouble	414	18,326
Underground Subdivisions (new construction) <ul style="list-style-type: none"> <li>• Pebble Cove, Lynnfield</li> </ul>	1,558	9,262
Animal Guard Installation	578	1,063
Miscellaneous Capital Costs	49,277	82,906
<b>TOTAL:</b>	<u>\$ 141,727</u>	<u>\$ 368,276</u>

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## MAINTENANCE PROGRAMS

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### **Aged/Overloaded Transformer Replacement through September 2015**

*Padmount:*

*Single-Phase: 14.29% replaced (of those over 20 years old)*

*Three-Phase: 8.97% replaced (of those over 20 years old)*

*Overhead:*

*Single-Phase: 11.38% replaced (of those over 20 years old)*

*Three-Phase: 4.44% replaced (of those over 20 years old)*

---

### **Pole Testing System-wide (600-1,000 poles/year) (as of 10/20/2015)**

Year-one inspection complete: 645 poles tested (~10%)

- 390 silver tag (PASSED)
- 191\* red tag (FAILED): **101 have been replaced**
- 22 double red tag (CONDEMNED): **22 have been replaced**

**67 of 123 transfers have been completed**

\*42 red tag (failed) poles were reevaluated and removed from the list.

---

### **Double Poles (as of 10/9/15)**

Total # of Double Poles: 502

Pending RMLD Transfer: 52

Lynnfield - 41

Reading - 135

North Reading – 127

Wilmington – 199

---

### **13.8kV/35kV Feeders – Quarterly Inspections**

As part of the feeder gathering project for the reliability project

7/1/15-present: 5W8, 5W9, 5W5, 4W10, 5W4, 4W28, 4W5, 4W6, 3W8, 3W18, 4W13

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### **Manhole Inspections**

*Pending.*

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### **Porcelain Cutout Replacements (with Polymer)**

As of September 30, 2015, there are 270 remaining porcelain cutouts to be replaced. 90% complete.

---

### **Tree Trimming**

320 spans were completed in September. YTD thru September - 925 spans have been completed.

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### **Substations:**

#### **Infrared Scanning (Monthly)**

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*Station 3* Scanning complete through September – no hot spots found

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*Station 4* Scanning complete through September – no hot spots found

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*Station 5* Scanning complete through September – no hot spots found

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#### **Substation Maintenance Program**

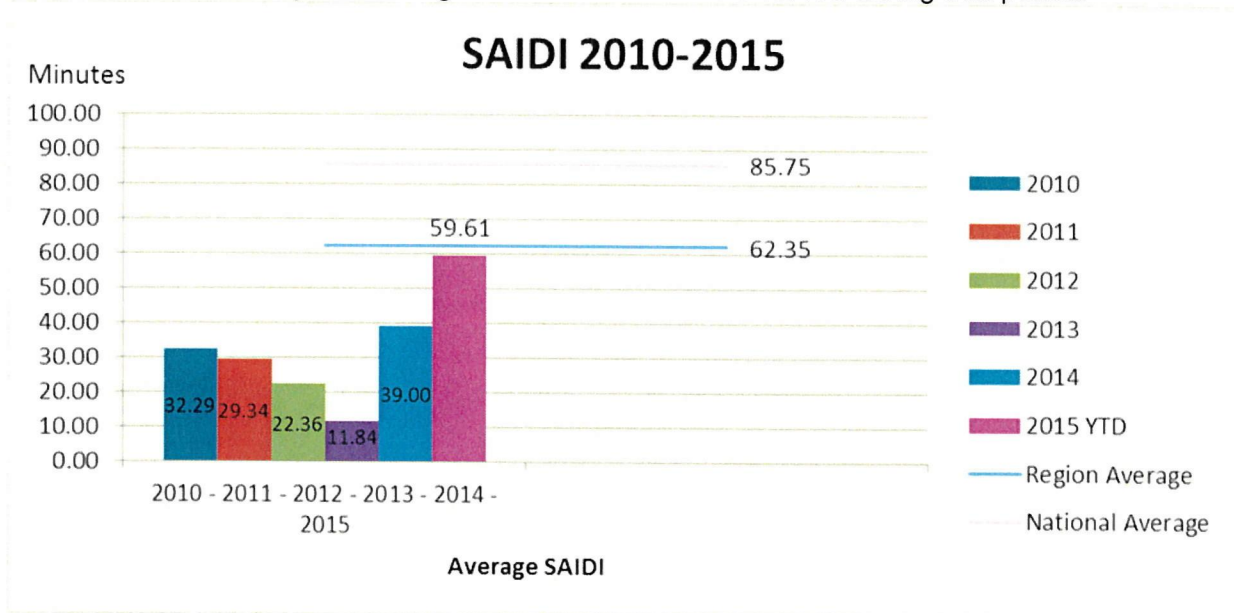
- *Inspection of all three stations by UPG complete.*
-

## SYSTEM RELIABILITY

Key industry standard metrics have been identified to enable the RMLD to measure and track system reliability.

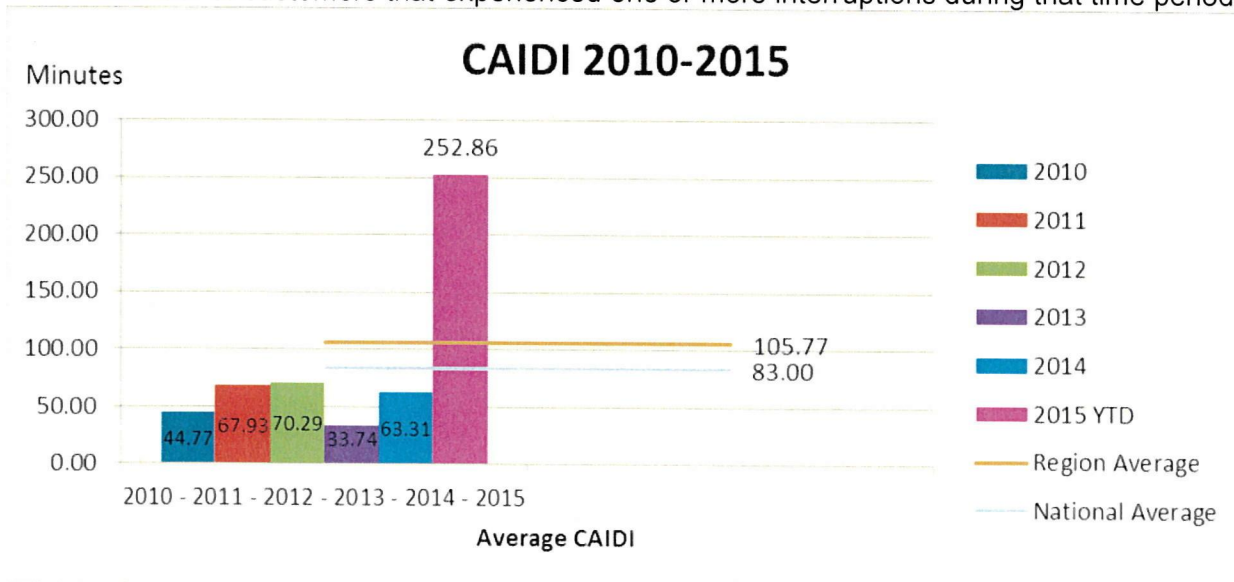
**SAIDI (System Average Interruption Duration Index)** is defined as the average interruption duration (in minutes) for customers served by the utility system during a specific time period.

SAIDI = the sum of all customer interruption durations within the specified time frame ÷ by the average number of customers served during that period.



**CAIDI (Customer Average Interruption Duration Index)** is defined as the average duration (in minutes) of an interruption experienced by customers during a specific time frame.

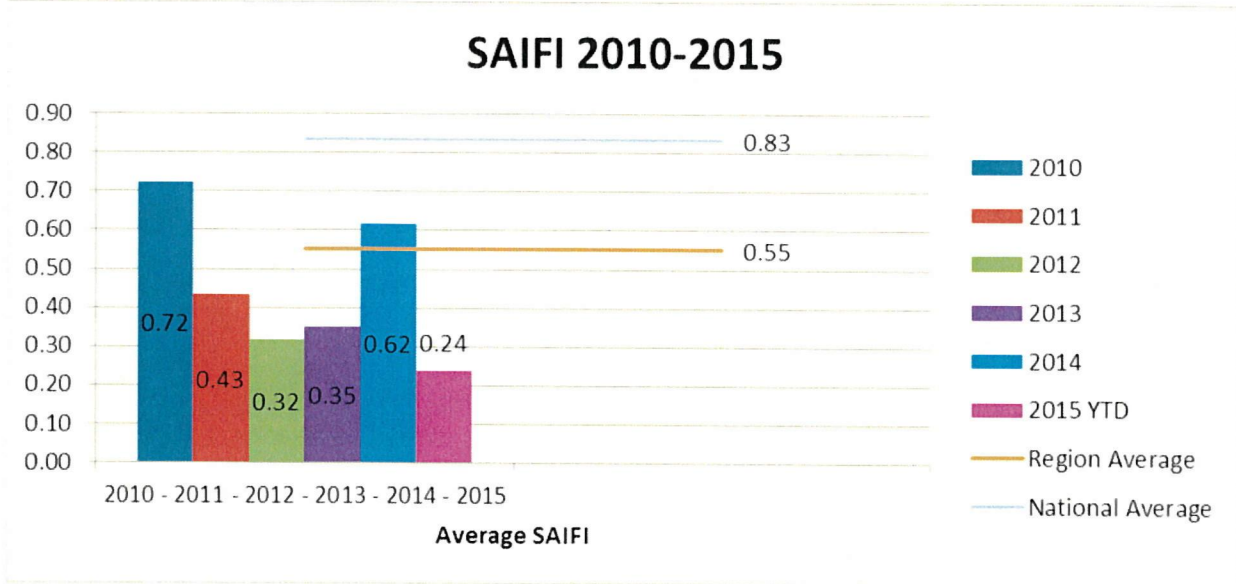
CAIDI = the sum of all customer interruption durations during that time period ÷ the number of customers that experienced one or more interruptions during that time period.



This metric reflects the average customer experience (minutes of duration) during an outage.

**SAIFI (System Average Interruption Frequency)** is defined as the average number of instances a customer on the utility system will experience an interruption during a specific time period.

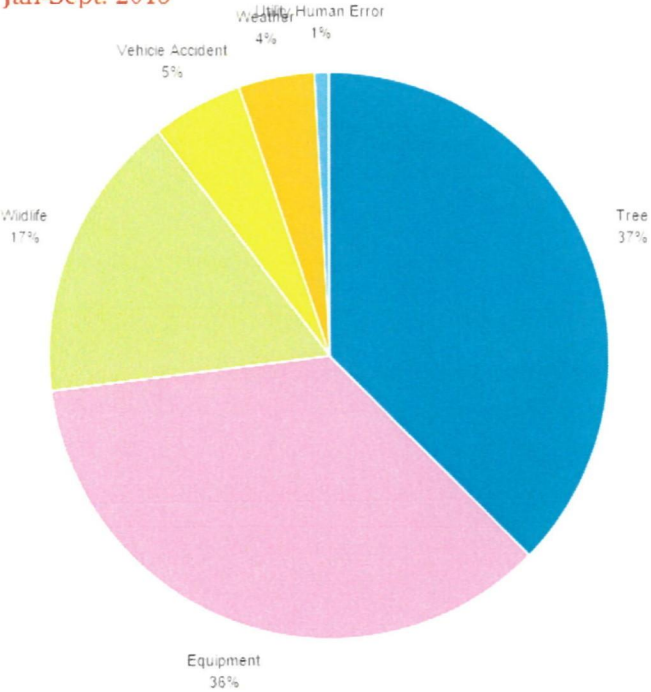
SAIFI = the total number of customer interruptions ÷ average number of customers served during that period.



**Note:** Since SAIDI, SAIFI and CAIDI are sustained interruption indices; only outages lasting longer than one minute are included in the calculations.

Outages Causes Calendar YTD (from eReliability website)

Jan-Sept. 2015



Outage Cause	Count
Tree	43
Equipment	41
Wildlife	19
Vehicle Accident	6
Weather	5
Utility Human Error	1
<b>Total</b>	<b>115</b>

MGL CHAPTER 30B BID  
ATTACHMENT 6



Reading Municipal Light Department  
RELIABLE POWER FOR GENERATIONS

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

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

October 16, 2015

Town of Reading Municipal Light Board

Subject: Remediation, Transportation, and Disposal of Hazardous Waste

On September 23, 2015 a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle and in the Commonwealth of Massachusetts Goods and Services Bulletin on Monday, September 21, 2015 requesting proposals for Remediation, Transportation, and Disposal of Hazardous Waste for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

ENPRO	Triumvirate Environmental	TSI Transformers Service, Inc.
US Ecology	TCI of NY, LLC	Transformer Decommissioning, Inc.
Casella	W.L. French	Eastern Environmental Technologies
Clean Venture, Inc.	TM Environmental	RC & D, Inc.
Pennoni		

Bids were received from ENPRO, Triumvirate Environment and New England Disposal Technologies.

The bid was publicly opened and read aloud at 11:00 a.m. October 16, 2015 in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid 2016-03 for Remediation, Transportation, and Disposal of Hazardous Waste be awarded a contract to:

**ENPRO for a three year period ending November 30, 2018 for an estimated cost of \$150,000 as the lowest qualified 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

The award of this bid provides for Hazmat Remediation services as required. This will be done under the direction of the RMLD Licensed Site Professional.

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Coleen O'Brien

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Hamid Jaffari

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Nick D'Alleva



**Remediation, Transportation, and Disposal of Hazardous Waste  
Bid 2016-03**

Bidder	Total Cost	All forms filled out	Firm Price	Certified Check or Bid Bond	Authorized signature	Exceptions to stated bid requirements	Transporter License	Disposal Treatment Facility License	Audited Financial Statement	Judgements & Fines	Certificate of Insurance
<b>ENPRO</b>		yes	yes	yes	yes	no	yes	yes	yes	yes	received
Typical Job A	\$ 3,682.00										
Typical Job B	\$ 14,622.72										
Combined Job A + Job B	\$ 18,304.72										
<b>Triumbrate Environmental</b>		yes	yes	yes	yes	no	yes	yes	yes	yes	upon request
Typical Job A	\$ 3,586.55										
Typical Job B	\$ 15,100.65										
Combined Job A + Job B	\$ 18,687.20										
<b>New England Disposal Technologies</b>		yes	yes	yes	yes	yes	yes	yes	yes	yes	upon request
Typical Job A	\$ 3,582.82										
Typical Job B	\$ 16,785.30										
Combined Job A + Job B	\$ 20,368.12										

BOARD MATERIAL AVAILABLE  
BUT NOT DISCUSSED

## **Jeanne Foti**

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**From:** Jeanne Foti  
**Sent:** Thursday, October 22, 2015 12:50 PM  
**To:** RMLD Board Members Group  
**Subject:** Account Payable and Payroll Questions

Good afternoon.

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

### **Account Payable Warrant – No Questions**

September 18, September 25, October 2, October 9 and October 16.

### **Payroll – No Questions**

September 21, October 5 and October 19.

This e-mail will be printed for the Board Packet for the RMLD Board meeting on October 29, 2015.

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.

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

October-15

	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
<b>READING MUNICIPAL LIGHT DEPT.</b>							
TOTAL BILL	\$103.55	\$178.48	\$126.28	\$924.79	\$180.77	\$4,335.08	\$697,874.72
PER KWH CHARGE	\$0.13806	\$0.11899	\$0.12628	\$0.12668	\$0.16738	\$0.12386	\$0.10144
<b>NATIONAL GRID</b>							
TOTAL BILL	\$135.21	\$278.17	\$180.27	\$1,268.19	\$182.25	\$4,710.12	\$802,290.74
PER KWH CHARGE	\$0.18028	\$0.18545	\$0.18027	\$0.17373	\$0.16875	\$0.13457	\$0.11662
% DIFFERENCE	30.57%	55.85%	42.75%	37.13%	0.82%	8.65%	14.96%
<b>EVERSOURCE(NSTAR)</b>							
TOTAL BILL	\$144.18	\$256.19	\$190.10	\$1,186.87	\$183.76	\$6,062.89	\$962,820.51
PER KWH CHARGE	\$0.19224	\$0.17079	\$0.19010	\$0.16258	\$0.17015	\$0.17323	\$0.13995
% DIFFERENCE	39.24%	43.54%	50.54%	28.34%	1.66%	39.86%	37.96%
<b>PEABODY MUNICIPAL LIGHT PLANT</b>							
TOTAL BILL	\$92.48	\$178.65	\$121.20	\$1,002.17	\$149.16	\$4,948.28	\$686,411.58
PER KWH CHARGE	\$0.12330	\$0.11910	\$0.12120	\$0.13728	\$0.13811	\$0.14138	\$0.09977
% DIFFERENCE	-10.69%	0.10%	-4.02%	8.37%	-17.49%	14.15%	-1.64%
<b>MIDDLETON MUNICIPAL LIGHT DEPT.</b>							
TOTAL BILL	\$99.77	\$198.39	\$132.64	\$959.51	\$168.44	\$4,762.93	\$807,171.40
PER KWH CHARGE	\$0.13303	\$0.13226	\$0.13264	\$0.13144	\$0.15596	\$0.13608	\$0.11733
% DIFFERENCE	-3.65%	11.15%	5.04%	3.75%	-6.82%	9.87%	15.66%
<b>WAKEFIELD MUNICIPAL LIGHT DEPT.</b>							
TOTAL BILL	\$126.74	\$235.92	\$159.38	\$1,202.79	\$191.68	\$5,648.08	\$955,959.30
PER KWH CHARGE	\$0.16898	\$0.15728	\$0.15938	\$0.16477	\$0.17749	\$0.16137	\$0.13896
% DIFFERENCE	22.39%	32.18%	26.21%	30.06%	6.04%	30.29%	36.98%