

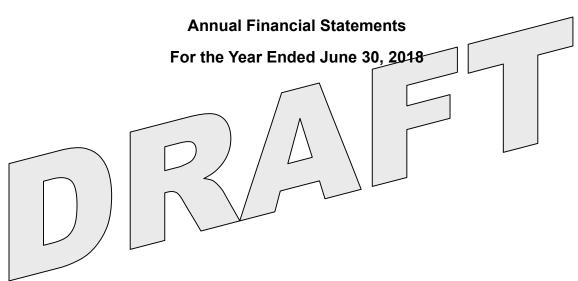
READING MUNICIPAL LIGHT DEPARTMENT

BOARD OF COMMISSIONERS

REGULAR SESSION

THURSDAY, NOVEMBER 29, 2018

AUDIT REPORT FROM MELANSON HEATH, FISCAL YEAR ENDED JUNE 30, 2018 ATTACHMENT 1



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, 2018 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 \$tatements

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.

Auditors' 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, 2018, 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.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and the Pension and OPEB schedules appearing on pages 40 to 43 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.

	2010
	 _, 2018

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, 2018. 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 Statement of Net Position, (2) the Proprietary Fund Statement of Revenues, Expenses and Changes in Net Position, (3) the Proprietary Fund Statement of Cash Flows, (4) the Fiduciary Funds Statement of Fiduciary Net Position, (5) the Fiduciary Funds Statement of Changes in Fiduciary Net Position, and (6) Notes to Financial Statements.

<u>Proprietary funds</u>. Proprietary fund reporting focuses on the determination of operating income, changes in net position (or cost recovery), financial position, and cash flows. The proprietary fund category includes enterprise funds.

Enterprise funds are used to report activity for which a fee is charged to external users, and must be used when one of the following criteria are met: (1) activity is financed with debt that is secured solely by a pledge of the net revenues from fees and charges, (2) laws or regulations require the activity's costs of providing services be recovered with fees and charges, and (3) the pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs such as depreciation or debt service. The primary focus on these criteria is on fees charged to external users.

<u>Fiduciary funds.</u> Fiduciary funds are used to account for resources held for the benefit of parties outside the government. Fiduciary funds are not reflected in the government-wide financial statements because the resources of those funds are not available to support the Department's own programs. The accounting used for fiduciary funds is much like that used for proprietary funds.

<u>Notes to financial statements</u>. The notes provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements.

<u>Other information</u>. In addition to the basic financial statements and accompanying notes, this report also presents certain required supplementary information which is required to be disclosed by accounting principles generally accepted in the United States of America.

B. FINANCIAL HIGHLIGHTS

The Proprietary Fund Statement of Net Position is designed to indicate our financial position at a specific point in time. At June 30, 2018, it shows our net worth of \$107,498,041 which comprises \$78,275,207 invested in capital assets, \$4,003,292 and \$5,695,996 restricted for depreciation fund and the pension trust, and \$19,523,546 unrestricted.

The Proprietary Fund Statement 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, 2018 was \$4,853,207.

The Proprietary Fund Statement of Cash Flows provide information about cash receipts, cash payments, investing, and financing activities during the accounting period. A review of our Proprietary Fund Statement of Cash Flows indicates that cash receipts from operating activities adequately covered our operating expenses in fiscal year 2018.

The following is a summary of the Department's financial data for the current fiscal year (in thousands).

year (in thou	sands).		
	Summary of Net Position		
		<u>2018</u>	
	Current assets \$	24,857	
	Noncurrent assets	110,941	
	Total assets	135,798	
	Deferred outflows of resources	3,997	
	Current liabilities	9,556	
	Noncurrent liabilities	20,635	
	Total liabilities	30,191	
	Deferred inflows of resources	2,106	
	Net position:		
	Net investment in capital assets	78,275	
	Restricted for depreciation fund	4,003	
	Restricted for pension trust	5,696	
	Unrestricted	19,524	
	Total net position	107,498	
	Total liabilities and net position \$	137,689	•
	•		

Summary of Change in Net Position

		<u>2018</u>
Operating revenues Operating expenses	\$	97,207 (91,132)
Operating income Non-operating revenues (expenses)	_	6,075 (1,221)
Change in net position Beginning net position, as restated	_	4,854 102,645
Ending net position	\$_	107,499

Electric sales (net of discounts) were \$96,747,035 in fiscal year 2018, an increase of 5.36% from the prior year. In fiscal year 2018, kilowatt hours sold decreased by 1.55% to 665,042,076, compared to 675,536,970 in fiscal year 2017. In fiscal year 2018, customers received charges of \$190,439 in purchase power fuel charge adjustments, compared to charges of \$724,692 in fiscal year 2017.

In fiscal year 2015, the Department restructured its rates and began billing customers purchase power capacity and transmission costs separately from the base rate. In fiscal year 2018, customers were charged purchase power capacity and transmission adjustments of \$269,269.

Operating expenses totaled \$91,132,369 in fiscal year 2018, an overall increase of 4.60% from fiscal year 2017. The largest portion of this total, \$69,506,184, was for purchase power costs. Other operating expenses included \$15,822,723 for general operating and maintenance costs, \$1,497,473 for voluntary payments to Towns, and depreciation expense of \$4,305,989. In fiscal year 2018, the depreciation rate was 3.0%.

In fiscal year 2018, the Department contributed \$1,650,416 to the Reading Municipal Light Department Employees' Retirement Trust ("Pension Trust") and the Pension Trust contributed \$1,650,416 to the Town of Reading Contributory Retirement System on behalf of the Department's employees.

In fiscal year 2018, the Department contributed \$607,125 to the Other Post-Employment Benefits Trust ("OPEB Trust"). Additional information on the Department's OPEB contributions can be found in Note 19 on pages 32 - 34 of this report.

C. CAPITAL ASSET AND DEBT ADMINISTRATION

<u>Capital assets</u>. Total investment in land at year end amounted to \$1,286,675; an increase of \$20,833 from the prior year. Total investment in depreciable capital assets at year-end amounted to \$76,988,531 (net of accumulated depreciation), an increase of \$2,143,437 from the prior year. This investment in depreciable capital assets

includes structures and improvements, equipment and furnishings, and infrastructure assets.

<u>Debt and other long-term obligations</u>. At the end of the current fiscal year, the Department had no outstanding bonded debt.

Additional information on capital assets and other long-term obligations 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

BUSINESS-TYPE PROPRIETARY FUND

STATEMENT OF NET POSITION JUNE 30, 2018

ASSETS Current: Unrestricted cash and short-term investments Receivables, net of allowance for uncollectable Prepaid expenses Inventory	\$ 12,411,639 10,285,725 727,717 1,432,065
Total current assets Noncurrent: Restricted cash and short-term investments Restricted investments Investment in associated companies Land Capital assets, net of accumulated depreciation	24,857,146 29,904,641 2,502,561 258,596 1,286,675 76,988,531
Total noncurrent assets DEFERRED OUTFLOWS OF RESOURCES Related to pensions Related to OPEB	3,348,332 648,615
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES LIABILITIES Current:	139,795,097
Accounts payable Accrued liabilities Customer deposits Customer advances for construction Current portion of long-term liabilities: Compensated absences	5,331,888 420,427 1,155,870 2,149,463 498,719
Total current liabilities Noncurrent: Net pension liability Net OPEB liability	9,556,367 10,781,819 7,158,353
Compensated absences Total noncurrent liabilities DEFERRED INFLOWS OF RESOURCES Related to pensions	2,694,957 20,635,129 2,105,560
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	32,297,056
NET POSITION Net investment in capital assets Restricted for:	78,275,207
Depreciation fund Pension trust Unrestricted	4,003,292 5,695,996 19,523,546
TOTAL NET POSITION	\$ 107,498,041

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

FOR THE YEAR ENDED JUNE 30, 2018

Operating Revenues: Electric sales, net of discounts of \$3,711,723 Purchase power adjustments: Fuel charge adjustment Capacity and transmission adjustment	\$	96,747,035 190,439 269,269
Total Operating Revenues		97,206,743
Operating Expenses: Purchase power Operating Maintenance Voluntary payments to towns Depreciation Total Operating Expenses Operating Income Nonoperating Revenues (Expenses): Interest income MMWEC surplus Contributions in aid of construction Return on investment to Town of Reading Loss on disposal of capital assets Other		69,506,184 13,228,683 2,594,040 1,497,473 4,305,989 91,132,369 6,074,374 195,459 32,412 372,680 (2,419,770) (63,845) 661,897
Total Nonoperating Revenues (Expenses), Net	-	(1,221,167)
Change in Net Position		4,853,207
Net Position at Beginning of Year, as restated	_	102,644,834
Net Position at End of Year	\$_	107,498,041

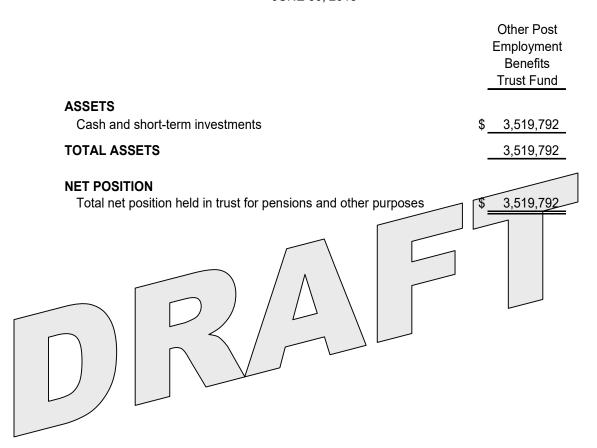
BUSINESS-TYPE PROPRIETARY FUND STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED JUNE 30, 2018

Cash Flows From Operating Activities: Receipts from customers and users Payments to vendors and employees Customer purchase power adjustments	\$	95,298,769 (89,089,325) 459,708
Net Cash Provided By (Used For) Operating Activities		6,669,152
Cash Flows From Noncapital Financing Activities: Return on investment to Town of Reading MMWEC surplus Other	-	(2,419,770) 32,412 641,359
Net Cash Provided By (Used For) Noncapital Financing Activities		(1,745,999)
Cash Flows From Capital and Related Financing Activities: Acquisition and construction of capital assets Intergovernmental revenues Net Cash Provided By (Used For) Capital and Related Financing Activities		(6,513,566) 1,594,841 (4,918,725)
Cash Flows From Investing Activities: Investment income (Increase) decrease in investments		195,459 111,084
Net Cash Provided By (Used For) Investing Activities		306,543
Net Change in Unrestricted Cash and Short-Term Investments		310,971
Cash and Short-Term Investments, Beginning of Year		42,005,309
Cash and Short-Term Investments, End of Year	\$	42,316,280
Reconciliation of Operating Income (Loss) to Net Cash: Operating income Adjustments to reconcile operating income to net cash provided by (used for) operating activities:	\$	6,074,374
Depreciation expense		4,305,989
Changes in assets, liabilities, and deferred outflows/inflows Accounts receivable Prepaid and other assets Inventory Deferred outflows - related to pensions Deferred outflows - related to OPEB Accounts payable and accrued liabilities Net pension liability Net OPEB liability Deferred inflows - related to pensions Other		(1,523,880) (47,016) 216,610 786,746 (339,869) (1,963,683) (2,294,719) (11,686) 1,390,672 75,614
Net Cash Provided By (Used For) Operating Activities	\$	6,669,152

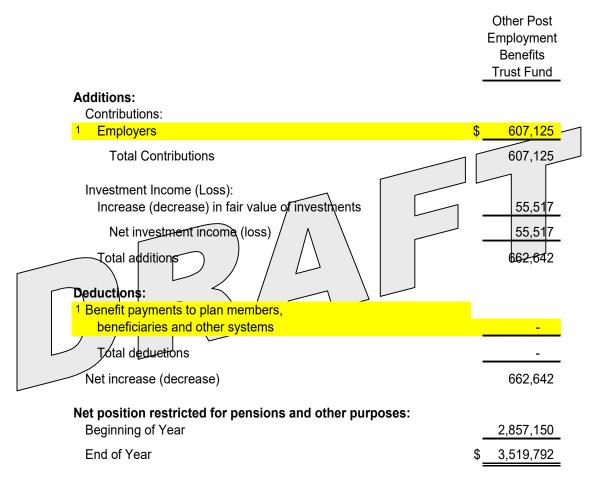
FIDUCIARY FUNDS STATEMENT OF FIDUCIARY NET POSITION

JUNE 30, 2018



FIDUCIARY FUNDS STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED JUNE 30, 2018



¹ Balances do not include the effect of current year GASB 74 information. Balances will change when the actuarial information becomes available.

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. <u>Business Activity</u> The Department purchases electricity for distribution to more than 68,000 residents within the towns of Reading, North Reading, Wilmington, and Lynnfield Center.
- 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.

The proprietary fund financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Under this method, revenues are recognized when earned and expenses are recorded when liabilities are incurred.

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. <u>Concentrations</u> - 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. <u>Retirement Trust</u> - 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.

In accordance with Government Accounting Standards Board Statement 68 (GASB 68), the Retirement Trust was consolidated into the Business-Type Proprietary Fund and is reflected in net position as "restricted for pension trust."

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 actuar ally 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. <u>Cash and Short-term Investments</u> 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. <u>Investments</u> 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.

- Inventory Inventory consists of parts and accessories purchased for use in the utility business for construction, operation, and maintenance purposes and is stated at average cost. Meters and transformers are capitalized when purchased.
- J. <u>Capital Assets and Depreciation</u> 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.

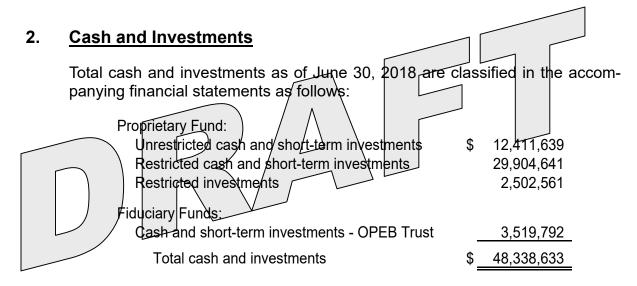
The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend asset lives are not capitalized.

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. <u>Long-Term Obligations</u> The proprietary fund financial statements report longterm debt and other long-term obligations as liabilities in the Statements of Net Position.
- M. <u>Use of Estimates</u> 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 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.



Total cash and investments at June 30, 2018 consist of the following:

Deposits with financial institutions	\$_	48,338,633
Total cash and investments	\$	48,338,633

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, 2018, 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, 2018, the Department and Pension Trust held investments in domestic and foreign fixed income bonds with varying maturity dates as follows:

	Proprietary		
	Fund		
	Restricted	Maturity	
	<u>Investments</u>	<u>Date</u>	
Corporate bonds			
AT&T Inc	\$ 418,601	12/01/22	
General Electric Cap Corp	404,606	01/09/23	
Wells Fargo & Co	402,020	08/15/23	
Simon Property /	372,899	06/1\$/27	
Rabobank Nederland Bank	495,010	11/09/22	
BNP-Paribas) / / \	\409,425	03/03/23	
Total / /	\$\\ 2,502,561		

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, 2018, the Department and Pension Trust held investments in domestic and foreign fixed income bonds with varying ratings as follows:

		Proprietary	
		Fund	_
		Restricted	Moody's
Investment Type		<u>Investments</u>	Rating
Corporate bonds:			
AT&T Inc	\$	418,601	BAA2
General Electric Cap Corp		404,606	A2
Wells Fargo & Co		402,020	A3
Simon Property		372,899	A3
Rabobank Nederland Bank		495,010	BAA1
BNP Paribas	_	409,425	AA3
Total	\$	2,502,561	

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, 2018, 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.

Because the Department poels its cash and short-term investments with the Town of Reading, and bank accounts are maintained in the name of the Town, the amount of the Department's balance exposed to custodial credit risk at June 30, 2018, cannot be reasonable determined.

As of June 30, 2018, 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.

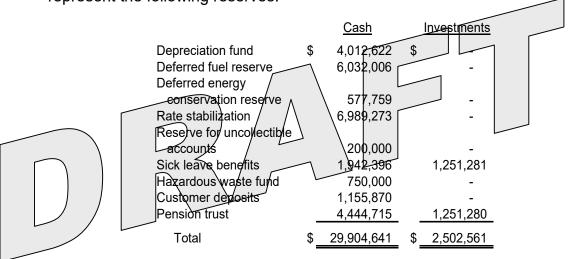
Fair Value

The Department categorizes its fair value measurements within the fair value hierarchy established by *Governmental Accounting Standards Board Statement No. 72 Fair Value Measurement and Application (GASB 72).* The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

			Fair Value Measurements Using:					
<u>Description</u>			Quoted prices in active Significant Significan markets for observable unobserva identical assets inputs inputs (Level 1) (Level 2) (Level 3				ervable outs	
Investments by fair value level Debt securities Corporate bonds	\$	2,502,561	\$	2,502,561	\$	_	\$	_
Total	\$_ \$_	2,502,561	Ψ	2,002,001	Ψ		Ψ	

3. Restricted Cash and Investments

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

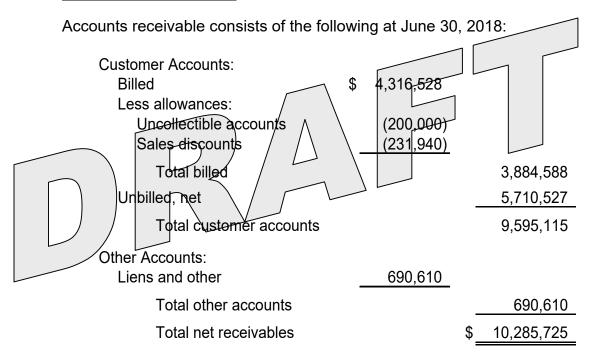


The Department maintains the following reserves:

- Depreciation fund The Department is normally required to reserve 3.0% of capital assets each year to fund capital improvements.
- <u>Deferred fuel reserve</u> 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.

- <u>Sick leave benefits</u> 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.
- Pension trust 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. Accounts Receivable

4. Accounts Receivable



5. <u>Prepaid Expenses</u>

Prepaid expenses consist of the following:

Insurance and other	\$	284,072
Purchase power		(120,787)
NYPA prepayment fund		307,573
WC Fuel - Watson	_	256,859
Total	\$	727,717

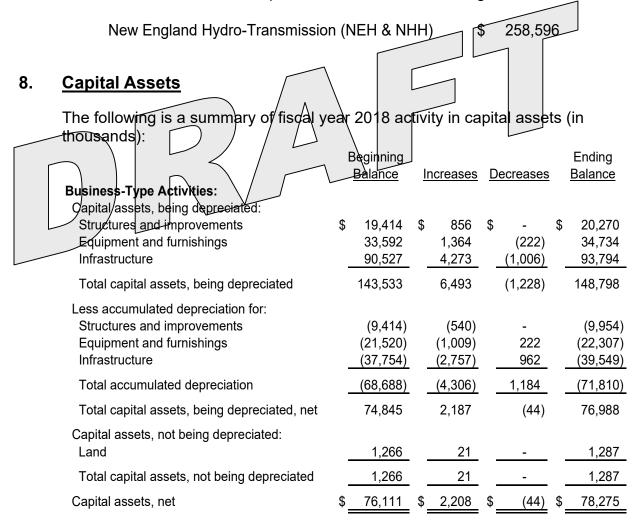
6. <u>Inventory</u>

Inventory comprises supplies and materials at June 30, 2018, 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 fair value, 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, 2018:

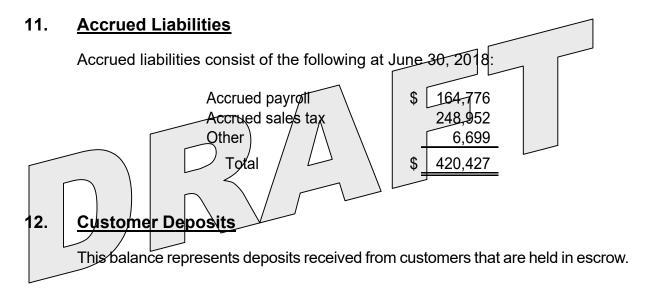


9. <u>Deferred Outflows of Resources</u>

Deferred outflows of resources represent the consumption of net position by the Department that is applicable to future reporting periods. Deferred outflows of resources have a positive effect on net position, similar to assets. Deferred outflows of resources related to pensions and OPEB, in accordance with GASB Statements No. 68 and 75, are more fully discussed in the corresponding pension and OPEB notes.

10. Accounts Payable

Accounts payable represent fiscal 2018 expenses that were paid after June 30, 2018.



13. <u>Customer Advances for Construction</u>

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. <u>Accrued Employee Compensated Absences</u>

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. Long-Term Debt

Changes in General Long-Term Obligations

During the year ended June 30, 2018, the following changes occurred in long-term obligations (in thousands):

	_	Total Balance 7/1/17	Ac	Iditions	Re	ductions	_	Total Balance 5/30/18	С	_ess urrent ortion	Lo	Equals ng-Term Portion 3/30/18
Business-Type Activities							_				_	
Net pension liability	\$	13,076	\$	-	\$	(2,294)	\$	10,782	\$	-	\$	10,782
Net OPEB liability		138		7,020		-		7,158		-		7,158
Other:												
Compensated absences	_	3,150	_	44			_	3,194	_	(499)	_	2,695
Subtotal - other	_	3,150	_	44		_	_	3,194		(499)		2,695
Totals	\$	16,364	\$_	7,064	\$	(2,294)	\$	21,134	\$_	(499)	\$ <u>.</u>	20,635
	_			•	-				1 -		_	

16. <u>Deferred Inflows of Resources</u>

Deferred inflows of resources are the acquisition of het position by the Department that are applicable to future reporting periods. Deferred inflows of resources have a negative effect on net position, similar to liabilities. Deferred inflows of resources related to pension will be recognized as expense in future years and is more fully described in the corresponding pension note.

7. 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 publicly available from the System's administrative offices located at Reading Town Hall, 16 Lowell Street, Reading, Massachusetts, 01867.

Participant Retirement Benefits

The System provides for retirement allowance benefits up to a maximum of 80% of a member's highest 3-year average annual rate of regular compensation for those hired prior to April 2, 2012 and the highest five-year average annual rate of regular compensation for those first becoming members of the Massachusetts System on or after that date. However, 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. Benefit payments are based upon a member's age, length of creditable service, level of compensation and group classification.

If a participant was a member prior to February 2012, a retirement allowance may be received at any age, upon attaining 20 years of service. The plan also provides for retirement at age 55 if the participant was a member prior to January 1, 1978, with no minimum vesting requirements. If the participant was a member on or after January 1, 1978 and a member of Groups 1 or 2, then a retirement allowance may be received if the participant (1) has at least 10 years of creditable service, (2) is age 55, (3) voluntarily left Department employment on or after that date, and (4) left accumulated annuity deductions in the fund. Members of Group 4 have no minimum vesting requirements, however must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

A participant who became a member on or after April 2, 2012 is eligible for a retirement allowance upon 10 years creditable service and reaching ages 60 or 55 for Groups 1 and 2, respectively. Participants in Group 4 must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

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.

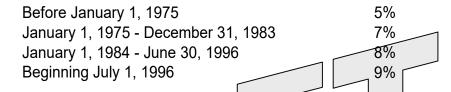
Participant Refunds

Employees who resign from service and who are not eligible to receive a retirement allowance are entitled to request a refund of their accumulated total deductions. Members voluntarily withdrawing with at least 10 years of service or involuntarily withdrawing, receive 100% of the regular interest

that has accrued on those accumulated total deductions. Members voluntarily withdrawing with less than 10 years of service get credited interest each year at a rate of 3%.

Participants 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:



For those members entering a Massachusetts System on or after April 2, 2012 in Group 1, the contribution rate will be reduced to 6% when at least 30 years of creditable service has been attained.

Employer Contributions

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, 2018 was \$1,650,416 which was equal to its annual required contribution.

B. Summary of Significant Accounting Policies

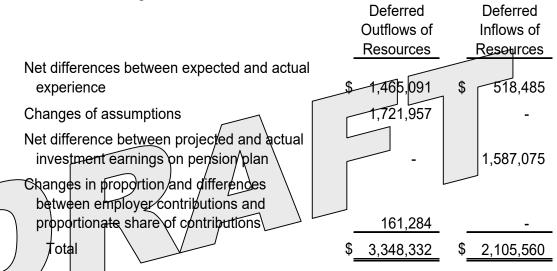
For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the System and additions to/deductions from System's fiduciary net position have been determined on the same basis as they are reported by System. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with benefit terms. Investments are reported at fair value.

C. <u>Pension Liabilities, Pension Expense, and Deferred Outflows of Resources</u> and Deferred Inflows of Resources Related to Pensions

At June 30, 2018, the Department reported a liability of \$10,781,819 for its proportionate share of the System's net pension liability. The net pension

liability was measured as of December 31, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2017 rolled forward to December 31, 2017. 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, 2017, the Department's proportion was 29.15%.

For the year ended June 30, 2018, the Department recognized pension expense of \$1,533,131. In addition, the Department reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:



Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30:

2019		\$	690,475
2020			678,142
2021			9,861
2022			(337,787)
2023		_	202,081
	Total	\$	1,242,772

D. Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of January 1, 2017, rolled forward to the measurement date of December 31,

2017 using the following actuarial assumptions, applied to all periods included in the measurement:

Valuation Date January 1, 2017

Actuarial Cost Method Entry Age Normal Cost Method

Actuarial Assumptions:

Investment rate of return 7.65%, net of pension plan investment expense,

including inflation

Projected salary increases 4.25%-6.00% for Group 1 and 4.75%-7.00% for

Group 4

Inflation rate 3.00% Annually

Post-retirement cost-of-living 3.00% of first \$12,000

adjustment

Mortality rates were based on the RP-2014 Mortality Table with fully generational mortality improvement using Scale MP-2014. For disabled lives, the mortality rates were based on the RP-2014 Disabled Mortality Table.

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, 2017 are summarized in the following table:

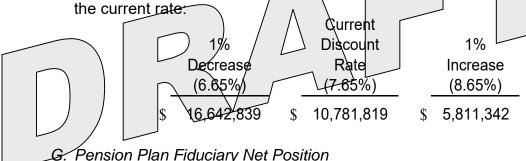
Asset Class	Target Asset <u>Allocation</u>	Expected Rates of Return
Global Equity	40.00%	4.91%
Hedge Funds & Portfolio Completetion	13.00%	3.40%
Fixed Income	12.00%	0.71%
Private Equity	11.00%	6.50%
Value-Added Fixed Income	10.00%	3.64%
Real Estate	10.00%	3.70%
Timber/Natural Resources	4.00%	3.25%
Total	100.00%	

E. Discount Rate

The discount rate used to measure the total pension liability was 7.65%. The projection of cash flows used to determine the discount rate assumed that the plan member contributions will be made at the current contribution rate and that employer contributions will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments to current active and inactive 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.

F. <u>Sensitivity of the Proportionate Share of the Net Pension Liability to Changes</u> 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 7.65%, 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 (6.65%) or 1 percentage-point higher (8.65%) than



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

H. <u>Town of Reading Municipal Light Department Employees Retirement Trust</u> ("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 included in the proprietary fund statements 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 January 1, 2017 rolled forward to December 31, 2017. However, the actuarial valuation does not take into account the fiduciary net position of the Department's Pension Trust at December 31, 2017 (the measurement date). As of December 31, 2017, the value of the pension trust was \$5,695,996.

18. Other Post-Employment Benefits (GASB 75)

GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. The Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. This Statement identifies the methods and assumptions that are required to be used to project benefit payments, discounted projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service.

All the following OPEB disclosures are based on a measurement date of June 30, 2017.

A. General Information about the OPER Plan

Plan Description

The Department provides post-employment healthcare benefits for retired employees through the Department's plan. The Department provides health insurance coverage through Blue Cross Blue Shield. The benefits, benefit levels, employee contributions, and employer contributions are governed by Chapter 32 of the Massachusetts General Laws.

Benefits Provided

The Department provides medical and prescription drug insurance to retirees and their covered dependents. All active employees who retire from the Department and meet the eligibility criteria will receive these benefits.

Plan Membership

At June 30, 2017, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries	
currently receiving benefit payments	91
Active employees	87
Total	178

B. Actuarial Assumptions and Other Inputs

The net OPEB liability was determined by an actuarial valuation as of June 30, 2017, using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation 2.50%

Salary increases 6.0% decreasing to 4.25% based on service for Group 1

and Group 2 7.0% decreasing to 4.75% based on service

for Group 4

Investment rate of return 7.50%

Discount rate 7.50%

Healthcare cost trend rates Medical/Prescription Drug: 7.0% decreasing by 0.5% for 5

years to an ultimate level of 4.5% per year.

Contributions: Retiree contributions are expected to

increase with medical trend.

Mortality rates were based on:

Pre-Retirement: RP-2014 Nealthy Employee Table projected generationally with Scale MP-2014

Healthy: RP-2014 Healthy Annuitant Mortality Table projected generationally with Scale MP-2014

Disabled: KR-2014 Disabled Retirbe Table projected generationally with Scale MR-2014

The actuarial assumptions used in the valuation were based on the results of an actuarial experience study as of June 30, 2017.

The long-term expected rate of return on OPEB 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 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 target asset allocation as of June 30, 2017 are summarized in the following table.

<u>Asset Class</u>	Target Asset <u>Allocation</u>	Long-term Expected Real <u>Rate of Return</u>
Domestic equity	18.00%	6.44%
International developed markets equity	16.00%	7.40%
International emerging markets equity	6.00%	9.42%
Core fixed income	12.00%	2.02%
High yield fixed income	10.00%	4.43%
Real estate	10.00%	5.00%
Commodities	4.00%	4.43%
Hedge fund, GTAA, risk parity	13.00%	3.75%
Private equity	11.00%	10.47%
Total	100.00%	

C. Discount Rate

The discount rate used to measure the net OPEB liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate.

Based on those assumptions, the OPEB plan fiduciary net position was projected to be available to make all projected future benefit payments of current plan members.

D. Net OPEB Liability

The components of the net OPEB liability, measured as of June 30, 2017, were as follows:

Total OPEB liability \$ 10,015,425
Plan fiduciary net position 2,857,072

Net OPEB liability \$ 7,158,353

E. Changes in the Net OPEB Liability

		Increase (Decrease)				
		Plan				
		Total OPEB		Fiduciary		Net OPEB
		Liability		Net Position		Liability
		<u>(a)</u>		<u>(b)</u>		<u>(a) - (b)</u>
Balances at 6/30/16	\$	9,556,217	\$	2,525,842	\$	7,030,375
Changes for the year:						
Service cost		245,842		-		245,842
Interest		698,939		-		698,939
Contributions - employer		-		794,319		(794,319)
Net investment income		-		22,484		(22,484)
Benefit payments	·	(485,573)		(485,573)		-
Net Changes	,	459,208		331,230		127,978
Balances at 6/30/17	\$	10,015,425	\$	2,857,072	\$	7,158,353

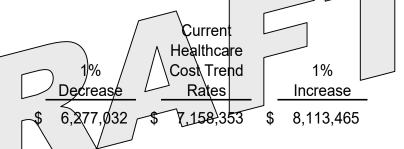
F. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using a discount rate that is one percentage-point lower or one percentage-point higher than the current discount rate:

		Current		
1%		Discount		1%
Decrease	_	Rate	_	Increase
\$ 8,129,189	\$	7,158,353	\$	6,350,695

G. <u>Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend</u> Rates

The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage-point lower or one percentage-point higher than the current healthcare cost trend rates:



OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2018, the Department recognized an OPEB expense of \$896,790. At June 30, 2018, the Department reported deferred outflows of resources related to OPEB from the following sources:

		Deferred
	(Outflows of
		Resources
Contributions subsequent to the measurement date	\$	607,125
Net difference between projected and actual OPEB investment earnings	_	41,490
Total	\$_	648,615

The \$648,615 reported as deferred outflows of resources related to OPEB resulting from contributions subsequent to the measurement date and before

the end of the fiscal year will be included as a reduction of the net OPEB liability in the year ended June 30, 2019.

Other amounts reported as deferred outflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended June 30:		
2019	\$	10,373
2020		10,373
2021		10,373
2022	_	10,371
Total	\$	41,490

19. Other Post-Employment Benefits (GASB 74)

GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (OPEB), replaces the requirements of Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. This applies if a trust fund has been established to fund future OPEB costs. In fiscal year 2010, the Department established an OPEB Trust Fund to provide funding for future employee health care costs.

All the following OPEB disclosures are based on a measurement date of June 30, 2018.

A. Investments

The OPEB trust fund assets consist of equities, fixed income, real estate, and alternatives. (specify)

Rate of return. For the year ended June 30, 2018, the annual money-weighted rate of return on investments, net of investment expense, was percent (or was not available). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

B. Actuarial Assumptions and Other Inputs

The total OPEB liability was determined by an actuarial valuation as of _____, 20XX, using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	%
Salary increases	%, average, including inflation
Investment rate of return	%, net of OPEB plan investment expense
Municipal bond rate	%
Discount rate	%
Healthcare cost trend rates	
	% for 2018, fluctuating%, to an ultimate
	rate of% as of and later years
Retirees' share of benefit-related costs	%

The actuarial assumptions used in the valuation were based on the results of an actuarial experience study as of ______, 20XX.

The long-term expected rate of return on OPEB 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 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 target asset allocation as of June 30, 2018 are summarized in the following table.

	Target	Long-term
	Asset	Expected Real
<u>Asset Class</u>	<u>Allocation</u>	Rate of Return
Equities	0.00%	0.00%
Fixed income	0.00%	0.00%
Real estate	0.00%	0.00%
Alternatives	0.00%	0.00%
Total	0.00%	

C. Discount Rate

The discount rate used to measure the total OPEB liability was ____%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate.

Based on those assumptions, the OPEB plan fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members. As a result, a blended discount rate was used based on a combination of the investment rate of return of % and municipal

bond rate of _____% (based on index provided by _____ on 20-year municipal bond rate as of June 30, 2018).

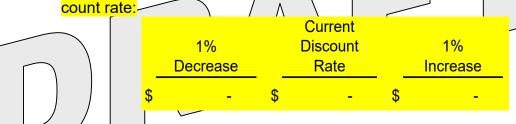
D. Net OPEB Liability

The components of the net OPEB liability, measured as of June 30, 2018, were as follows:

Total OPEB liability	\$	-
Plan fiduciary net position	_	-
Net OPEB liability	\$ _	
Plan fiduciary net position as a percentage of the total OPEB liability		#DIV/0!

E. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using a discount rate that is one percentage-point lower or one percentage-point higher than the current dis-



F. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage-point lower or one percentage-point higher than the current healthcare cost trend rates:

		Current Healthcare		
	1%	Cost Trend		1%
_	Decrease	 Rates	_	Increase
\$	-	\$ -	\$	-

20. <u>Participation in Massachusetts Municipal Wholesale Electric</u> 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 is sued by MANVEC 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 issued separate issues of revenue bonds for each of its eight Projects, which are payable solely from, and secured solely by, the revenues derived from the Project to which the bonds relate, plus available funds pledged under MMWEC's Amended and Restated General Bond Resolution (GBR) with respect to the bonds of that Project. 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 3.7% interest in the W.F. Wyman Unit No. 4 plant, which is operated and owned by its majority owner, FPL Energy Wyman IV, LLC, a subsidiary of NextEra Energy Resources LLC, and a 4.8% ownership interest in the Millstone Unit 3 nuclear unit, operated by Dominion Nuclear Connecticut, Inc. (DNCI), the majority owner and an indirect subsidiary of Dominion Resources, Inc. DNCI also owns and operates the Millstone Unit 2 nuclear unit. The operating license for the Millstone Unit 3 nuclear unit extends to November 25, 2045.

A substantial portion of MMWEC's plant investment and financing program is an 11.6% ownership interest in the Seabrook Station nuclear generating unit operated by NextEra Energy Seabrook, LLC (NextEra Seabrook) the majority owner and an indirect subsidiary of NextEra Energy Resources LLC. The operating license for Seabrook Station extends to March 15, 2030. NextEra Seabrook has submitted an application to extend the Seabrook Station operating license for an additional 20 years.

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 costs are being funded through monthly Project billings. Also, the Project Participants are liable for their proportionate share of the uninsured costs of a nuclear incident that might be imposed under the Price-Anderson Act (Act). Originally enacted in 1957, the Act has been renewed several times. In July 2005, as part of the Energy Policy Act of 2005, Congress extended the Act until the end of 2025.

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).

MINUTE 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, 2018 principal payment, total capital expenditures amounted to \$1,499,468,000, of which \$127,174,000 represents the amount associated with the Department's Project Capability. MMWEC's debt outstanding for the Projects from Power Supply System Revenue Bonds totals \$10,680,000, of which \$182,000 is associated with the Department's share of Project Capability. After the July 1, 2018 principal payment, MMWEC's total future debt service requirement on outstanding bonds issued for the Projects is \$7,959,000, none of which is anticipated to be billed to the Department in the future.

The Department has no required payments under the PSAs and PPAs.

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 \$8,578,000 and \$9,548,000 for the years ended June 30, 2018 and 2017, respectively.

21. 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 2018 REC activity and balances is as follows:

REC Sales During Fiscal 2018

		Unit		
	<u>Certificates</u>	<u>Price</u>	<u>Amount</u>	
CT Class I	6,756	\$ 12.75	\$ 86,139	
CT Class I	1,875	\$ 2.00	3,750	
MA Class I	1,939	\$ 12.75	24,722	
MA Class I	4,503	\$ 2.00	9,006	
MA Class II	4,085	\$ 25.00	102,125	
MA Class II	616	\$ 25.00	15,400	
NH/MA/CT/RI Class I	8,286	\$ 12.75	105,647	
NH/MA/CT/RI Class I	6,655	\$ 2.00	13,310	
NH/MA/RI Class I	3,973	\$ 12.75	50,656	
Total	38,688		\$ 410,755 (1	1)

⁽¹⁾ Sale proceeds netted against fiscal year 2018 purchased power fuel charge

REC Holdings at June 3	30, 2018				
	Banked	Projected	Total		Estimated
	<u>Certificates</u>	Certificates	<u>Certificates</u>		<u>Value</u>
CT Class I	6,888	8,631	15,519	\$	106,764
MA Class I & II	6,837	6,995	13,832		153,626
MA/RI/NH 1	5,279	14,942	20,221		79,185
MA/CT/RI/NH 1	10,507	8,121	18,628	_	162,859
Total	29,511	38,689	68,200	\$_	502,434

A banked REC is a REC that has been processed by the NEPOOL GIS Coordinator and is in the Department's GIS account. A projected REC is the Department's estimate of what will be received based on invoices generated by REC-producing projects that the Department has entitlements to.

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, 2018 are not recognized as an asset on the proprietary fund Statements of Net Position.

22. 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, 2018. 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:

2019	\$_	4,084
Total	\$_	4,084

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 exercised the option to extend the lease for an additional 24 months until May 31, 2020. Following is the future minimum rental expense to be paid by the Department for the year ending June 30:

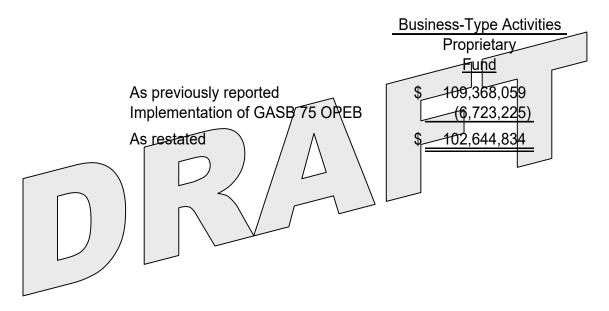
2019	\$_	147,902
Total	\$_	147,902

23. Commitments and Contingencies

<u>Outstanding Legal Issues</u> - On an ongoing basis, there are typically pending legal issues in which the Department is involved. The Department's management is of the opinion that the potential future settlement of these issues would not materially affect its financial statements taken as a whole.

24. <u>Beginning Net Position Restatement and Reclassification</u>

In fiscal year 2018, the Department implemented GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits other than Pensions. As a result of the implementation, the beginning (July 1, 2017) net position of the Department's proprietary fund has been restated as follows:



TOWN OF READING, MASSACHUSETTS, MUNICIPAL LIGHT DEPARTMENT

SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (GASB 68)

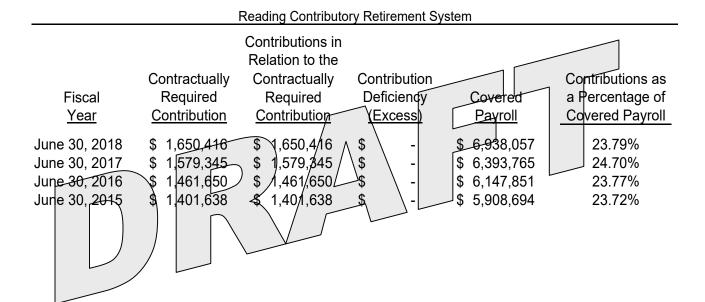
JUNE 30, 2018 (Unaudited)

Reading Contributory Retirement System Proportion Proportionate of the Share of the Proportionate Share of the Plan Fiduciary Net Position Percentage of the Total
Pension Liability Fiscal Measurement Net Pension Net Pension Net Pension Liability as a Liability Liability Covered Payroll Percentage of Covered Payroll <u>Year</u> Date December 31, 2017 155.40% 79.32% June 30, 2018 29.15% \$10,781,819 \$ 6,938,057 73.43% 72.17% June 30, 2017 December 31, 2016 29.15% \$13,076,538 \$ 6,393,765 204.52% June 30, 2016 December 31, 2015 28.25% \$12,862,732 \$ 6,147,851 209.22% June 30, 2015 December 31, 2014 28.25% \$8,464,663 \$ 5,908,694 143.26% 89% و years will be displayed as they become available. Schedules are intended to show information for 10 years. Additional See Independent Auditors Report.

TOWN OF READING, MASSACHUSETTS, MUNICIPAL LIGHT DEPARTMENT

SCHEDULE OF PENSION CONTRIBUTIONS (GASB 68)

JUNE 30, 2018 (Unaudited)



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 OTHER POST-EMPLOYMENT BENEFITS (OPEB)

Schedule of Changes in the Net OPEB Liability (GASB 74 and 75)

(Unaudited)

	2018 ¹		<u>2017</u>
Total OPEB liability			
Service cost \$	-	\$	245,842
Interest on unfunded liability - time value of \$	-		698,939
Benefit payments, including refunds of member contributions		_	(485,573)
Net change in total OPEB liability	-		459,208
Total OPEB liability - beginning	-		9,556,217
Total OPEB liability - ending (a)	-	1 \$_	10,015,425
Plan fiduciary net position Contributions - employer Net investment income Benefit payments including refunds of member contributions	: :	\$	794,319 22,484 (485,573)
Net change in plan fiduciary net position	-		331,230
Plan fiduciary net position - beginning	-	_	2,525,842
Plan fiduciary net position - ending (b) \$	-	\$_	2,857,072
Net OPEB liability (asset) - ending (a-b)*	-	\$_	7,158,353

¹ Balances do not include the effect of current year GASB 74 information. Balances will change when the actuarial information becomes available.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

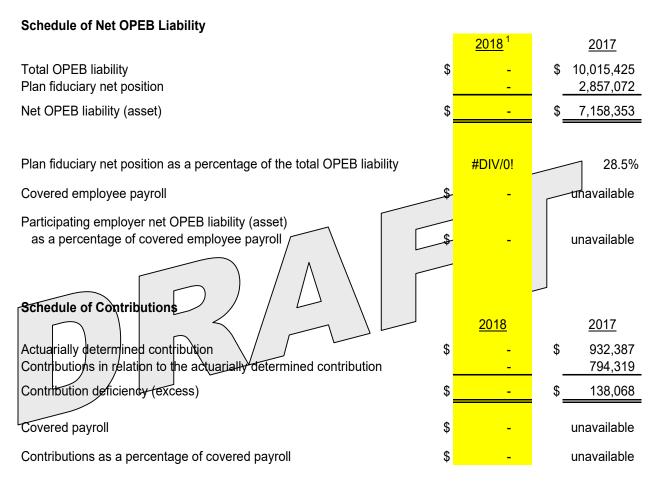
See notes to the Department's financial statements for summary of significant actuarial methods and assumptions.

See Independent Auditors' Report.

^{*}Materially agrees with Statement of Fiduciary Net Position

TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT OTHER POST-EMPLOYMENT BENEFITS (OPEB)

Schedules of Net OPEB Liability, Contributions, and Investment Returns (GASB 74 and 75) (Unaudited)



¹ Balances do not include the effect of current year GASB 74 information. Balances will change when the actuarial information becomes available.

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

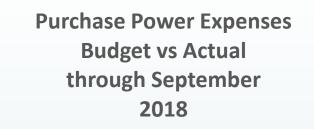
See notes to Department's financial statements for summary of significant actuarial methods and assumptions.

See Independent Auditors' Report.

POWER SUPPLY REPORT AUGUST 2018 ATTACHMENT 2

Board of Commissioners Meeting November 29, 2018

Charles Underhill, Director of Integrated Resources
Reporting for September, 2018



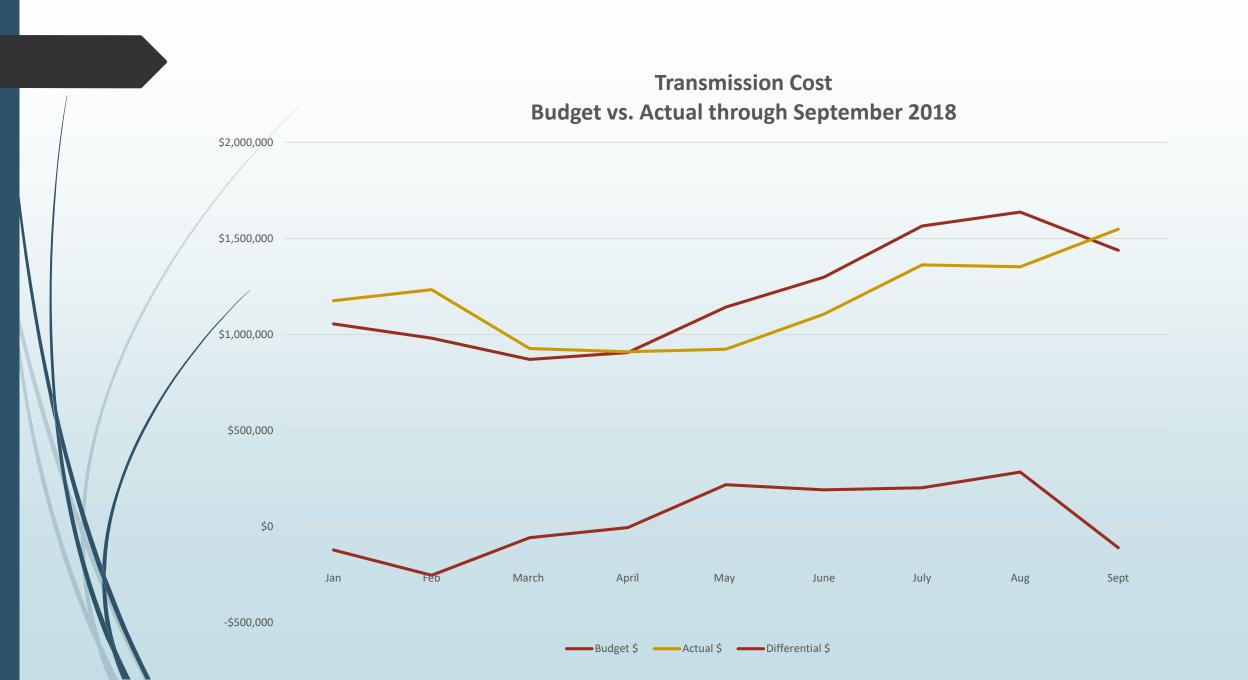




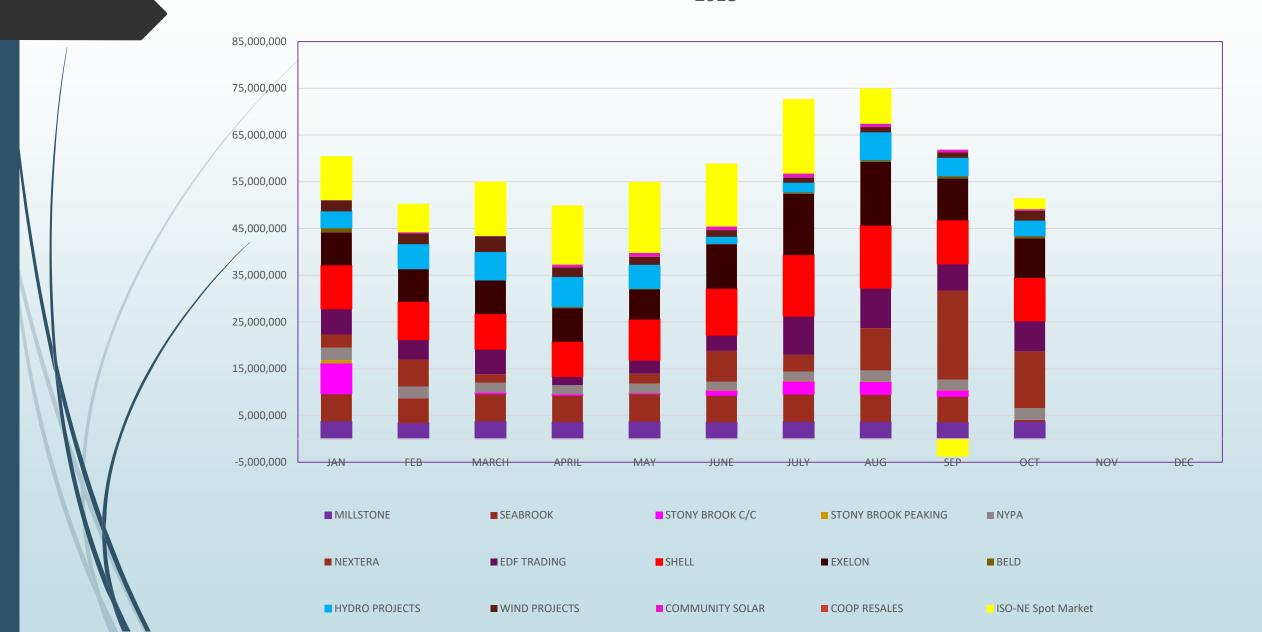








Actual kWh Purchases by Resource 2018



To:

Coleen O'Brien

From: Maureen McHugh, Charles Underhill

Date:

November 26, 2018

Subject:

Purchase Power Summary - September 2018

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of September 2018.

ENERGY

The RMLD's total metered load for the month of September was 57,439,114, which is a 1.39% increase from the September 2017 figures. The system distribution losses are 3.6%.

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

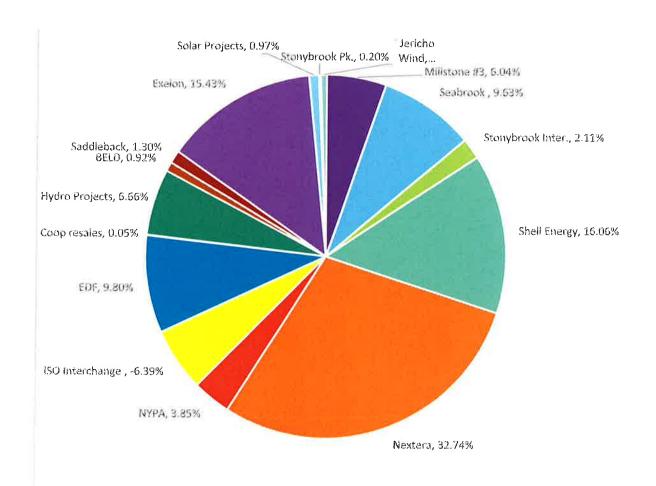
		Table 1			
	Amount of	Cost of	% of Total	Total \$	\$ as a
Resource	Energy	Energy	Energy	Costs	%
	(kWh)	(\$/Mwh)			
Millstone #3	3,512,032	\$6.38	6.04%	\$22,401	1.09%
Seabrook	5,600,701	\$5.92	9.63%	\$33,156	1,62%
Stonybrook Intermediate	1,225,033	\$63.00	2.11%	\$77,176	3.77%
Shell Energy	9,338,800	\$57.00	16.06%	\$532,302	25,97%
NYPA	2,240,560	\$5.29	3.85%	\$11,846	0.58%
Nextera	19,036,000	\$35.16	32.74%	\$669,222	32.65%
ISO Interchange	(3,715,942)	\$46.92	-6.39%	-\$174,362	-8.51%
Nema Congestion		\$0.00	0.00%	-\$31,768	-1.55%
Coop Resales	26,193	\$141.72	0.05%	\$3,712	0.18%
EDF	5,697,600	\$25.76	9.80%	\$146,746	7,16%
Hydro Projects*	3,873,100	\$73,69	6.66%	\$285,414	13.92%
Braintree Watson Unit	535,946	\$57.84	0.92%	\$31,001	1,51%
Saddleback/Jericho Wind	1,127,211	\$92.00	1.94%	\$103,699	5.06%
Community Solar	563,571	\$73,15	0.97%	\$41,224	2.01%
Exelon	8,972,800	\$30.70	15,43%	\$275,457	13.44%
Stonybrook Peaking	113,585	\$198.92	0.20%	\$22,594	1,10%
Monthly Total	58,147,190	\$35.25	100.00%	\$2,049,821	100.00%

^{*}Pepperell, Woronoco, Indian River, Turner Falls, Collins, Pioneer, Hosiery Mills, Aspinook Hydro

Table 2 breaks down the ISO interchange between the DA LMP Settlement and the RT Net Energy for the month of September 2018.

		Table 2	
	Amount	Cost	% of Total
Resource	of Energy	of Energy	Energy
	(kWh)	(\$/Mwh)	
ISO DA LMP * Settlement	5,375,349	\$56.23	9.24%
RT Net Energy ** Settlement	(9,091,291)	\$53.01	-15.63%
ISO Interchange (subtotal)	(3,715,942)	\$46.92	-6.39%

SEPTEMBER 2018 ENERGY BY RESOURCE



CAPACITY

The RMLD hit a demand of 154,834 kW, which occurred on September 6, at 3 pm. The RMLD's monthly UCAP requirement for September 2018, was 233,628 kWs.

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

		Table 3		
Source	Amount (kWs)	Cost (\$/kW-month)	Total Cost \$	% of Total Cost
Millstone #3	4,950	22.81	\$112,887	5.92%
Seabrook	7,914	19.78	\$156,503	8.21%
Stonybrook Peaking	24,980	1.86	\$46,487	2.44%
Stonybrook CC	42,925	3.30	\$141,502	7.42%
NYPA	0	0.00	-\$21,927	-1.15%
Hydro Quebec	0	0	\$22,710	1.19%
Braintree Watson Unit	0	0.00	\$110,921	5.82%
ISO-NE Supply Auction	152,859	8.75	\$1,338,081	70.16%
Total	233,628	\$8.16	\$1,907,164	100.00%

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

	Resource	Energy	Capacity	Table 4 Total cost	% of Total Cost	Amt of Energy (kWh)	Cost of Power (\$/kWh)
	Millstone #3	\$22,401	\$112,887	\$135,288	3.44%	3,512,032	\$0.0385
	Seabrook	\$33,156	\$156,503	\$189,659	4.82%	5,600,701	\$0.0339
	Stonybrook Intermediate	\$77,176	\$141,502	\$218,678	5.56%	1,225,033	\$0.1785
	Hydro Quebec	\$0	\$22,710	\$22,710	0.58%	ē	\$0.0000
	Shell Energy	\$532,302	\$0	\$532,302	13.53%	9,338,800	\$0.0570
	NextEra/EDF	\$669,222	\$0	\$669,222	17.01%	19,036,000	\$0.0352
*	NYPA	\$11,846	\$0	-\$10,081	-0.26%	2,240,560	-\$0.0045
	NYPA FCM Credit	\$0	-\$21,927	-\$21,927	-0.56%	皇	\$0.0000
	ISO Interchange	-\$174,362	0	-\$174,362	-4.43%	(3,715,942)	\$0.0469
	ISO Capacity	\$0	\$1,338,081	\$1,338,081	34.00%	8	\$0.0000
	Nema Congestion	-\$31,768	\$0	-\$31,768	-0.81%		\$0.0000
	EDF	\$146,746	\$0	\$146,746	3.73%	5,697,600	\$0.0258
*	Hydro Projects	\$285,414	\$0	\$285,414	7.25%	3,873,100	\$0.0737
	Braintree Watson Unit	\$31,001	\$110,921	\$141,922	3.61%	535,946	\$0.2648
*	Saddleback/Jericho	\$103,699	\$0	\$103,699	2.64%	1,127,211	\$0.0920
*	Burlington & Community Solar	\$41,224	\$0	\$41,224	1.05%	563,571	\$0.0731
	Coop Resales	\$3,712	\$0	\$3,712	0.09%	26,193	\$0.1417
	Exelon Energy	\$275,457	\$0	\$275,457	7.00%	8,972,800	\$0.0307
	Stonybrook Peaking	\$22,594	\$46,487	\$69,081	1.76%	113,585	\$0.6082
	Monthly Total	\$2,049,821	\$1,907,164	\$3,935,058	100.00%	58,147,190	\$0.0677

^{*}Renewable Resources; per RMLD Board Policy, any RECs are sold to offset energy costs for all customers.

RENEWABLE ENERGY CERTIFICATES (RECs)

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

		Table 5			
	RE	Cs Summa	гу		
		2018			
REC	RECs	RECs	BID	Revenue*	Revenue**
Classification	Projected	Sold	Current	Potential	Received
CT 1	8,661	3,884	2.00	\$17,321	\$28,589
MA 1	2,246	1,033	2,00	\$4,491	\$7,649
MA/CT/RI/NH1	13,606	6,724	3.00	\$40,818	\$50,090
MA/RI/NH 1	7,691	3,654	3.00	\$23,073	\$27,222
MA 2	4,575	2,115	25.00	\$114,375	\$54,403
Totals	36,778	17,410		\$200,078	\$167,952

TRANSMISSION

The RMLD's total transmission costs for the month of September 2018, were \$1,548,248. This is an increase of 14.45% from the August 2018 transmission cost of \$1,352,807. In September 2017, the transmission costs were \$1,351,323.

		Table 6	
	Current Month	Last Month	Last Year
Peak Demand (kW)	154,835	163,635	127,181
Energy (kWh)	58,147,190	74,896,135	56,437,192
Energy (\$)	\$2,049,821	\$3,227,629	\$1,982,794
Capacity (\$)	\$1,907,164	\$1,804,194	\$2,166,683
Transmission(\$)	\$1,548,248	\$1,352,807	\$1,351,323
Total	\$5,505,232	\$6,384,629	\$5,500,800

ENGINEERING & OPERATIONS REPORT SEPTEMBER 2018 ATTACHMENT 3

Engineering & Operations Report

RMLD Board of Commissioners Meeting November 29, 2018

September 2018 Reporting Period

Hamid Jaffari, Director of Engineering & Operations

Engineering & Operations Capital Improvement Projects

		PROJECT	% Complete	SEP	YTD ACTUAL	BUDGETED	REMAINING BALANCE
	19- 102	Padmount Switchgear Upgrade at Industrial Parks	25%		3,856	436,232	432,376
	19-103	Grid Modernization and Optimization	On-going	5,641	62,268	676,380	614,112
	19- 105	New Wilmington Substation	6%	854	4,953	151,250	146,297
		Preliminary Investigation Charges		(854)	(4,953)	-	4,953
	19-106	Underground Facilities Upgrades (URDs, Manholes, etc)	On-going	58,268	143,452	332,109	188,657
	19-107	13.8kV Upgrade (Step-down Areas, etc.)	On-going	666	90,040	330,855	240,815
	19- 108	115 kV Transmission Line Upgrade	100%	3,224	18,118	222,516	204,398
	19-109	35 kV Underground Cable Upgrade Station 4, 5 and RR ROW	cancelled		-	252,467	252,467
	19-111	Substation Equipment Upgrade	On-going		-	50,317	50,317
	19-112	AMI Mesh Network Expansion	On-going		52,403	121,099	68,697
	19-115	Power/Lab and Tool Equipment	On-going	1,131	1,131	75,600	74,469
	19-116	Transformers & Capacitors	On-going		57,855	582,500	524,645
/	19-117	Meter Purchases	On-going	2,160	14,352	60,000	45,648
	19-122	4W5/4W12 Getaway Improvements, W	10%		-	151,894	151,894
	19-123	Ballardvale Street Pole Line Upgrade, W	cancelled		-	225,228	225,228
	19-126	Communication Equipment (Fiber Optic)	On-going		-	48,715	48,715
	19-131	LED Streetlights Upgrade	100%	7,186	23,358	-	(23,358)
	19-132	4W6 Getaway Replacement, W	pending		-	157,089	157,089
	19-135	4W16 Getaway Replacement, W	pending		-	205,962	205,962
	19-137	Pole Line Upgrade - Woburn Street (West to Concord), W	85%	39,842	110,150	212,758	102,608
	19- 175	Pole Replacement Program	On-going	11,929	76,699	263,190	186,492
	19-458	Secondary and Main Replacement Program	On-going		34,850	344,353	309,503
	19- TBD	Force Account: DOT - Main and Hopkins, R	postponed		-	225,000	225,000
		New Service Installations - Residential/Commerical	On-going	15,459	42,263	142,403	100,140

Engineering & Operations Routine Capital Construction

/	DESCRIPTION	SEP	YTD
Pole Setting/Transfers		30,989	83,029
Overhead/Underground		30,458	150,808
Projects Assigned as Required		-	-
Pole Damage (some reimburse Work was completed to rep	able) air or replace three (3) poles.	6,608	17,829
Station Group		-	448
Hazmat/Oil Spills Clean-up		-	408
Porcelain Cutout Replacement	Program	-	-
Lighting (Street Light Connection	ons)	1,415	9,217
Storm Trouble		-	872
Underground Subdivisions (bill	lable)		
Martin's Landing, NR	401 Andover Street, W	26,008	75,267
Garden of Eden, W	Murray Hill (Phase 3 & 4), W		
Animal Guard Installation		-	-
Miscellaneous Capital Costs			
FirstLight, R/W	Charles Street Pump Station, R	47,652	115,548
McDonald Road, W			
	TOTAL:	\$143,130	\$453,426

Facilities, IRD and IT Capital Projects/Purchases

	SEP	ACTUAL YTD	BUDGET	REMAINING BALANCE
Facilities	\$12,431	\$12,431	\$565,000	\$552,569
Integrated Resources Division (IRD)	-	-	\$110,000	\$110,000
Information Technology (IT)	\$1,846	\$16,586	\$550,000	\$533,414

TOTAL CAPITAL SPENDING YTD (All Divisions)

SEP	YTD	FY19 BUDGET	REMAINING BALANCE
\$302,913	\$1,213,238	\$7,570,489	\$6,357,251

Routine Maintenance

■ Transformer Replacement (through September 2018)

Pad mount 32.12%

Overhead 22.5%

■ Pole Inspection (as of 11/13/2018)

246 poles have been replaced 195 of 246 transfers have been completed

Inspection of Feeders (2018)

Inspected Circuits: All Circuits Inspected for 2018 3W5, 3W6, 3W7, 3W8, 3W13, 3W14, 3W15, 3W18; 4W4, 4W5, 4W6, 4W7, 4W9, 4W10, 4W12, 4W13, 4W16, 4W17, 4W18, 4W19, 4W23, 4W24, 4W28, 4W30; 5W4, 5W5, 5W6 (transfer), 5W8, 5W9

■ Manhole Inspection (through September 2018)

967 of 1,237 manholes have been inspected.

Porcelain Cutout Replacement (through September 2018)

91% complete

242 remaining to be replaced

Routine Maintenance (continued)

Tree Trimming

September: 69 spans **YTD**: 133 spans through September

Substation Maintenance

Infrared Scanning - complete through September - no hot spots found

Underground Subdivisions Upgrade

Recent Completed: Crestwood Estates (NR), Aspen Road (NR), Long Hill Lane (NR), Shasta Drive (NR), Lantern Lane, (NR), Cherokee Lane (W), Carriage Way (NR)

In Progress: Westover Drive (LF), Greenbriar Drive (NR), Great Neck Drive (W), Gandalf Estates (W), Turner Drive (NR),

Double Poles

Ownership: 17,800 (approximately)

50% RMLD

50% Verizon

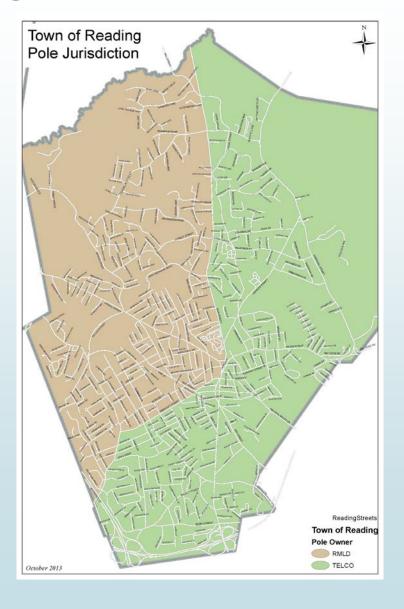
Custodial:

Reading – split (see map)

North Reading – RMLD

Lynnfield – Verizon

Wilmington - Verizon



NJUNS

"Next to Go" as of November 16, 2018

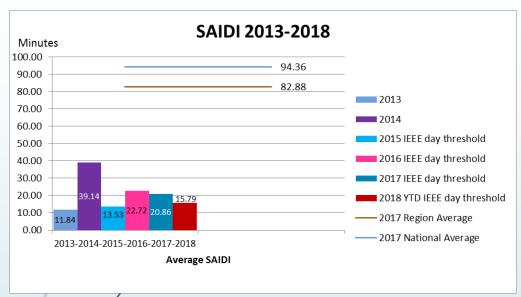
LYNNFIELD	
Next to Go and Job Type	Tickets
■ LFLDFD	3
TRANSFER	3
□ RMLD	17
TRANSFER	16
DISPUTE	1
CMCTNR	3
TRANSFER	3
Grand Total	23

NORTH READING	
Next to Go and Job Type	Tickets
□ VZNEDR	13
TRANSFER	13
RMLD	17
TRANSFER	8
PULL POLE	9
□ LTFMA	1
TRANSFER	1
Grand Total	31

READING	
Next to Go and Job Type	Tickets
■ RMLD	25
TRANSFER	16
PULL POLE	9
■ RDNGFD	10
TRANSFER	10
□ VZNESA	5
TRANSFER	3 2
PULL POLE	2
□ NРЗРМА	4
TRANSFER	4
□ CMCTNR	12
TRANSFER	12
□ LTFMA	1
TRANSFER	1
Grand Total	57

WILMINGTON	
Next to Go and Job Type	Tickets
■WMGNFD	39
TRANSFER	39
■RMLD	31
TRANSFER	27
PULL POLE	4
■VZBMA	1
TRANSFER	1
■ NP3PMA	6
TRANSFER	6
⊟LTFMA	1
TRANSFER	1
□ CMCTNR	3
TRANSFER	3
□VZNEDR	6
TRANSFER	3
PULL POLE	2
DISPUTE	1
□NPFAMA	1
TRANSFER	1
□СМСТЅВ	1
TRANSFER	1
Grand Total	89

RMLD Reliability Indices

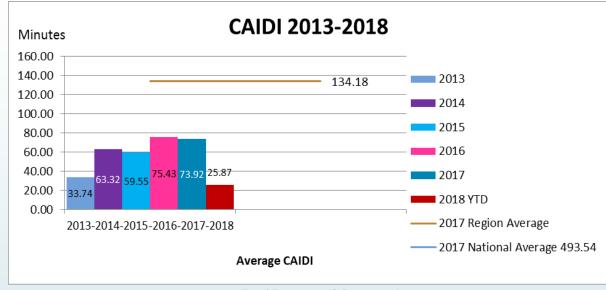


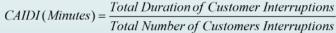
$$SAIDI (Minutes) = \frac{Total \ Duration \ of \ Customer \ Interruptions}{Total \ Number \ of \ Customers \ Served}$$

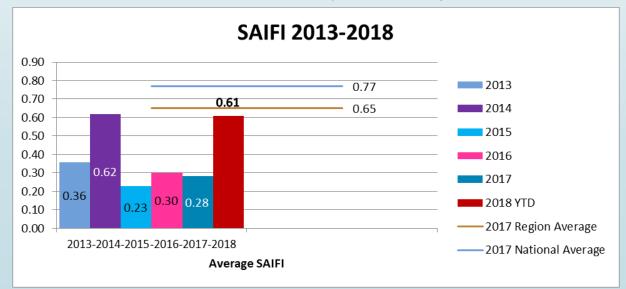
Note: The major event (ME) threshold allows a utility to remove outages that exceed the IEEE 2.5 beta threshold for events. These events could be severe weather, which can lead to unusually long outages in comparison to your distribution system's typical outage.

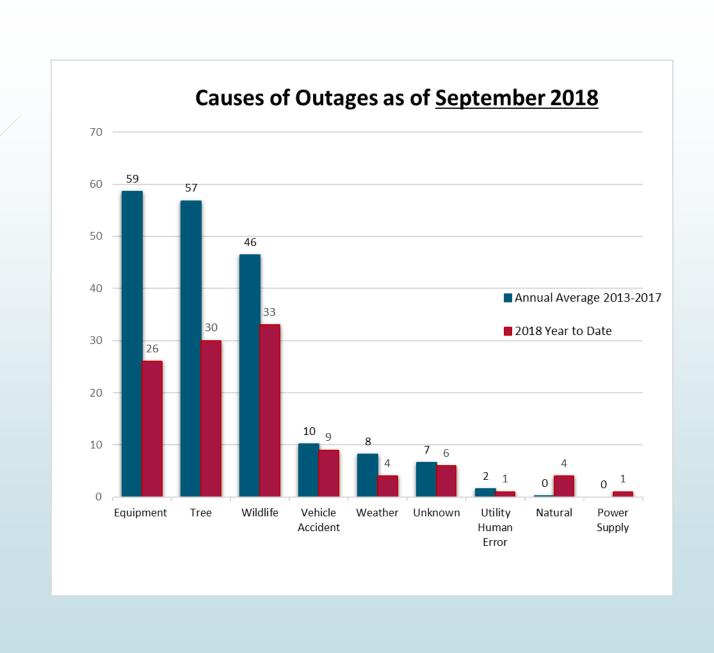
 $SAIFI = \frac{Total\ Number\ of\ Customer\ Interruptions}{Total\ Number\ of\ Customers\ Served}$

Note: Regional and national averages have been updated for 2017.









Questions?



RMLD PROCUREMENT REQUEST REQUIRING BOARD APPROVAL ATTACHMENT 4

November 9, 2018

Town of Reading Municipal Light Board

Subject: IFP 2019-02 750 MCM 15kV Power Cable

Pursuant to M.G.L c. 164 § 56D, on October 17, 2018, an invitation for proposal was placed as a legal notice in the Middlesex East Section of the Daily Times Chronicle requesting sealed proposals for 750 MCM 15kV Power Cable.

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

A.A. MacPherson Co., Inc.

Arthur J. Hurley Company, Inc.

E.L. Flowers & Associates

First Line Associates

HasGo Power Equipment

Marmon Utility, LLC

Pirelli Cable Corporation

Power Sales Group, Inc.

Shamrock Power Sales

Stuart C. Irby Company

The Okonite Company

WESCO Distribution

Yale Electric East LLC

Sealed proposals were received from four companies: Stuart C. Irby Company, Arthur J. Hurley Company, Inc., WESCO Distribution, and The Okonite Company.

The sealed proposals were publicly opened and read aloud at 11:00 a.m., November 1, 2018, in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.

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

Move that proposal 2019-02 for 750 MCM 15kV Power Cable be awarded to: Arthur J. Hurley Company, Inc., for \$124,488.00, pursuant to M.G.L. Chapter 164 § 56D on the recommendation of the General Manager.

The CY19 Capital Budget amount for this item is \$97,403. The remaining balance will be charged to the Operating Budget for inventory.

Emmanuel Agouridis

Hamid Jaffari

Coleen O'Brien

750 MCM Power Cable IFP 2019-02

Proposer	<u>Manufacturer</u>	Delivery Date	<u>Unit Cost</u>	Qty in feet	Total Net <u>Cost</u>	Certified Check or <u>Bond</u>	All forms filled out	Authorized signature	Exceptions to stated proposal requirements	Exceptions are acceptable	Meet Specification requirement	Specification <u>Data Sheets</u>
Arthur J. Hurley Compan Item 1 750 MCM Cable	The Okonite Company	9 weeks	\$14.82	8,400	\$124,488.00	yes	yes	yes	no	n/a	yes	yes
The Okonite Company Item 1 750 MCM Cable	The Okonite Company	10 weeks	\$15.28	8,400	\$128,352.00	yes	yes	yes	no	n/a	yes	no
-	Note: Price not firm.											
WESCO Distribution Item 1 750 MCM Cable	General Cable	15-17 weeks	\$13.04	10,000	\$130,400.00	yes	yes	yes	yes	no	no	no
	Note: Proposal is for a of Price not firm.	quantity not reque	ested.									
Stuart C. Irby Company Item 1 750 MCM Cable	Southwire	14-16 weeks	\$16.49	9,000	\$148,410.00	yes	yes	yes	yes	no	no	yes
	Note: Proposal is for a confirm.	quantity not reque	ested.									-

2019-02 Analysis

November 9, 2018

Town of Reading Municipal Light Board

Subject: IFB 2019-06 Electrical Utility Excavation including Emergency Excavation and Construction Services

Pursuant to M.G.L c. 30 § 39M, on October 10, 2018, an invitation for bid was placed as a legal notice in the Middlesex East Section of the Daily Times Chronicle requesting sealed bids for Electrical Utility Excavation including Emergency Excavation and Construction Services.

An invitation for bid was sent to the following seventeen companies:

Caruso and McGovern Construction, Inc.

Deltek

E.B. Rotondi & Sons, Inc.

Fischbach & Moore Electric Group, LLC

James Lynch Construction Co., Inc.

K & R Construction Co., LLC

Mattuchio Construction Co., Inc.

Meninno Construction Co., Inc.

Northeast Site Development, LLC

Power Line Contractors, Inc.

Prime Vendor, Inc.

Projectdog

R.S. Hurford Co., Inc.

Tim Zanelli Excavating, LLC

Tro-Con Corporation

Ventresca, Inc.

W.L. French Excavating Corporation

Sealed bids were received from two companies: Caruso and McGovern Construction, Inc. and Tim Zanelli Excavating, LLC.

The sealed bids were publicly opened and read aloud at 11:00 a.m., November 1, 2018, in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid IFB 2019-06 for: Electrical Utility Excavation including Emergency Excavation and Construction Services be awarded to: Tim Zanelli Excavating, LLC, for a not to exceed amount of \$100,000 per year (without written approval) pursuant to M.G.L c. 30 § 39M, as the lowest responsible and eligible bidder on the recommendation of the General Manager.

These services will be paid for from the CY19-21 Capital (\$90,000) and Operating (\$210,000) Budgets.

Brian Smith

Hamid Jaffari

Coleen O'Brien

Electrical Utility Excavation Including Emergency Excavation and Construction Services IFB 2019-06

Proposer	<u>Total Price</u>	Time in <u>Business</u>	List of Previous <u>Projects</u>	All forms filled out	Certified Check or Bid Bond	Authorized signature	Exemption to bid
Tim Zanelli Excavating, LLC		15 years	yes	yes	yes	yes	no
Combined total for all three jobs for 2018-2019	\$19,249.86						
Combined total for all three jobs for 2019-2020	\$20,159.36						
Combined total for all three jobs for 2020-2021	\$21,103.74	_					
Grand total for all three typical jobs for three years	\$60,512.96						
	5						
Caruso and McGovern Construction, Inc.		35 years	yes	yes	yes	yes	no
Combined total for all three jobs for 2018-2019	\$30,531.80						
Combined total for all three jobs for 2019-2020	\$30,939.80						
Combined total for all three jobs for 2020-2021	\$31,347.80						
Grand total for all three typical jobs for three years	\$92,819.40						

BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED

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

November-18

	RESIDENTIAL 750 kWh's	RESIDENTIAL-TOU 1500 kWh's 75/25 Split	1500 kWh's 1000 kWh's		SMALL COMMERCIAL 1,080 kWh's 10.000 kW Demand	SCHOOL RATE 35000 kWh's 130.5 kW Demand	INDUSTRIAL - TOU 109,500 kWh's 250.000 kW Demand 80/20 Split	
READING MUNICIPAL LIGHT DEPT.	* 400.40	^	A	44 007 05	4400.04	A	A.	
TOTAL BILL	\$123.12 \$0.16416	\$210.05 \$0.14003	\$139.59 \$0.13959	\$1,007.35 \$0.13799	\$198.21 \$0.18352	\$4,643.45 \$0.13267	\$842,792.79 \$0.12251	
PER KWH CHARGE	φυ.10410	\$ 0.14003	Ф 0.13959	\$0.13799	\$0.18352	ф0.13207	φU.12251	
NATIONAL GRID								
TOTAL BILL	\$181.16	\$394.97	\$227.67	\$1,754.99	\$268.16	\$7,203.52	\$1,315,173.20	
PER KWH CHARGE	\$0.24155	\$0.26331	\$0.22767	\$0.24041	\$0.24830	\$0.20581	\$0.19117	
% DIFFERENCE	47.14%	88.04%	63.09%	74.22%	35.30%	55.13%	56.05%	
EVERSOURCE(NSTAR)								
TOTAL BILL	\$174.36	\$307.31	\$230.14	\$1,554.42	\$252.15	\$7,300.31	\$1,232,862.79	
PER KWH CHARGE	\$0.23247	\$0.20487	\$0.23014	\$0.21293	\$0.23348	\$0.20858	\$0.17921	
% DIFFERENCE	41.62%	46.31%	64.86%	54.31%	27.22%	57.22%	46.28%	
PEABODY MUNICIPAL LIGHT PLANT								
TOTAL BILL	\$87.48	\$169.49	\$114.91	\$940.93	\$149.38	\$4,654.63	\$627,554.29	
PER KWH CHARGE	\$0.11664	\$0.11299	\$0.11491	\$0.12889	\$0.13832	\$0.13299	\$0.09122	
% DIFFERENCE	-28.95%	-19.31%	-17.68%	-6.59%	-24.63%	0.24%	-25.54%	
MIDDLETON MUNICIPAL LIGHT DEPT.								
TOTAL BILL	\$98.74	\$201.66	\$132.75	\$959.51	\$168.44	\$4,762.93	\$807,171.40	
PER KWH CHARGE	\$0.13165	\$0.13444	\$0.13275	\$0.13144	\$0.15596	\$0.13608	\$0.11733	
% DIFFERENCE	-19.80%	-3.99%	-4.91%	-4.75%	-15.02%	2.57%	-4.23%	
WAKEFIELD MUNICIPAL LIGHT DEPT.								
TOTAL BILL	\$132.36	\$247.17	\$166.88	\$1,257.54	\$199.78	\$5,910.58	\$1,007,556.30	
PER KWH CHARGE	\$0.17648	\$0.16478	\$0.16688	\$0.17227	\$0.18499	\$0.16887	\$0.14646	
% DIFFERENCE	7.51%	17.67%	19.55%	24.84%	0.80%	27.29%	19.55%	

From: <u>Tracy Schultz</u>

To: RMLD Board Members Group; "Dave Hennessy (Davidhennessy@gmail.com)"

Subject: AP and Payroll Questions for 11-29-18 Board Book Date: Wednesday, November 28, 2018 6:21:00 AM

Good afternoon,

AP:

On October 19th there were no Commissioner questions.

On October 26th there were no Commissioner questions.

On November 2nd a Commissioner asked about an attorney invoice regarding an audit letter.

On November 9th there were no Commissioner questions.

On November 16th there were no Commissioner questions.

On November 23rd there were no Commissioner questions.

Payroll:

On October 29th there were no Commissioner questions.

On November 12th there were no Commissioner questions.

On November 26th there were no Commissioner questions.

This e-mail will be included in 11-29-18 Board Book.

Tracy Schultz

Executive Assistant

Reading Municipal Light Department

230 Ash Street. Reading. MA. 0186

Tel: 781.942.6489