HINGHAM MUNICIPAL LIGHTING PLANT Financial Statements December 31, 2018 and 2017

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# GOULET, SALVIDIO & ASSOCIATES, P.C. CERTIFIED PUBLIC ACCOUNTANTS

# **INDEPENDENT AUDITORS' REPORT**

The Board of Commissioners Hingham Municipal Lighting Plant 350 Lincoln Street – Suite 1101 Hingham, MA 02043

We have audited the accompanying financial statements of Hingham Municipal Lighting Plant as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise Hingham Municipal Lighting Plant's basic financial statements as listed in the table of contents.

# Management's Responsibility for the Financial Statements

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 an opinion on these financial statements based on our audits. We conducted our audits 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 auditors' 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 opinion.

324 Grove Street Worcester MA, 01605 • 54 East Main Street Webster MA, 01570

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Hingham Municipal Lighting Plant as of December 31, 2018 and 2017, and the changes in financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Emphasis of Matter**

As discussed in Note 1, the financial statements present only the Hingham Municipal Lighting Plant and do not purport to, and do not present fairly the financial position of the Town of Hingham, Massachusetts, as of December 31, 2018 and 2017, and the changes in financial position, or its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

# **Other Matters**

# Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Other Postemployment Benefits and Net Pension Liability information on pages three through seven and 40 through 44 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 sufficient evidence to express an opinion or provide any assurance.

#### Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The Schedules of Sales of Electricity and Schedules of Operations and Maintenance Expenses on pages 45 and 46 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Goulet, Salvidio & Associates, P.C.

Soulet, Salvidio & associates, P.C.

Worcester, Massachusetts June 13, 2019

## MANAGEMENT'S DISCUSSION AND ANALYSIS

Within this section of the Hingham Municipal Lighting Plant's annual financial report, management provides narrative discussion and analysis of the financial activities of the Hingham Municipal Lighting Plant for the years ended December 31, 2018 and 2017. The Plant's performance is discussed and analyzed within the context of the accompanying financial statements and disclosures following this section.

# **Overview of the Financial Statements:**

The basic financial statements include (1) the statements of net position (2) the statements of revenues, expenses and changes in net position (3) the statements of cash flows and (4) notes to the financial statements.

The Statements of Net Position are designed to indicate our financial position as of a specific point in time. At December 31, 2018, it shows our net worth has decreased .79% over the year ended December 31, 2017.

The Statements of Revenues, Expenses and Changes in Net Position, summarizes our operating results and reveals how much net income was earned for the year. As discussed in more detail, our net income for December 31, 2018 and 2017 was \$149,907 and \$3,126,006, respectively.

The Statements of Cash Flows provides information about the cash receipts and cash payments during the accounting period. It also provides information about the investing and financing activities for the same period.

# Summary of Net Position – Operating Fund

	2018	2017
Current Assets Noncurrent Assets Total Assets	\$ 10,259,890 <u>48,498,984</u> 58,758,874	\$ 12,187,803 46,452,846 58,640,649
Deferred Outflows of Resources	1,355,473	952,767
Total Assets and Deferred Outflows of Resources	<u>\$ 60,114,347</u>	<u>\$ 59,593,416</u>
Current Liabilities Noncurrent Liabilities	\$ 2,463,050 5,697,145	\$ 2,752,715 5,692,193
Total Liabilities	8,160,195	8,444,908
Deferred Inflows of Resources	7,896,526	6,736,708

Net Position:		
Net Investment in Capital Assets	28,904,039	29,635,781
Net Position Restricted for Depreciation	10,571,304	8,542,548
Unrestricted Net Position	4,582,283	6,233,471
Total Net Position	44,057,626	44,411,800
Total Liabilities, Deferred Inflows		
of Resources and Net Position	\$ 60,114,347	<u>\$ 59,593,416</u>

#### Summary of Changes in Net Position – Operating Fund

	2018	2017
Operating Revenues Operating Expenses	\$ 28,683,613 28,866,609	\$ 27,527,845 24,599,725
Operating Income Nonoperating Revenues	(182,996) 332,903	2,928,120 197,886
Income Before Contributions and Transfers	149,907	3,126,006
Transfers Out – Payments in Lieu of Taxes	(504,081)	(490,000)
Implementation of GASB 75	0	(630,084)
Beginning Net Position	44,411,800	42,405,878
Ending Net Position	<u>\$ 44,057,626</u>	<u>\$ 44,411,800</u>

#### **Financial Highlights:**

Operating revenues increased \$1.2m in 2018 or approximately 4.2%. This is attributable to an increase in kWh sales and a rate increase approximately midway through the year. Operating expenses increased \$4.3m in 2018, or approximately 17%. This increase in expenses can be attributed in large part to dramatic increases in capacity and transmission charges.

Over the past decade or so, even in a down economy, the Lighting Plant had experienced significant load growth in its system. There were a few years in those ten (10) + when the total number of customers remained largely unchanged and no larger projects came on line so any increase in sales were weather dependent vs. new load. Sales in 2018 increased, by about 2.7%, likely because of weather as the number of customers was basically flat over 2017. There are three (3) apartment/condo complexes which are in various stages of development. When complete they will add approximately 500 residential units to HMLP's load. If the developers' consumption projections come to full fruition, however history shows they rarely do, these projects could possibly add about 3MW of load. The Lighting Plant distribution system is well situated for growth as we continue to make capital improvements to our infrastructure. The Lighting Plant has funded these capital infrastructure improvements from internal sources with no borrowing required. The Lighting Plant continues to improve its reliability by funding a maintenance and replacement program for the areas in the Town where it is required.

# **Financial Highlights (Continued):**

The Hingham Municipal Lighting Plant experienced, in August 2018, its annual peak usage at approximately 57.1 MW. This represents an increase in peak load of about 7.25% from 2017 and is slightly higher than our previous all-time peak, 56.6MW which occurred in July of 2011. During 2018 the kilowatthour usage, 206m kWh, in the system increased by approximately 2% on a total load of 202m kWh.

The number of customers who pay their bills online or with a credit card continues to rise. We are averaging approximately 3,000 customers, or 30%, a month paying in that manner.

Faced with significantly higher costs related to energy supply we engaged Energy New England to perform a cost of service study. They analyzed our 2017 sales and expenses and projected costs for 2018 and beyond as best we could estimate. They concluded and advised we needed to implement an increase in revenue to cover rising capacity and transmission costs. The dollar amounts associated with those portions of energy supply went from \$4.9m in 2016 to \$6m in 2017 to \$8.3m in 2018.

The Hingham Municipal Lighting Plant adopted a policy that allowed it to become the first electric utility in at least all of New England to be able to say 100% of our supply is carbon free. To meet that definition, have 100% of our supply be considered carbon free, the Board directed the General Manager to retire whatever renewable energy credits (RECS) we have rights to and buy enough replacement RECs to offset any of our fossil fuel supply or renewable supply for which we do not own the RECs. The Board opted to do that in 2017 and 2018 and will reassess the implications of that in 2019 when we know all the costs associated with those transactions.

The Hingham Municipal Lighting Plant have looked at the demographics of its workforce and made several hires to be ready for when key operating employees retire in the next year plus. The Line Division Manager and Supervisor are expected to retire in early 2020. Replacements for both are in place and should be ready to transition smoothly when the retirements take place. An Assistant General Manager has also been hired as the current General Manager is expected to retire January 2021.

We are in various stages of analyzing or bringing to fruition 3 larger projects that will move HMLP to the next higher level of providing superior service to our ratepayers. They are: adding another transmission line to supply the town with possibly another substation, running fiber optic cable throughout town so we can instantaneously communicate with all of our infrastructure 24x7 and adding utility sized battery storage to help control costs, improve reliability and be environmentally prudent.

# **Debt Administration and Utility Plant:**

# Debt Administration

The Hingham Municipal Lighting Plant remains a vertically integrated utility, as do all Municipal Light Departments in Massachusetts. This means that we are allowed under the Massachusetts Utility Restructuring Laws to retain our ownership and control over our electrical generation assets. Investor owned utilities, such as National Grid and Eversource, have been required to sell their generation assets as a result of the same restructuring laws.

The generation assets, which we have a vested ownership in, along with the other municipal electrical systems in New England, are financed through municipal bonds. The collective debt owed under these bonds stand today at approximately \$7.4 million of which Hingham Municipal Lighting Plant's share is just over \$373,000. The interest has been, and will continue to be paid with revenues received from the sales of electricity.

# Debt Administration and Utility Plant (Continued):

# Utility Plant

Net utility plant decreased by \$731,742 from 2017. This decrease is the difference between the current year additions of \$1,146,302 and the annual depreciation write off of \$1,878,044. The Light Plant continues to add infrastructure to its system to provide service to the new growth in Town.

The Lighting Plant completed the installation and implementation of a new Enterprise Resource Planning (ERP) computer program with Cogsdale. The Cogsdale billing system went into production in late 2007. This system allows all components of the business; Customer Service, Financial, Inventory, Work Order, Project Accounting and Billing to reside on the same database and make the financial information and reporting more readily available.

In an effort to keep power outages to a minimum and provide an asset database the HMLP completed a mapping of the Town's electrical distribution system some years ago. This has greatly assisted our operations folks when addressing outages that occur and when locating and switching circuits to balance load more evenly and restore power. The Lighting Plant has the capability to locate the poles, transformers, meters, and other types of services remotely via a tablet. A further benefit to this mapping was achieved when the online outage management system we purchased became fully operational. This system, which we continuously upgrade, helps us better track outages, identifies the likely source of the trouble and gives a sense of areas that may become problematic.

# **Significant Balances and Transactions:**

# Pension Fund

The Pension Fund's purpose is to set aside monies for retirement costs attributable to the Lighting Plant's retirees for whom the Town of Hingham is assessed annually by Massachusetts Contributory Retirement System, and to satisfy the Plant's anticipated future pension liabilities for its current employees. During 2015, the Lighting Plant implemented GASB #68 and #71, which requires all governmental units to recognize their net pension liability. As a result, the Lighting Plant recognizes a net pension liability related to its future pension commitments of \$2,968,051 and \$3,353,532 for the years ended December 31, 2018 and 2017, respectively.

#### **OPEB** Trust Fund

The Other Postemployment Benefits Trust Fund's purpose is to set aside monies for costs attributable to the Lighting Plant's retiree's medical costs. The Lighting Plant has set aside funds for this liability and the current fund is seventy-four percent funded, well ahead of the potential need for the fund to be fully funded. The fund is being managed by an experienced wealth management firm, based on the Lighting Plant's Investment Policy Statement.

#### **Depreciation Fund**

The Lighting Plant maintains a depreciation fund, which is managed by the Town of Hingham Treasurer. This fund is used to pay for large capital investments such as new trucks and other long-term assets. Items such as these would be purchased from the operating funds, which would then be replenished by funds transferred from the depreciation fund. The depreciation fund is required by state statute.

#### Rate Stabilization Fund

These funds are for unexpected escalation in costs, such as the decommissioning of nuclear power plants before the end of their operating license, unusual price spikes in fuel prices and transmission cost increases. We increased our contributions to this fund to better position us for any increases.

# Significant Balances and Transactions (Continued):

# Purchased Power Working Capital

The purchased power working capital is an amount held by Energy New England (ENE), our power supply agent. ENE requires that they hold a set amount of capital from which it may pay our power obligations when they are due. They replenish the fund as needed from our monthly invoice payments.

# Insurance Escrow Reserve Fund

The insurance escrow reserve fund was set up to help reduce future costs of our general liability policy. Years ago management considered having a self-insurance fund for our excess liability needs because the insurance market was hard (high premiums and difficulty in finding coverage). Our current plan is to hold the amount in excess of the self-retention for nuisance claims or where damages exceed the covered limit.

# HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF NET POSITION DECEMBER 31, 2018 AND 2017

#### OPERATING FUND

# ASSETS AND DEFERRED OUTFLOWS OF RESOURCES

	2018	(As Revised) 2017
CURRENT ASSETS:		
Funds on Deposit with Town Treasurer		
Operating Cash	\$ 4,362,165	\$ 7,338,805
Accounts Receivable, Net	2,234,203	1,656,142
Accounts Receivable, Related Party	124,579	103,727
Other Receivable	157,540	506,823
Materials and Supplies	946,983	998,665
Prepaid Power Contracts	591,587	438,377
Purchased Power Working Capital	1,842,833	1,145,264
TOTAL CURRENT ASSETS	10,259,890	12,187,803
NONCURRENT ASSETS:		
Funds on Deposit with Town Treasurer		
Depreciation Fund	10,571,304	8,542,548
Customer Deposits	1,733,474	1,706,607
Insurance Reserve Fund	253,687	253,687
Rate Stabilization Fund	6,627,694	5,952,053
Investments	362,170	362,170
Preliminary Survey and Investigations	46,616	0
Utility Plant Assets, Net	28,904,039	29,635,781
TOTAL NONCURRENT ASSETS	48,498,984	46,452,846
TOTAL ASSETS	58,758,874	58,640,649
DEFERRED OUTFLOWS OF RESOURCES:		
Deferred Outflows of Resources Related to OPEB	233,159	0
Deferred Outflows of Resources Related to Pensions	1,122,314	952,767
TOTAL DEFERRED OUTFLOWS OF RESOURCES	1,355,473	952,767
TOTAL ASSETS AND DEFERRED OUTFLOWS OF		
RESOURCES	\$ 60,114,347	\$ 59,593,416

See Accompanying Notes to Financial Statements

# HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF NET POSITION DECEMBER 31, 2018 AND 2017

#### OPERATING FUND

#### LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION

	2018	(As Revised) 2017
CURRENT LIABILITIES:		
Accounts Payable	\$ 1,508,530	\$ 1,873,287
Accounts Payable - Related Party	504,480	490,000
Accrued Expenses	112,078	93,661
Customer Advances for Construction	288,775	255,375
Sales Tax Payable	49,187	40,392
TOTAL CURRENT LIABILITIES	2,463,050	2,752,715
NONCURRENT LIABILITIES:		
Customer Deposits	1,733,474	1,706,607
Net Pension Liability	2,968,051	3,353,532
Net Other Postemployment Benefits Obligation	995,620	632,054
TOTAL NONCURRENT LIABILITIES	5,697,145	5,692,193
TOTAL LIABILITIES	8,160,195	8,444,908
DEFERRED INFLOWS OF RESOURCES:		
Contribution in Aid of Construction, Net	771,941	695,130
Deferred Inflows of Resources Related to Pensions	801,039	89,525
Deferred Inflows of Resources Related to OPEB	89,852	0
Rate Stabilization Reserve	6,233,694	5,952,053
TOTAL DEFERRED INFLOWS OF RESOURCES	7,896,526	6,736,708
NET POSITION:		
Net Investment in Capital Assets	28,904,039	29,635,781
Net Position Restricted for Depreciation	10,571,304	8,542,548
Unrestricted Net Position	4,582,283	6,233,471
TOTAL NET POSITION	44,057,626	44,411,800
TOTAL LIABILITIES, DEFERRED INFLOWS OF		
RESOURCES AND NET POSITION	\$ 60,114,347	\$ 59,593,416

See Accompanying Notes to Financial Statements

#### HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

#### OPERATING FUND

	 2018	(/	As Revised) 2017
OPERATING REVENUES:			
Sales of Electricity	\$ 28,424,897	\$	27,370,839
Other Operating Revenues	 258,716		157,006
TOTAL OPERATING REVENUES	 28,683,613		27,527,845
OPERATING EXPENSES:			
Operations and Maintenance	27,012,439		22,776,102
Depreciation, Net of Amortization	 1,854,170		1,823,623
TOTAL OPERATING EXPENSES	 28,866,609		24,599,725
OPERATING INCOME (LOSS)	 (182,996)		2,928,120
NONOPERATING REVENUES (EXPENSES):			
Grant Income	63,505		95,150
Investment Income	285,291		112,639
Interest Expense	 (15,893)		(9,903)
TOTAL NONOPERATING REVENUES (EXPENSES)	 332,903		197,886
Income Before Contributions and Transfers	149,907		3,126,006
NET POSITION - JANUARY 1	44,411,800		42,405,878
Implementation of GASB 75	0		(630,084)
Transfers Out - Payments in Lieu of Taxes	 (504,081)		(490,000)
NET POSITION - DECEMBER 31	\$ 44,057,626	\$	44,411,800

#### HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

#### OPERATING FUND

	2018	(As Revised) 2017	
CASH FLOWS FROM OPERATING ACTIVITIES:			
Cash Received from Customers	\$ 28,558,050	\$ 27,679,244	
Cash Paid to Suppliers	(22,784,035)	(17,222,478)	
Cash Paid to Employees	(3,237,742)	(3,218,083)	
Cash Paid for Benefits	(1,501,054)	(1,343,321)	
Payment in Lieu of Taxes	(504,081)	(490,000)	
Net Cash Provided by Operating Activities	531,138	5,405,362	
CASH FLOWS FROM NONCAPITAL AND RELATED			
FINANCING ACTIVITIES:			
Interest Expense	(15,893)	(9,903)	
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Net Transfers (to) from the Depreciation Fund	(1,878,045)	(1,534,487)	
Additions to Plant Assets	(1,146,302)	(1,194,320)	
Grant Income	63,505	95,150	
Contribution in Aid of Construction	36,885	33,902	
Net Cash Used in Capital and Related			
Financing Activities	(2,923,957)	(2,599,755)	
CASH FLOWS FROM INVESTING ACTIVITIES:			
Investment Income	58,939	38,293	
Net Transfers to Rate Stabilization Fund	(600,000)	(600,000)	
	(000,000)	(000,000)	
Net Cash Used in Investing Activities	(541,061)	(561,707)	
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(2,949,773)	2,233,997	
AND CASH EQUIVALENTS	(2,747,775)	2,255,997	
CASH AND CASH EQUIVALENTS - JANUARY 1	9,299,099	7,065,102	
CASH AND CASH EQUIVALENTS - DECEMBER 31	\$ 6,349,326	\$ 9,299,099	

#### HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

#### OPERATING FUND

(As Revised)

# RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:

NET CASH PROVIDED BY OPERATING ACTIVITIES:	2018	2017
Operating Income (Loss)	\$ (182,996)	\$ 2,928,120
Adjustments to Reconcile Operating Income (Loss) to		
Net Cash Provided by Operating Activities:		
Depreciation	1,878,044	1,845,215
Amortization of Contribution in Aid of Construction	(23,874)	(21,592)
Payment in Lieu of Taxes	(504,081)	(490,000)
Rate Stabilization Reserve	281,641	625,346
Reserve for Discount	20,991	(69,843)
Pension Expense	504,643	525,015
OPEB Expense	341,676	(21,642)
Changes in Assets and Liabilities:		
(Increase) Decrease in Assets:		
Accounts Receivable	(599,052)	591,000
Accounts Receivable, Related Party	(20,852)	4,121
Other Receivables	349,283	(380,449)
Materials and Supplies	51,682	(188,561)
Prepaid Expenses	(153,210)	223,075
Purchased Power Working Capital	(697,569)	(108,593)
Preliminary Survey and Investigations	(46,616)	0
Deferred Outflows of Resources Related to Pension	(348,157)	(331,435)
Increase (Decrease) in Liabilities:		
Accounts Payable	(364,757)	295,019
Accounts Payable - Related Party	14,480	(4,999)
Accrued Expenses	18,417	(13,394)
Sales Tax Payable	8,795	(7,611)
Customer Deposits	26,867	2,356
Customer Advances for Construction	97,200	4,214
Net Other Postemployment Benefits Obligation	(121,417)	0
Net Cash Provided by Operating Activities	\$ 531,138	\$ 5,405,362

#### SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:

The following accounts are considered to be cash or cash equivalents for the statements of cash flows:

	 2018	(A	As Revised) 2017
Operating Cash Customer Deposits Insurance Reserve Fund	\$ 4,362,165 1,733,474 253,687	\$	7,338,805 1,706,607 253,687
	\$ 6,349,326	\$	9,299,099

See Accompanying Notes to Financial Statements

# HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF FIDUCIARY NET POSITION DECEMBER 31, 2018 AND 2017

#### OPEB TRUST FUND

# ASSETS

	2018		2017	
NONCURRENT ASSETS: Funds on Deposit with Town Treasurer Cash and Cash Equivalents Investments	\$	11,580 1,814,109	\$	34,112 1,843,096
	\$	1,825,689	\$	1,877,208
FIDUCIARY NET P	OSITIO	N		
FIDUCIARY NET POSITION - Restricted	\$	1,825,689	\$	1,877,208

# HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

#### OPEB TRUST FUND

	2018		 2017	
Net Investment Income Net Appreciation (Depreciation) in Fair Value	\$	74,231	\$ 46,769	
of Investments		(118,468)	63,596	
Management and Related Fees		(7,282)	(7,143)	
CHANGE IN FIDUCIARY NET POSITION		(51,519)	 103,222	
FIDUCIARY NET POSITION - January 1		1,877,208	 1,773,986	
FIDUCIARY NET POSITION - December 31	\$	1,825,689	\$ 1,877,208	

# NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

#### Reporting Entity

The Hingham Municipal Lighting Plant is a component unit of the Town of Hingham, Massachusetts. The Lighting Plant purchases power from various sources and sells it to the ultimate consumers at rates submitted to the Massachusetts Department of Public Utilities (DPU). The Municipal Lighting Board appoints a manager of municipal lighting who under direction and control of the Municipal Lighting Board, has full charge of the operations and management of the Plant.

# Regulation and Basis of Accounting

The Lighting Plant's financial statements are reported using the flow of economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

Under Massachusetts Law, electric rates of the Lighting Plant are set by the Municipal Light Board and may be changed not more than once every three months. Rate schedules are filed with the Massachusetts Department of Public Utilities. While the DPU exercises general supervisory authority over the Lighting Plant, the rates are not subject to DPU approval. Rates must be set such that net earnings from operations do not exceed 8% of the cost of the utility plant. During July 2017, the Lighting Plant reduced their electric rates.

# Utility Plant

The statutory provision for depreciation of utility plant is computed on the straight-line method at three percent of cost of the Lighting Plant's assets in service at the beginning of the year, exclusive of land and land rights. Therefore, no depreciation is taken in the year of the Lighting Plant's additions. Massachusetts law stipulates that the Lighting Plant may change from the statutory depreciation rate only with the approval of the DPU up to five percent. The Lighting Plant used a rate of 3% for 2018 and 2017. The Lighting Plant charges maintenance and repairs to expense when incurred. Replacements and betterments are charged to the utility plant.

#### Revenues

Revenues from the sale of electricity are recorded on the basis of bills rendered from monthly readings taken on a cycle basis. The revenues are based on rates established by the Lighting Plant, which are applied to customers' consumption of electricity. The Lighting Plant's rates contain an adjustable component pursuant to which increased power costs (power costs in excess of amounts recovered through base rates) are billable to customers.

## Provision for Payment in Lieu of Taxes

The Lighting Plant is exempt from federal income taxes. Although also exempt from property taxes, the Lighting Plant pays amounts in lieu of taxes to the Town of Hingham.

#### Reclassification

Certain amounts in the 2017 financial statements have been reclassified to conform to the 2018 presentation with no effect on previously reported net income.

# Contribution in Aid of Construction

Contributions in Aid of Construction represent non-refundable payments received from consumers and developers for extension of electric services for assets owned and maintained by Hingham Municipal Lighting Plant. These amounts are recorded as a deferred inflow of resources net of amortization.

# NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued):

#### Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

# Cash and Cash Equivalents

For purposes of the statements of cash flows, the Lighting Plant considers all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents.

#### Materials and Supplies

Materials and supplies are valued using the average cost method.

# Compensated Absences

In accordance with Plant policies, employees are allowed to accumulate sick days, up to a maximum of 200 days. Upon termination of employment with the Lighting Plant, the employee will be paid at a rate of \$10 per day for the first 100 days and \$20 per day for the next 100 days.

Union employees are permitted to carry over 10 vacation days from one year to the next. Upon termination of employment with the Lighting Plant, the employee will be paid for unused vacation time based on the employee's base rate of pay at the time of termination.

#### Accounts Receivable

The Lighting Plant carries its accounts receivable at cost. A receivable is considered past due if payments have not been received by the plant within 60 days. At that time, the Lighting Plant will send a delinquent notice specifying a termination date. The termination notice is sent out giving the customer at least seventy-two hours' notice before termination. On a periodic basis, the Lighting Plant does evaluate its accounts receivable to determine if any write-offs are necessary. Accounts receivable are stated net of an allowance for doubtful accounts of \$50,000 for both 2018 and 2017.

#### **Operating Revenue**

Operating revenue includes revenues and expenses related to the continuing operations of the Lighting Plant. Principal operating revenues are charges to customers for sales of electricity or services. Operating expenses are the costs of providing electricity and include administrative expenses and depreciation of capital assets. Other revenues and expenses are classified as non-operating in the financial statements.

#### Sales Tax

The Lighting Plant collects sales tax. The amount received is credited to a liability account and as payments are made, this account is charged. At any point in time, this account represents the net amount owed to the taxing authority for amounts collected, but not yet remitted.

#### **Unbilled Revenue:**

No recognition is given to the amount of sales to customers which are unbilled at the end of the accounting period.

# NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued):

# Pensions

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 Hingham Contributory Retirement System and additions to/deductions from the System's fiduciary net position have been determined on the same basis as they are reported by the System. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms.

# Other Postemployment Benefits (OPEB)

For purposes of measuring the Lighting Plant's OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Hingham Municipal Light Plant's OPEB Plan and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, the Plan recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for money market investments and participating interest earning investment contracts that have a maturity at the time of purchase of one year or less, which are reported at cost.

# Deferred Outflows/Inflows of Resources

In addition to assets and liabilities, the statement of net position will sometimes report a separate section for deferred outflows and deferred inflows of resources. These separate financial statement elements, deferred outflows and inflows of resources, represent a consumption of net position that applies to a future period and so will not be recognized as an outflow/inflow of resources (expense/expenditure) until then.

#### Financial Statement Revision

The Lighting Plant revised its beginning net position through the implementation of GASB Statement #75 related to accounting for OPEB. The cumulative effect of the revision was to increase the OPEB liability and decrease the prior year total net position by \$630,084.

# NOTE 2 - CONCENTRATION OF CREDIT RISK:

The Town Treasurer is the custodian of the Hingham Municipal Lighting Plant's cash and investments. The Plant coordinates all investment activity with the Treasurer, who has responsibility for these transactions.

Separate cash and investment pools are maintained for the depreciation fund, customer deposits, insurance reserve fund, rate stabilization fund and other postemployment benefit funds.

Investment policies authorize the investment in obligations of certificates of deposit, money market accounts and bank deposits. Since these investments are held to maturity they are recorded at cost. The treasurer may also invest trust funds in securities which are legal for the investment of funds under the laws of the Commonwealth.

# NOTE 2 - CONCENTRATION OF CREDIT RISK (Continued):

#### Custodial Credit Risk - Deposits

In the event of bank failure, the Plant's deposits may not be returned. Hingham Municipal Lighting Plant's deposits with the Town Treasurer are commingled and invested with deposits from other Town funds. Accordingly, it is not practical to disclose the related bank balance and credit risk of such cash deposits for Hingham Municipal Lighting Plant. Funds on deposit with financial institutions are subject to the insurance coverage limits imposed by the Federal Deposit Insurance Corporation (FDIC). The amount of insurance coverage for the Plant's deposits is not determinable because the limits of insurance are computed on a town-wide basis.

# Custodial Credit Risk - Investments

Investment custodial risk is the risk that, in the event of a failure by the counterparty, the Plant will not be able to recover the value of its investments. The Plant invests in U.S. Treasury/Agency Securities, Equity Securities, Mutual Funds and Corporate Bonds. The Plant has a custodial credit risk exposure of the amount invested in equity securities. The Plant tried to keep this risk at a minimum by only allowing a certain percentage of the total investments to be invested in these securities (20-60% for the OPEB Trust Funds). The investments with Rockland Trust are protected in accordance with the Securities Investor Protection Corporation (SIPC) up to \$500,000 including cash claims up to \$250,000.

# Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. The Plant tries to reduce this risk by investing in fixed income investments that mature in less than 5 years.

# NOTE 3 - INSURANCE RESERVE FUND:

The Lighting Plant has set up an insurance fund, which is to be used to reduce the future costs of insurance expense. The Lighting Plant keeps the amount separate in their records. The Insurance Reserve Fund balance at December 31, 2018 and 2017 was \$253,687.

# NOTE 4 - RATE STABILIZATION FUND:

The rate stabilization fund was created as an aftermath of Massachusetts Electricity Restructuring Act of 1997. These funds are for unexpected escalation in costs, such as the decommissioning of nuclear power plants before the end of their operating license, unusual price spikes in fuel prices and transmission cost increases. The rate stabilization fund balance at December 31, 2018 and 2017 was \$6,627,694 and \$5,952,053, respectively. The balance in the fund is offset by a corresponding deferred inflow of resources for the accumulated provision for rate refund.

# NOTE 5 - DEPRECIATION FUND:

Pursuant to provisions of the Commonwealth's General Laws, the Lighting Plant is required to maintain a restricted cash fund to finance utility plant additions. Cash in an amount equivalent to the annual depreciation expense is transferred from unrestricted funds to the depreciation fund. Interest earned on the balance of the fund must also remain in the fund. The fund is managed by the Town Treasurer and may be used for the cost of plant, nuclear decommissioning costs, the costs of contractual commitments, and deferred costs related to such commitments which the Municipal Lighting Board determines are above market value.

Year End	Ratings as of <u>Value</u>	 2018 Fair Year	2018 Under 1 Years	 2017 Fair Value
Term Securities				
Certificates of Deposit	N/A	\$ 3,450,000	<u>\$ 3,450,000</u>	\$ 3,650,000
Other Securities				
Century Bank Savings Account Massachusetts Municipal	t	2,922,652		2,888,030
Depository Trust Money Market Funds		 4,197,489 1,163		 1,725,267 279,251
Total Investments		\$ <u>10,571,304</u>		\$ 8,542,548

As of December 31, 2018, there are no investments in any one issuer (excluding U.S. Treasury securities and mutual funds) that represented 5% or more of the total portfolio value.

## NOTE 6 - OTHER RECEIVABLES:

Other receivables consist of the following:

		2018		2017
Merchandise and Jobbing	\$	62,956	\$	44,344
Mutual Aid		68,019		435,158
Grant Receivable		0		10,872
Interest Receivable		26,565		16,449
Total Other Receivables	<u>\$</u>	157,540	<u>\$</u>	506,823

# NOTE 7 - PURCHASED POWER WORKING CAPITAL:

The purchased power working capital are amounts held by power supply agents. Agents are required to hold a set amount of capital from which it may pay our power obligations when due. They replenish the fund as needed from our monthly invoice payments. The income earned allocated to the Lighting Plant will be applied as a credit to monthly power billing. Balances as of December 31, 2018 and 2017 are noted on the following schedule.

	 2018		2017
Watson MMWEC ENE	\$ 164,290 1,582 <u>1,676,961</u>	\$	278,821 1,576 <u>864,867</u>
Total	\$ 1,842,833	\$	1,145,264

## NOTE 8 - INVESTMENTS:

The Lighting Plant owns shares of Hydro Quebec Phase II stock. The securities are stated at cost. Fair market value approximates stated value.

Hingham Municipal Lighting Plant invested \$150,000 for a 5% ownership interest in Energy New England, LLC. During 2016, the Light Plant invested \$164,920 for an additional 5% ownership interest in Energy New England, LLC. Energy New England, LLC, is a nonpublic energy and energy services cooperative formed to aggregate the resources and collective buying power of municipal electric systems. Products and services include power supply/power brokering, risk management, all requirements contracts, total system resource management, consolidated wholesale billing, report preparation and filing and energy market services. The investment is stated at cost. Fair market value approximates stated value.

# NOTE 9 - RELATED PARTY:

The Lighting Plant provides electrical service to the Town for all schools, municipal buildings and street lighting at average rates per kilowatt-hour, which approximate those billed to other customers. Revenues from billings to the Town were approximately \$1,319,017 in 2018 and \$1,445,490 in 2017. Included in the accompanying statements of net assets as of December 31, 2018 and 2017 is \$124,579 and \$103,727, respectively, of amounts due from the Town.

The Town provides to the Lighting Plant, police detail, various insurances and other expenses, which amounted to approximately \$1,311,943 in 2018 and \$1,244,710 in 2017. As of December 31, 2018 and 2017 amounts payable to the Town were \$504,480 and \$490,000, respectively.

In 2018 and 2017, the Lighting Plant made payments in lieu of property taxes to the Town in the amount of \$504,480 and \$490,000, respectively.

# NOTE 10 - NET INVESTMENT IN CAPITAL ASSETS:

		2018		2017
Cost of Capital Assets Acquired Less: Accumulated Depreciation	\$	64,200,413 (35,296,374)	\$	63,189,891 (33,554,110)
Net Investment in Capital Assets	<u>\$</u>	28,904,039	<u>\$</u>	29,635,781

# NOTE 11 - UTILITY PLANT ASSETS:

	Balance January 1, 2018	Increases	Decreases	Balance December 31, 2018
Capital Assets Not Being Depreciated:				
Land	\$ 434,863	\$ 0	\$ 0	\$ 434,863
Construction in Progress	153,540	0	(17,953)	135,587
Total Capital Assets Not Being Depreciated	588,403	0	(17,953)	570,450
Capital Assets Being Depreciated:				
Transmission Plant	1,783,046	0	0	1,783,046
Distribution Plant	44,296,604	899,218	(135,780)	45,060,042
General Plant	16,521,838	265,037	0	16,786,875
Total Capital Assets Being Depreciated	62,601,488	1,164,255	(135,780)	63,629,963
Less Accumulated Depreciation For:				
Transmission Plant	(1,619,322)	(52,402)	0	(1,671,724)
Distribution Plant	(27,801,175)	(1,329,987)	135,780	(28,995,382)
General Plant	(4,133,613)	(495,655)	0	(4,629,268)
Total Accumulated Depreciation	(33,554,110)	(1,878,044)	135,780	(35,296,374)
Capital Assets Being Depreciated, Net	29,047,378	(713,789)	0	28,333,589
Utility Plant Assets, Net	\$ 29,635,781	\$ (713,789)	\$ (17,953)	\$ 28,904,039

Depreciation expense for the years ended December 31, 2018 and 2017 was \$1,878,044 and \$1,845,215, respectively. Depreciation expense reported on the Statements of Revenues, Expenses and Changes in Net Position is net of amortization of \$23,874 and \$21,592 related to contribution in aid of construction for the years ended December 31, 2018 and 2017, respectively.

# NOTE 12 - GRANT INCOME:

During 2018, Hingham Municipal Lighting Plant was awarded a LED Streetlight Grant from Massachusetts FOEP for the purpose of converting existing streetlights to LED streetlights. The grant provided reimbursement of 50% of the costs incurred by the Department related to the LED streetlight conversion. As of December 31, 2018, the lighting Plant received \$63,505 of grant funding.

# NOTE 13 - PENSION PLAN:

#### Plan Description

The Plant, through the Town of Hingham, is a member of the Hingham Contributory Retirement System which, in turn, is a member of the Massachusetts Contributory Retirement System which is governed by M.G.L. c.32 of the Massachusetts General Laws. Membership in the plan is mandatory immediately upon the commencement of employment for all permanent, full-time employees. The plan is a cost-sharing multiple-employer contributory defined benefit plan for all town employees except those employees who are covered by teachers' retirement board. The Plan's separately issued financial statements can be obtained by contacting Hingham Retirement Board at 210 Central Street, Hingham, Massachusetts 02043.

# **Benefits Provided**

The System provides retirement, disability and death benefits to plan members and beneficiaries. Massachusetts Contributory Retirement System benefits are uniform from system to system. The System provides for retirement allowance benefits up to a maximum of 80% of member's highest three-year average annual rate of regular compensation. For members who became members on or after April 2, 2012, average salary is the average annual rate of regular compensation received during the five consecutive years that produce the highest average, or, if greater, during the last five years. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

There are three classes of membership in the retirement system: Group 1, Group 2, and Group 4. Group 1 consists of general employees which includes clerical and administrative positions. Group 2 consists of positions that have been specified as hazardous. Lastly, Group 4 consists of police officers, firefighters, and other hazardous positions.

Members become vested after ten years of creditable service. A superannuation retirement allowance may be received upon the completion of twenty years of service or upon reaching the age of 55 with ten years of service if hired after 1978 and if classified in group 1 or 2. A person who became a member on or after April 2, 2012 is eligible for a superannuation retirement allowance upon reaching the age of 60 with 10 years of service if in group 1, 55 years of age with 10 years of service if in group 2, and 55 years of age if classified in group 4 or hired prior to 1978. Normal retirement for most employees occurs at age 65 (for certain hazardous duty and public safety positions normal retirement is at age 55).

Members who become permanently and totally disabled for further duty may be eligible to receive a disability retirement allowance. The amount of benefits to be received in such cases is dependent upon several factors: including whether or not the disability is work related, the member's age, years of creditable service, level of compensation, veterans' status, and group classification.

# NOTE 13 - PENSION PLAN (Continued):

#### Benefits Provided (continued)

Employees who resign from state service and who are not eligible to receive a retirement allowance or are under the age of 55 are entitled to request a refund of their accumulated total contributions. Survivor benefits are extended to eligible beneficiaries of members whose death occurs prior to or following retirement.

Cost-of-living adjustments granted between 1981 and 1997 and any increase in other benefits imposed by the Commonwealth's state law during those years are borne by the Commonwealth and are deposited into the pension fund. Cost-of-living adjustments granted after 1997 must be approved by the Board and are borne by the System.

#### Contributions

Active members are required to contribute at rates from 5-9% of their gross regular compensation. The percentage rate is keyed to the date upon which an employee's membership commences. Members hired after 1978 contribute an additional 2% of annual pay above \$30,000. The Plant is required to pay into the System its share of the system-wide actuarial determined contribution that is apportioned among the member units based on the actuarial study. The actuarially determined Plant contribution is an amount, when combined with employee contributions, is expected to finance the cost of benefits earned by the employees during the year, with an additional amount to finance the unfunded liability. The Plant's required contributions to the System for the years ended December 31, 2018 and 2017 were \$419,203 and \$507,393, respectively, which \$331,435 and \$279,906 were paid during calendar year 2017 and 2016, respectively.

#### Pension Liabilities

At December 31, 2018 and 2017, the Plant reported a liability of \$2,968,051 and \$3,353,532, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2017 and 2016, and the total pension liability used to calculate the new pension liability was determined by an actuarial valuation as of January 1, 2018 and 2016, respectively. The Town's proportion of the net pension liability was based on a projection of the Town's long-term share of contributions to the pension plan relative to the projected contributions of all participating member units. At the measured date of December 31, 2017 and 2016 the Town's proportion was 88.71% and 88.84%, respectively.

The Plant's portion of the net pension liability was based on the percentage of the Plant's contributions to the total Town's contributions as of the measured date of December 31, 2017 and 2016. At the measured date of December 31, 2017 and 2016, the Plant's portion was 6.97% and 6.18%, respectively, of the Town's total contributions.

#### Pension Expense

For the years ended December 31, 2018 and 2017, the Plant recognized a pension expense of \$504,643 and \$525,015, respectively. For the years ended December 31, 2018 and 2017, the Plant reported deferred outflows of resources and deferred inflows of resources related to pension from the following sources on below.

NOTE 13 - PENSION PLAN (Continued):

Pension Expense (continued) Deferred Outflows of Resources Related to Pension		2018		2017
Changes of assumptions	\$	415,680	\$	220,577
Net difference between projected and actual earnings on Pension plan investments		0		320,626
Changes in proportion and differences between employer contributions and proportionate share at the Plant level		358,477		80,129
Plan contributions subsequent to the measurement date		348,157		331,435
Total	<u>\$</u>	1,122,314	<u>\$</u>	952,767
Deferred Inflows of Resources Related to Pension		2018		2017
Differences between expected and actual experience	\$	480,135	\$	78,872
Net difference between projected and actual earnings on Pension plan investments		312,968		0
Changes in proportion and differences between employer contributions and proportionate share at the Plant level		7,936		10,653
Total	<u>\$</u>	801,039	<u>\$</u>	89,525

The Plant's net deferred outflows and inflows of resources related to pensions will be recognized in pension expense as shown below.

Year Ended December 3	1:	
201	9 \$	73,477
202	0	60,147
202	1	(60,094)
202	2	(110,858)
202	.3	10,446
Tot	al <u>\$</u>	(26,882)

As discussed in the previous paragraph, deferred outflows of resources related to pensions as of December 31, 2018 and 2017 was \$1,122,314 and \$952,767, respectively, which includes \$348,157 and \$331,435, respectively, of contributions made subsequent to the measurement date that does not get amortized.

NOTE 13 - PENSION PLAN (Continued):

<u>Actuarial Assumptions</u> The total pension liability as of December 31, 2018 was determined by an actuarial valuation as of January 1, 2018, using the following actuarial assumptions, applied to all periods included in the measurement.

Valuation Date	January 1, 2018		
Actuarial Cost Method	Entry Age Normal		
Amortization Method	<i>Unfunded Actuarial Accrued Liability (UAAL):</i> Increasing dollar amount at 4% to reduce the Unfunded Actuarial Accrued Liability to zero on or before June 30, 2035.		
Asset Valuation Method	<ul> <li>The Actuarial Value of Assets is the market value of assets as of the valuation date reduced by the sum of:</li> <li>a. 80% of gains and losses of the prior year,</li> <li>b. 60% of gains and losses of the second prior year,</li> <li>c. 40% of gains and losses of the third prior year and</li> <li>d. 20% of gains and losses of the fourth prior year</li> </ul>		
Inflation Rate	2% per year		
Projected Salary Increases	Group 1: 6% - 4.25%, based on service Group 4: 7% - 4.75%, based on service		
Cost of Living Allowance	Cost-of Living Allowances (COLA) are assumed to be 3% of the pension amount, capped at \$390 per year. No change from previous valuation.		
Rates of Retirement	Varies based upon age for general employees, police and fire employees.		
Mortality Rates:			
Healthy Retirees	RP-2000 Mortality Table (base year 2009) with full generational mortality improvement using Scale BB.		
Disabled Retirees	RP-2000 Mortality Table (base year 2012) with full generational mortality improvement using Scale BB.		
Investment Rate of Return	7.5% per year, net of pension plan investment expense, including inflation.		
Administrative Expenses	The anticipated administrative expenses for the fiscal year 2019 were assumed to be \$150,000 and are anticipated to increase 4% per year.		

# NOTE 13 - PENSION PLAN (Continued):

#### Investment Policy

The Plan's asset allocation policies are established by PRIT. Plan assets are managed on a total return basis with a long-term objective of achieving a fully funded status for the benefits provided through the Plan.

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 category 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 pensions plan's target asset allocation as of the measured date of December 31, 2017 are summarized on the following schedule.

Asset Class	Target Allocation	Long-Term Expected Rate of Return
Global Equity	40%	4.91%
Fixed Income	22%	2.04%
Private Equity	11%	6.50%
Real Estate	10%	3.70%
Timber/Natural Resources	4%	3.25%
Hedge Funds	13%	3.40%
Total	100%	

#### **Discount Rate**

The discount rate used to measure the total pension liability was 7.5%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rates and that contributions from participating employers will be made in accordance with Sections 22D and 22F of Chapter 32 of the Massachusetts General Laws. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

#### Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability calculated using the discount rate of 7.5%, as well as what the net pension liability would be if it were calculated using a discount rate 1-percentage point lower (6.5%) or 1-percentage point higher (8.5%) than the current rate:

		Current	
	1% Decrease	Discount Rate	1% Increase
	(6.5%)	(7.5%)	(8.5%)
Proportionate share of the Net Pension Liability	\$ 4,221,623	\$ 2,968,051	\$ 1,903,747

# Pension Plan Fiduciary Net Position

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

# NOTE 14 - LEASES:

During March 2017, the Lighting Plant extended an operating lease agreement to lease antenna space. This lease expires in February 2020. Rent expense related to this lease was approximately \$23,851 and \$20,537 for the years ended December 31, 2018 and 2017, respectively.

Future Minimum Lease Payments:

	Annual Cost
December 31, 2019 2020	21,123 
Total	<u>\$ 24,644</u>

# NOTE 15 - MMWEC PARTICIPATION:

The Town of Hingham, acting through its Lighting Plant, is a Participant in certain Projects of the Massachusetts Municipal Wholesale Electric Company (MMWEC).

MMWEC is a public corporation and a political subdivision of the Commonwealth of Massachusetts, created as a means to develop a bulk power supply for its Members and other utilities. MMWEC is authorized to construct, own or purchase ownership interests in, and to issue revenue bonds to finance, electric facilities (Projects). MMWEC has acquired ownership interests in electric facilities operated by other entities and also owns and operates its own electric facilities. MMWEC sells all of the capability (Project Capability) of each of its Projects to its Members and other utilities (Project Participants) under Power Sales Agreements (PSAs). Among other things, the PSAs require each Project Participant to pay its *pro rata* share of MMWEC's costs related to the Project, which costs include debt service on the revenue bonds issued by MMWEC to finance the Project, plus 10% of MMWEC's debt service to be paid into a Reserve and Contingency Fund. In addition, should a Project Capability to an additional amount when due, other Project 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.

Hingham Municipal Lighting Plant has entered into PSAs and Power Purchase Agreements (PPAs) with MMWEC. Under both the PSAs and PPAs, the Lighting Plant is required to make certain payments to MMWEC payable solely from the Lighting Plant's revenues. Under the PSAs, each Participant is unconditionally obligated to make all 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).

# NOTE 16 - OTHER POSTEMPLOYMENT BENEFIT (OPEB) TRUST FUND:

The Other Postemployment Benefit Liability Trust Fund was established by vote of the Board of Commissioners on January 10, 2009. The Board voted to accept the provisions of MGS Chapter 32B, Section 20 which establishes a separate Fund and a funding schedule for the Fund. The schedule and any future updates shall be designed, consistent with standards issued by the Governmental Accounting Standards Board, to reduce the unfunded actuarial liability of health care and postemployment benefits to zero as of an actuarially acceptable period of years and to meet the normal costs of all future benefits for

which the government unit is obligated. The Trust is under custodianship of the treasurer of the Town of Hingham. The balance in the Trust as of December 31, 2018 and 2017 was \$1,825,689 and \$1,877,208, respectively.

Governmental Accounting Standards Board (GASB) Statement No. 72, Fair Value Measurement and Application, provides a definition of fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets and liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under GASB Statement No. 72 are described as follows:

# Level 1

Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Department has the ability to access.

# Level 2

Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability; and
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

# Level 3

Inputs to valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

# NOTE 16 - OTHER POSTEMPLOYMENT BENEFIT (OPEB) TRUST FUND (Continued):

The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in methodologies used at December 31, 2018 and 2017.

- Common Stocks, Corporate Bonds and U.S. Government Securities: Valued at closing price as reported on the active market on which the individual securities are traded.
- Mutual Funds: Valued at the net asset value (NAV) of shares held by the Department at year end.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although management believes its valuations methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following sets forth, by level within the fair value hierarchy, the Department's investments at fair value at December 31, 2018 and 2017. As of December 31, 2018 and 2017, the Trust did not have any investments that were measured using Level 2 or Level 3 inputs.

Description Corporate Bonds: Credit Rating-	December 31, 2018 Quoted Prices in Active Markets for Identical Assets (All Level 1)		Que Activ Ide	mber 31, 2017 oted Prices in ve Markets for ntical Assets All Level 1)
AA+	\$	49,891	\$	50,115
AA	Ψ	0	Ψ	30,908
AA-		40,426		41,749
$\mathbf{A}+$		65,579		66,807
А		87,978		90,115
BBB+		58,217		29,880
U.S. Government Securities		595,768		496,453
Equity Securities		189,500		277,089
Mutual Funds		726,750		759,980
Total FMV Investments		1,814,109		1,843,096
Other Securities				
Money Market		11,580		34,112
Total	\$	1,825,689	\$	1,877,208

# NOTE 16 - OTHER POSTEMPLOYMENT BENEFIT (OPEB) TRUST FUND (Continued):

There were no investments in any one issuer (other than U.S. Treasury securities and mutual funds) that represented 5% or more of total investments as of December 31, 2018.

The Trust has adopted GASB 74 for the year ending December 31, 2017. The adoption of GSAB 74 introduced a new actuarial cost method and discount rate as well as new disclosures and methodologies for reporting plan liabilities and OPEB expenses.

The following disclosures have been provided by the Actuary at the Plant level.

# Plan Description

The Town of Hingham administers the retiree health care benefits program-a single-employer defined benefit plan that is used to provide postemployment benefits other than pensions (OPEB) for all permanent full-time employees.

#### Plan Membership

At June 30, 2018, OPEB plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits payments	15
Active plan members	30
-	45

# Benefits provided

The Town provides health care benefits for retirees and their dependents. Benefits are provided through the Mayflower Municipal Health Group, and the full cost of benefits is shared between the Town and retirees.

#### Contributions

The Town annual contributes an actuarially determined contribution based on the results of the most recent actuarial valuation.

#### Investment Policy

The OPEB plan's investment policy in regard to the allocation of invested assets is established by Rockland Trust and may be amended at any time. It is the policy of Rockland Trust to pursue an investment strategy that reduces risk through prudent diversification of the portfolio across a broad selection of distinct asset classes. The OPEB plan's investment policy discourages the use of cash equivalents, except for liquidity purposes in times of market uncertainty, and aims to refrain from dramatically shifting asset class allocations over short time spans.

#### Rate of Return

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of OPEB plan investments by the proportion of time they are available to earn a return during that period. The rate of return is then calculated by solving, through an iterative process, for the rate that equates the sum of the weighted external cash flows into and out of the OPEB plan investments to the ending fair value of OPEB plan investments.

# NOTE 16 - OTHER POSTEMPLOYMENT BENEFIT (OPEB) TRUST FUND (Continued):

# Net OPEB Liability of the Plan

The components of the net OPEB liability at June 30, 2018 and 2017, were as follows:

	2018	2017
Total OPEB Liability Fiduciary Net Position	\$ 2,857,908 (1,862,288)	\$ 2,450,363 (1,818,309)
Net OPEB Liability	<u>\$ 995,620</u>	<u>\$ 632,054</u>

Fiduciary net position as a percentage of the total OPEB liability was 65.16%.

#### Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of July 1, 2017, using the following assumptions, applied to all periods included in the measurement:

Inflation	2.6% per year, based on the 2017 Social Security Trustees Report
Actuarial Cost Method	Entry Age Normal
Amortization Method	Increasing at 3.5% over 30 years on an open amortization period for partial pre-funding.
Asset Valuation Method	Market Value
Payroll Growth	3.5% per year
Investment rate of return	7.5%, net of investment expenses, including inflation
Healthcare cost trend rate	8% for 2017, decreasing .5% per year to an ultimate rate of 3.8%.
Pre-Retirement Mortality-	
General and Public Safety	RP-2000 Employee Mortality Table, base year 2009, projected with generational mortality improvement using scale BB
Post-Retirement Mortality- General and Public Safety	RP-2000 Healthy Annuitant Mortality Table, base year 2009, projected with generational mortality improvement using scale BB.

# NOTE 16 - OTHER POSTEMPLOYMENT BENEFIT (OPEB) TRUST FUND (Continued):

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 OPEB 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 target asset allocation as of June 30, 2018 are summarized in the table below.

Asset Class	Town Target Allocation	Town Long-Term Expected Rate of Return	Light Target Allocation	Light Long-Term Expected Rate of Return
Global Equity	40%	4.94%	21%	9.10%
Private Equity	11%	6.50%	0%	N/A
Core Fixed Income	12%	.71%	0%	N/A
Value-Added Fixed Income	10%	3.60%	0%	N/A
Domestic Fixed Income	0%	N/A	56%	1.10%
International Fixed Income	0%	N/A	6%	2.00%
Real Estate	10%	3.70%	2%	10.80%
Timberland	4%	3.25%	0%	N/A
Portfolio Completion Strategies	13%	3.54%	0%	N/A
Alternatives	0%	0.00%	13%	9.00%
Cash and Cash Equivalents	0%	0.00%	1%	-0.10%
Total	100%		100%	

#### Discount Rate

The discount rate used to measure the total OPEB liability was 7.5%. The projection of cash flows used to determine the discount rate assumed that contributions from the Town will be made in accordance with the Plan's funding policy. Based on those assumptions, the OPEB Plan's fiduciary net positon was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

# Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability calculated using the discount rate of 7.5%, as well as what the net OPEB liability would be if it were calculated using a discount rate 1-percentage point lower (6.5%) or 1-percentage point higher (8.5%) than the current rate:

	Current					
	1% Decrease Discount Rate 1% In			Increase		
		(6.5%)	(	(7.5%)	(	(8.5%)
Net OPEB Liability	\$	1,173,978	\$	995,620	\$	851,196

# NOTE 16 - OTHER POSTEMPLOYMENT BENEFIT (OPEB) TRUST FUND (Continued)

#### Sensitivity of the Net Pension Liability to Changes in the Healthcare Cost Trend Rates

The table on the following page presents the net OPEB liability calculated using current healthcare cost trend rates as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage point lower (7% year 1 decreasing to 2.8%) or 1-percentage point higher (9% year 1 decreasing to 4.8%) than the current healthcare cost trend rates:

			(	Current		
			Healt	thcare Cost		
	1%	Decrease	Tre	end Rates	19	6 Increase
	7% Year 1 8% Year 1		9	%Year 1		
	Decre	asing to 2.8%	Decrea	asing to 3.8%	Decr	easing to 4.8%
Net OPEB Liability	\$	832,483	\$	995,620	\$	1,200,520

# NOTE 17 - OTHER POSTEMPLOYMENT BENEFITS (OPEB):

The Lighting Plant implemented GASB Statement 75, Accounting and financial Reporting for Postemployment Benefits Other than Pensions for the year ended December 31, 2018. As required by GASB 75, the Lighting Plant has recorded the net OPEB obligation at the beginning of the transition year as determined by an actuarial study, and has applied the measurement recognition requirements of GASB 75 on a prospective basis.

#### Plan Description

The Town of Hingham administers the retiree health care benefits program-a single-employer defined benefit plan that is used to provide postemployment benefits other than pensions (OPEB) for all permanent full-time employees.

#### Plan Membership

At June 30, 2018, OPEB plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits payments	15
Active plan members	30
•	45

#### Benefits provided

The Town provides health care benefits for retirees and their dependents. Benefits are provided through the Mayflower Municipal Health Group, and the full cost of benefits is shared between the Town and retirees.

#### **Contributions**

The Town annual contributes an actuarially determined contribution based on the results of the most recent actuarial valuation.

#### **OPEB** Liabilities

At December 31, 2018 and 2017, the Lighting Plant reported a liability of \$995,620 and \$632,054, respectively, for its net OPEB liability. The 2018 and 2017 net OPEB liability was measured as of June 30, 2018 and 2017, and was determined by an actuarial valuation as of July 1, 2017.

# NOTE 17 - OTHER POSTEMPLOYMENT BENEFITS (OPEB) (Continued):

#### **OPEB** Expense

For the year ended December 31, 2018, the Lighting Plant recognized an OPEB expense of \$341,676. At December 31, 2018, the Lighting Plant reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources on the following page.

Deferred Outflows of Resources Related to OPEB		2018
Changes of assumptions	<u>\$</u>	233,159
Deferred Inflows of Resources Related to OPEB		
Differences between expected and actual experience Net difference between projected and actual	\$	73,875
earnings on OPEB plan investments		15,977
Total	<u>\$</u>	89,852

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in the Lighting Plant's OPEB expense as follows:

#### Net Deferred Outflows/Inflows of Resources Related to OPEB

Year Ended December 31:

2019	\$	22,426
2020		22,426
2021		22,426
2022		22,426
2023		23,204
Thereafter		30,399
Total	<u>\$</u>	143,307

GASB 75 requires the disclosure of actuarial assumptions, the discount rate, and sensitivity of the net OPEB liability to changes in the discount rate and healthcare cost trend rates. Refer to the previous note "Other Postemployment Benefit Trust Fund" for these disclosures.

# NOTE 18 - RISK MANAGEMENT:

#### Self-Insurance Trust

The Lighting Plant participates in Massachusetts Municipal Utility Self-Insurance Trust Fund (the Trust) with 17 other municipalities for the purpose of sharing excess liability and officers' liability risks. Through the Trust, general liability coverage provides for \$500,000 per occurrence, with a \$50,000 deductible that would be paid by the Lighting Plant. Environmental insurance coverage provides for \$1,500,000 per occurrence, with a \$100,000 deductible of which \$50,000 is the responsibility of the Lighting Plant and the remaining \$50,000 is the responsibility of the Trust. Each participating municipality contributes to the Trust based on its share of the group's total kilowatt-hour sales. Payments for claims over the deductible limit are funded by Trust assets or, if required, additional contributions from the participants.

The Town is also self-insured for those employees electing indemnity plans. The Town also provides preferred provider health plans, which are premium-based health plans, for the employees not electing indemnity plans.

The Town is self-insured for other general liability; however Chapter 258 of the Massachusetts General Laws limits the liability to a maximum of \$100,000 per claim in all matters except actions relating to federal/civil rights, eminent domain and breach of contract.

Generally accepted accounting principles requires that liabilities for self-insured claims be reported if it is probable that a loss has been incurred and the amount can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported. At December 31, 2018 and 2017, the Lighting Plant considers it's pro rata share of these losses to be immaterial to its financial statements.

# NOTE 19 - COMMITMENTS AND CONTINGENCIES:

The Lighting Plant is subject to various legal proceedings covering a range of matters that arise in the ordinary course of its business activities. No provision for loss on litigation and/or claims has been made. Management and legal counsel do not anticipate that any related settlement would have a material adverse effect on the Lighting Plant's financial position.

# Current Power Purchase Commitments

Hingham Municipal Lighting Plant (HMLP) has entered into various power contracts through Energy New England (ENE), as their acting agent. These power contracts began in 2008 and some go through to the life of the unit.

HMLP has entered into a contract with Braintree Electric Light Department as a 10% entitlement owner to the Watson Power Plant. This purchase power contract is effective from 2009 thru 2029. Watson Units 1 and 2 entitle HMLP to 11.4 MWs. They are primarily natural gas fired, but can burn oil if needed for reliability. The average 2018 energy price for Watson was \$0.07923/kWh. HMLP is a 2.3% entitlement owner to Potter 2 CC which is a life of unit contract. Potter 2 CC entitles HMLP to 2.1 MW of electricity when the plant runs.

HMLP is a .5% entitlement owner in the Seabrook nuclear power plant and is entitled to almost 6MW. The average 2018 energy price for Seabrook was \$0.0058/kWh. This contract is a life of unit contract.

## HINGHAM MUNICIPAL LIGHTING PLANT NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2018 AND 2017

## NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

#### Current Power Purchase Commitments (continued)

HMLP is a .1% entitlement owner in the Millstone nuclear power plant and is entitled to almost 1 ¼ MW. The average 2018 energy price for Millstone was \$0.00635/kWh. This contract is a life of unit contract.

HMLP is a 6% entitlement owner in the Brown Bear (formerly Miller Hydro) plant for hydroelectric renewable energy and is entitled to almost 1 MW. HMLP entered into an initial six-year contract with Brown Bear that expired in 2016. It was renewed to run until 2021. The average 2018 energy price for Brown Bear was \$0.04939/kWh.

HMLP has entered into a 15-year contract terminating in 2026 with Spruce Mountain Wind Farm for renewable wind energy. HMLP has an ownership entitlement of 9% with a commitment to purchase almost 2 MW. The average 2018 energy price for Spruce Mountain Wind was \$0.09925/kWh.

HMLP has entered into a 20-year contract terminating in 2035 with Saddleback Ridge Wind for renewable wind energy. HMLP has an ownership entitlement of 5.6% with a commitment to purchase almost 2 MW. The average 2018 energy price for Saddleback Ridge Wind was \$0.09258/kWh.

The Canton Mountain Wind project commenced commercial operation and began delivering power on January 1, 2018. HMLP has an ownership entitlement of 7.25% in this 20 MW facility, which should provide about 5,000 megawatt-hours of electricity annually for the Lighting Plant. The average 2018 energy price for Canton Mountain Wind was \$0.09979/kWh.

HMLP has a supply contract with the New Bedford Landfill for 25% of the output from the 3.2 megawatt plant. In 2018, HMLP received 3,809 megawatt-hours of electricity from this facility at an average cost of \$0.04453/kWh.

HMLP has entered into a 25-year contract terminating in 2041 with NUGen - Harrington St. PV for renewable solar energy. HMLP has an ownership entitlement of 20 % in each of the two 5.996 MW DC facilities. Each facility is projected to produce about 7,000 megawatt-hours of electricity each year, with a degradation of approximately 0.5% annually. In 2018, these two facilities produced a combined 2,778 megawatt-hours of electricity for HMLP at an average cost of \$0.06189/kWh.

HMLP is an entitlement owner in the Stony Brook Intermediate (4%) and Peaking (5 1/3%) units. The Intermediate units can run on either gas or oil while the peaking unit runs on oil. Units 1A, B and C of the Intermediate units entitle HMLP to a total of 14MW. Units 2A and B of the Peaking units entitle HMLP to a total of 9.2MW. The contracts are for the life of the units. The average 2018 energy price for the Intermediate units was \$0.07975/kWh and the average 2018 energy price for the Peaking units was \$0.19452/kWh.

HMLP is a 2% entitlement owner in the NYPA Hydro Base and Peaking plants for hydroelectric renewable energy. The contracts are life of unit contracts. The average 2018 energy price for the NYPA units was \$0.00522/kWh.

HMLP has other contracts with various generators which allows for the purchase of energy when various price points come into play. In 2017, the companies HMLP bought from under these agreements were NextEra, and Excelon/Constellation. For NextEra the average per kWh price was \$0.0459, for Excelon/Constellation was \$0.0483.

## HINGHAM MUNICIPAL LIGHTING PLANT NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2018 AND 2017

## NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

#### Current Power Purchase Commitments (continued)

Additionally, HMLP has the ability to purchase from ISO-New England's Energy Interchange. In 2018, HMLP paid \$0.00522/kWh for energy through ISO-New England.

## Future Power Purchase Commitments

HMLP entered in to a ten-year power purchase agreement with NextEra that starts on January 1, 2020. The contract will provide 2.5 megawatts of electricity every hour. The price is \$40.87/MWH, escalating at 2.5% annually.

Also, ENE has been engaged in informal talks with the owners of Brown Bear Hydro regarding the opportunity to extend that contract beyond 2021, but there are no formal results to report at this time. Similarly, ENE is talking to other renewable generators about possible power purchase opportunities for HMLP. Offerings are being put together which will position HMLP to be in compliance with CES requirements (which currently do not apply to municipal light plants. There is pressure being exerted on legislators which would require us to follow those directives.). Certainly, extending existing contracts and entering into new ones will be driven by the economics.

## **MMWEC** Contingencies and Liabilities

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.

## HINGHAM MUNICIPAL LIGHTING PLANT NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2018 AND 2017

## NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

#### MMWEC Contingencies and Liabilities (continued)

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.

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

As of December 31, 2018, total capital expenditures amounted to \$1,652,338,000, of which \$64,987,000 represents the amount associated with the Lighting Plant's Project Capability. MMWEC's debt outstanding for the Projects from Power Supply Project Revenue Bonds totals \$7,110,000, of which \$358,000 is associated with the Lighting Plant's share of Project Capability. As of December 31, 2018, MMWEC's total future debt service requirement on outstanding bonds issued for the Projects is \$7,419,000, of which \$373,000 is anticipated to be billed to the Plant in the future.

In addition, under the PSAs, the Lighting Plant is required to pay to MMWEC its share of the Operation and Maintenance (O&M) costs of the Projects in which it participates. The Lighting Plant's total O&M costs including debt service under the PSAs were \$3,338,000 and \$3,984,000 for the years ended December 31, 2018 and 2017, respectively.

HMLP's annual energy costs related to its long-term power purchase commitments as of December 31, 2018 are approximately as follows:

		MMWEC		ENE		Watson		 Total
Years Ending December 31,	2019	\$	373,000	\$	5,794,554	\$	1,578,000	\$ 7,745,554
-	2020		0		5,598,002		1,565,103	7,163,105
	2021		0		5,179,754		1,565,165	6,744,919
	2022		0		5,242,389		1,577,062	6,819,451
	2023		0		4,178,462		1,580,146	5,758,608
2024	-2028		0		14,043,297		7,348,860	21,392,157
2029	-2033		0		8,354,223		344,221	8,698,444
2034	-2038		0		4,763,662		0	4,763,662
2039	-2042		0		434,698		0	 434,698
	Total	<u>\$</u>	373,000	\$	<u>53,589,041</u>	\$	15,558,557	\$ 69,520,598

#### HINGHAM MUNICIPAL LIGHTING PLANT NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2018 AND 2017 (\$000)

	PERCENTAGE SHARE	EXPI	AL PROJECT ENDITURES O DATE	FICIPANT'S SHARE	OUTS	ISSUED & TANDING 31/2018	'ICIPANT'S HARE	DEBT ON	OTAL SERVICE BONDS TANDING	ICIPANT'S HARE
Stony Brook Peaking Project	5.3307	\$	59,845	\$ 3,190	\$	0	\$ 0	\$	0	\$ 0
Stony Brook Intermediate Project	4.3870		175,809	7,713		0	0		0	0
Nuclear Mix No. 1-SBK	3.4281		11,881	407		0	0		0	0
Nuclear Mix No. 1-MLS	3.4281		124,683	4,274		0	0		0	0
Nuclear Project No. 3-MLS	1.4311		155,029	2,219		0	0		0	0
Nuclear Project No. 4-SBK	3.4180		356,087	12,171		0	0		0	0
Nuclear Project No. 5-SBK	1.6644		96,443	1,605		0	0		0	0
Wyman Project	0.0000		8,792	0		0	0		0	0
Project No. 6-SBK	5.0331		663,769	 33,408		7,110	 358		7,419	 373
TOTAL		\$	1,652,338	\$ 64,987	\$	7,110	\$ 358	\$	7,419	\$ 373

	PERCENTAGE SHARE	OPERATION & MAINTENANCE 12/31/2017		PARTICIPANT'S SHARE		OPERATION & MAINTENANCE 12/31/2018		PARTICIPANT'S SHARE	
Stony Brook Peaking Project	5.3307	\$	4,487	\$	239	\$	4,644	\$	248
Stony Brook Intermediate Project	4.3870		16,662		731		19,982		877
Nuclear Mix No. 1-SBK	3.4281		686		24		635		22
Nuclear Mix No. 1-MLS	3.4281		6,532		224		6,661		228
Nuclear Project No. 3-MLS	1.4311		15,756		225		13,664		196
Nuclear Project No. 4-SBK	3.4180		16,344		559		14,276		488
Nuclear Project No. 5-SBK	1.6644		4,704		78		3,672		61
Wyman Project	0.0000		976		0		1,098		0
Project No. 6-SBK	5.0331		37,834		1,904		24,196		1,218
TOTAL		\$	103,981	\$	3,984	\$	88,828	\$	3,338

#### HINGHAM MUNICIPAL LIGHTING PLANT NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2018 AND 2017 (\$000)

	PERCENTAGE		2019	PARTICIPANT'S		
	SHARE	ANNUAL COST		SHARE		
Stony Brook Peaking Project	5.3307	\$	0	\$	0	
Stony Brook Intermediate Project	4.3870	Ŷ	0	Ŷ	0	
Nuclear Mix No. 1-SBK	3.4281		0		0	
Nuclear Mix No. 1-MLS	3.4281		0		0	
Nuclear Project No. 3-MLS	1.4311		0		0	
Nuclear Project No. 4-SBK	3.4180		0		0	
Nuclear Project No. 5-SBK	1.6644		0		0	
Wyman Project	0.0000		0		0	
Project No. 6-SBK	5.0331		7,419		373	
TOTAL		\$	7,419	\$	373	

# HINGHAM MUNICIPAL LIGHTING PLANT REQUIRED SUPPLEMENTARY INFORMATION NET PENSION LIABILITY

## OPERATING FUND

For the Year Ending December 31,		2018	2017	 2016	 2015
Actuarial Valuation Date Measurement Date		1/1/2018 12/31/2017	1/1/2016 12/31/2016	1/1/2016 12/31/2015	1/1/2014 12/31/2014
Schedule of the Department's Proportionate Share of the Net Pension Liability (NPL):	e				
Plant's Portion of the NPL		6.9651%	6.1815%	6.2142%	5.9032%
Plant's Proportionate Share of the NPL	\$	2,968,051	\$ 3,353,532	\$ 3,309,805	\$ 2,349,591
Covered Payroll	\$	2,510,092	\$ 3,218,083	\$ 2,885,804	\$ 2,850,178
NPL as a Percentage of Covered Payroll		118.24%	104.21%	114.69%	82.44%
Plan's Fiduciary Net Position as a Percentage of the Total Pension Liability		73.71%	65.39%	64.21%	70.93%
Schedule of Contributions:					
Actuarially Determined Contributions Less: Contributions in Relation to the Actuarially	\$	331,435	\$ 279,906	\$ 272,180	\$ 246,899
Determined Contribution		(331,435)	(279,906)	(272,180)	(246,899)
Contribution Deficiency (Excess)	\$	0	\$ 0	\$ 0	\$ 0
Covered Payroll	\$	2,510,092	\$ 3,218,083	\$ 2,885,804	\$ 2,850,178
Contributions as a Percentage of Covered Payroll		13.20%	8.70%	9.43%	8.66%

Note: This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10 year trend is compiled, pension plans should present information for those years for which information is available.

> See Independent Auditors' Report 40

# HINGHAM MUNICIPAL LIGHTING PLANT NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION NET PENSION LIABILITY

# **OPERATING FUND**

# NOTE A - NET PENSION LIABILITY:

Changes in Assumptions

Since the last measurement date, the long term investment return rate changed from 7.75% to 7.5%.

# HINGHAM MUNICIPAL LIGHTING PLANT REQUIRED SUPPLEMENTARY INFORMATION SCHEDULES OF CHANGES IN THE NET OPEB LIABILITY

## OPERATING AND OPEB TRUST FUND

	2018			2017		
Total OPEB Liability:						
Service Cost	\$	74,350	\$	61,714		
Interest		190,960		180,144		
Difference between expected and actual experience		259,916		-		
Changes of benefit terms		(295,512)		-		
Changes of Assumptions		299,248		-		
Benefit Payments		(121,417)		(108,438)		
Net Change in Total OPEB Liability		407,545		133,420		
Total OPEB Liability - Beginning		2,450,363		2,316,943		
Total OPEB Liability - Ending	\$	2,857,908	\$	2,450,363		
Plan Fiduciary Net Position:						
Contributions-Employer	\$	121,417	\$	108,438		
Net Investment Income		51,217		45,343		
Benefit Payments		(121,417)		(108,438)		
Administrative Expenses		(7,238)		(619)		
Net Change in Plan Fiduciary Net Position		43,979		44,724		
Plan Fiduciary Net Position - Beginning		1,818,309		1,773,585		
Plan Fiduciary Net Position - Ending	\$	1,862,288	\$	1,818,309		
Net OPEB Liability - Ending	\$	995,620	\$	632,054		

Note: This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10 year trend is compiled, OPEB plans should present information for those years for which information is available.

See Independent Auditors' Report

# HINGHAM MUNICIPAL LIGHTING PLANT REQUIRED SUPPLEMENTARY INFORMATION SCHEDULES OF NET OPEB LIABILITY, EMPLOYER CONTRIBUTIONS AND INVESTMENT RETURNS

## OPERATING AND OPEB TRUST FUND

	2018		 2017
Schedules of Net OPEB Liability:			
Total OPEB Liability Plan Fiduciary Net Position	\$	2,857,908 (1,862,288)	\$ 2,450,363 (1,818,309)
Net OPEB Liability	\$	995,620	\$ 632,054
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability		65.16%	74.21%
Total Employee Payroll	\$	3,237,742	\$ 3,218,083
Net OPEB Liability as a Percentage of Covered Payroll		30.75%	19.64%
Schedules of Employer Contributions:			
Actuarially Determined Contributions Less: Contributions in relation to the actuarially determined	\$	118,438	\$ 86,796
contribution		(121,417)	 (108,438)
Contribution Deficiency (Excess)	\$	(2,979)	\$ (21,642)
Covered Payroll	\$	1,862,288	\$ 3,218,083
Contributions as a percentage of covered payroll		6.52%	3.37%
Schedules of Investment Returns:			
Annual Money-Weighted rate of Return, net of investment expenses		8.91%	11.67%

Note: This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10 year trend is compiled, OPEB plans should present information for those years for which information is available.

See Independent Auditors' Report

# HINGHAM MUNICIPAL LIGHTING PLANT NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION OTHER POSTEMPLOYMENT BENEFITS

# OPERATING FUND AND OPEB TRUST FUND

# NOTE A - OTHER POSTEMPLOYMENT BENEFITS:

Changes in Assumptions

Since the last measurement date, the discount rate changed from 7.75% to 7.5%.

# HINGHAM MUNICIPAL LIGHTING PLANT SCHEDULES OF SALES OF ELECTRICITY FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

## OPERATING FUND

	 2018	(As Revised 2017		
SALES OF ELECTRICITY:				
Residential	\$ 13,153,586	\$	12,709,885	
Commercial and Industrial	13,725,684		13,133,212	
Municipal	1,455,247		1,445,490	
Security Lighting	 90,380		82,252	
TOTAL SALES OF ELECTRICITY	\$ 28,424,897	\$	27,370,839	

## HINGHAM MUNICIPAL LIGHTING PLANT SCHEDULES OF OPERATION AND MAINTENANCE EXPENSES FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

#### OPERATING FUND

	2018	(As Revised) 2017
POWER PRODUCTION EXPENSES:		
Purchased Power	\$ 21,015,790	\$ 18,908,604
Flush of Funds	(135,905)	(1,484,363)
Other Purchased Power	726,691	620,618
Total Power Production Expenses	21,606,576	18,044,859
DISTRIBUTION EXPENSES:		
Miscellaneous Distribution Expenses	923,662	851,475
MAINTENANCE EXPENSES:		
Maintenance of Lines	1,006,087	539,713
Maintenance - Other	98,305	51,833
Total Maintenance Expenses	1,104,392	591,546
CUSTOMER ACCOUNTS:		
Customer Accounting and Collection Expense	907,457	855,717
Uncollectible Accounts	3,389	29,706
Meter Reading Expense	84,646	105,888
Total Customer Accounts	995,492	991,311
GENERAL AND ADMINISTRATIVE EXPENSES:		
Administrative and General Salaries	258,747	172,112
Office Supplies and Expenses	30,633	25,537
Outside Services Employed	164,772	253,122
Property Insurance	194,112	192,252
Employees' Pension and Benefits	1,501,054	1,343,321
Dues, Meetings and Other General Expenses	81,310	95,868
Transportation	66,790	63,730
Maintenance of General Plant	84,899	150,969
Total General and Administrative Expenses	2,382,317	2,296,911
TOTAL OPERATION AND MAINTENANCE EXPENSES	\$ 27,012,439	\$ 22,776,102