

**HINGHAM MUNICIPAL LIGHTING PLANT**  
Financial Statements  
December 31, 2017 and 2016

HINGHAM MUNICIPAL LIGHTING PLANT  
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 DECEMBER 31, 2017 AND 2016

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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, 2017 and 2016, and the related notes to the financial statements, which collectively comprise the 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

Tel: 508.757.5957 • Fax: 1.508.422.0883 • Email: [admin@gsamycpa.com](mailto:admin@gsamycpa.com) • Web: [www.gsamycpa.com](http://www.gsamycpa.com)

## **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, 2017 and 2016, 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, 2017 and 2016, 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. The information has been subjected to the auditing procedures applied in the audit of 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.

*Goulet, Salvidio & Associates, P.C.*

Worcester, Massachusetts  
May 31, 2018

## 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, 2017 and 2016. 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, 2017, it shows our net worth has increased 6.2% over the year ended December 31, 2016.

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, 2017 and 2016 was \$3,126,006 and \$3,942,836, 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

	2017	2016
Current Assets	\$ 12,187,803	\$ 10,027,122
Noncurrent Assets	46,452,846	44,892,342
Total Assets	58,640,649	54,919,464
Deferred Outflows of Resources	952,767	1,112,428
Total Assets and Deferred Outflows of Resources	\$ 59,593,416	\$ 56,031,892
Current Liabilities	\$ 2,752,715	\$ 2,479,487
Noncurrent Liabilities	5,062,109	5,037,668
Total Liabilities	7,814,824	7,517,155
Deferred Inflows of Resources	6,736,708	6,108,859
Net Position:		
Net Investment in Capital Assets	29,635,781	30,286,676
Net Position Restricted for Depreciation	8,542,548	6,959,061
Unrestricted Net Position	6,863,555	5,160,141
Total Net Position	45,041,884	42,405,878
Total Liabilities, Deferred Inflows of Resources and Net Position	\$ 59,593,416	\$ 56,031,892

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

	2017	2016
Operating Revenues	\$ 27,527,845	\$ 30,048,674
Operating Expenses	24,599,725	26,174,226
Operating Income	2,928,120	3,874,448
Nonoperating Revenues	197,886	68,388
Income Before Contributions and Transfers	3,126,006	3,942,836
Transfers Out – Payments in Lieu of Taxes	(490,000)	(494,999)
Beginning Net Position	42,405,878	38,958,041
Ending Net Position	\$ 45,041,884	\$ 42,405,878

#### **Financial Highlights:**

Operating revenues decreased \$2,520,829 in 2017, or approximately 8.4%. This is due to an electric rate decrease implemented in 2017.

Operating expenses decreased \$1,574,501 in 2017, or approximately 6.0%. This decrease in expenses can be attributed in large part to falling power cost charges. The price of natural gas, the predominant fuel for our generation, has dropped so it stands to follow that our overall expenses will decrease as power supply is HMLP's largest category of costs. Additionally, in 2017 HMLP received \$1,484,363 by way of a large return of flush of funds.

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 during that decade when no larger projects came on line, therefore any increase in sales were weather dependent vs. new load. Sales in 2017 decreased likely because of milder weather, energy efficiencies and behind the meter generation which was reflected in an overall reduction of 2.5%. A single measure reflecting the milder weather in 2017 was around the peak which occurred in June as opposed to July or August. There are three 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 due to continued capital improvements to the Plant's 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.

In June 2017, the Hingham Municipal Lighting Plant experienced its annual peak usage at 53.2 MW. This represents a decrease in peak load of 4.25% from 2016 and is approximately 6% less than our all-time peak which occurred in 2011. During 2017, the kilowatt-hour usage in the system decreased by approximately 2.5% on a total load of 202mm kWh. The Lighting Plant estimates kilowatt-hour usage to be flat, weather dependent, for 2018.

The Lighting Plant has a 10% ownership interest in the Energy New England Company. This organization is the premier power supply and risk management organization in New England and its ownership is made up of several Massachusetts municipal electric systems.

## **Financial Highlights (Continued):**

This ownership and relationship gives the Lighting Plant an opportunity to bolster its power supply portfolio and strengthen its risk management area, by having professional power supply individuals assisting the system in its short and long term supply options. The ownership also serves as an investment for the system in an organization that is growing its business. ENE has been instrumental in HMLP increasing its renewable energy portfolio and being able to secure purchase power contracts at very attractive rates.

The number of customers who pay their bills online or with a credit card continues to rise. HMLP is averaging approximately 2,600 customers a month paying in that manner.

The Hingham Municipal Lighting Plant engaged Energy New England to perform a cost of service study. They analyzed 2015 and 2016 sales and expenses. They concluded and advised that HMLP could implement a rate decrease. The Board voted to cut HMLP's rates for every rate class, with the exception of private lighting. The percentage decreases varied from rate to rate but ranged from 10% to 30%.

The Hingham Municipal Lighting Plant applied for and received a grant from the Massachusetts Department of Energy Resources to help pay for converting the Town's streetlights from High Pressure Sodium (HPS) to Light-Emitting Diode (LEDs). The grant paid for 50% of the capital costs associated with the street lights. The work to change over the lights commenced in 2017 and finished 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 its supply is carbon free. To meet the definition of 100% carbon free the Board directed the General Manager to retire whatever renewable energy credits (RECS) the Plant had rights to and buy enough replacement RECs to offset any fossil fuel supply or renewable supply for which the Plant did not own the RECs. The Board opted to do that in 2017 and 2018 and will reassess the implications of this decision in 2019 when all the costs associated with those transactions are known.

Additionally, 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. Certainly, extending existing contracts and entering into new ones will be driven by the economics.

## **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 NSTAR, 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 \$11.4 million of which Hingham Municipal Lighting Plant's share is approximately \$449,000. 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 \$650,895 from 2016. This decrease is the difference between the current year additions of \$1,194,320 and the annual depreciation write off of \$1,845,215. 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 Lighting Plant completed a mapping of the Town's electrical distribution system. This will greatly assist the linemen in locating and switching circuits. The Lighting Plant will have the capability to locate the poles, transformers, meters, and other types of services that are on the mapping system. A further benefit to this mapping was achieved when the online outage management system we purchased became fully operational. This system will help us better track outages and identify the likely source of the trouble.

## **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 \$3,353,532 and \$3,309,805 for the years ended December 31, 2017 and 2016, 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, 2017 AND 2016

OPERATING FUND

ASSETS AND DEFERRED OUTFLOWS OF RESOURCES

	2017	2016
<b>CURRENT ASSETS:</b>		
Funds on Deposit with Town Treasurer		
Operating Cash	\$ 7,338,805	\$ 5,107,374
Accounts Receivable, Net	1,656,142	2,177,299
Accounts Receivable, Related Party	103,727	107,848
Other Receivable	506,823	126,374
Materials and Supplies	998,665	810,104
Prepaid Power Contracts	438,377	661,452
Purchased Power Working Capital	1,145,264	1,036,671
<b>TOTAL CURRENT ASSETS</b>	<b>12,187,803</b>	<b>10,027,122</b>
<b>NONCURRENT ASSETS:</b>		
Funds on Deposit with Town Treasurer		
Depreciation Fund	8,542,548	6,959,061
Customer Deposits	1,706,607	1,704,041
Insurance Reserve Fund	253,687	253,687
Rate Stabilization Fund	5,952,053	5,326,707
Investments	362,170	362,170
Utility Plant Assets, Net	29,635,781	30,286,676
<b>TOTAL NONCURRENT ASSETS</b>	<b>46,452,846</b>	<b>44,892,342</b>
<b>TOTAL ASSETS</b>	<b>58,640,649</b>	<b>54,919,464</b>
<b>DEFERRED OUTFLOWS OF RESOURCES:</b>		
Deferred Outflows of Resources Related to Pensions	952,767	1,112,428
<b>TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES</b>	<b>\$ 59,593,416</b>	<b>\$ 56,031,892</b>

See Accompanying Notes to Financial Statements

HINGHAM MUNICIPAL LIGHTING PLANT  
STATEMENTS OF NET POSITION  
DECEMBER 31, 2017 AND 2016

OPERATING FUND

LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION

	2017	2016
CURRENT LIABILITIES:		
Accounts Payable	\$ 1,873,287	\$ 1,578,268
Accounts Payable - Related Party	490,000	494,999
Accrued Expenses	93,661	107,055
Customer Advances for Construction	255,375	251,162
Sales Tax Payable	40,392	48,003
TOTAL CURRENT LIABILITIES	2,752,715	2,479,487
NONCURRENT LIABILITIES:		
Customer Deposits	1,706,607	1,704,251
Net Pension Liability	3,353,532	3,309,805
Net Other Postemployment Benefits Obligation	1,970	23,612
TOTAL NONCURRENT LIABILITIES	5,062,109	5,037,668
TOTAL LIABILITIES	7,814,824	7,517,155
DEFERRED INFLOWS OF RESOURCES:		
Contribution in Aid of Construction, Net	695,130	682,819
Deferred Inflows of Resources Related to Pensions	89,525	99,333
Rate Stabilization Reserve	5,952,053	5,326,707
TOTAL DEFERRED INFLOWS OF RESOURCES	6,736,708	6,108,859
NET POSITION:		
Net Investment in Capital Assets	29,635,781	30,286,676
Net Position Restricted for Depreciation	8,542,548	6,959,061
Unrestricted Net Position	6,863,555	5,160,141
TOTAL NET POSITION	45,041,884	42,405,878
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	\$ 59,593,416	\$ 56,031,892

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, 2017 AND 2016

OPERATING FUND

	<u>2017</u>	<u>2016</u>
OPERATING REVENUES:		
Sales of Electricity	\$ 27,370,839	\$ 29,840,782
Other Operating Revenues	<u>157,006</u>	<u>207,892</u>
 TOTAL OPERATING REVENUES	 <u>27,527,845</u>	 <u>30,048,674</u>
OPERATING EXPENSES:		
Operations and Maintenance	22,776,102	24,650,597
Depreciation, Net of Amortization	<u>1,823,623</u>	<u>1,523,629</u>
 TOTAL OPERATING EXPENSES	 <u>24,599,725</u>	 <u>26,174,226</u>
 OPERATING INCOME	 <u>2,928,120</u>	 <u>3,874,448</u>
NONOPERATING REVENUES (EXPENSES):		
Grant Income	95,150	0
Investment Income	112,639	71,988
Interest Expense	<u>(9,903)</u>	<u>(3,600)</u>
 TOTAL NONOPERATING REVENUES (EXPENSES)	 <u>197,886</u>	 <u>68,388</u>
 Income Before Contributions and Transfers	 3,126,006	 3,942,836
 NET POSITION - JANUARY 1	 42,405,878	 38,958,041
 Transfers Out - Payments in Lieu of Taxes	 <u>(490,000)</u>	 <u>(494,999)</u>
 NET POSITION - DECEMBER 31	 <u>\$ 45,041,884</u>	 <u>\$ 42,405,878</u>

See Accompanying Notes to Financial Statements

HINGHAM MUNICIPAL LIGHTING PLANT  
STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

OPERATING FUND

	2017	2016
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Cash Received from Customers	\$ 27,679,244	\$ 29,656,910
Cash Paid to Suppliers	(17,222,478)	(19,146,268)
Cash Paid to Employees	(3,218,083)	(2,885,804)
Cash Paid for Benefits	(1,343,321)	(1,257,161)
Payment in Lieu of Taxes	(490,000)	(494,999)
Net Cash Provided by Operating Activities	5,405,362	5,872,678
<b>CASH FLOWS FROM NONCAPITAL AND RELATED FINANCING ACTIVITIES:</b>		
Interest Expense	(9,903)	(3,600)
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</b>		
Net Transfers (to) from the Depreciation Fund	(1,534,487)	474,351
Additions to Plant Assets	(1,194,320)	(3,373,300)
Grant Income	95,150	0
Contribution in Aid of Construction	33,902	331,756
Net Cash Used in Capital and Related Financing Activities	(2,599,755)	(2,567,193)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Investment Income	38,293	12,953
Net Transfers to Rate Stabilization Fund	(600,000)	(600,000)
Purchases of Investments	0	(195,295)
Net Cash Used in Investing Activities	(561,707)	(782,342)
<b>NET INCREASE IN CASH AND CASH EQUIVALENTS</b>	2,233,997	2,519,543
<b>CASH AND CASH EQUIVALENTS - JANUARY 1</b>	7,065,102	4,545,559
<b>CASH AND CASH EQUIVALENTS - DECEMBER 31</b>	\$ 9,299,099	\$ 7,065,102

See Accompanying Notes to Financial Statements

HINGHAM MUNICIPAL LIGHTING PLANT  
STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

OPERATING FUND

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

	2017	2016
Operating Income	\$ 2,928,120	\$ 3,874,448
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities:		
Depreciation	1,845,215	1,534,487
Amortization of Contribution in Aid of Construction	(21,592)	(10,858)
Payment in Lieu of Taxes	(490,000)	(494,999)
Changes in Assets and Liabilities:		
(Increase) Decrease in Assets:		
Accounts Receivable	521,157	46,327
Accounts Receivable, Related Party	4,121	(13,699)
Other Receivables	(380,449)	158,065
Materials and Supplies	(188,561)	72,212
Prepaid Expenses	223,075	354,239
Purchased Power Working Capital	(108,593)	(8,761)
Deferred Outflows of Resources Related to Pension	159,661	(799,657)
Increase (Decrease) in Liabilities:		
Accounts Payable	295,019	80,057
Accounts Payable - Related Party	(4,999)	(9,081)
Accrued Expenses	(13,394)	4,032
Sales Tax Payable	(7,611)	163
Customer Deposits	2,356	57,945
Customer Advances for Construction	4,214	(640,402)
Net Pension Liability	43,727	960,214
Net Other Postemployment Benefits Obligation	(21,642)	(6,488)
Rate Stabilization Reserve	625,346	615,101
Deferred Inflows of Resources Related to Pension	(9,808)	99,333
	\$ 5,405,362	\$ 5,872,678

SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:

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

	2017	2016
Operating Cash	\$ 7,338,805	\$ 5,107,374
Customer Deposits	1,706,607	1,704,041
Insurance Reserve Fund	253,687	253,687
	\$ 9,299,099	\$ 7,065,102

See Accompanying Notes to Financial Statements

HINGHAM MUNICIPAL LIGHTING PLANT  
 STATEMENTS OF FIDUCIARY NET POSITION  
 DECEMBER 31, 2017 AND 2016

OTHER POSTEMPLOYMENT BENEFITS TRUST FUND

ASSETS

	2017	2016
NONCURRENT ASSETS:		
Funds on Deposit with Town Treasurer		
Cash and Cash Equivalents	\$ 34,112	\$ 28,432
Investments	1,843,096	1,745,554
	\$ 1,877,208	\$ 1,773,986

FIDUCIARY NET POSITION

FIDUCIARY NET POSITION - Restricted	\$ 1,877,208	\$ 1,773,986
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HINGHAM MUNICIPAL LIGHTING PLANT  
 STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION  
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

OTHER POSTEMPLOYMENT BENEFITS TRUST FUND

	2017	2016
Interest Earned on Invested Funds	\$ 46,769	\$ 44,506
Net Appreciation in Fair Value of Investments	63,596	56,146
Management and Related Fees	(7,143)	(6,818)
CHANGE IN FIDUCIARY NET POSITION	103,222	93,834
FIDUCIARY NET POSITION - January 1	1,773,986	1,680,152
FIDUCIARY NET POSITION - December 31	\$ 1,877,208	\$ 1,773,986

See Accompanying Notes to Financial Statements

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

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 2017 and 2016. 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 2016 financial statements have been reclassified to conform to the 2017 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.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

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 2017 and 2016.

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.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

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.

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.

NOTE 2 - FUTURE IMPLEMENTATION OF GASB PRONOUNCEMENTS:

*GASB Statement 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, is required to be implemented for periods beginning after June 15, 2017. The Light Plant is currently evaluating the effect this pronouncement will have on the basic financial statements.

NOTE 3 - 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.

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.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 3 - CONCENTRATION OF CREDIT RISK (Continued):

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 4 - 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, 2017 and 2016 was \$253,687.

NOTE 5 - 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, 2017 and 2016 was \$5,952,053 and \$5,326,707, respectively. The balance in the fund is offset by a corresponding deferred inflow of resources for the accumulated provision for rate refund.

NOTE 6 - 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.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 6 - DEPRECIATION FUND (Continued):

	Ratings as of <u>Year End</u>	2017 Fair <u>Value</u>	2017 Under 1 <u>Year</u>	2017 1-5 <u>Years</u>	2016 Fair <u>Value</u>
<u>Term Securities</u>					
Certificates of Deposit	N/A	\$ 3,650,000	<u>\$ 2,900,000</u>	<u>\$ 750,000</u>	\$ 2,385,000
<u>Other Securities</u>					
Century Bank Savings Account		2,888,030			2,875,223
Massachusetts Municipal Depository Trust		1,725,267			178,171
Money Market Funds		<u>279,251</u>			<u>1,520,667</u>
Total Investments		<u>\$ 8,542,548</u>			<u>\$ 6,959,061</u>

As of December 31, 2017, 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 7 - OTHER RECEIVABLES:

Other receivables consist of the following:

	<u>2017</u>	<u>2016</u>
Merchandise and Jobbing	\$ 44,344	\$ 27,111
Mutual Aid	435,158	0
Grant Receivable	10,872	0
Spruce Mountain Wind REC's	0	95,626
Interest Receivable	<u>16,449</u>	<u>3,637</u>
Total Other Receivables	<u>\$ 506,823</u>	<u>\$ 126,374</u>

NOTE 8 - 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, 2017 and 2016 are noted on the following page.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 8 - PURCHASED POWER WORKING CAPITAL (Continued):

	2017	2016
Watson	\$ 278,821	\$ 174,778
MMWEC	1,576	1,564
ENE	864,867	860,329
Total	\$ 1,145,264	\$ 1,036,671

NOTE 9 - 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 10 - 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 \$1,445,490 in 2017 and \$1,420,111 in 2016. Included in the accompanying statements of net assets as of December 31, 2017 and 2016 is \$103,727 and \$107,848, 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 \$1,244,710 in 2017 and \$1,242,244 in 2016. As of December 31, 2017 and 2016 amounts payable to the Town were \$490,000 and \$494,999, respectively.

In 2017 and 2016, the Lighting Plant made payments in lieu of property taxes to the Town in the amount of \$490,000 and \$494,999, respectively.

NOTE 11 - NET INVESTMENT IN CAPITAL ASSETS:

	2017	2016
Cost of Capital Assets Acquired	\$ 63,189,891	\$ 62,089,734
Less: Accumulated Depreciation	33,554,110	31,803,058
Net Investment in Capital Assets	\$ 29,635,781	\$ 30,286,676

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 12 - UTILITY PLANT ASSETS:

	Balance January 1, 2017	Increases	Decreases	Balance December 31, 2017
Capital Assets Not Being Depreciated:				
Land	\$ 434,863	\$ 0	\$ 0	\$ 434,863
Construction in Progress	147,677	5,863	0	153,540
<b>Total Capital Assets Not Being Depreciated</b>	<b>582,540</b>	<b>5,863</b>	<b>0</b>	<b>588,403</b>
Capital Assets Being Depreciated:				
Transmission Plant	1,783,046	0	0	1,783,046
Distribution Plant	43,543,928	846,839	(94,163)	44,296,604
General Plant	16,180,220	341,618	0	16,521,838
<b>Total Capital Assets Being Depreciated</b>	<b>61,507,194</b>	<b>1,188,457</b>	<b>(94,163)</b>	<b>62,601,488</b>
Less Accumulated Depreciation For:				
Transmission Plant	(1,566,920)	(52,402)	0	(1,619,322)
Distribution Plant	(26,587,930)	(1,307,408)	94,163	(27,801,175)
General Plant	(3,648,208)	(485,405)	0	(4,133,613)
<b>Total Accumulated Depreciation</b>	<b>(31,803,058)</b>	<b>(1,845,215)</b>	<b>94,163</b>	<b>(33,554,110)</b>
<b>Capital Assets Being Depreciated, Net</b>	<b>29,704,136</b>	<b>(656,758)</b>	<b>0</b>	<b>29,047,378</b>
<b>Utility Plant Assets, Net</b>	<b>\$ 30,286,676</b>	<b>\$ (650,895)</b>	<b>\$ 0</b>	<b>\$ 29,635,781</b>

Depreciation expense for the years ended December 31, 2017 and 2016 was \$1,534,487 and \$1,845,215, respectively. Depreciation expense reported on the Statements of Revenues, Expenses and Changes in Net Position is net of amortization of \$21,592 and \$10,858 related to contribution in aid of construction for the years ended December 31, 2017 and 2016, respectively.

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.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 13 - PENSION PLAN (Continued):

*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.

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, 2017 and 2016 were \$279,906 and \$272,180, respectively, which were paid during calendar year 2017 and 2016, respectively.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 13 - PENSION PLAN (Continued):

*Pension Liabilities* - At December 31, 2017 and 2016, the Plant reported a liability of \$3,353,532 and \$3,309,805, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2016 and 2015, and the total pension liability used to calculate the new pension liability was determined by an actuarial valuation as of January 1, 2016. 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, 2016 and 2015 the Town's proportion was 88.8358% and 88.788%, 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, 2016 and 2015. At the measured date of December 31, 2016 and 2015, the Plant's portion was 6.18% and 6.21%, respectively, of the Town's total contributions.

*Pension Expense* - For the years ended December 31, 2017 and 2016, the Plant recognized a pension expense of \$525,015 and \$544,396, respectively. For the years ended December 31, 2017 and 2016, the Plant reported deferred outflows of resources related to pensions of \$952,767 and \$1,112,428, respectively, consisting of the differences between projected and actual investment earnings which amounted to \$320,626 and \$454,305, respectively, changes in assumptions which amounted to \$220,577 and \$277,802, respectively, changes in proportion and differences between employer contributions and proportionate share of contributions which amounted to \$80,129 and \$100,415, respectively, and the amount paid for contributions made subsequent to the measurement date which amounted to \$331,435 and \$279,906, respectively. For the years ended December 31, 2017 and 2016, the Plant reported deferred inflows of resources related to pensions of \$89,525 and \$99,333, respectively, consisting of the differences between expected and actual experience which amounted to \$78,872 and \$99,333, respectively, and changes in proportion and differences between employer contributions and proportionate share of contributions which amounted to \$10,653 and zero, respectively.

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

<u>Deferred Outflows of Resources</u>		<u>Deferred Inflows of Resources</u>	
Year Ended December 31:		Year Ended December 31:	
2018	\$ 124,266	2018	\$ 17,905
2019	124,266	2019	17,905
2020	124,266	2020	17,905
2021	124,266	2021	17,905
2022	<u>124,268</u>	2022	<u>17,905</u>
Total	<u>\$ 621,332</u>	Total	<u>\$ 89,525</u>

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

*Actuarial Assumptions* - The total pension liability as of December 31, 2017 and 2016 was determined by an actuarial valuation as of January 1, 2016, using the following actuarial assumptions, applied to all periods included in the measurement.

HINGHAM MUNICIPAL LIGHTING PLANT  
 NOTES TO FINANCIAL STATEMENTS  
 DECEMBER 31, 2017 AND 2016

NOTE 13 - PENSION PLAN (Continued):

*Actuarial Assumptions (continued):*

Valuation Date	January 1, 2016
Actuarial Cost Method	Entry Age Normal
Amortization Method	<i>Unfunded Actuarial Accrued Liability (UAL):</i> Increasing dollar amount at 4% to reduce the Unfunded Actuarial Accrued Liability to zero on or before June 30, 2038.
Asset Valuation Method	The Actuarial Value of Assets is the market value of assets as of the valuation date reduced by the sum of: <ul style="list-style-type: none"> <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	2.5% 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 \$360 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	7.75% per year, net of pension plan investment expense, including inflation.
Annuity Savings Fund Interest Rate	3.00% per year

*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.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 13 - PENSION PLAN (Continued):

*Investment Policy (continued):*

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 December 31, 2016 are summarized below.

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Rate of Return</u>
Domestic Equity	24%	4.93%
International Equity	12%	4.80%
Emerging Markets Int'l Equity	12%	7.26%
Core Fixed Income	17%	0.97%
Value-Added Fixed Income	10%	3.60%
Real Estate	10%	3.49%
Hedge Funds	5%	2.80%
Private Equity	<u>10%</u>	7.08%
 Total	 100%	

*Discount Rate* - The discount rate used to measure the total pension liability was 7.75%. The projection of cash flows used to determine the discount rate assumed that 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 7.75%, as well as what the net pension liability would be if it were calculated using a discount rate 1-percentage point lower (6.75%) or 1-percentage point higher (8.75%) than the current rate:

	1% Decrease <u>(6.75%)</u>	Current Discount Rate <u>(7.75%)</u>	1% Increase <u>(8.75%)</u>
Proportionate share of the Net Pension Liability	\$ 4,417,594	\$ 3,353,532	\$ 2,449,817

*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.

HINGHAM MUNICIPAL LIGHTING PLANT  
 NOTES TO FINANCIAL STATEMENTS  
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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 \$20,537 and \$16,066 for the years ended December 31, 2017 and 2016, respectively.

Future Minimum Lease Payments:

	Annual Cost
December 31, 2018	21,123
2019	21,123
2020	3,521
Total	\$ 45,767

During 2015, the Lighting Plant extended an operating lease agreement to lease office space. This lease expired in 2016. Rent expense related to this lease was approximately \$0 and \$69,050 for the years ended December 31, 2017 and 2016, respectively.

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 Participant fail to make any payment when due, other Project Participants of that Project may be required to increase (step-up) their payments and correspondingly their Participant's share of that Project's Project Capability to an additional amount not to exceed 25% of their original Participant's share of that Project's Project Capability. Project Participants have covenanted to fix, revise and collect rates at least sufficient to meet their obligations under the PSAs.

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).

HINGHAM MUNICIPAL LIGHTING PLANT  
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DECEMBER 31, 2017 AND 2016

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, 2017 and 2016 was \$1,877,208 and \$1,773,986, 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.

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, 2017 and 2016.

- 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.

HINGHAM MUNICIPAL LIGHTING PLANT  
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NOTE 16 - OTHER POSTEMPLOYMENT BENEFIT (OPEB) TRUST FUND (Continued):

- 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 Department 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 page sets forth, by level within the fair value hierarchy, the Department's investments at fair value at December 31, 2017 and 2016. As of December 31, 2017 and 2016, the Department did not have any investments that were measured using Level 2 or Level 3 inputs.

<u>Description</u>	December 31, 2017 Quoted Prices in Active Markets for Identical Assets (All Level 1)	December 31, 2016 Quoted Prices in Active Markets for Identical Assets (All Level 1)
<u>Corporate Bonds:</u>		
Credit Rating-		
AA+	\$ 50,115	\$ 50,475
AA	30,908	31,266
AA-	41,749	73,251
A+	66,807	35,263
A	90,115	91,085
BBB+	29,880	59,998
U.S. Government Securities	496,453	427,283
Equity Securities	277,089	239,770
Mutual Funds	759,980	737,163
Total FMV Investments	1,843,096	1,745,554
 <u>Other Securities</u>		
Money Market	34,112	28,432
 Total	 \$ 1,877,208	 \$ 1,773,986

Gain on Investments

	2017	2016
Realized Gain (Loss) on Investments	\$ 9,775	\$ (9,220)
Unrealized Gain on Investments	53,821	65,366
Gain on Investments	\$ 63,596	\$ 56,146

HINGHAM MUNICIPAL LIGHTING PLANT  
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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 during 2017 and 2016.

The Trust has adopted GASB 74 for the year ending December 31, 2017, which introduces 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 Administration:*

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, 2017, OPEB plan member ship consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits payments	472
Active plan members	<u>987</u>
	<u>1,459</u>

*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.

HINGHAM MUNICIPAL LIGHTING PLANT  
 NOTES TO FINANCIAL STATEMENTS  
 DECEMBER 31, 2017 AND 2016

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, 2017, were as follows:

Total OPEB Liability	\$ 76,698,371
Fiduciary Net Position	<u>(12,056,362)</u>
Net OPEB Liability	<u>\$ 64,642,009</u>

Fiduciary net position as a percentage of the total OPEB liability was 15.72%.

*Actuarial Assumptions:*

The total OPEB liability was determined by an actuarial valuation as of June 30, 2016, using the following assumptions, applied to all periods included in the measurement:

Inflation	3%
Investment rate of return	7.75%, net of investment expenses, including inflation
Healthcare cost trend rate	7% for 2016, decreasing .5% per year to an ultimate rate of 5% for 2020 and later years.
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.

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, 2017 are summarized in the table on the following page.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

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

Asset Class	Target Allocation Town	Long-Term Expected Rate of Return Town	Target Allocation Light	Long-Term Expected Rate of Return Light
Global Equity	40%	7.97%	30%	10.53%
Private Equity	10%	9.50%	0%	N/A
Core Fixed Income	13%	3.85%	0%	N/A
Value-Added Fixed Income	10%	7.26%	0%	N/A
US Fixed Income	0%	N/A	45%	3.63%
Fixed Income Mutual Funds	0%	N/A	24%	5.96%
Real Estate	10%	6.50%	0%	N/A
Timberland	4%	6.00%	0%	N/A
Portfolio Completion Strategies	13%	6.48%	0%	N/A
Cash and Cash Equivalents	0%	N/A	1%	1.81%
<b>Total</b>	<b>100%</b>		<b>100%</b>	

*Discount Rate:*

The discount rate used to measure the total OPEB liability was 7.75%. 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 position 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 7.75%, as well as what the net OPEB liability would be if it were calculated using a discount rate 1-percentage point lower (6.75%) or 1-percentage point higher (8.75%) than the current rate:

	1% Decrease <u>(6.75%)</u>	Current Discount Rate <u>(7.75%)</u>	1% Increase <u>(8.75%)</u>
Net OPEB Liability	\$ 75,995,116	\$ 64,642,009	\$ 55,465,840

*Sensitivity of the Net Pension Liability to Changes in the Healthcare Cost Trend Rates-* The following 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 (6% year 1 decreasing to 4%) or 1-percentage point higher (8% year 1 decreasing to 6%) than the current healthcare cost trend rates:

	1% Decrease 6% Year 1 <u>Decreasing to 4%</u>	Current Healthcare Cost Trend Rates 7 Year 1 <u>Decreasing to 5%</u>	1% Increase 8% Year 1 <u>Decreasing to 6%</u>
Net OPEB Liability	\$ 54,209,067	\$ 64,642,009	\$ 77,784,750

HINGHAM MUNICIPAL LIGHTING PLANT  
 NOTES TO FINANCIAL STATEMENTS  
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NOTE 17 - 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, 2017 and 2016, the Lighting Plant considers its pro rata share of these losses to be immaterial to its financial statements.

NOTE 18 - OTHER POSTEMPLOYMENT BENEFITS (OPEB):

Hingham Municipal Lighting Plant (HMLP) has implemented GASB Statement 45, *Accounting for Financial Reporting by Employers for Postemployment Benefits Other than Pensions*. As allowed by GASB 45, the Lighting Plant has established the net OPEB obligation at zero at the beginning of the transition year and has applied the measurement recognition requirements of GASB 45 on a prospective basis.

*Plan Description.* HMLP participates in the town sponsored single employer defined benefit health plan. HMLP provides certain health care and life insurance benefits for eligible retirees and their spouses. Chapter 32B of the MGL assigns authority to establish and amend benefit provisions of the plan.

As of June 30, 2016 HMLP's membership consisted of the following:

Current retirees, beneficiaries		13
Current active members		28
Total		41

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 18 - OTHER POSTEMPLOYMENT BENEFITS (OPEB) (Continued):

*Funding Policy.* HMLP recognizes the cost of providing these benefits, in accordance with government accounting standards, on a pay-as-you-go basis, by expensing the annual insurance premiums charged HMLP by the Town, which aggregated approximately \$288,583 and \$290,880 for the years ended 2017 and 2016, respectively. The cost of providing these benefits for retirees is about 50% of the premium. Retired plan members currently receiving benefits are required to contribute 50% of the cost of benefits provided depending on the plan they choose. HMLP contributes \$3.73 monthly for a life insurance benefit, if elected.

*Annual OPEB Costs.* HMLP'S annual other postemployment benefit (OPEB) cost (expense) is calculated based on the annual required contribution (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. The following page shows the components of the Lighting Plant's annual OPEB cost for the years ending December 31, 2017 and 2016, the amount actually contributed to the plan, and changes in the Lighting Plant's net OPEB obligation based on an actuarial valuation as of June 30, 2016.

	2017	2016
Normal cost with interest	\$ 42,856	\$ 41,208
Amortization of unfunded actuarial accrued liability with interest	43,940	42,250
Annual required contribution	86,796	83,458
Contributions made	(108,438)	(89,946)
Decrease in net OPEB Obligation	(21,642)	(6,488)
Net OPEB obligation - Beginning of year	23,612	30,100
Net OPEB obligation - End of year	\$ 1,970	\$ 23,612

The Lighting Plant's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation were as follows:

Year ended	Annual OPEB costs	Percentage of OPEB cost contributed	Net OPEB obligation
2015	\$ 64,148	156%	\$ 30,100
2016	\$ 83,458	108%	\$ 23,612
2017	\$ 86,796	125%	\$ 1,970

*Funded Status and Funding Progress.* Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 18 - OTHER POSTEMPLOYMENT BENEFITS (OPEB) (Continued):

*Funded Status and Funding Progress (continued):*

Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revisions as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplemental information presents trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The funded status is as follows:

	2017	2016
Actuarial accrued liability (AAL)	\$ 2,529,119	\$ 2,529,119
Value of plan assets	(1,877,208)	(1,773,986)
Unfunded actuarial accrued liability	\$ 651,911	755,133
Funded ratio (actuarial value of plan assets/AAL)	74.22%	70.14%
Covered payroll (active plan members)	\$ 3,218,083	\$ 2,885,804
UAAL as a percentage of covered payroll	20.26%	26.17%

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

As of June 30, 2016, actuarial valuation, actuarial liabilities were determined using the projected unit credit cost method. The actuarial assumptions included an 7.75% investment rate of return and an annual healthcare cost trend rate of 7.0%, initially, reduced by decrements to an ultimate rate of 5% after 6 years. The health care cost trend rate differs between the master medical and other healthcare plans.

The Lighting Plant's unfunded actuarial accrued liability is being amortized assuming 8.0% increases on a closed basis. The remaining amortization period at June 30, 2016 was twenty-one years.

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.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016

NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

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 2017 energy price for Watson was \$0.03096/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. However, due to market economics and an extended outage, Potter did not run in 2017.

HMLP is a .5% entitlement owner in the Seabrook nuclear power plant and is entitled to almost 6MW. The average 2017 energy price for Seabrook was \$0.00604/kWh. This contract is a life of unit contract.

HMLP is a .1% entitlement owner in the Millstone nuclear power plant and is entitled to almost 1 ¼ MW. The average 2017 energy price for Millstone was \$0.00666/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 2017 energy price for Brown Bear was \$0.04844/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 2017 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 2017 energy price for Saddleback Ridge Wind was \$0.09144/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. A small amount of test power was delivered during Q4 2017 at an average price of \$0.09149/kWh.

HMLP has a supply contract with the New Bedford Landfill for 25% of the output from the 3.2 megawatt plant. In 2017, HMLP received 4,778 megawatt-hours of electricity from this facility at an average cost of \$0.04581/kWh.

HMLP entered into a supply contract with Granby Landfill in 2016. Unfortunately, mutually agreeable terms to extend the contract beyond December 31, 2017 could not be reached, therefore this contract has not been renewed. HMLP was entitled to .5MWH of renewable energy and had an ownership entitlement of about 17%. The average 2017 energy price for Granby Landfill was \$0.051/kWh.

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
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NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

Current Power Purchase Commitments (continued):

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 2017, 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 2017 energy price for the Intermediate units was \$0.05428/kWh and the average 2017 energy price for the Peaking units was \$0.22397/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 2017 energy price for the NYPA units was \$0.00492/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, Excelon/Constellation and PSEG. For NextEra the average per kWh price was \$0.05059/kWh, for Excelon/Constellation was \$0.04830/kWh and \$0.3725/kWh from PSEG.

Additionally, HMLP has the ability to purchase from ISO-New England's Energy Interchange. In 2017, HMLP paid \$0.03829/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.

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.

HINGHAM MUNICIPAL LIGHTING PLANT  
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NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

MMWEC Contingencies and Liabilities (continued):

MMWEC operates the Stony Brook Intermediate Project and the Stony Brook Peaking Project, both fossil-fueled power plants. MMWEC has a 3.7% interest in the W.F. Wyman Unit No. 4 plant, which is operated and owned by its majority owner, FPL Energy Wyman IV, LLC, a subsidiary of NextEra Energy Resources LLC, and a 4.8% ownership interest in the Millstone Unit 3 nuclear unit, operated by Dominion Nuclear Connecticut, Inc. (DNCI), the majority owner and an indirect subsidiary of Dominion Resources, Inc. DNCI also owns and operates the Millstone Unit 2 nuclear unit. The operating license for the Millstone Unit 3 nuclear unit extends to November 25, 2045.

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

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

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, 2017, total capital expenditures amounted to \$1,583,481,000, of which \$62,406,000 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 \$10,680,000, of which \$415,000 is associated with the Lighting Plant's share of Project Capability.

As of December 31, 2017, MMWEC's total future debt service requirement on outstanding bonds issued for the Projects is \$11,425,000, of which \$449,000 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 \$3,984,000 and \$5,874,000 for the years ended December 31, 2017 and 2016, respectively.

HINGHAM MUNICIPAL LIGHTING PLANT  
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NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

MMWEC Contingencies and Liabilities (continued):

HMLP's annual energy costs related to its long-term power purchase commitments as of December 31, 2017 are approximately as follows:

	<u>MMWEC</u>	<u>ENE</u>	<u>Watson</u>	<u>Total</u>
Years Ending December 31, 2018	\$ 77,000	\$ 5,850,190	\$ 1,574,693	\$ 7,501,883
2019	372,000	4,350,700	1,576,453	6,299,153
2020	0	4,853,623	1,560,483	6,414,106
2021	0	4,439,949	1,557,427	5,997,376
2022	0	4,503,305	1,566,158	6,069,463
2023-2027	0	14,060,123	7,776,078	21,836,201
2028-2032	0	8,256,506	1,345,374	9,601,880
2033-2037	0	4,677,927	0	4,677,927
2038-2041	0	644,257	0	644,257
Total	<u>\$ 449,000</u>	<u>\$ 51,636,579</u>	<u>\$ 16,956,666</u>	<u>\$ 69,042,245</u>

NOTE 20 - RESTATEMENT OF 2016 FINANCIAL STATEMENT:

During 2017, the Plant discovered a financial statement error that caused an understatement of the Plant's investment in NEH/NHH. Accordingly, an adjustment was made in the amount of \$30,375 to decrease purchased power expense and increase their investment. The net effect on 2016 net income was an increase of \$30,375. 2016 has been restated to reflect this change.

HINGHAM MUNICIPAL LIGHTING PLANT  
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	PERCENTAGE SHARE	TOTAL PROJECT EXPENDITURES TO DATE	PARTICIPANT'S SHARE	DEBT ISSUED & OUTSTANDING 12/31/2017	PARTICIPANT'S SHARE	TOTAL DEBT SERVICE ON BONDS OUTSTANDING	PARTICIPANT'S SHARE
Stony Brook Peaking Project	5.3307	\$ 59,792	\$ 3,187	\$ -	\$ -	\$ -	\$ -
Stony Brook Intermediate Project	4.3870	174,406	7,651	-	-	-	-
Nuclear Mix No. 1-SBK	3.4281	12,578	431	-	-	-	-
Nuclear Mix No. 1-MLS	3.4281	119,823	4,108	-	-	-	-
Nuclear Project No. 3-MLS	1.4311	148,404	2,124	3,195	46	3,312	47
Nuclear Project No. 4-SBK	3.4180	333,722	11,407	-	-	-	-
Nuclear Project No. 5-SBK	1.6644	90,779	1,511	225	4	231	4
Wyman Project	-	8,452	-	-	-	-	-
Project No. 6-SBK	5.0331	635,525	31,987	7,260	365	7,882	398
<b>TOTAL</b>		<b>\$ 1,583,481</b>	<b>\$ 62,406</b>	<b>\$ 10,680</b>	<b>\$ 415</b>	<b>\$ 11,425</b>	<b>\$ 449</b>

	PERCENTAGE SHARE	OPERATION & MAINTENANCE 12/31/2016	PARTICIPANT'S SHARE	OPERATION & MAINTENANCE 12/31/2017	PARTICIPANT'S SHARE
Stony Brook Peaking Project	5.3307	\$ 4,008	\$ 214	\$ 4,487	\$ 239
Stony Brook Intermediate Project	4.3870	28,039	1,230	16,662	731
Nuclear Mix No. 1-SBK	3.4281	723	25	686	24
Nuclear Mix No. 1-MLS	3.4281	6,038	207	6,532	224
Nuclear Project No. 3-MLS	1.4311	22,939	328	15,756	225
Nuclear Project No. 4-SBK	3.4180	27,748	948	16,344	559
Nuclear Project No. 5-SBK	1.6644	7,615	127	4,704	78
Wyman Project	-	961	-	976	-
Project No. 6-SBK	5.0331	55,538	2,795	37,834	1,904
<b>TOTAL</b>		<b>\$ 153,609</b>	<b>\$ 5,874</b>	<b>\$ 103,981</b>	<b>\$ 3,984</b>

HINGHAM MUNICIPAL LIGHTING PLANT  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016  
(\$000)

	<u>PERCENTAGE SHARE</u>	<u>2018 ANNUAL COST</u>	<u>PARTICIPANT'S SHARE</u>	<u>2019 ANNUAL COST</u>	<u>PARTICIPANT'S SHARE</u>
Stony Brook Peaking Project	5.3307	\$ -	\$ -	\$ -	\$ -
Stony Brook Intermediate Project	4.3870	-	-	-	-
Nuclear Mix No. 1-SBK	3.4281	-	-	-	-
Nuclear Mix No. 1-MLS	3.4281	-	-	-	-
Nuclear Project No. 3-MLS	1.4311	3,346	48	-	-
Nuclear Project No. 4-SBK	3.4180	-	-	-	-
Nuclear Project No. 5-SBK	1.6644	235	4	-	-
Wyman Project	-	-	-	-	-
Project No. 6-SBK	5.0331	<u>503</u>	<u>25</u>	<u>7,456</u>	<u>372</u>
 TOTAL		<u>\$ 4,084</u>	<u>\$ 77</u>	<u>\$ 7,456</u>	<u>\$ 372</u>

HINGHAM MUNICIPAL LIGHTING PLANT  
 REQUIRED SUPPLEMENTARY INFORMATION  
 OTHER POSTEMPLOYMENT BENEFITS

OPERATING FUND

**Schedule of Funding Progress - Other Postemployment Benefits:**

Actuarial Valuation Date	For the Year Ending	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Payroll
1/1/2010	12/31/2009	\$ (1,470,420)	\$ 2,116,139	\$ 645,719	69.49%	\$ 2,271,331	28.43%
1/1/2010	12/31/2010	\$ (1,474,784)	\$ 2,116,139	\$ 641,355	69.69%	\$ 2,389,952	26.84%
1/1/2010	12/31/2011	\$ (1,458,883)	\$ 2,116,139	\$ 657,256	68.94%	\$ 2,389,952	27.50%
6/30/2012	12/31/2012	\$ (1,556,673)	\$ 1,732,899	\$ 176,226	89.83%	\$ 2,023,648	8.71%
6/30/2012	12/31/2013	\$ (1,654,752)	\$ 1,732,899	\$ 78,147	95.49%	\$ 2,561,240	3.05%
6/30/2014	12/31/2014	\$ (1,706,185)	\$ 2,048,846	\$ 342,661	83.28%	\$ 2,701,262	12.69%
6/30/2014	12/31/2015	\$ (1,680,152)	\$ 2,048,846	\$ 368,694	82.00%	\$ 2,850,178	12.94%
6/30/2016	12/31/2016	\$ (1,773,986)	\$ 2,529,119	\$ 755,133	70.14%	\$ 2,885,804	26.17%
6/30/2016	12/31/2017	\$ (1,877,208)	\$ 2,529,119	\$ 651,911	74.22%	\$ 3,218,083	20.26%

**Schedule of Actuarial Methods and Assumptions**

The Schedule of Actuarial Methods and Assumptions presents factors that significantly affect the identification of trends in the amounts reported.

**Actuarial Methods**

Valuation Date	6/30/2016
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Assumed to increase annually by 4.0%
Remaining Amortization Period	21 years

**Actuarial Assumptions**

Discount Rate:	7.75% full pre-funding
Health Care Cost Trend Rate	Initially 7%, reduced by decrements of .5% per year; ultimate rate of 5%

HINGHAM MUNICIPAL LIGHTING PLANT  
REQUIRED SUPPLEMENTARY INFORMATION  
NET PENSION LIABILITY

OPERATING FUND

**Schedule of the Plant's Proportionate Share of the Net Pension Liability (NPL)**

Actuarial Valuation Date	Measurement Date	For the Year Ending	Plant's Portion of the NPL	Plant's Proportionate Share of the NPL	Plant's Total Employee Payroll	NPL as a Percentage of Total Employee Payroll	Plan's Fiduciary Net Position as a Percentage of the Total Pension Liability
1/1/2014	12/31/2014	12/31/2015	5.9032%	\$ 2,349,591	\$ 2,850,178	82.44%	70.93%
1/1/2016	12/31/2015	12/31/2016	6.2142%	\$ 3,309,805	\$ 2,885,804	114.69%	64.21%
1/1/2016	12/31/2016	12/31/2017	6.1815%	\$ 3,353,532	\$ 3,218,083	104.21%	65.39%

**Schedule of Contributions**

Actuarial Valuation Date	Measurement Date	For the Year Ending	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Plant's Total Employee Payroll	Contribution as a Percentage of Plant's Total Employee Payroll
1/1/2014	12/31/2014	12/31/2015	\$ 246,899	\$ (246,899)	\$ -	\$ 2,850,178	8.66%
1/1/2016	12/31/2015	12/31/2016	\$ 272,180	\$ (272,180)	\$ -	\$ 2,885,804	9.43%
1/1/2016	12/31/2016	12/31/2017	\$ 279,906	\$ (279,906)	\$ -	\$ 3,218,083	8.70%

Note: These schedules are intended to present information for 10 years. Until a 10 year trend is compiled, information is presented for those years for which information is available.

See Independent Auditors' Report

HINGHAM MUNICIPAL LIGHTING PLANT  
 REQUIRED SUPPLEMENTARY INFORMATION  
 SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY AND RELATED RATIOS

OPEB TRUST FUND

	2017
Total OPEB Liability:	
Service Cost	\$ 1,866,612
Interest	5,649,691
Changes of Benefit Terms	-
Differences between Expected and Actual Experience	-
Changes of Assumptions	-
Benefit Payments	(3,701,124)
Net Change in Total OPEB Liability	3,815,179
Total OPEB Liability - Beginning	72,883,192
Total OPEB Liability - Ending	\$ 76,698,371
Plan Fiduciary Net Position:	
Contributions-Employer	\$ 4,496,187
Net Investment Income	1,212,079
Benefit Payments	(3,701,124)
Administrative Expenses	(53,296)
Other	1,489
Net Change in Plan Fiduciary Net Position	1,955,335
Plan Fiduciary Net Position - Beginning	10,101,027
Plan Fiduciary Net Position - Ending	\$ 12,056,362
Net OPEB Liability - Ending	\$ 64,642,009
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	15.72%
Covered Payroll	61,312,938
Net OPEB Liability as a Percentage of Covered Payroll	105.43%

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.

HINGHAM MUNICIPAL LIGHTING PLANT  
 REQUIRED SUPPLEMENTARY INFORMATION  
 SCHEDULE OF OPEB EMPLOYER CONTRIBUTIONS

OPEB TRUST FUND

For Fiscal Year Ended June 30		2017
Actuarially Determined Contributions	\$	5,658,433
Contributions in relation to the actuarially determined contribution		4,496,187
Contribution Deficiency (Excess)	\$	1,162,246
Covered Payroll	\$	61,312,938
Contributions as a percentage of covered payroll		7.33%

**Notes to Schedule**

Valuation Date:

Actuarially determined contributions are determined as of July 1, one year prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used in calculations of actuarially determined contributions:

Actuarial Cost Method	Projected Unit Credit
Amortization Method	Increasing at 4% over 30 years on a closed amortization period
Amortization Period	30 years
Asset Valuation Method	Market Value
Inflation	3%
Healthcare Cost Trend Rates	7% for 2016, decreasing .5% per year to an ultimate rate of 5% for 2020 and later years.
Investment Rate of Return	7.75%, net of OPEB plan investment expense, including inflation

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.

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HINGHAM MUNICIPAL LIGHTING PLANT  
REQUIRED SUPPLEMENTARY INFORMATION  
SCHEDULE OF INVESTMENT RETURNS

OPEB TRUST FUND

2017

Annual Money-Weighted Rate of Return, Net of Investment Expenses	11.67%
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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.

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HINGHAM MUNICIPAL LIGHTING PLANT  
 SCHEDULES OF SALES OF ELECTRICITY  
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

OPERATING FUND

	2017	2016
SALES OF ELECTRICITY:		
Residential	\$ 12,709,885	\$ 13,836,538
Commercial and Industrial	13,133,212	14,508,451
Municipal	1,445,490	1,420,111
Security Lighting	82,252	75,682
 TOTAL SALES OF ELECTRICITY	 \$ 27,370,839	 \$ 29,840,782

See Independent Auditors' Report

HINGHAM MUNICIPAL LIGHTING PLANT  
SCHEDULES OF OPERATION AND MAINTENANCE EXPENSES  
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

OPERATING FUND

	2017	2016
<b>POWER PRODUCTION EXPENSES:</b>		
Purchased Power	\$ 18,908,604	\$ 19,540,725
Flush of Funds	(1,484,363)	(301,091)
Other Purchased Power	620,618	607,694
Total Power Production Expenses	18,044,859	19,847,328
<b>DISTRIBUTION EXPENSES:</b>		
Miscellaneous Distribution Expenses	851,475	770,451
<b>MAINTENANCE EXPENSES:</b>		
Maintenance of Lines	539,713	886,136
Maintenance - Other	51,833	44,308
Total Maintenance Expenses	591,546	930,444
<b>CUSTOMER ACCOUNTS:</b>		
Customer Accounting and Collection Expense	855,717	825,586
Uncollectible Accounts	29,706	9,171
Meter Reading Expense	105,888	205,112
Total Customer Accounts	991,311	1,039,869
<b>GENERAL AND ADMINISTRATIVE EXPENSES:</b>		
Administrative and General Salaries	172,112	164,014
Office Supplies and Expenses	25,537	19,701
Outside Services Employed	253,122	128,699
Property Insurance	192,252	183,886
Employees' Pension and Benefits	1,343,321	1,257,161
Dues, Meetings and Other General Expenses	95,868	112,962
Transportation	67,537	59,552
Rent	0	69,050
Maintenance of General Plant	147,162	67,480
Total General and Administrative Expenses	2,296,911	2,062,505
<b>TOTAL OPERATION AND MAINTENANCE EXPENSES</b>	<b>\$ 22,776,102</b>	<b>\$ 24,650,597</b>

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