HINGHAM MUNICIPAL LIGHTING PLANT

Financial Statements December 31, 2016 and 2015

HINGHAM MUNICIPAL LIGHTING PLANT TABLE OF CONTENTS DECEMBER 31, 2016 AND 2015

	Page
Independent Auditors' Report	1,2
Management's Discussion and Analysis	3-6
Financial Statements:	
Operating Fund:	
Statements of Net Position	7,8
Statements of Revenues, Expenses and Changes in Net Position	9
Statements of Cash Flows	10,11
OPEB Irrevocable Trust Fund:	
Statements of Net Position	12
Statements of Changes in Net Position	12
Notes to Financial Statements	13-34
Supplemental Information:	
Operating Fund:	
Required Supplementary Information – Other Postemployment Benefits	35
Required Supplementary Information - Net Pension Liability	36
Schedules of Sales of Electricity	37
Schedules of Operations and Maintenance Expenses	38



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, 2016 and 2015, 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.

206 Southbridge Street Auburn MA, 01501

324 Grove Street 54 E. Main Street Worcester MA, 01605 Webster, MA 01570

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Hingham Municipal Lighting Plant as of December 31, 2016 and 2015, and the respective changes in financial position and their 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, 2016 and 2015, and the changes in financial position, or, where applicable, 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 six and 35 through 36 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with evidence sufficient to express an opinion or provide any assurance.

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 37 and 38 are presented for purposes of additional analysis and are not a required part of the 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 financial statements. The information has been subjected to the auditing procedures applied in the audit of the 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 financial statements as a whole.

Goulet, Salvidio & Associates, P.C.

Loulet, Salvidio & associatio. P.C.

Worcester, Massachusetts

June 13, 2017

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, 2016 and 2015. 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, 2016, it shows our net worth has increased 8.8% over the year ended December 31, 2015.

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, 2016 and 2015 was \$3,912,461 and \$3,729,759, 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

	2016	2015
Current Assets Noncurrent Assets	\$ 10,027,12 44,861,96	
Total Assets	54,889,08	50,789,512
Deferred Outflows of Resources	1,112,42	28 312,771
Total Assets and Deferred Outflows of Resources	\$ 56,001,5	<u>\$ 51,102,283</u>
Current Liabilities Noncurrent Liabilities	\$ 2,479,48 5,036,60	
Total Liabilities	7,517,1:	7,070,715
Deferred Inflows of Resources	6,108,8	5,073,527
Net Position:		
Net Investment in Capital Assets	30,286,6	
Net Position Restricted for Depreciation	6,959,0	
Unrestricted Net Position	5,129,70	3,120,700
Total Net Position	42,375,50	38,958,041
Total Liabilities, Deferred Inflows of Resources and Net Position	<u>\$ 56,001,5</u>	<u>\$ 51,102,283</u>

Summary of Changes in Net Position – Operating Fund

	 2016	2015		
Operating Revenues Operating Expenses	\$ 30,112,054 26,267,981	\$	31,359,635 27,690,233	
Operating Income Nonoperating Revenues	 3,844,073 68,388		3,669,402 60,357	
Income Before Contributions and Transfers	3,912,461		3,729,759	
Transfers Out – Payments in Lieu of Taxes Beginning Net Position	 (494,999) 38,958,041		(504,080) 35,732,362	
Ending Net Position	\$ 42,375,503	\$	38,958,041	

Financial Highlights:

Operating revenues decreased \$1,247,581 in 2016 or approximately 4.0%.

Operating expenses decreased \$1,422,252 in 2016, or approximately 5.1%. 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, 70%, category of costs.

Over the past decade the Lighting Plant had experienced significant load growth in its system, even in a down economy. There were a few years when no larger projects came online, so any increase in sales were weather dependent vs. new load. The weather in 2016 was generally milder in both winter and summer which was reflected in basically flat sales. There was a heat spell in August which brought us close to our previous all-time peak load, but generally the year was milder. 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 as we continue to make capital improvements to our infrastructure. The Lighting Plant has funded these capital infrastructure improvements from internal sources with no borrowing required. The Lighting Plant continues to improve its reliability by funding a maintenance and replacement program for the areas in the Town where it is required.

The Hingham Municipal Lighting Plant experienced, on August 22nd, 2016, its annual peak usage at 55.4 MW. This represents an increase in peak load of 12.34% from 2015 and is approximately 2% less than our all-time peak which occurred in 2011. During 2016 the kilowatt-hour usage in the system was basically flat with less than a 0.0018% increase on a total load of 208.7m kWh. The Lighting Plant estimates kilowatt-hour usage to be flat, weather dependent, for 2017 as well.

The Lighting Plant increased its ownership interest in the Energy New England Company to 10%. The increase became possible when the Connecticut municipal light plant who was an owner exercised its right to leave the company and HMLP bought a piece of their ownership position. ENE is the premier power supply and risk management organization in New England and its ownership is made up of several Massachusetts municipal light plants. 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. We are averaging approximately 2,100 customers a month paying in that manner.

HMLP acquired land from the Town in 2013 upon which we built a new service center. The new facility has put our clerical and administrative employees, for the first time in company history, under the same roof as our field employees. This has proven to be a plus for the customer as it allows them to conduct all of their on-site HMLP business in one location, has promoted better communication between all our employees and customers, has provided opportunities for synergies between these groups and allows for better management oversight. Construction commenced in April of 2015 and was substantially complete in April of 2016. The administration and clerical employees moved into the building in June of 2016 and the field operations employees moved in October of 2016 when the final touches were completed to the warehouse area. Our Cushing Street facility was returned to the Town as was the agreement when we were given the land to build our operations center. The final construction cost was higher than initially projected but the increases were due to changes made during the construction process. The building continues to draw rave reviews from visitors for its look and functionality.

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 the Plant is 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 \$55.8 million of which Hingham Municipal Lighting Plant's share is just over \$2.3 million. The interest has been, and will continue to be paid with revenues received from the sales of electricity.

Utility Plant

Net utility plant increased by \$1,838,813 from 2015. This increase is the difference between the current year additions of \$3,373,300 and the annual depreciation write off of \$1,534,487. 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 recognized a net pension liability related to its future pension commitments of \$3,309,805 and \$2,349,591 for the years ended December 31, 2016 and 2015, 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.

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, 2016 AND 2015

OPERATING FUND

ASSETS AND DEFERRED OUTFLOWS OF RESOURCES

	2016	2015
CURRENT ASSETS:		
Funds on Deposit with Town Treasurer		
Operating Cash	\$ 5,107,374	\$ 2,645,566
Accounts Receivable, Net	2,177,299	2,223,626
Accounts Receivable, Related Party	107,848	94,149
Other Receivable	126,374	284,439
Materials and Supplies	810,104	882,316
Prepaid Power Contracts	661,452	1,015,691
Purchased Power Working Capital	1,036,671	1,027,910
TOTAL CURRENT ASSETS	10,027,122	8,173,697
NONCURRENT ASSETS:		
Funds on Deposit with Town Treasurer		
Depreciation Fund	6,959,061	7,389,478
Customer Deposits	1,704,041	1,646,306
Insurance Reserve Fund	253,687	253,687
Rate Stabilization Fund	5,326,707	4,711,606
Investments	331,795	166,875
Utility Plant Assets, Net	30,286,676	28,447,863
TOTAL NONCURRENT ASSETS	44,861,967	42,615,815
TOTAL ASSETS	54,889,089	50,789,512
DEFERRED OUTFLOWS OF RESOURCES:		
Deferred Outflows of Resources Related to Pensions	1,112,428	312,771
TOTAL ASSETS AND DEFERRED OUTFLOWS OF		
RESOURCES	\$ 56,001,517	\$ 51,102,283

HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF NET POSITION DECEMBER 31, 2016 AND 2015

OPERATING FUND

LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION

	2016	2015		
CURRENT LIABILITIES:				
Accounts Payable	\$ 1,578,268	\$ 1,498,211		
Accounts Payable - Related Party	494,999	504,080		
Accrued Expenses	107,055	103,023		
Customer Advances for Construction	251,162	891,564		
Sales Tax Payable	48,003	47,840		
TOTAL CURRENT LIABILITIES	2,479,487	3,044,718		
NONCURRENT LIABILITIES:				
Customer Deposits	1,704,251	1,646,306		
Net Pension Liability	3,309,805	2,349,591		
Net Other Postemployment Benefits Obligation	23,612	30,100		
TOTAL NONCURRENT LIABILITIES	5,037,668	4,025,997		
TOTAL LIABILITIES	7,517,155	7,070,715		
DEFERRED INFLOWS OF RESOURCES:				
Contribution in Aid of Construction, Net	682,819	361,921		
Deferred Inflows of Resources Related to Pensions	99,333	0		
Rate Stabilization Reserve	5,326,707	4,711,606		
TOTAL DEFERRED INFLOWS OF RESOURCES	6,108,859	5,073,527		
NET POSITION:				
Net Investment in Capital Assets	30,286,676	28,447,863		
Net Position Restricted for Depreciation	6,959,061	7,389,478		
Unrestricted Net Position	5,129,766	3,120,700		
TOTAL NET POSITION	42,375,503	38,958,041		
TOTAL LIABILITIES, DEFERRED INFLOWS OF				
RESOURCES AND NET POSITION	\$ 56,001,517	\$ 51,102,283		

HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015

OPERATING FUND

	2016	2015		
OPERATING REVENUES:				
Sales of Electricity	\$ 29,904,162	\$ 31,137,669		
Other Operating Revenues	207,892	221,966		
TOTAL OPERATING REVENUES	30,112,054	31,359,635		
OPERATING EXPENSES:				
Operations and Maintenance	24,744,352	25,185,679		
Depreciation and Amortization	1,523,629	2,504,554		
TOTAL OPERATING EXPENSES	26,267,981	27,690,233		
OPERATING INCOME	3,844,073	3,669,402		
NONOPERATING REVENUES (EXPENSES):				
Investment Income	71,988	61,845		
Interest Expense	(3,600)	(1,488)		
TOTAL NONOPERATING REVENUES (EXPENSES)	68,388	60,357		
Income Before Contributions and Transfers	3,912,461	3,729,759		
NET POSITION - JANUARY 1	38,958,041	35,732,362		
Transfers Out - Payments in Lieu of Taxes	(494,999)	(504,080)		
NET POSITION - DECEMBER 31	\$ 42,375,503	\$ 38,958,041		

HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015

OPERATING FUND

	2016	2015		
CASH FLOWS FROM OPERATING ACTIVITIES: Cash Received from Customers Cash Paid to Suppliers Cash Paid to Employees Cash Paid for Benefits Payment in Lieu of Taxes	\$ 29,720,290 (19,240,023) (2,885,804) (1,257,161) (494,999)	\$ 31,324,699 (21,488,170) (2,850,178) (965,854) (504,080)		
Net Cash Provided by Operating Activities	5,842,303	5,516,417		
CASH FLOWS FROM NONCAPITAL AND RELATED FINANCING ACTIVITIES: Interest Expense	(3,600)	(1,488)		
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES: Net Investment Transactions in the Depreciation Fund Additions to Plant Assets Contribution in Aid of Construction	474,351 (3,373,300) 331,756	5,305,870 (8,558,132) 132,977		
Net Cash Used in Capital and Related Financing Activities	(2,567,193)	(3,119,285)		
CASH FLOWS FROM INVESTING ACTIVITIES: Investment Income Net Transfers to Rate Stabilization Fund Purchases of Investments Proceeds from Disposition of Investments	12,953 (600,000) (164,920)	4,508 (600,000) 0 10,000		
Net Cash Used in Investing Activities	(751,967)	(585,492)		
NET INCREASE IN CASH AND CASH EQUIVALENTS	2,519,543	1,810,152		
CASH AND CASH EQUIVALENTS - JANUARY 1	4,545,559	2,735,407		
CASH AND CASH EQUIVALENTS - DECEMBER 31	\$ 7,065,102	\$ 4,545,559		

HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015

OPERATING FUND

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

NET CASHTROVIDED BY OFERATING ACTIVITIES.	 2016	2015		
Operating Income	\$ 3,844,073	\$	3,669,402	
Adjustments to Reconcile Operating Income to				
Net Cash Provided by Operating Activities:				
Depreciation	1,534,487		2,516,604	
Amortization of Contribution in Aid of Construction	(10,858)		(12,050)	
Payment in Lieu of Taxes	(494,999)		(504,080)	
Rate Stabilization Reserve	615,101		613,251	
Changes in Assets and Liabilities:				
(Increase) Decrease in Assets:				
Accounts Receivable	46,327		158,255	
Accounts Receivable, Related Party	(13,699)	19,454		
Deferred Outflows of Resources Related to Pension	(799,657)	(65,872)		
Other Receivables	158,065		(109,791)	
Materials and Supplies	72,212		(107,755)	
Prepaid Expenses	354,239		(141,862)	
Purchased Power Working Capital	(8,761)		11,879	
Increase (Decrease) in Liabilities:				
Accounts Payable	80,057	(437,069)		
Accounts Payable - Related Party	(9,081)	(20,097)		
Accrued Expenses	4,032	2,294		
Deferred Inflows of Resources Related to Pension	99,333	0		
Sales Tax Payable	163		(2,924)	
Customer Deposits	57,945		26,895	
Customer Advances for Construction	(640,402)		(129,749)	
Net Pension Liability	960,214		65,685	
Net Other Postemployment Benefits Obligation	 (6,488)		(36,053)	
Net Cash Provided by Operating Activities	\$ 5,842,303	\$	5,516,417	

SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:

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

	 2016	 2015	
Operating Cash Customer Deposits Insurance Reserve Fund	\$ 5,107,374 1,704,041 253,687	\$ 2,645,566 1,646,306 253,687	
	\$ 7,065,102	\$ 4,545,559	

HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF NET POSITION DECEMBER 31, 2016 AND 2015

OPEB TRUST FUND

ASSETS

		2016	2015		
NONCURRENT ASSETS: Funds on Deposit with Town Treasurer Cash and Cash Equivalents Investments	\$	28,432 1,745,554	\$	15,499 1,664,653	
	\$	1,773,986	\$	1,680,152	
N	NET POSITION				
NET POSITION - Restricted	\$	1,636,018	\$	1,595,910	

HINGHAM MUNICIPAL LIGHTING PLANT STATEMENTS OF CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015

OPEB TRUST FUND

	 2016	 2015		
Interest Earned on Invested Funds Net Appreciation (Depreciation) in Fair Value	\$ 44,506	\$ 41,032		
of Investments	46,926	(59,335)		
Management and Related Fees	 (6,818)	 (7,730)		
CHANGE IN NET POSITION	 40,108	 (67,065)		
NET POSITION - January 1	 1,595,910	 1,662,975		
NET POSITION - December 31	\$ 1,636,018	\$ 1,595,910		

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.

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 2016 and 5% for 2015. 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 2015 financial statements have been reclassified to conform to the 2016 presentation with no effect on previously reported net income.

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.

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.

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 2016 and 2015.

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.

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

Unbilled Revenue:

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

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.

Financial Statement Revision

During 2015, the Plant revised its beginning net position through the implementation of GASB Statements #68 and #71 related to accounting for pensions. The cumulative effect of this revision was to reduce total net position by \$1,769,427.

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.

NOTE 3 - CONCENTRATION OF CREDIT RISK (Continued):

Custodial Credit Risk - Deposits

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

Custodial Credit Risk - Investments

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

Interest Rate Risk

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

NOTE 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, 2016 and 2015 was \$253,687.

NOTE 5 - DEPRECIATION FUND:

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

NOTE 5 - DEPRECIATION FUND (Continued):

		tings s of <u>r En</u>		2016 Fair Value	2016 Under 1 Year	 2015 Fair Value
Term Securities	=					
Certificates of Deposit	N	I/A	\$	2,385,000	\$ 2,385,000	\$ 3,837,000
Other Securities	=					
Century Bank Savings Accour Massachusetts Municipal	nt			2,875,223		2,657,157
Depository Trust				178,171		854,653
Money Market Funds			_	1,520,667		 40,668
Total Investments			\$	6,959,061		\$ 7,389,478

There are no realized or unrealized gains or losses due to all of the funds either being a cash equivalent or certificates of deposit which are held to maturity and recognized at their cost basis. There are no investments over 5% of the portfolio's value.

NOTE 6 - 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, 2016 and 2015 was \$5,326,707 and \$4,711,606, respectively. The balance in the fund is offset by a corresponding deferred inflow of resources for the accumulated provision for rate refund.

NOTE 7 - OTHER RECEIVABLES:

Other receivables consist of the following:

		2016	 2015
Merchandise and Jobbing	\$	27,111	\$ 60,885
Spruce Mountain Wind REC's		95,626	219,977
Interest Receivable		3,637	 3,577
Total Other Receivables	<u>\$</u>	126,374	\$ 284,439

2016

2015

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, 2016 and 2015 are as follows:

	 2016		2015	
Watson MMWEC ENE	\$ 174,778 1,564 860,329	\$	167,579 1,553 858,778	
Total	\$ 1,036,671	\$	1,027,910	

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.

Hingham Municipal Lighting Plant invested \$10,000 for a 50% ownership in South Shore Energy Cooperative, LLC a nonpublic municipal consulting services cooperative. During November 2015, the South Shore Energy Cooperative, LLC was dissolved.

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 \$1,334,547 in 2016 and \$1,479,817 in 2015. Included in the accompanying statements of net assets as of December 31, 2016 and 2015 is \$107,848 and \$94,149, 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 \$1,242,244 in 2016 and \$1,235,998 in 2015. As of December 31, 2016 and 2015 amounts payable to the Town were \$494,999 and \$504,080, respectively.

In 2016 and 2015, the Lighting Plant made payments in lieu of property taxes to the Town in the amount of \$494,999 and \$504,080, respectively.

NOTE 11 - UTILITY PLANT ASSETS:

	Balance January 1, 2016	Increases	Decreases	Balance December 31, 2016
Capital Assets Not Being Depreciated:				
Land	\$ 434,863	\$ 0	\$ 0	\$ 434,863
Construction in Progress	8,556,480	2,235,169	(10,643,972)	147,677
Total Capital Assets Not Being Depreciate	ed 8,991,343	2,235,169	(10,643,972)	582,540
Capital Assets Being Depreciated:				
Transmission Plant	1,583,968	199,078	0	1,783,046
Distribution Plant	43,091,930	1,283,628	(831,630)	43,543,928
General Plant	6,473,658	10,299,397	(592,835)	16,180,220
Total Capital Assets Being Depreciated	51,149,556	11,782,103	(1,424,465)	61,507,194
Less Accumulated Depreciation For:				
Transmission Plant	(1,520,490)	(46,430)	0	(1,566,920)
Distribution Plant	(26,125,713)	(1,293,847)	831,630	(26,587,930)
General Plant	(4,046,833)	(194,210)	592,835	(3,648,208)
Total Accumulated Depreciation	(31,693,036)	(1,534,487)	1,424,465	(31,803,058)
Capital Assets Being Depreciated, Net	19,456,520	10,247,616	0	29,704,136
Utility Plant Assets, Net	\$ 28,447,863	\$ 12,482,785	\$ (10,643,972)	\$ 30,286,676

NOTE 12 - NET INVESTMENT IN CAPITAL ASSETS:

		2016	 2015
Cost of Capital Assets Acquired Less: Accumulated Depreciation	\$	62,089,734 31,803,058	\$ 60,140,899 31,693,036
Net Investment in Capital Assets	<u>\$</u>	30,286,676	\$ 28,447,863

NOTE 13 - PENSION PLAN:

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

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

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

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

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

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.

NOTE 13 - PENSION PLAN (Continued):

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, 2016 and 2015 were \$272,180 and \$246,899, respectively, which were paid during calendar year 2015 and 2014, respectively.

Pension Liabilities- At December 31, 2016 and 2015, the Plant reported a liability of \$3,309,805 and \$2,349,591, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2015 and 2014, and the total pension liability used to calculate the new pension liability was determined by an actuarial valuation as of January 1, 2015. 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, 2015 and 2014 the Town's proportion was 88.788% and 91.943%, 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, 2015 and 2014. At the measured date of December 31, 2015 and 2014, the Plant's portion was 6.2% and 5.9%, respectively, of the Town's total contributions.

Pension Expense- For the years ended December 31, 2016 and 2015 the Plant recognized a pension expense of \$544,396 and \$267,393, respectively. For the years ended December 31, 2016 and 2015, the Plant reported deferred outflows of resources related to pensions of \$1,112,428 and \$312,771, respectively, consisting of the differences between projected and actual investment earnings which amounted to \$454,305 and \$45,191, respectively, changes in assumptions which amounted to \$277,802 and zero, respectively, changes in proportion and differences between employer contributions and proportionate share of contributions at the Plan and Light Plant level which amounted to \$100,415 and zero, respectively, and the amount paid for contributions made subsequent to the measurement date which amounted to \$279,906 and \$267,580, respectively. For the years ended December 31, 2016 and 2015, the Plant reported deferred inflows of resources related to pensions of \$99,333 and zero, respectively, consisting of the differences between expected and actual experience.

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

For the Years Ended December 31,	2017	\$	172,686
	2018		172,686
	2019		160,797
	2020		54,333
	Total	<u>\$</u>	560,502

NOTE 13 - PENSION PLAN (Continued):

Actuarial Assumptions-The total pension liability as of December 31, 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:

Valuation Date January 1, 2016

Actuarial Cost Method Entry Age Normal

Amortization Method *Unfunded Actuarial Accrued Liability (UAL)*:

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:

a. 80% of gains and losses of the prior year,

b. 60% of gains and losses of the second prior year,c. 40% of gains and losses of the third prior year and

d. 20% of gains and losses of the fourth prior year

Inflation Rate Not explicitly assumed

Projected Salary Increases The assumed rates for salary increases including

longevity is 4%.

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 Projected to 2014 with Scale

AA.

Disabled Retirees RP-2000 Mortality Table set forward two years for

disabled members.

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

NOTE 13 - PENSION PLAN (Continued):

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

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major category asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pensions plan's target asset allocation as of December 31, 2015 are summarized below.

	Target	Long-Term Expected
Asset Class	Allocation	Rate of Return
Domestic Equity	24%	8.10%
International Equity	12%	8.30%
Int'l Emerging Market Equity	12%	10.60%
Core Fixed Income	17%	3.40%
Value-Added Fixed Income	10%	6.90%
Real Estate	10%	6.40%
Hedge Funds	5%	5.80%
Private Equity	10%	9.60%
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:

		Current	
	1% Decrease	Discount Rate	1% Increase
	(6.75%)	(7.75%)	(8.75%)
Proportionate share of the Net Pension Liability	\$ 4.333.509	\$ 3,309,805	\$ 2,439,997

Pension Plan Fiduciary Net Position- Detailed information about the pension plan's fiduciary net position is available in the separately issued Hingham Contributory Retirement System financial report.

NOTE 14 - LEASES:

During 2012, the Lighting Plant extended an operating lease agreement to lease antenna space. This lease expires in 2017 and has one sixty-month renewal option. Rent expense related to this lease was approximately \$16,066 and \$16,699 for the years ended December 31, 2016 and 2015, respectively.

Future minimum lease payments as of December 31, 2016 were \$18,410 for the year ending December 31, 2017.

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 \$69,050 and \$124,026 for the years ended December 31, 2016 and 2015, 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).

NOTE 16 - OTHER POSTEMPLOYMENT BENEFIT 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.

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

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, 2016 and 2015 was \$1,773,986 and \$1,680,152, 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, 2016 and 2015.

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

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

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 sets forth, by level within the fair value hierarchy, the Department's investments at fair value at December 31, 2016 and 2015. As of December 31, 2016 and 2015, the Department did not have any investments that were measured using Level 2 or Level 3 inputs.

Description	Q Ac Id	cember 31, 2016 uoted Prices in tive Markets for lentical Assets (All Level 1)		Quoted Prices in Active Markets for Identical Assets (All Level 1)
Corporate Bonds:				
Credit Rating-	¢	50 475	¢	20.260
AA+	\$	50,475	\$	30,368
AA		31,266		31,616
AA-		73,251		43,991
A+		35,263		35,170
A		91,085		62,214
A-		0		90,235
BBB+		59,998		89,988
U.S. Government Securities		427,283		379,219
Equity Securities		239,770		225,396
Mutual Funds		737,163	_	676,456
Total FMV Investments		1,745,554		1,664,653
Other Securities				
Money Market		28,432	_	15,499
Total	\$	1,773,986	\$	1,680,152
Gain (Loss) on Investments			2016	2015
Realized Gain (Loss) on Investr Unrealized Gain (Loss) on Inve		\$	(9,220) \$ 56,146	37,421 (96,756)
Gain (Loss) on Investments		<u>\$</u>	46,926 \$	(59,335)

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 2016.

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, 2016 and 2015, the Lighting Plant considers it's 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

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 \$290,880 and \$279,411 for the years ended 2016 and 2015, 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 shows the components of the Lighting Plant's annual OPEB cost for the years ending December 31, 2016 and 2015, 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:

	 2016	 2015
Normal cost with interest Amortization of unfunded actuarial	\$ 41,208	\$ 46,569
accrued liability with interest Annual required contribution	 42,250 83,458	 17,599 64,148
Contributions made	(89,946)	(100,221)
Increase (Decrease) in net OPEB Obligation	 (6,488)	(36,053)
Net OPEB obligation - Beginning of year	 30,100	 66,153
Net OPEB obligation - End of year	\$ 23,612	\$ 30,100

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:

			Percentage of		
	Aı	nnual OPEB	OPEB cost	Ne	et OPEB
Year end	<u>ed</u>	costs	contributed	ot	ligation
2014	\$	63,522	148%	\$	66,153
2015	\$	64,148	156%	\$	30,100
2016	\$	83.458	108%%	\$	23 612

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.

NOTE 18 - OTHER POSTEMPLOYMENT BENEFITS (OPEB) (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:

	 2016
Actuarial accrued liability (AAL) Value of plan assets	\$ 2,529,119 (1,773,986)
Unfunded actuarial accrued liability	\$ 755,133
Funded ratio (actuarial value of plan assets/AAL)	70.14%
Covered payroll (active plan members)	\$ 2,885,804
UAAL as a percentage of covered payroll	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-two 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.

NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

Power Purchase Commitments

Hingham Municipal Lighting Plant 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.

Hingham Municipal Lighting Plant has entered into a contract with Braintree Electric Lighting 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 us to 11.4 MWs. They are natural gas fired. The average 2016 energy price for Watson was \$0.06746/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. The average 2016 energy price for Potter was \$5.63/kWh. Potter's per kWh price was so high because it barely ran in 2016. Because the capacity charges for HMLP associated with Potter are the same regardless of how often a plant runs (or not), the average per kWh gets skewed if there are so few kWh hours to work into the formula. It can run on either oil or natural gas.

HMLP is a .5% entitlement owner in the Seabrook nuclear power plant and is entitled to almost 6MW. The average 2016 energy price for Seabrook was \$0.00652/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 2016 energy price for Millstone was \$0.0067/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. The Lighting Plant entered into an initial six year contract with Brown Bear that expired during 2016. The contract was renewed through 2021. The contracted parties are interested in further extending the agreement and are currently working to come to terms. The average 2016 energy price for Brown Bear was \$0.05336/kWh. Eagle Creek Renewables, owner of Brown Bear, recently purchased another similarly-sized facility in Maine and discussions regarding contract opportunities are in progress. ArcLight Capital, previous owner of the Miller Hydro project, recently closed on their purchase of the TransCanada Hydro with assets in the 500 MW range and have expressed interest in long-term transactions. Certainly extending existing contracts and entering into new contracts will be driven by economics.

HMLP has entered into a fifteen 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 2016 energy price for Spruce Mountain Wind was \$0.09925/kWh.

HMLP has entered into a twenty 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 8MW. The average 2016 energy price for Saddleback Ridge Wind was \$0.09295/kWh.

HMLP has entered into a contract running until 2017 with Granby Landfill. The contracted parties are interested in extending the agreement and are currently working to come to terms. HMLP is entitled to .5MWH of renewable energy and have an ownership entitlement of about 17%. The average 2016 energy price for Granby Landfill is \$0.051/kWh.

NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

Power Purchase Commitments (continued)

HMLP has entered into a twenty-five 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 5.996MW DC facilities. Each facility is projected to produce 7.7MW annually with a degradation rate of approximately .5% per annum. HMLP's combined annual purchase is estimated to be approximately 3MW.

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 entitle us to a total of 14MW. Units 2A and B of the Peaking units entitle us to a total of 9.2MW. The contracts are for the life of the units. The average 2016 energy price for the Intermediate units are \$0.05135/kWh. The average 2016 energy price for the Peaking unites are \$0.22455/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 2016 energy price for the NYPA units is \$0.00492/kWh.

HMLP has contracts with multiple generators which allows them to buy energy when various price points come into play. In 2016, the companies HMLP purchased from under this agreement were NextEra and Excelon/Constellation. The average per kWh for NextEra was \$0.05165 and the average per kWh price for Excelon/Constellation was \$0.05125.

HMLP has the ability to purchase from ISO-New England's Energy Interchange. In 2016, HMLP paid \$0.03665/kWh for energy through ISO-New England.

MMWEC Contingencies and Liabilities

MMWEC has issued separate issues of revenue bonds for each of its eight Projects, which are payable solely from, and secured solely by, the revenues derived from the Project to which the bonds relate, plus available funds pledged under MMWEC's Amended and Restated General Bond Resolution (GBR) with respect to the bonds of that Project. The MMWEC revenues derived from each Project are used solely to provide for the payment of the bonds of any bond issue relating to such Project and to pay MMWEC's cost of owning and operating such Project and are not used to provide for the payment of the bonds of any bond issue relating to any other Project.

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

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

NOTE 19 - COMMITMENTS AND CONTINGENCIES (Continued):

MMWEC Contingencies and Liabilities (continued)

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

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

As of December 31, 2016, total capital expenditures amounted to \$1,636,374,000, of which \$64,438,000 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 \$55,795,000, of which \$2,336,000 is associated with the Lighting Plant's share of Project Capability.

As of December 31, 2016, MMWEC's total future debt service requirement on outstanding bonds issued for the Projects is \$59,281,000, of which \$2,485,000 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 \$5,874,000 and \$6,327,000 for the years ended December 31, 2016 and 2015, respectively.

HMLP's annual energy costs related to its long-term power purchase commitments as of December 31, 2016 are approximately as follows:

	MMWEC	ENE	Watson	Total
Years Ending December 31, 2017 2018	\$ 2,033,000 77,000	\$ 5,746,441	\$ 1,512,950	\$ 9,292,391 6,020,704
2019	375,000	4,431,602 3,902,535	1,512,102 1,510,819	5,788,354
2020 2021 2022 2026	0	3,506,326 3,257,871	1,491,792 1,485,663	4,998,118 4,743,534
2022-2026 2027-2031	0	9,093,814 3,823,822	7,435,975 2,613,503	16,529,789 6,437,325
2032-2036 2037-2041	0	3,019,984 854,877	0	3,019,984 854,877
Total	\$ 2,485,000	\$ 37,637,272	\$ 17,562,804	\$ 57,685,076

	PERCENTAGE SHARE	EXP	AL PROJECT ENDITURES O DATE		ICIPANT'S HARE	OUT	IT ISSUED & STANDING 2/31/2016		ICIPANT'S HARE	DEBT ON	OTAL SERVICE BONDS TANDING		TICIPANT'S SHARE
Stony Brook Peaking Project	5.3307	\$	59,762	\$	3,186	\$	_	\$	_	\$	_	\$	_
Stony Brook Intermediate Project	4.3870	Ψ	174,182	Ψ	7,641	Ψ	_	Ψ	_	•	_	Ψ	_
Nuclear Mix No. 1-SBK	3.4281		14,443		495		_		_		_		_
Nuclear Mix No. 1-MLS	3.4281		120,538		4,132		_		_		_		_
Nuclear Project No. 3-MLS	1.4311		152,231		2,179		6,540		94		6,984		100
Nuclear Project No. 4-SBK	3.4180		351,298		12,007		8,455		289		8,802		301
Nuclear Project No. 5-SBK	1.6644		95,231		1,585		2,970		49		3,119		52
Wyman Project	-		8,805		-		-		-		-, -		-
Project No. 6-SBK	5.0331		659,884		33,213		37,830		1,904		40,376		2,032
•			<u> </u>										
TOTAL		\$	1,636,374	\$	64,438	\$	55,795	\$	2,336	\$	59,281	\$	2,485
	PERCENTAGE SHARE	MAI	ERATION & NTENANCE 2/31/2015		ICIPANT'S HARE	MAII	RATION & NTENANCE 2/31/2016		ICIPANT'S HARE				
Stony Brook Peaking Project	5.3307	\$	3,730	\$	199	\$	4,008	\$	214				
Stony Brook Intermediate Project	4.3870	Ψ	40,083	Ψ	1,758	Ψ	28,039	Ψ	1,230				
Nuclear Mix No. 1-SBK	3.4281		576		20		723		25				
Nuclear Mix No. 1-MLS	3.4281		6,369		218		6,038		207				
Nuclear Project No. 3-MLS	1.4311		27,329		391		22,939		328				
Nuclear Project No. 4-SBK	3.4180		28,086		960		27,748		948				
Nuclear Project No. 5-SBK	1.6644		7,530		125		7,615		127				
Wyman Project	-		2,591		-		961		-				
Project No. 6-SBK	5.0331		52,773		2,656		55,538		2,795				
TOTAL		\$	169,067	\$	6,327	\$	153,609	\$	5,874				

	PERCENTAGE SHARE	ANN	2017 UAL COST	TICIPANT'S SHARE	ANN	2018 UAL COST	CIPANT'S HARE	2019 JAL COST	ICIPANT'S HARE
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		3,639	52		3,345	48	_	_
Nuclear Project No. 4-SBK	3.4180		8,802	301		· -	_	_	-
Nuclear Project No. 5-SBK	1.6644		2,884	48		235	4	_	-
Wyman Project	_		_	-		-	-	-	-
Project No. 6-SBK	5.0331		32,417	1,632		503	25	 7,456	 375
TOTAL		\$	47,742	\$ 2,033	\$	4,083	\$ 77	\$ 7,456	\$ 375

HINGHAM MUNICIPAL LIGHTING PLANT REQUIRED SUPPLEMENTARY INFORMATION OTHER POSTEMPLOYMENT BENEFITS

OPERATING FUND

Schedule of Funding Progress - Other Postemployment Benefits:

Actuarial Valuation	For the Year	Actuarial Value of	Actuarial Accrued Liability	_	nfunded	Funded	Covered	UAAL as a Percentage of
Date	Ending	Assets	(AAL)	AA	L (UAAL)	Ratio	Payroll	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%

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 22 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)

								NPL as a	
					Plant's			Percentage of	
				Pı	roportionate	P	lant's Total	Total	
Actuarial	Measurement	For the Year	Plant's Portion	S	hare of the		Employee	Employee	Plan's Fiduciary Net Position as a
Valuation Date	Date	Ending	of the NPL		NPL		Payroll	Payroll	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%	\$	3,312,969	\$	2,885,804	114.80%	64.21%

Schedule of Contributions

					Con	tributions in				
					Re	lation to the				
			A	ctuarially	A	Actuarially	Cont	ribution	Plant's Total	
Actuarial	Measurement	For the Year	D	etermined	D	etermined	Def	iciency	Employee	Contribution as a Percentage of Plant's Total
Valuation Date	Date	Ending	Co	ontribution	Co	ontribution	(E:	xcess)	Payroll	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%

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.

HINGHAM MUNICIPAL LIGHTING PLANT SCHEDULES OF SALES OF ELECTRICITY FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015

OPERATING FUND

	 2016		2015
SALES OF ELECTRICITY:			
Residential	\$ 13,899,918	\$	14,537,382
Commercial and Industrial	14,508,451		15,044,024
Municipal	1,420,111		1,479,817
Security Lighting	 75,682		76,446
		_	
TOTAL SALES OF ELECTRICITY	\$ 29,904,162	\$	31,137,669

HINGHAM MUNICIPAL LIGHTING PLANT SCHEDULES OF OPERATIONS AND MAINTENANCE EXPENSES FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015

OPERATING FUND

	2016	2015
POWER PRODUCTION EXPENSES: Purchased Power Other Purchased Power	\$ 19,270,009 607,694	\$ 20,014,846 589,482
Total Power Production Expenses	19,877,703	20,604,328
DISTRIBUTION EXPENSES: Miscellaneous Distribution Expenses	770,451	729,830
MAINTENANCE EXPENSES: Maintenance of Lines Maintenance - Other	881,795 44,308	917,903 44,663
Total Maintenance Expenses	926,103	962,566
CUSTOMER ACCOUNTS: Customer Accounting and Collection Expense Uncollectible Accounts Meter Reading Expense	825,586 9,171 205,112	812,715 1,223 191,059
Total Customer Accounts	1,039,869	1,004,997
GENERAL AND ADMINISTRATIVE EXPENSES: Administrative and General Salaries Office Supplies and Expenses Outside Services Employed Property Insurance Employees' Pension and Benefits Dues, Meetings and Other General Expenses Transportation Rent Maintenance of General Plant Total General and Administrative Expenses	164,014 19,700 192,079 183,886 1,257,161 112,962 63,894 69,050 67,480	162,656 20,506 182,201 166,319 965,854 113,196 70,866 124,026 78,334
TOTAL OPERATIONS AND MAINTENANCE EXPENSES	\$ 24,744,352	\$ 25,185,679