

## MARBLEHEAD TOWN REPORT 2017

### MUNICIPAL LIGHT DEPARTMENT

To the citizens of the Town of Marblehead:

The Marblehead Municipal Light Department is pleased to provide its 123rd annual report and financial statements for the calendar year ending December 31, 2017.

The weather in the early months of 2017 was not a factor compared to the previous few years when the area experienced a parade of snow storms and periods of extended cold weather. The cold weather we did experience was short lived and did not adversely affect the Department's operation. The winter months turned out warmer than average resulting in lower electric sales compared to previous years.

The summer of 2017 experienced few days over ninety degrees and we did not experience any prolonged heat waves. We set yearly demand peak earlier in the year than usual for 2017. This occurred on June 19<sup>th</sup> with the demand of 27,531 kilowatts. This was substantially below the previous record of 31,639 kilowatts set in 2013 and was 7.7% lower than the previous year. Total energy consumption for the year 2017 remained constant, decreasing 1.9% from 102,854,622 kilowatt-hours in 2016 to 100,799,000 kilowatt-hours in 2017.

With greater than 50% of New England's electricity production from fossil fuels, and the largest share being natural gas, changes in the cost of fuels, either up or down, will impact the wholesale cost of electricity in the region. The low cost of natural gas of previous years has now led to congestion and availability problems on the pipelines into New England. Residential use takes priority during the coldest months for heating, leaving little left for power plants. This has in turn has caused the need to run oil-fired generation more often in the winter months, which drives up power prices due to increased fuel costs.

This continuing pressure on natural gas delivery has required MMLD to run our diesel generators on occasion to support the power grid in the Northeastern Massachusetts (or NEMA) zone, due to few generating stations in the area. It is usually during times of system stress, such as extended cold or hot weather spells, when our units are needed. The units are a proven resource for the town, reducing our power purchase costs, reducing overall costs, and supplying the town with emergency power if necessary.

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The end of 2017 brought another full year of energy production from our Berkshire Wind Power Project, exemplifying the success of public power in conjunction with renewable energy sources. The town's portion was once again over 2,974,000 KWH of electricity. The Marblehead Municipal Light Department also received an additional amount of wind power, 2,292,400 KWH, from a new facility, Hancock Wind, in Maine which went on line in December of 2016. The Light Department also received over 2,051,000 KWH from Eagle Creek Hydro. The Light Department receives approximately 41% of the electricity from carbon free generating sources. Marblehead Municipal Light benefits from these renewable energy resources through its membership in the Massachusetts Municipal Wholesale Electric Company.

We did see an increase in photovoltaic systems this year with eleven new residential systems installed. Presently there are forty five photovoltaic systems installed on buildings in Marblehead. The Light Department benefits from these installations by not having to purchase approximately 220,000 KWH of electricity.

Although new sources of generation supply are required to meet the needs of our growing customer usage, we also recognize the importance of energy efficiency and demand side management programs within our community to try and reduce some of that growth requirement. Our programs provide various rebates when customers buy more energy efficient appliances, programmable thermostats and cool home rebates. Through this program, HELPS, administered by MMWEC, our customers received over \$10,000 during 2017. For further information on the Light Department's energy and conservation programs please visit our website at [www.marbleheadelectric.com](http://www.marbleheadelectric.com) or call 781-631-5600.

Marblehead Municipal Light Department's Automated Metering System is continuing to prove itself as a valuable tool. During outages to our customers, we are notified through the Smart Meter System as to the location of the outage. This notification in turn allows for faster restoration by identifying the location of the failed electrical component. There are times when our electrical crews are already on the way to repair outages before our customers make us aware there is a problem. These types of smart systems are the future of the utility business.

As part of the light department's continuing 5-year budget and work-plan, work continued on several distribution projects in 2015.

- The Department replaced the Beacon Substation 3 MVA transformer. The new transformer was received in late 2017 and will be placed into service

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in early 2018.

- New poles and spacer cable construction were installed on Bayview Road during 2016 and the project completed in 2017
- The installation of replacement LED street lighting on portions of the busier main streets was completed in 2016. The replacement of the remaining older sodium street lights in the residential areas will continue until almost all of the Town's existing street lights are converted to LED fixtures. Approximately 1/3 of the sodium street lights in Marblehead have been replaced with the energy efficient LED fixtures.
- Work had begun on the Clifton Avenue conductor upgrade project by setting all new poles, and installing new hardware. Completion of this project should be in 2017.

In addition to our distribution and construction projects, we also completed the review and design process for the Commercial Street Building renovation. The department retained Winter Street Architects of Salem to work with us to develop plans and go forward on this project. Bids for the project were received in November of 2016 and a General Contractor, GVW Construction of East Boston, was awarded the project in January of 2017. Construction on the Commercial Building began in late January and continued throughout 2017. At the end of 2017 the building renovation project was approximately 85% completed. The original Commercial Street building was last updated in 1969, adding the business offices to the former generating facility. The building was in need of considerable work to bring it up to today's building code requirements. Originally constructed in 1894 the building has served MMLD well. The renovated building will be energy efficient having a Geothermal heating and cooling system. The building will be LEED Certified with state of the art design while maintaining respect for the past. The Department looks forward to returning to our Commercial Street Building during the first quarter of 2018.

Net surplus revenue that was returned to the Town to reduce the tax levy in 2017 was \$330,000, part of the thirteen-year cumulative amount through 2015, totaling \$5,760,000.

Appreciation is tendered to the Board of Selectmen, Town Officials, Department Heads, and to all Town employees for their continued support, cooperation, and contributions.

## **MARBLEHEAD TOWN REPORT 2017**

Respectfully Submitted,

Andrew F. Hadden, General Manager  
Michael A. Hull, Commission Chairman  
Walter E. Homan, Commissioner  
Michael A. Tumulty, Commissioner  
Michael J. Maccario, Commissioner

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## MUNICIPAL LIGHT DEPARTMENT

### BALANCE SHEET

For the year ending December 31, 2017

#### Assets

Plant Investments		18,163,875.35
Current Assets:		
Cash - Operating	4,217,578.14	
Petty Cash	500.00	
Construction	18,908.88	
Accounts Receivable	2,626,544.80	
Interest Receivable	0.00	
Materials & Supplies	<u>73,026.05</u>	
Total Current Assets		6,936,557.87
Depreciation Fund		7,318,648.61
Insurance Escrow Account		975,114.77
Hydro Savings Reserve		42,108.77
MMWEC - NEPEX Reserve Trust		381,425.29
Rate Stabilization Reserve		900,000.00
Consumer Deposits		191,265.00
Prepayments		<u>1,364,968.30</u>
Total Assets		<u>36,273,963.96</u>

#### Liabilities And Surplus

Accounts Payable:		
Depreciation	457,759.73	
Operating	1,839,857.36	
Construction	0.00	
Consumer Deposits	1,400.00	
Total Accounts Payable		2,299,017.09
Consumer Deposits		189,865.00
Reserve for Uncollectible Accounts		289,648.21
Reserve for Future Compensated Absences		89,718.92
Accumulated Provision For Rate Stabilization		900,000.00
Opneb Liability		614,000.00
Unappropriated Earned Surplus		31,891,714.74
Total Liabilities And Surplus		<u>36,273,963.96</u>

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## MUNICIPAL LIGHT DEPARTMENT

### STATEMENT OF INCOME

For the year ending December 31, 2017

Operating Revenue		16,116,861.24
Less Expenses:		
Operating	12,273,609.83	
Maintenance	1,042,864.01	
Depreciation	<u>1,519,509.97</u>	
Total Expenses		<u>14,835,983.81</u>
Operating Income		1,280,877.43
Interest Income		27,039.68
Other Income		<u>67,115.60</u>
Less Miscellaneous Income Deductions		<u>0.00</u>
Net Income Transferred to Surplus		<u>1,375,032.71</u>

### STATEMENT OF SURPLUS

For the year ending December 31, 2017

Balance December 31, 2016		27,210,129.61
Add: Credit balance transferred from income		1,375,032.71
Adjustment to transfer prior years		
Power Refunds to surplus		<u>0.00</u>
Subtotal		28,585,162.32
Deduct: Amount transferred to Town Treasurer to reduce the Tax Levy		(330,000.00)
In Lieu Of Tax Payment to City Of Salem adjusting entries for year ended December 2016		<u>(4,662.53)</u>
		<u>3,641,214.95</u>
Balance December 31, 2017		<u>31,891,714.74</u>

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### OPERATING EXPENSES

For the year ending December 31, 2017

Power Generation Expenses:		
Fuel	2,691.00	
Generating Expense - Lubricants	4,822.27	
Misc. Other Power Generating Expense	1,821.39	
Maint. of Other Power Generation	<u>97,366.64</u>	
Total Power Generation Expense		106,701.30
Power Supply Expenses:		
Electric Energy Purchased	7,683,246.57	
Misc. Purchased Power Expense	<u>2,531,812.66</u>	
Total Power Supply Expenses		10,215,059.23
Transmission Expense:		
Maintenance of Overhead Lines		0.00
Distribution Expenses:		
Station Expense - Labor & Other	4,654.57	
Station Expense - Heat & Electricity	28,329.70	
Street Lighting	9,501.34	
Meter Expense - Inspection, Testing, Removing, Resetting	63,643.14	
Customer Installation Expense	27,763.28	
Misc. Distribution Expense	185,020.61	
Maintenance of Structures	0.00	
Maintenance of Station Equipment	82,937.23	
Maint. of Overhead & Underground Lines	767,618.63	
Maintenance of Line Transformers	1,896.10	
Maintenance of Meters	<u>16,747.76</u>	
Total Distribution Expenses		1,188,112.36
Customer Account Expenses:		
Supervision of Customer Accounting	109,751.07	
Meter Reading - Labor & Expenses	27,763.28	
Customer Records & Collections	229,938.39	
Uncollectible Accounts	8,369.33	
Interest Paid on Consumer Deposits	<u>129.57</u>	
Total Customer Account Expenses		375,951.64
Advertising, Conservation, Energy Audits		88,478.79
Administrative & General Expenses:		
Administrative Salaries	164,651.47	
Office Supplies & Expenses	235,132.46	
Outside Services Employed	116,988.87	
Property Insurance	41,159.20	
Injuries & Damages	425.00	
Rents	124,395.62	
Employee's Pensions & Benefits	548,851.17	
Maintenance of General Plant	10,885.30	
Transportation	65,412.35	
Miscellaneous General Expense	<u>34,269.08</u>	
Total Administrative & Gen. Expenses		<u>1,342,170.52</u>
Total Operating & Maintenance Expenses		<u>13,316,473.84</u>