

MARBLEHEAD TOWN REPORT 2016

MUNICIPAL LIGHT DEPARTMENT

To the citizens of the Town of Marblehead:

The Marblehead Municipal Light Department is pleased to provide its 122nd annual report and financial statements for the calendar year ending December 31, 2016.

The weather in the early months of 2016 was less of a factor compared to the previous year when the area experienced a parade of one hefty snow storm after another. The extreme cold weather on Valentine's Day did not adversely affect the Department's operation. Following the extreme cold power costs declined due to the decline in global fuel prices. These factors drove our purchased power costs down for the following months continuing into the Summer season.

The summer of 2016 experienced only a few days over ninety degrees and we did not experience any prolonged heat waves. We set yearly demand peak for 2016 on August 19th with the demand of 29,835 kilowatts. This was substantially below the previous record of 31,639 KW set in 2013. Total energy consumption for the year 2016 still remains almost constant, decreasing from 105,294,644 kilowatt-hours in 2015 to 104,766,410 kilowatt-hours in 2016.

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 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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Due to the importance of these generators to the town, we are currently performing upgrades to the system, allowing these units to run as clean, quiet, and efficiently as possible.

The end of 2016 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. This wind power project has once again exceeded expectations in the production of clean energy. Berkshire Wind set a record generating over 59% of the time in December. The town's portion was once again over 3,000,000 KWH of electricity. The Marblehead Municipal Light Department will receive an additional amount of wind power from a new facility, Hancock Wind, in Maine which went on line in December of 2016. This facility could provide enough clean energy to Marblehead to double the present amount the Town receives. 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 local photovoltaic systems this year with seven new residential systems installed. Presently there are twenty eight photovoltaic systems installed on buildings in Marblehead. The Light Department has already been contacted by another homeowner this year for the installation of photovoltaic systems on their building.

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 \$7,500.00 during 2016. For further information on the Light Department's energy and conservation programs please visit our website at 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.

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

- Work on the Ocean Avenue (Marblehead Neck) conductor upgrade project was completed in 2016.
- The rebuilding of the poles and wire on a portion of Evans Road was completed in 2016.
- New poles and spacer cable construction were installed on Bayview Road during 2016 and should be completed in 2017
- The installation of replacement LED street lighting on portions of Atlantic Avenue, Ocean Avenue, and Pleasant Street were completed in 2016. These replacements will continue until almost all of the Town's existing street lights are LED.
- 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. There are few options in a town so fully developed, so relocating or new construction were both ruled out as options. 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 and a General Contractor was awarded the project in January of 2017. The original Commercial Street building was updated in 1969, adding the business offices to the generating facility. The building is 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 thoughtful design and respect for the past. In May we temperately relocated our Business Office to Tioga Way and have since relocated our line personnel to Tioga Way also. Construction has begun on our Commercial Street facility and we look forward to its' completion.

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Net surplus revenue that was returned to the Town to reduce the tax levy in 2016 was \$330,000, part of the thirteen-year cumulative amount through 2015, totaling \$5,430,000.

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

Respectfully Submitted,

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

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BALANCE SHEET

For the year ending December 31, 2016

Assets

Plant Investments		12,285,583.96
Current Assets:		
Cash - Operating	4,409,006.01	
Petty Cash	500.00	
Construction	18,908.88	
Accounts Receivable	2,603,196.59	
Interest Receivable	0.00	
Materials & Supplies	<u>74,693.41</u>	
Total Current Assets		7,106,304.89
Depreciation Fund		6,949,454.36
Insurance Escrow Account		972,279.29
Hydro Savings Reserve		42,108.77
MMWEC - NEPEX Reserve Trust		582,542.27
Rate Stabilization Reserve		900,000.00
Consumer Deposits		168,661.00
Prepayments		<u>1,703,427.86</u>
Total Assets		<u>30,710,362.40</u>

Liabilities And Surplus

Accounts Payable:		
Depreciation	1,775.61	
Operating	1,445,838.80	
Construction	0.00	
Consumer Deposits	4,567.00	
Total Accounts Payable		1,452,181.41
Consumer Deposits		164,094.00
Reserve for Uncollectible Accounts		322,961.76
Reserve for Future Compensated Absences		100,301.66
Accumulated Provision For Rate Stabilization		900,000.00
Opeb Liability		560,693.96
Unappropriated Earned Surplus		27,210,129.61
Total Liabilities And Surplus		<u>30,710,362.40</u>

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STATEMENT OF INCOME

For the year ending December 31, 2016

Operating Revenue		16,347,200.67
Less Expenses:		
Operating	12,465,596.63	
Maintenance	1,010,638.44	
Depreciation	<u>1,482,805.22</u>	
Total Expenses		<u>14,959,040.29</u>
Operating Income		1,388,160.38
Interest Income		24,785.22
Other Income		<u>0.00</u>
Less Miscellaneous Income Deductions		<u>20,248.61</u>
Net Income Transferred to Surplus		<u>1,392,696.99</u>

STATEMENT OF SURPLUS

For the year ending December 31, 2016

Balance December 31, 2015		25,934,405.16
Add: Credit balance transferred from income		1,392,696.99
Adjustment to transfer prior years		
Power Refunds to surplus		<u>0.00</u>
Subtotal		27,327,102.15
Deduct: Amount transferred to Town Treasurer		
to reduce the Tax Levy		(330,000.00)
In Lieu Of Tax Payment to City Of Salem		(4,966.61)
Auditor's adjusting entries for year		
ended December 2015		<u>217,994.07</u>
Balance December 31, 2016		<u>27,210,129.61</u>

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OPERATING EXPENSES

For the year ending December 31, 2016

Power Generation Expenses:		
Fuel	25,540.36	
Generating Expense - Lubricants	(759.00)	
Misc. Other Power Generating Expense	2,114.69	
Maint. of Other Power Generation	<u>166,168.15</u>	
Total Power Generation Expense		193,064.20
Power Supply Expenses:		
Electric Energy Purchased	7,606,558.77	
Misc. Purchased Power Expense	<u>2,318,774.87</u>	
Total Power Supply Expenses		9,925,333.64
Transmission Expense:		
Maintenance of Overhead Lines		0.00
Distribution Expenses:		
Station Expense - Labor & Other	23,571.07	
Station Expense - Heat & Electricity	12,903.99	
Street Lighting	3,402.13	
Meter Expense - Inspection, Testing, Removing, Resetting	48,970.94	
Customer Installation Expense	20,057.54	
Misc. Distribution Expense	166,285.60	
Maintenance of Structures	0.00	
Maintenance of Station Equipment	49,338.56	
Maint. of Overhead & Underground Lines	674,079.67	
Maintenance of Line Transformers	9,695.58	
Maintenance of Meters	<u>16,319.64</u>	
Total Distribution Expenses		1,024,624.72
Customer Account Expenses:		
Supervision of Customer Accounting	96,945.53	
Meter Reading - Labor & Expenses	19,799.99	
Customer Records & Collections	220,774.95	
Uncollectible Accounts	(64,973.53)	
Interest Paid on Consumer Deposits	<u>669.50</u>	
Total Customer Account Expenses		273,216.44
Advertising, Conservation, Energy Audits		70,971.12
Administrative & General Expenses:		
Administrative Salaries	207,828.00	
Office Supplies & Expenses	266,325.42	
Outside Services Employed	71,964.41	
Property Insurance	38,586.82	
Injuries & Damages	817.00	
Rents	83,357.55	
Employee's Pensions & Benefits	1,182,901.85	
Maintenance of General Plant	38,060.18	
Transportation	56,976.66	
Miscellaneous General Expense	<u>42,207.06</u>	
Total Administrative & Gen. Expenses		<u>1,989,024.95</u>
Total Operating & Maintenance Expenses		<u>13,476,235.07</u>