

## **MUNICIPAL LIGHT DEPARTMENT**

To the citizens of the Town of Marblehead:

The Marblehead Municipal Light Department is pleased to provide its 116th annual report and financial statements for the calendar year ending December 31, 2010.

In the electric utility industry weather extremes are not typically a welcome sight and in 2010 we certainly had our share of unwelcome sights in Marblehead. From the nor'easter in late February, violent thunder and lightning storms in June, the extreme heat in July and August, the threat of hurricane Earl in September, to a post Christmas blizzard, weather conditions had a significant impact on light department operations in 2010.

What seemed to be a slow start to the winter season quickly changed in the early evening of February 25 when heavy rains and strong winds approaching 80 miles per hour toppled trees and brought down power lines all over town. By 7:00 p.m. the situation really began to cascade and for the next two days straight, work crews worked tirelessly to restore power to all impacted customers. In many respects this storm was worse than Hurricane Bob in 1991.

In June, Marblehead and surrounding communities suffered the brunt of two consecutive severe thunder and lightning storms which again brought heavy rains, gusty winds, and knocked down trees taking wires along with them.

And while the threat of Hurricane Earl in early September turned out to be just that, only a threat, work crews were positioned and well prepared for what might have been. Then finally in December the Town once again experienced what was more than just a threat when a post Christmas blizzard came rolling into Town ending the year with yet another challenge for the light department operations personnel.

Although the summer of 2010 was much hotter than in recent years, the Town did not set any new records for energy demand or consumption. Total energy consumption in 2010 increased to 105,826,130 kilowatt-hours compared to 101,459,386 kilowatt-hours consumed in 2009. The hourly peak demand was also up reaching 28,028 kilowatts on July 6 at 1:00 p.m. compared to 25,677 kilowatts set on August 18, 2009 at 5:00 p.m. Both of these statistics could have been a lot higher if it weren't for the energy conservation efforts by our customers.

While working through many of the weather related issues throughout the year the light department also substantially completed a major substation project. The new Commercial Street substation was energized on March 26 and all circuits were transferred to the new station by mid April. This was the first significant upgrade to the Commercial Street substation equipment since 1960 and significantly increases the reliability to our customers. The new equipment also reduces noise while incorporating an aesthetic design not typically found in traditional substation projects. All that remains is to remove the older de-energized substation equipment.

As part of the light department's 5-year budget and work-plan, work crews replaced 60 older pole-mount distribution transformers and also began a project to replace the aging Anderson circuit. This circuit, which primarily serves the business and residential customers along Pleasant Street from Washington Street to School Street, will replace several poles and the older open wire and cross arm configuration with new poles and aerial spacer cable configuration without cross arms. When completed in early 2011 this project will improve reliability as well as enhance aesthetics to the area served.

Through most of 2010 the price of natural gas from month to month has been in a slightly downward trending to flat market and has provided much stability to our wholesale power supply costs. Since greater than 50% of New England's electricity production is from fossil fuels, any changes in fuel cost, either up or down, will impact the wholesale cost of electricity. As a result of the stability of natural gas prices, the Purchased Power Adjustment charged to our customers has also remained stable for 2010. Favorable fuel price forecasts in 2010 have also prompted us to make forward purchases well into 2013 to help stabilize overall future power supply costs for our customers.

After ten-plus years of careful planning and development, the vision of the Berkshire Wind Power Project as a leader in clean, green, and renewable energy is coming to fruition. By the end of November 2010 all 10 wind turbines had been erected and work continued on the remaining critical path items. The 10-turbine, 15 megawatt project, is scheduled to begin operation in early 2011 and produce more than 52,500 megawatt hours per year, enough to power approximately 6,000 homes. Marblehead's share of the project is 6.7 percent or just over 1 megawatt.

The Marblehead Municipal Light Department (MMLD) along with the Massachusetts Municipal Wholesale Electric Company and 13 other municipal light plants formed the Berkshire Wind Power Cooperative Corporation to own and manage the project located on Brodie Mountain in Hancock, Massachusetts. The

purpose of this project is to create a renewable energy addition to our overall power supply portfolio, reduce dependence on fossil fuels, and curb greenhouse gas emissions.

Over the life of the turbines, the operation of the Berkshire Wind Power Project will offset over 612,000 metric tons of carbon dioxide (CO<sub>2</sub>) production and the use of 1.7 million barrels of oil.

Throughout 2010, MMLD has been working closely with the Department of Energy (DOE) to coordinate the implementation of our new smart meter program. The 50 percent matching grant totaling \$1,346,175.00 was finalized and awarded to MMLD on March 12, 2010. The MMLD project involves the town-wide installation of a fully integrated advanced metering system and a pilot program to assess the effectiveness of dynamic pricing and automated load management. It is aimed at reducing peak electricity demand, overall energy use, and operations and maintenance costs while increasing distribution system efficiency, reliability, and power quality.

MMLD was one of only one hundred companies nation-wide, including only 33 public power systems, selected for negotiations for an award with the DOE. According to the DOE, the awards amount to the largest single energy grid modernization investment in the country's history. Full roll-out of the project is scheduled for early 2011.

In 1995 the actual installed cost of the electric plant in service totaled \$9,047,488. By the end of 2010 the actual installed cost totaled \$25,355,473 demonstrating the light department's commitment to infrastructure improvement. This increased investment in electric plant has been accomplished without the need to issue debt.

The light department together with the water and sewer department provided the funding for a new emergency notification system called CodeRED. The CodeRED system is a high speed telephone calling system capable of delivering customized pre-recorded emergency messages directly to homes and businesses. The timing of the purchase was very fortuitous as the system was utilized by the Town during the blizzard in late December.

Net surplus revenue that was returned to the Town to reduce the tax levy in 2010 was \$330,000. The ten-year cumulative amount through 2010 totaled \$3,530,000.

While we continue to investigate new sources of generation supply, we also recognize the importance of energy efficiency and demand side management programs within our community. Our programs provide various rebates when customers buy certain appliances or programmable thermostats, and also include a substantial rebate on home insulation and the installation of photovoltaic systems. The total rebate amount to our customers in 2010 was \$97,252 and represents a total energy savings estimated at 300,670 kilowatt hours. For further information on the light department's energy and conservation programs please visit our website at [www.marbleheadelectric.com](http://www.marbleheadelectric.com).

The light department saw many changes in personnel this year as four long time employees retired. Kathleen Snow, 30 years; Robert Dane, 24 years; Diane Glavin, 16 years; and Douglas Proto, 14 years; all retired in 2010. We wish them health, happiness, and continued success. As part of the personnel changes we brought on two new full time employees, Kirk Blaisdell and Toyo Johnson, and one part time employee Matthew Karakoudas. Welcome aboard!

In 2010, the Light Department received a Safety Award from the American Public Power Association for the year 2009. For MMLD, this is our 16th consecutive safety award and our 20th in the last 21 years, an unprecedented record of which we are extremely proud. We continue to emphasize the importance of safety in the workplace as well as through our successful school safety programs.

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

Respectfully Submitted,

Robert V. Jolly, Jr., General Manager

Philip W. Sweeney, Chairman  
Wilbur E. Bassett, Commissioner  
Calvin T. Crawford, Commissioner  
Walter E. Homan, Commissioner  
Charles O. Phillips, Commissioner

## MUNICIPAL LIGHT DEPARTMENT

### BALANCE SHEET

For the year ending December 31, 2010

#### Assets

Plant Investments		12,709,864.11
Current Assets:		
Cash - Operating	2,585,354.37	
Petty Cash	500.00	
Construction	38,237.56	
Accounts Receivable	1,670,312.76	
Interest Receivable	877.57	
Materials & Supplies	<u>91,716.55</u>	
Total Current Assets		4,386,998.81
Depreciation Fund		3,309,675.30
Insurance Escrow Account		952,170.73
Hydro Savings Reserve		59,663.21
MMWEC - NEPEX Reserve Trust		556,142.58
Rate Stabilization Reserve		900,000.00
Consumer Deposits		18,214.89
Prepayments		<u>1,241,316.77</u>
Total Assets		<u>24,134,046.40</u>

#### Liabilities And Surplus

Accounts Payable:		
Depreciation	10,511.39	
Operating	1,079,804.81	
Construction	0.00	
Consumer Deposits	0.00	
Total Accounts Payable		1,090,316.20
Consumer Deposits		21,069.89
Reserve for Uncollectible Accounts		383,966.79
Reserve for Future Compensated Absences		118,956.97
Accumulated Provision For Rate Stabilization		900,000.00
Opeb Liability		515,533.00
Unappropriated Earned Surplus		<u>21,104,203.55</u>
Total Liabilities And Surplus		<u>24,134,046.40</u>

**MUNICIPAL LIGHT DEPARTMENT**

**STATEMENT OF INCOME**

For the year ending December 31, 2010

Operating Revenue		15,083,310.91
Less Expenses:		
Operating	12,257,638.23	
Maintenance	900,525.21	
Depreciation	<u>1,226,276.21</u>	
Total Expenses		<u>14,384,439.65</u>
Operating Income		698,871.26
Interest Income		33,845.28
Other Income		77,482.06
Less Miscellaneous Income Deductions		<u>0.00</u>
Net Income Transferred to Surplus		<u>810,198.60</u>

**STATEMENT OF SURPLUS**

For the year ending December 31, 2010

Balance December 31, 2009		20,935,458.03
Add: Credit balance transferred from income		810,198.60
Adjustment to transfer prior years		
Power Refunds to surplus		<u>0.00</u>
Subtotal		21,745,656.63
Deduct: Amount transferred to Town Treasurer		
to reduce the Tax Levy		(330,000.00)
In Lieu Of Tax Payment to City Of Salem		(6,791.08)
Auditor's adjusting entries for year		
ended December 2009		<u>(304,662.00)</u>
Balance December 31, 2010		<u>21,104,203.55</u>

## MUNICIPAL LIGHT DEPARTMENT

### OPERATING EXPENSES

For the year ending December 31, 2010

Power Generation Expenses:		
Fuel	27,873.27	
Generating Expense - Lubricants	900.83	
Misc. Other Power Generating Expense	0.00	
Maint. of Other Power Generation	<u>60,167.80</u>	
Total Power Generation Expense		88,941.90
Power Supply Expenses:		
Electric Energy Purchased	8,124,366.55	
Misc. Purchased Power Expense	<u>1,639,158.11</u>	
Total Power Supply Expenses		9,763,524.66
Transmission Expense:		
Maintenance of Overhead Lines		0.00
Distribution Expenses:		
Station Expense - Labor & Other	14,044.49	
Station Expense - Heat & Electricity	52,209.23	
Street Lighting	4,273.43	
Meter Expense - Inspection, Testing, Removing, Resetting	84,605.05	
Customer Installation Expense	57,597.92	
Misc. Distribution Expense	143,893.05	
Maintenance of Structures	2,021.04	
Maintenance of Station Equipment	33,787.81	
Maint. of Overhead & Underground Lines	701,596.90	
Maintenance of Line Transformers	9,785.64	
Maintenance of Meters	<u>1,556.06</u>	
Total Distribution Expenses		1,105,370.62
Customer Account Expenses:		
Supervision of Customer Accounting	97,003.85	
Meter Reading - Labor & Expenses	71,210.48	
Customer Records & Collections	267,759.80	
Uncollectible Accounts	30,000.00	
Interest Paid on Consumer Deposits	<u>77.96</u>	
Total Customer Account Expenses		466,052.09
Advertising, Conservation, Energy Audits		168,367.01
Administrative & General Expenses:		
Administrative Salaries	159,326.42	
Office Supplies & Expenses	145,639.46	
Outside Services Employed	28,824.70	
Property Insurance	32,796.00	
Injuries & Damages	9,915.90	
Employee's Pensions & Benefits	1,059,180.32	
Maintenance of General Plant	40,397.35	
Transportation	51,212.61	
Miscellaneous General Expense	<u>38,614.40</u>	
Total Administrative & Gen. Expenses		<u>1,565,907.16</u>
Total Operating & Maintenance Expenses		<u>13,158,163.44</u>

## **MUNICIPAL LIGHT DEPARTMENT**

### **NOTE TO THE FINANCIAL STATEMENTS**

For the year ending December 31, 2010

The Marblehead Municipal Light Department has since 1971 entered into power agreements for the supply of electric energy to the Town of Marblehead. The agreements are of varying terms with multiple suppliers ranging out to 2026. The aggregate amount of certain obligations under the agreements as of December 31, 2010 and estimated for future years is \$7,164,000.00. This sum represents a significant part of the fixed cost portion of existing contracts for electric energy and is accounted for in the monthly billing process. Complete audited financial statements and supplementary reports are available at the Marblehead Municipal Light Department.